reuse aotearoa

Reuse, Repair & Share in Wellington City:

analysis of current initiatives, gaps and opportunities

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Cover image: WCC Public Library
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WHO WE ARE

Reuse Aotearoa is an organisation dedicated to building the momentum and capability to scale reuse activities and business models in New Zealand. We focus on understanding and telling the story of reuse through evidence-based research, and on facilitating collaboration to grow the presence, prevalence and viability of reuse activities across the motu.

The story of this report (Abstract)

In 2025, Wellington City Council (WCC) commissioned Reuse Aotearoa to explore the current state of Reuse, Repair and Share (RRS) activities in Wellington and the potential for future growth in these areas to reduce waste. The research combined a desktop stocktake of RRS initiatives in Wellington, with a gap analysis informed by interviews with representatives of 13 organisations who run RRS initiatives and/or zero waste and resource recovery programmes.

The study identified 456 discrete RRS initiatives that are available to residents and businesses in Wellington City. Initiatives are well-utilised, but services are unevenly spread between different types of RRS activities and product types. The resulting gaps in provision undermine the overall accessibility and attractiveness of RRS services. The key barriers to establishing and growing RRS initiatives are a lack of financial viability and limited access to appropriate premises and infrastructural services. Data capture and analysis also needs improvement to understand and communicate the impact of current and future RRS activities. There is an opportunity to increase collaboration and partnership in relation to RRS activities within Council teams at WCC and amongst and between Councils, RRS operators, and mana whenua and Māori groups across the region.

Drawing on the identified barriers and opportunities and a supporting literature review, the report proposes 30 potential intervention options for WCC to consider, to help increase the presence, resilience and impact of RRS in Wellington City.

Disclaimer

For this research project, we undertook both a desktop study and a number of interviews with various individuals representing different businesses and organisations. Our desktop study traversed a range of materials already in the public domain. As a result, not every business, organisation, or initiative mentioned in this report was interviewed. Furthermore, not every interviewee is necessarily mentioned. The images in this report were acquired from a range of businesses and organisations identified through the stocktake research. The inclusion of their images does not mean that these particular organisations were interviewees in the gap analysis phase of this study. Inclusion of images from various organisations also does not indicate those organisations endorse the contents of this document.

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Artificial Intelligence: Reuse Aotearoa does not use Large Language Models or Generative AI. This report has been prepared without the use of such tools and technologies.

Report commissioned by:

Absolutely Positively **Wellington** City Council
Me Heke Ki Pōneke

Thank you to Wellington City Council for commissioning this research, and to all the interviewees who participated in this research project and so generously shared their time, insights and expertise with us. We also acknowledge all the hundreds of organisations already operating reuse, repair, and share initiatives across Wellington, Porirua, and Lower Hutt cities.

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Mug.Cycle reusable cup system at Harbourside Market
Image Supplied

EXECUTIVE SUMMARY

How this report came to be

The practices of reuse, repair and share (RRS) are an antidote to the throwaway society. They keep products from being prematurely wasted and delay the need to manufacture new products. As such, RRS practices are some of the more impactful ways that individuals and organisations can get involved in reducing waste and emissions. Offering and participating in RRS initiatives can also bring wider benefits by increasing social wellbeing and community connection and delivering positive economic outcomes, like green job creation (Interreg Europe, 2022).

Supporting the prevalence and success of RRS initiatives is recognised as an important strategy for cities and regions that are working towards a circular economy (OECD, 2020; OECD, 2021). In Wellington, increasing the accessibility and attractiveness of RRS to local residents and businesses is part of Wellington City Council's (WCC) planned approach to reducing waste, as set out in the Council's Zero Waste Strategy (ZWS) and the Wellington region Waste Management and Minimisation Plan (WMMP). Zero waste business models, services and infrastructure like RRS are also highlighted as important in the Council's Economic Wellbeing Strategy (EWS).

However, getting viable RRS initiatives off the ground is not easy within the current linear economy. To get a sense of the current state of play, and to identify opportunities to support and increase RRS in Wellington City, WCC commissioned Reuse Aotearoa to:

- stocktake existing RRS activities in Wellington;
- analyse the gaps in accessibility and attractiveness of RRS initiatives, including barriers and opportunities to their establishment, viability and growth; and
- suggest some potential intervention options Council could consider to support RRS in the city.

Bike repair at Bikespace: Image supplied by WCC

Cahoots Workshop: Image supplied

What we did

We completed a desktop study of publicly available resources (e.g. websites, social media and reports) to identify and describe all existing RRS initiatives within the WCC, Hutt City Council (HCC) and Porirua City Council (PCC) territorial boundaries. Initiatives were entered into a spreadsheet that is available as a supporting document to this report (**Appendix 1**). In addition, we interviewed representatives from 13 organisations who operate RRS initiatives and/or zero waste and resource recovery programmes.

The stocktake results and interview transcripts were analysed to identify gaps, barriers and opportunities facing RRS, according to five recurring thematic areas in relevant WCC policy documents:

- **Accessibility** (in terms of availability, convenience, affordability, employment/work).
- **Attractiveness** (in terms of awareness of existing initiatives; factors that do or do not attract organisations or potential users to adopt or access RRS initiatives).
- **Waste reduction and other impacts.**
- **Resilience** (financial and infrastructural).
- **Collaboration and partnership.**

The development of potential intervention options drew on the gaps and opportunities highlighted in the stocktake and gap analysis (which were summarised into two indexes of 56 gaps and 47 opportunities), alongside a desktop review of examples of actual interventions implemented by city and local government authorities to support RRS, or interventions that have been suggested in the literature.

Both the literature review of actual and suggested intervention examples, and the potential intervention options drafted for WCC, were compiled in a spreadsheet included as a supporting document to this report (**Appendix 6**).

What we found

Wellington City is home to at least 456 discrete RRS initiatives that are available to residents and businesses as an alternative to buying new products or prematurely wasting existing products. Of these:

- **186** (41%) are reuse initiatives.
- **157** (34%) are share initiatives.
- **113** (25%) are repair initiatives.

These initiatives include varied activities, such as secondhand stores, reusable packaging systems, community and commercial repair services, hire/rental companies, libraries, shared workshop spaces and more. The products involved span a broad range from clothing, textiles, furniture and electronics, through to bikes, books, tools, toys, heavy machinery, event gear and more. Overall, the stocktake shows a good baseline of RRS activity to expand upon.

Existing initiatives are well-utilised, demonstrating public demand for RRS services. However, services are unevenly spread between different types of RRS activities and product types, resulting in gaps in provision that undermine the overall availability, convenience, and affordability of RRS services. For example, there is good and affordable provision and utilisation of library models for books, and op-shops for clothing. However, there is a shortage of commercial repair services for consumer goods, or library systems for items beyond books.

There is also disparity in the types of organisations that run RRS initiatives in Wellington City. Commercial organisations run 78% of initiatives, non-profits run 18%, and public/council organisations run 5%. While fewer in number, community and council-run RRS initiatives often prioritise affordability and accessibility, fill gaps left by the market in terms of underprovided

Cityhop vehicle share scheme: Image supplied by WCC

services or products, and often operate from facilities where RRS initiatives are clustered together, which can promote user convenience, collaboration and innovation. Only 3.5% of RRS initiatives in Wellington City are run by resource recovery organisations, even though these organisations are typically associated with waste minimisation. Māori-led RRS initiatives are also underrepresented, at less than 2% of initiatives.

A lack of financial viability and limited access to appropriate spaces, premises and wider infrastructure for back-of-house and public-facing RRS operations are the key barriers to establishing and growing resilient, attractive, affordable and convenient RRS initiatives. We heard these barriers are particularly significant for: repair services generally; non-profit share and repair initiatives; any initiatives that involve the handling of larger items that require space for retail, storage and logistics; and commercial initiatives that rely on reverse logistics, e.g. product reuse systems. Financial and infrastructural barriers have flow-on impacts for the resilience and capacity of initiatives and their affordability for users; the ability to employ staff and offer secure, well-paid work; and the provision of convenient services situated in central, accessible locations with extensive opening hours and attractive facilities.

Although RRS activities tend to be labour-intensive, financial barriers, alongside a shortage of professional bodies and formalised vocational programmes for the RRS sector, may be impeding job creation and career pathways in the sector. For some activities, particularly repair, there is a shortage of appropriately skilled and qualified jobseekers. The lack of culturally appropriate industry training programmes and RRS initiatives may also compound Māori underrepresentation in the RRS sector.

Clothing repair at Kowtow: Image supplied

FillGood Reusable Serviceware Wash Facility

While collaboration and partnership can be an important ingredient in the resilience and innovation of initiatives, more could be done in these areas. For example, internal collaboration in WCC to rationalise the disparate approach to RRS across teams would be strategically useful. Meanwhile, filling gaps in local and regional collaboration, partnerships and peer support systems amongst and between different commercial and non-profit RRS operators, councils, mana whenua and Māori groups would allow RRS to scale in alignment with community needs and priorities.

The story of RRS could also be told better. Both existing and future initiatives could benefit from support to increase the visibility of their RRS services, and to get the word out to Wellingtonians about these services as an alternative to buying new items. The evidence base for this story could be strengthened by working towards coordinated and consistent data capture, which would help to quantify the impact of current and future RRS activities. Collecting and analysing this data would also enable Council to monitor the extent to which RRS helps with achieving WCC's strategic waste minimisation, climate, and economic and social wellbeing goals over time.

What can be done to promote the growth and success of RRS in Wellington?

The report proposes 30 intervention options for WCC to consider, to help increase the presence, resilience and impact of RRS in Wellington City. These intervention options seek to mitigate the 56 gaps and harness the 47 opportunities identified in the stocktake and gap analysis. They focus on:

- measures to optimise existing initiatives and support the ongoing growth of clusters of RRS initiatives within individual sites, centres and facilities, including current and future resource recovery centres;
- growing new initiatives in priority areas, such as Māori-led initiatives, commercial repair services, libraries of things, repair cafes and shared workshop spaces;
- expanding the reach, accessibility and visibility of RRS through mobile or touring RRS events, a large showcase or festival, and promotion of RRS initiatives and resources on various platforms, including Council's website;
- incentivising the use and adoption of RRS initiatives through public procurement policies, and targeted grants and subsidies, including the possibility of vouchers and coupons for residents to spend at RRS services;
- efforts to foster and facilitate in-person, online, local and regional RRS sector networking, collaboration and peer support amongst operators of RRS initiatives, and between RRS operators and mana whenua, Councils, and the waste and resource recovery sector, alongside efforts to improve internal Council collaboration on RRS;
- connecting current and potential RRS initiatives with space and infrastructural services to support their operations, including exploring the use of regulatory levers to open up access to under-utilised commercial or council-owned spaces, and brokering relationships between RRS operators and property owners in Wellington City;
- partnering with others to develop appropriate vocational training programmes and incubation hubs for RRS initiatives, including kaupapa-led programmes;
- improving systems and methodologies to gather and analyse data to understand the current and potential impact of RRS initiatives in Wellington City; and
- working with others to advocate for national policies and legislation to level the economic playing field between linear business models and circular business models, like RRS.

Secondhand electronics accessories at Te Aro Zero Waste: Image supplied

The opportunity to work with others who are already offering RRS initiatives in Wellington City in order to strengthen and build on existing services, infrastructure and expertise is significant. Through nurturing strong partnerships, offering targeted financial, practical and regulatory support, and empowering existing organisations to uplift others into the RRS sector, WCC can help to build Wellington City's leadership in the area of RRS and, in so doing, contribute to a national shift towards a low-waste, low-emissions circular economy that operates at the top of the waste hierarchy.

1 INTRODUCTION

1.1 Background

In 2025, Wellington City Council (WCC) commissioned Reuse Aotearoa to undertake a stocktake and gap analysis of Reuse, Repair and Share (RRS) activities in Wellington, and to highlight practical actions the Council can take to support future growth in these areas. The research is intended to support the Council to achieve relevant goals in its Zero Waste Strategy (ZWS) and the Wellington Region Waste Management and Minimisation Plan (WMMP). Both documents recognise that more activity at the top of the waste hierarchy is needed to reduce waste and ensure Wellington keeps moving towards a circular economy.

This report shares the findings from the stocktake of existing RRS activities across Wellington City, Porirua and Lower Hutt, and analyses the gaps, barriers and opportunities for RRS in Wellington City based on both the stocktake results and interviews with a sample of RRS operators. The stocktake and gap analysis findings provide the evidence base that informs the intervention options proposed in the final part of the report, which focuses on actions WCC could take to help make waste-free products and services, waste reduction, and reuse more attractive and accessible for Wellington residents and businesses.

1.2 How this report should be used

The report has been written for WCC as the primary audience. The intervention options reflect the Wellington City context for RRS that emerged from the stocktake and gap analysis. Nevertheless, the report and supporting documents are relevant to a broader audience. For example, the stocktake research identified RRS initiatives within the Porirua City Council (PCC) and Hutt City Council (HCC) territorial boundaries, so could be useful to those councils. The stocktake spreadsheet of existing initiatives is included as a supporting document to this report (**Appendix 1**) and may also be useful to WCC, PCC and HCC residents and businesses wishing to find RRS services in their own lives and operations.

The intervention options draw on the gap analysis findings. They also draw on a desktop review of: example interventions already implemented by councils in Aotearoa New Zealand (Aotearoa NZ) and overseas; and interventions suggested in the literature focused on how cities and local governments can support more circular business models like RRS. This review demonstrated that many of the gaps, barriers and opportunities identified in the Wellington City context are also present elsewhere. As such, both the findings of the interventions review, and the intervention options identified for WCC, could be a useful and applicable reference for other local authorities (particularly city councils) in Aotearoa NZ, for RRS operators, and for zero waste and circular economy advocates outside of Wellington City.

1.3 What are RRS activities, and how do they reduce waste?

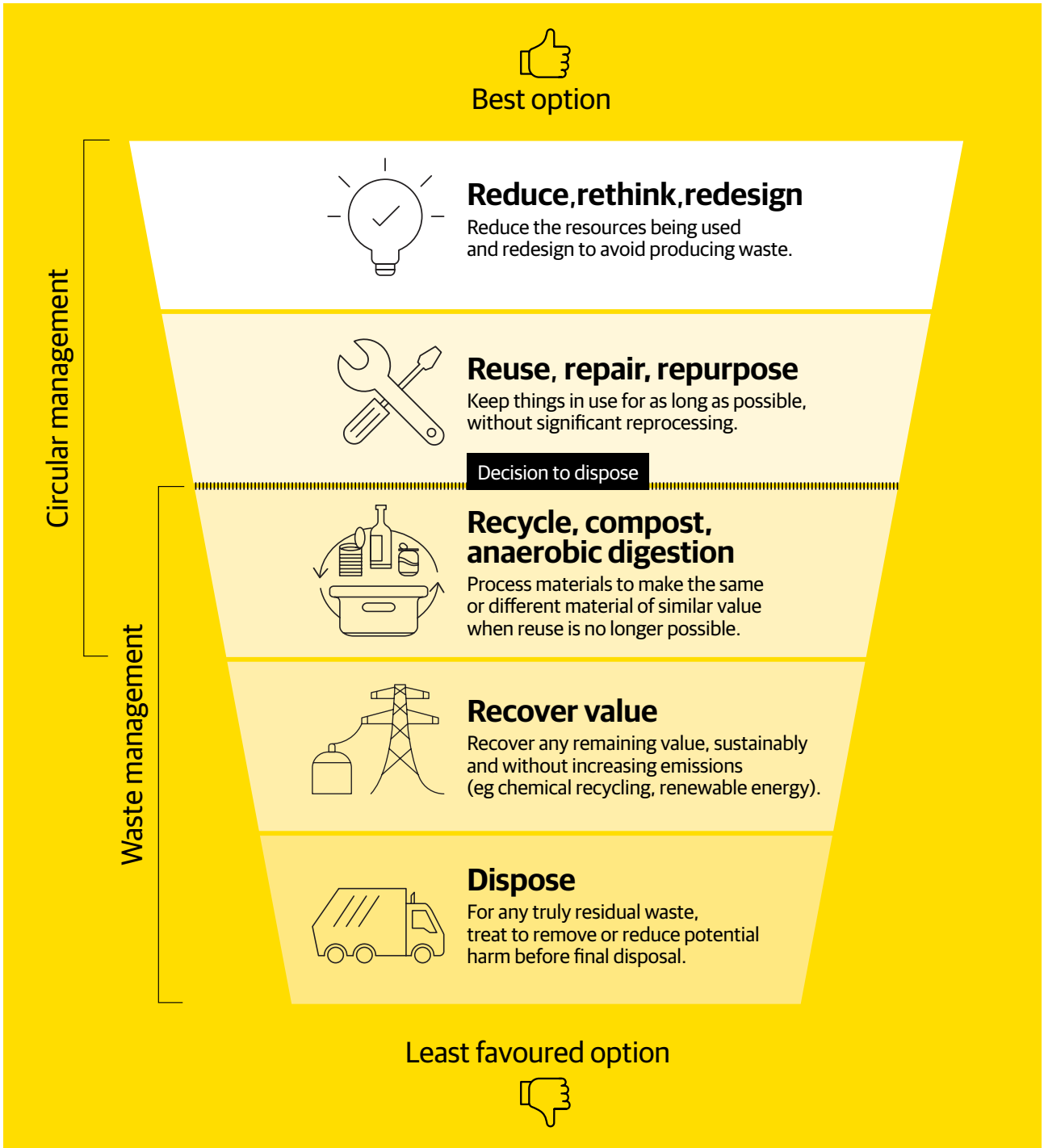
1.3.1 The Waste Hierarchy

Reuse, repair and share are terms that describe some of the activities that fit in the upper layers of the waste hierarchy. The waste hierarchy is an internationally recognised framework for prioritising actions to reduce waste. Actions towards the top of the waste hierarchy are of higher priority than actions nearer the bottom because they are more effective at preventing and reducing waste. They also have increased flow-on environmental benefits, including more effective reduction of greenhouse gas emissions, pollution and resource extraction (Blumhardt, 2023, p.8). Activities higher up the waste hierarchy also bring stronger social co-benefits, such as increased job creation, local resilience and opportunities for community enterprise and connection (Ribeiro-Broomhead & Tangri, 2021; Circular City Centre & European Investment Bank, 2025, pp.10-11; Interreg Europe, 2022).

Figure 1 shows the version of the waste hierarchy that appears in the ZWS.[1] The top layer (Reduce, rethink, redesign) relates to activities that reduce waste at the source (i.e. source reduction) through redesigning products and business models to be less resource-intensive. By using fewer resources from the outset,

[1] NB the waste hierarchy in the WMMP has a different visual design, but is substantively identical to the hierarchy in Figure 1.

Figure 1: Waste Hierarchy from the WCC ZWS (p.13)



these products and practices ultimately generate less waste while also placing less pressure on the planet's raw material resources. The next layer down (Reuse, repair, repurpose) relates to activities that extend product lifespans. By keeping products in use, reuse and repair keep products out of landfill and delay the need to manufacture new products.

The ZWS and WMMP waste hierarchy describe reduce, rethink, redesign, reuse, repair and repurpose as "circular management" strategies because they stop waste before it starts and reduce raw material extraction. The tiers below (including recycling and composting) are "waste management" activities because they involve handling discarded items that are no longer intended for (or capable of) reuse in their original form and require either reprocessing or disposal.

1.3.2 Defining share, reuse and repair

Sharing involves business models, services or collective community arrangements that enable multiple people or organisations to access products without having to own them personally. This can include commercial hire or rental of items (including leasing and product-as-a-service), libraries where people can join as members and borrow items to take home, or facilities with fixed equipment that people can use when they visit the space, e.g. workshops or gyms (see definitions of "Sharing" and "Sharing Economy" in the ZWS, p.69, and "Share" in Share Reuse Repair Initiative, 2025, p.8).

Sharing is a waste minimisation strategy that falls within the "Reduce, rethink, redesign" tier of the waste hierarchy, as it reduces the overall number of products required to meet the needs of many people. As such, it avoids product 'over-duplication', i.e. more 'stuff' in society than is required to fulfil the community's needs. Less stuff means fewer raw materials that need to be extracted to make under-utilised items (which is an inefficient, or wasteful, use of the planet's resources), and fewer end-of-life products. Business models based around sharing also incentivise the manufacture of more durable and repairable items and thus indirectly support product life extension (ibid).

Reuse is the activity of putting products through multiple uses, rather than a single use, or giving a second life to items that are no longer wanted by their original owner. Between each use or before an item is transferred to a new owner, items may need to be prepared for reuse, which can include cleaning, repairing or refurbishing. The reuse economy can include businesses or organisations that: specialise in recirculating reusable products, such as operators of reusable packaging systems or laundry services; sell or redistribute secondhand items; or undertake critical precursor logistical or practical activities that enable reuse, such as deconstruction of buildings or hosting drop-off locations for individuals to return items for specific reuse programmes (see definitions of "Reuse" and "Reuse Economy" in the ZWS, p.69; the definition of "Reuse" in Share, Reuse Repair Initiative, 2025, p.8; and the definition of "Reuse" and "Preparation for Reuse" in WasteMINZ, 2025).

Reuse practices reduce resource extraction and waste by extending the service life of products, giving people access to existing products rather than having to purchase new ones, and providing non-wasteful alternatives where wasteful products or practices (e.g. single-use items or demolition) would otherwise be used (ibid).

Repair is the "[o]peration by which a faulty or broken product or component is returned back to a usable state to fulfil its intended use" (ZWS, p.69). A healthy repair economy features: widely accessible commercial repair or maintenance services and spare parts; repair facilities and workshop spaces; community-assisted repair at events like repair cafes; and the training and skills needed to complete repairs. Repair enhances reuse and sharing systems by keeping the products in those systems going, thus enabling them to be reused or shared for longer. For example, repair can be part of the process of preparing items for reuse. Repair reduces waste by restoring broken items to functionality, thereby keeping them out of landfill and avoiding the need to replace broken items with new products (see the definitions of "Repair" in the ZWS, p.69 and Share, Reuse Repair Initiative, 2025, p.8).

1.4 The strategic context: RRS in Council strategies, plans and policies

The strategic and practical mandate for WCC to pursue RRS opportunities to reduce waste is clear throughout both the ZWS and the WMMP. It is reflected in the objectives, outcomes and/or actions in these documents, as well as their narrative bodies. For example, 18 of the 29 actions (62%) in WCC's action plan in the WMMP target the top two tiers of the waste hierarchy. The WMMP also states that prioritising these two tiers "is at the heart of this WMMP" (p.7). As such, fostering RRS is a key strategic responsibility and work stream for waste teams in WCC and the wider region.

The relevance of RRS also extends to other issue areas of strategic importance to Council, including the circular economy, climate change, and social and economic wellbeing. Both the ZWS and WMMP outline how RRS fit comfortably not only within a waste minimisation paradigm, but also within the broader framework of the circular economy. For example, the WMMP notes that the "repair and reuse economy is a critical part of the circular economy" (p.23), and RRS activities are labelled "circular management" strategies in the waste hierarchy in the ZWS and WMMP. Other studies have also described RRS activities as circular business models (Blumhardt, 2023) or circular consumption (e.g. Circular City Centre & European Investment Bank, 2025). In the OECD's synthesis report for its Circular Economy in Cities and Regions project, and in its indicators for measuring progress towards circularity, RRS are included as important activities that cities and regions should promote (OECD, 2020; OECD, 2021).

The relationship between RRS and circularity is important because shifting to a circular economy is widely recognised as critical to mitigating climate change (see, for example, the chapters addressing the circular economy in the Climate Change Commission's reports providing advice on emissions budgets (Climate Change Commission, 2021, Ch 13) and the policy direction for the second emissions reduction plan (Climate Change Commission, 2023, Ch. 12)). This makes the pursuit of RRS also relevant when considering emissions reduction strategies. The circular economy is also connected to achieving the Sustainable Development Goals, particularly SDG 12 relating to responsible consumption and production (OECD, 2020, p.19). As such, increasing RRS activities is often also discussed in the context of wellbeing initiatives (e.g. see Waikato Wellbeing Project, n.d.; The Wellbeing Economy Alliance Aotearoa, 2025).

In light of the above, RRS or adjacent concepts, such as circularity and zero waste, emerge in WCC strategic documents beyond the waste minimisation sphere. In the city's Social Wellbeing Framework (2021), "accelerating reuse" is cited as part of working towards being a "waste free city" within the Environmental strategic objective (p.8). Furthermore, the council's key sharing infrastructure (library services, community facilities and recreation centres) is recognised as one way that council contributes to social wellbeing, including community connection, learning and health (pp. 10-12). Waste reduction efforts and the circular economy are also part of WCC's climate strategy, Te Atakura - First to Zero (2019).

Most notably, both wellbeing and the circular economy sit at the heart of the vision in WCC's Economic Wellbeing Strategy (2022). One of the strategy's six outcomes "Transitioning to a zero carbon circular economy" relies on, among other things, developing RRS activities through an "emerging zero waste ecosystem" (p.38), investment "in better waste management systems to facilitate a circular economy" (p.41), and a "strong network of local Zero Waste Hubs... combining reuse, repair, recycling composting, product stewardship takeback, behaviour change and community engagement" (p.38).

The inclusion of RRS and/or the circular economy in various WCC strategic documents validates WCC giving ongoing attention to nurturing and increasing RRS activity in the city, while also highlighting internal partnership opportunities to accelerate progress.

2 SCOPE AND METHODOLOGY

This research project was divided into three phases:

1. A stocktake of existing RRS initiatives within WCC, HCC and PCC territorial boundaries.
2. A gap analysis of barriers and opportunities for RRS initiatives to establish, sustain themselves and grow in Wellington City.
3. The design and proposal of intervention options for WCC to help make RRS activities more attractive and accessible for Wellingtonians.

Each phase had a slightly different scope and methodological approach, and each phase built on the findings of the phase before it, as outlined in this section.

2.1 Scope

The scope of this research project was defined by WCC in a Scope of Work document and related to:

- the geographical areas to be considered;
- the nature of the RRS activities, and the sectors, infrastructure and services in which they occurred; and
- the products involved.

2.1.1 Geography

For the initial stocktake, the geographic scope covered initiatives occurring within the WCC, PCC and HCC territorial boundaries. This reflected a recognition that residents and businesses of Wellington City commonly travel to and from neighbouring council areas for work or to access businesses and services in those areas. Therefore, territorial boundaries are not necessarily relevant to how residents and businesses evaluate their practical ability to access RRS services. However, this geographic scope was narrowed for the gap analysis and intervention options phases, which focused only on initiatives located in and servicing Wellington City, in order to align with WCC's jurisdiction.

Secondhand shopping in Wellington: Image supplied by WCC

2.1.2 Reuse, repair, share activities, infrastructure and services

All activity in the reuse tier of the waste hierarchy was in scope, including repair, repurpose, remanufacture, refurbish, redistribute, rehome, secondhand market and takeback for reuse. Hire and share from the reduce tier was in scope. Recycling and any other activity from the lower tiers of the waste hierarchy were out of scope, as was activity in the reduce tier of the hierarchy that was not sharing (e.g. lightweighting of products to reduce raw material input).

The following infrastructure and services (whether commercial, non-profit or public/council-run) were in-scope:

- Facilities and initiatives like libraries, community centres, marae, sports facilities, resource recovery centres, repair cafes, community share shelves, and shared workshop, studio or office spaces that enable RRS.
- Businesses, institutions and organisations that offer hire/rental, repair, maintenance or restoration services, refurbishment for resale, takeback schemes for reuse, or sale of new or harvested spare parts of in-scope products. Or, who run secondhand stores and op-shops, laundry services and laundromats, and bookable collection of donated items for reuse.
- Workshops, training courses and skills sharing activities for repair and reuse.
- Transport share services, such as carshare or e-scooter rental.

Out-of-scope infrastructure and services included:

- those focused on an organisation's in-house RRS, rather than external or public-facing initiatives;
- general sustainability education and advice;
- retail of new items that could be used for repair (e.g. sale of tools);
- institutions, such as hospitals, corrections, clinics and military bases;
- heavy industry and manufacture;
- the provision of public parks, green spaces, gardens, roads, playgrounds;
- public transport, taxis, ride-hailing;
- shared data storage;
- sharing for accommodation (e.g. rentals or peer-to-peer accommodation sharing);
- venue hire (except for marae[2]); and
- any infrastructure or services dealing with out-of-scope products.

2.1.3 Products

The main focus of this project was the priority product group "plastics, packaging and consumables" from the ZWS (also referred to as "Household items and consumables"). While this description implies a focus on residential consumption, WCC specified the project should also look at similar types of product waste streams where they result from business activities, e.g. office furniture, corporate IT etc. A small handful of products (packaging and serviceware, motorised vehicles and bikes) that were in-scope for the stocktake were out-of-scope for the rest of the research. This was because Council already has projects or workstreams targeting these particular products and wished to avoid proposed interventions that would overlap with, or duplicate, these efforts.

Based on the above, the in-scope products from the Scope of Work were:

- **Household items,** e.g. whiteware, appliances, kitchenware, furnishings, furniture, tools and machinery, gardening equipment, art and craft, sports, camping and outdoor equipment, baby and kids gear, toys, games, puzzles, musical equipment, books.
- **Textiles,** e.g. clothing, curtains, wool, cotton, upholstery, fabric, carpet, shoes.
- **Electronics,** e.g. laptops, computers, phones, visual and audio equipment, printer cartridge(refill), TVs.
- **Building and DIY materials** for small-scale residential DIY enabling repair, refurbishment, repurposing of used materials rather than buying new (paint, timber, fittings, fixtures, doors, windows).
- **Equipment for businesses and households**, e.g. trailers, scaffolding, log chipper, mulcher, sports and gym gear.
- **Commercial/Corporate,** such as office furniture, equipment and resources, electronics, fibre, textiles (i.e. uniforms), retired assets (e.g. vehicles and IT and other equipment).
- **Motorised vehicles** (in-scope only for sharing initiatives and the stocktake)
- **Bikes** (in-scope only for the stocktake)
- **Events gear,** e.g. party equipment, events bins
- **Theatre gear,** e.g. props, flats, equipment, costumes
- **Nappies**
- **Spare parts for repair**
- **Packaging (primary**, **secondary and tertiary)** (in-scope only for the stocktake).

[2] While venue hire was out-of-scope, an exception was made for marae once it became apparent that the results of the stocktake showed significant underrepresentation of Maōri-led RRS initiatives. Excluding marae hireage, particularly when our gap analysis showed marae are an expression of Māori-led sharing and reuse activity, would have only increased the disparity shown in the results.

The out-of-scope products from the Scope of Work included:

- **WCC internal products** i.e. sharing equipment between teams;
- **Organics**, including food, seeds/growing/gardens, compost, green waste;
- **Construction & Demolition products**, except building materials for small scale residential DIY;
- **Sludge**;
- **Real estate** i.e. Air BnB, portable storage/housing;
- **Period products**
- **Landscaping and Earthworks** e.g. waste from landscaping activity, garden maintenance, and site works, both domestic and commercial, soil, cleanfill, rubble, contaminated soil,
- **Potentially hazardous waste**, sludge, liquid waste, tyres;
- **Industrial waste**, including chemicals, oil, solvents, scrap metal, organics, hazardous waste.

2.2 Methodology

The research methodology took a mixed-methods approach combining desktop reviews and interviews to gather primary data for the stocktake and gap analysis, alongside literature reviews of secondary sources, which supported the design of intervention options. The stocktake data was primarily analysed from a quantitative perspective, while the gap analysis relied on these findings alongside qualitative analysis of interviews. The methodology for each phase of the report is set out below.

2.2.1 Stocktake

The stocktake focused on identifying all in-scope initiatives occurring within the territorial boundaries of WCC, PCC and HCC using a desktop-based approach. We relied on keyword searches (**Appendix 2**), supplemented by: a review of existing resources that highlighted or identified relevant initiatives, including directories (**Appendix 3**); a list of initiatives shared by the WCC Waste Minimisation team; and the pre-existing knowledge of the research team (75% of whom live and work in Wellington City). As initiatives were identified, they were placed into a spreadsheet, which was then populated with publicly available information about each initiative (mostly sourced through the websites and social media of the organisations running the initiatives). The information gathered about each initiative included:

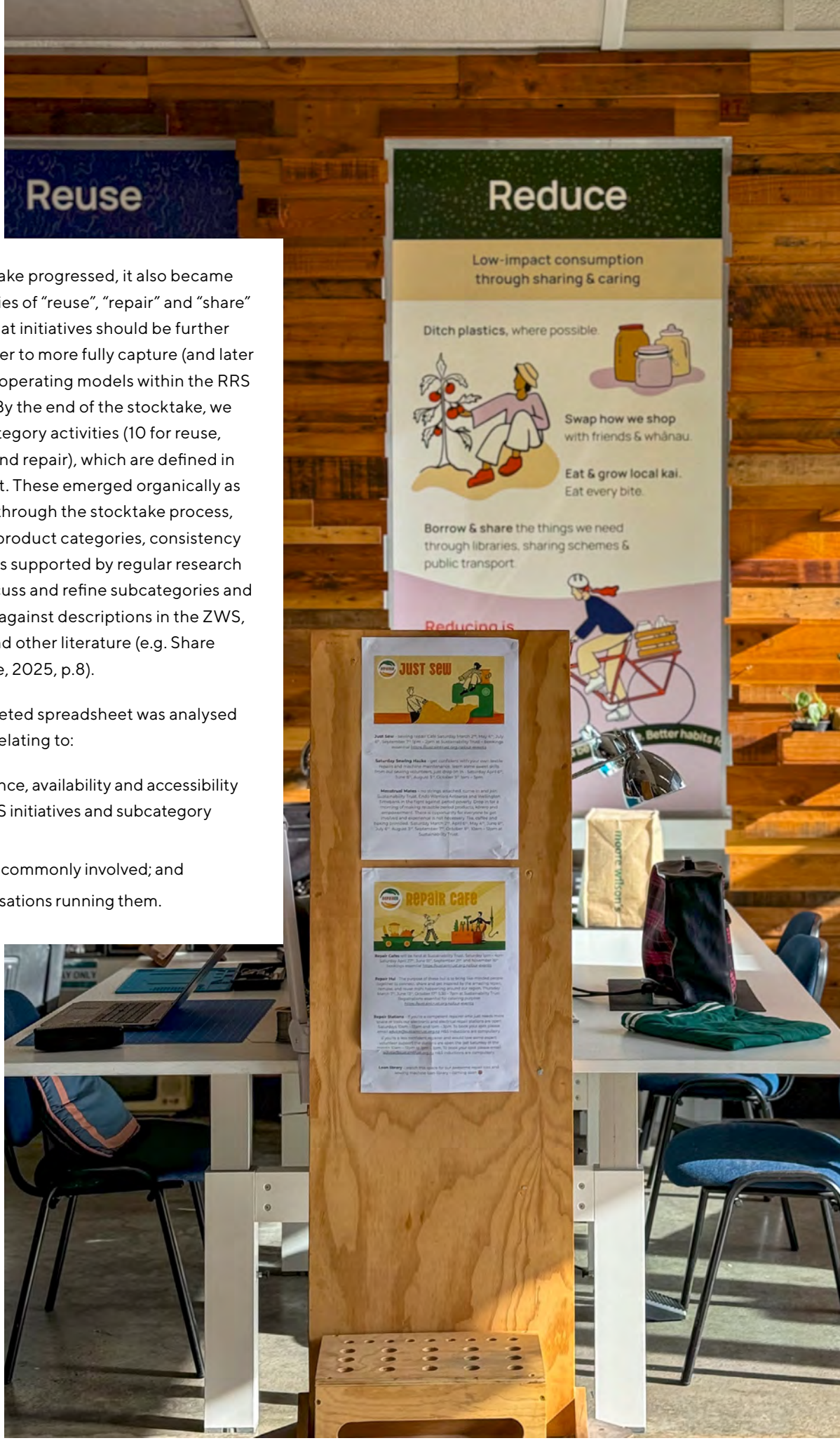
- the initiative's name;
- the nature of the lead organisation (e.g. Commercial, Non-profit or Public/Council facility)
- whether the initiative was Māori-led or run by a resource recovery operator (where this information was available);
- the geographical location of the initiative's activities/services (i.e. Wellington City, Porirua and/or Lower Hutt);
- whether the initiative focused on reuse, on repair or on share;
- the product categories involved;
- further details about the initiative, input as free-text notes; and
- a URL link to the source of the information.

Aspects of the stocktake methodology were iterative and dynamic. For example, there was a snowball effect where initiatives not previously identified through the keyword searches were later found when undertaking research to populate details for the entry of another initiative. Product categories were also refined during the stocktake process as the need for greater granularity in distinguishing products increased as more initiatives were added. Ideally, a standardised list of product categories used by RRS operators like reuse shops would have been used, but no such list exists. Instead, we drew on lists used or recommended in other research projects (e.g. Allen, Lane & Healy, 2024) and product category lists shared with the research team by some resource recovery operators (in Wellington and elsewhere). However, all these lists required some refining, mostly due to some product categories being either too broad or too specific for our purposes. Decisions about product categories were discussed in regular research team meetings. The product categories list we used is set out in **Appendix 4**.

As work on the stocktake progressed, it also became clear that the categories of "reuse", "repair" and "share" were too broad and that initiatives should be further subcategorised in order to more fully capture (and later compare) the diverse operating models within the RRS umbrella categories. By the end of the stocktake, we had derived 22 subcategory activities (10 for reuse, and 6 each for share and repair), which are defined in Section 3 of the report. These emerged organically as the team progressed through the stocktake process, although, as with the product categories, consistency and rationalisation was supported by regular research team meetings to discuss and refine subcategories and to sense-check them against descriptions in the ZWS, the Scope of Work, and other literature (e.g. Share Reuse Repair Initiative, 2025, p.8).

The data in the completed spreadsheet was analysed for high-level trends relating to:

- the overall prevalence, availability and accessibility of the different RRS initiatives and subcategory activities;
- the products most commonly involved; and
- the types of organisations running them.



Te Aro Zero Waste
Image supplied

2.2.2 Gap analysis

The gap analysis was primarily based on two activities:

1. An analysis of the stocktake findings.
2. Interviews with a representative sample of organisations operating RRS initiatives who were identified in the stocktake. Interviews focused on what was working well for the interviewees, alongside the barriers and opportunities to making RRS initiatives like theirs attractive and accessible to Wellingtonians.

The analysis of stocktake findings and development of interview questions were guided by a Gap Assessment Criteria that was prepared by Reuse Aotearoa and reviewed in collaboration with Council. The Gap Assessment Criteria was based on the relevant objectives, principles, outcomes and actions important to Council, as expressed in the ZWS and the WMMP. We also referred to the Economic Wellbeing Strategy (EWS) and Tūpiki Ora Māori Strategy (Tūpiki Ora). We extracted five broad themes from these documents, from which we determined it would be appropriate to analyse the extent to which RRS initiatives:

- are **attractive** to Wellingtonians,[3] and support a culture/mindset change towards responsible consumption and zero waste.[4]
- are **accessible, equitable and convenient** to Wellington businesses and residents,[5] including reflecting the proximity principle of being close to communities.[6]
- lead to **waste reduction, materials reuse,** a **circular economy,** and **waste-free products and services.**[7]
- reflect **collaboration, participation** and **partnership,** including actively involving the community in design and delivery,[8] working in partnership with mana whenua,[9] and collaboration between council, mana whenua, community groups and business.[10]
- are **resilient**[11] and supported by wider **networks, infrastructure, systems, services and conditions.**[12]

Beyond objectives, principles and outcomes, it is also clear from the ZWS and WMMP that a critical part of Council's proposed approach to increasing the accessibility and attractiveness of waste reduction to Wellingtonians is to build a network of services through resource recovery facilities and partnerships with community hubs and social enterprises. This is also highlighted as important for the transition to a

[3] Objective 2 of ZWS: *"Waste reduction is made attractive and accessible to Wellingtonians"*, p.52.

[4] Principle in ZWS: *"Culture change"*, p.40; Guiding Principle in WMMP: *"Te wero i ngā aronga hinengaro | Challenging mindsets"*, p.26.

[5] Objective 2 of ZWS: *"Waste reduction is made attractive and accessible to Wellingtonians"*, p.52; Objective 5 of WMMP: *"It is accessible and convenient to reduce waste, reuse materials and minimise disposal to landfill in line with the waste hierarchy"*, p.27; Action #8 of WCC Action Plan in the WMMP: *"Support the provision of consistent, equitable and accessible collection services, drop off points and community zero waste hubs."*, p.60. Furthermore, the notion of equity and a just transition are cross-cutting themes throughout the ZWS, EWS, Tūpiki Ora, and the WMMP.

[6] Principle in ZWS: *"Proximity principle"*, p.40.

[7] Objective 1 of ZWS: *"Products and services provided in Wellington are waste free"*, p.48; Principles in ZWS: *"Reduction of waste"* and *"Materials reuse"*, p.40; Objective 4 of the WMMP: *"Material circularity is increased through reuse, resource recovery, waste infrastructure and services"*, p.27; Guiding Principles in the WMMP: *"Te whakaiti para | Waste reduction"* and *"Ōhanga āmiomio | Circular economy"*, p.26; Outcome 2 of EWS: *"Transitioning to a zero carbon circular economy"*, p.27.

[8] Principle in ZWS: *"Community participation"*, p.40; WCC's commitment against Tūpiki Ora in the context of the ZWS (see p.37); Actions #3, 5, 6 & 18 in the WCC Action Plan in the WMMP, pp.59-62.

[9] Tūpiki Ora; Guiding Principle in the WMMP: *"Whakamanahia Te Tiriti o Waitangi | Honour Te Tiriti o Waitangi"*, p.25; Actions #3, 5, 6 & 18 in the WCC Action Plan in the WMMP, pp.59-62; Priority Action 2.1.2 in the Economic Wellbeing Strategy, p.68.

[10] Objective 2 in the WMMP: *"Objective 2: There is collective responsibility within the Wellington region for reducing our resource use and protecting our natural environment."*, pp.26-27; Guiding Principle in the WMMP: *"Te mahi tahi me te whai wāhitanga | Collaboration and participation"*, p.26; Priority Actions 2.1.1 and 2.1.2 in the Economic Wellbeing Strategy, p.68.

[11] Objective 7 in the WMMP: *"Objective 7: Resource recovery facilities and waste systems are resilient and able to cope with emergency events."*, p.27; Guiding Principle of the WMMP: *"He pūnaha manawaroa mō te para me te taumanu rawa | Resilient waste and resource recovery system"*, p.26; Principle of ZWS: *"Resilient waste system"*, p.40.

[12] Objective 3 of ZWS: *"Infrastructure and systems to increase resource circularity are established"*, p.58; Outcome 2 of ZWS: *"The community is equipped to reduce waste"*, p.42; Objective 3 of the WMMP: *"Objective 3: The conditions are in place to support everyone to use fewer resources and minimise waste"*, p.27.

Te Aro Zero Waste
Image supplied by WCC

circular economy in the EWS (pp.38,41). Collaboration between councils, community organisations, industry and businesses, as well as the existence of zero waste hubs, repair cafes and community resource recovery centres, are all highlighted in the WMMP as examples of successful initiatives and programmes already underway in the Wellington region (pp. 22-23).

Fostering and championing business capability is also an important theme. The WMMP sets a specific target that each council will "engage with and support 30% of the business community to minimise waste and implement waste minimisation activities by 2029" (p.28). Working with business to develop plans to transition to a circular economy is also a priority action in the EWS (p.68), alongside additional actions to celebrate the stories of local businesses that contribute to a circular economy, and implement inclusive local procurement approaches to facilitate sustainable circular economy job creation (ibid). In the ZWS, some of the ideas outlined to support businesses to minimise waste through RRS strategies include:

- working with businesses and organisations who are keen to establish or grow repair and reuse services, and with mana whenua to scale up interventions;
- incubating capacity and capability to deliver reuse and repair services and grow relevant skillsets;
- considering the role of sharing and collaborative business models, including libraries and rental services; and
- increasing the promotion of repurposing and secondhand sale options.

In light of the above, some further areas of analysis we incorporated into the Gap Assessment Criteria included:

- potential willing partners for council;
- employment, education/training and community participation opportunities and deficits in the areas of RRS;
- the level of awareness and promotion of existing services, and the current audience for these; and

- the potential to expand and scale the promotion and reach of RRS services and infrastructure.

We developed indicators to support assessment of gaps in each of the five thematic areas, which guided analysis of the stocktake results and development of interview questions. These indicators were largely drawn from the analysis of the strategic documents discussed above, which helped to contextualise the purpose and rationale of the objectives, principles, outcomes and actions. Some of the indicators we developed by thematic area included:

- assessing **accessibility** according to the availability, convenience and affordability of initiatives, and contribution to employment and equity;
- assessing **attractiveness** of RRS initiatives by exploring levels of awareness, promotion, and demand for existing services, evidence of marketing and communications programmes, and whether the services are culturally appropriate for diverse users;
- assessing **waste reduction** and other impacts based on whether and how interviewees were collecting data to verify any impacts that they claimed;
- assessing **resilience** based on whether infrastructural needs are met and the availability of capability, skillsets and training to develop RRS activities; and
- assessing **collaboration, participation and partnership** based on interviewees' willingness to work with others and/or Council, or evidence of this occurring already.

Interviewee selection process and approach

Interviewees were drawn from the stocktake spreadsheet. As there were several hundred organisations operating the initiatives identified, we applied a selective comparative approach to shortlist a representative sample. The goal was to enable a well-rounded analysis of a large dataset, and support in generating findings that would best support the final intervention options phase of the research, e.g.:

- identify characteristics of successful initiatives that perhaps others could be supported to replicate;
- highlight key barriers that might be overcome by tailored interventions;
- prioritise organisation types that could most benefit from council interventions; and
- highlight the nature of the interventions that may be most impactful.

In discussions with WCC it was agreed that a useful selective approach would be to use the stocktake data to identify, for each of the RRS areas, one or two examples of an organisation, initiative, or product category that is:

- **A success** (to learn what is successful and apply this learning to other areas).
- **Emerging** (that may need help, but may be important to increase activity up the hierarchy, and understand what the needs for growth are).
- **Underrepresented** (in order to understand what the barriers are and what types of interventions (if any) could support).

Other selection criteria included ensuring the interviewees represented a mixture of:

- organisation types (i.e. commercial, non-profit, public/council-run, Māori-led, resource recovery operators);
- products involved, including underserved product areas; and
- subcategory activities across RRS.

Applying the above criteria, potential interviewees were shortlisted and then this list was ranked by Council in order of priority. The Reuse Aotearoa team then approached interviewees in this order.

We contacted 21 potential interviewees and successfully interviewed 13 over the course of a month between 14 August 2025 and 18 September 2025. Twelve interviewees were organisations identified in the stocktake. One interviewee represented a national organisation with expertise in Māori zero waste community initiatives and policy development who provided high-level insights around the barriers and opportunities for community participation in RRS activities. The eight interviewees we were unable to interview either declined to participate (3) or did not respond to our invitations (5).

Interviews were approximately 60 minutes and were undertaken either online or in-person. The interview questions were based on the Gap Assessment Criteria and were reviewed by WCC's Waste Minimisation team and its research team prior to interview commencement; they are included in **Appendix 5**. All interviews were recorded and transcribed with the consent of the interviewees to be used solely by the Reuse Aotearoa research team. **Table 1** lists the interviewees, outlining their organisation type and the initiatives and subcategory activities operated by each. The details in Table 1 are high-level to avoid sharing identifying information because interviewees were provided with a research release form that advised their participation would be kept anonymous (unless prior consent was granted to include identifying information, such as in a case study).

Interview transcripts were thematically analysed by the team member who undertook the interview according to the key themes of the Gap Assessment Criteria. Relevant excerpts of the transcript were copied into a shared document according to the insights they generated in relation to the themes and indicators we were exploring. The shared document and interview transcripts were then reviewed by one team member to ensure

Table 1: Interviewees

Interviewee #	Organisation type	Initiative types and subcategory activities
1	Commercial	**Reuse** (Secondhand sale, Redistribution; Product takeback scheme for reuse) **Repair** (Commercial repair/maintenance service) **Share** (Commercial hire/rental)
2	Commercial	**Repair** (Commercial repair/maintenance service)
3	Non-profit	**Reuse** (Secondhand sale)
4	Non-profit	N/A - national organisation with expertise in zero waste.
5	Public/council facility	**Share** (Library or shared community item (free or membership), Shared facility, workshop or equipment (where equipment is fixed to space))
6	Non-profit	**Reuse** (Redistribution); **Share** (Library or shared community item (free or membership), Shared facility, workshop or equipment (where equipment is fixed to space), Skills exchange (e.g. Timebank or community courses))
7	Non-profit	**Reuse** (Secondhand sale, Third-party drop-off location for reuse initiative, Packaging - Refill by bulk dispenser location, Redistribution) **Repair** (Community repair or assisted/mentored repair (subsidised), Training/skills, Access to repair facilities/workshop space) **Share** (Library or shared community item (free or membership), Shared facility, workshop or equipment (where equipment is fixed to space))
8	Commercial	**Reuse** (Product reuse (not packaging)) **Share** (Commercial hire/rental)
9	Public/council facility	**Reuse** (secondhand sale, redistribution, Third-party drop-off location for reuse initiative) **Repair** (preparation for reuse, e.g. refurbish, recondition, restoration, Spare parts available)
10	Commercial	**Reuse** (Product takeback scheme for reuse), Redistribution)
11	Non-profit	**Reuse** (Secondhand sale, Redistribution, Deconstruction (or other construction practice that enables reuse)) **Repair** (Preparation for reuse (e.g. refurbish, recondition, restoration))
12	Commercial	**Share** (App-based sharing platform)
13	Commercial	**Reuse** (Secondhand sale; Product takeback scheme for reuse) **Repair** (Preparation for reuse (e.g. refurbish, recondition, restoration))

consistency and completeness. Following the thematic analysis, the findings were drafted into a narrative with sections for each of the five thematic areas. This draft narrative was then reviewed internally by the research team and summary tables were created for each section (and most subsections) of the gap analysis:

- **Accessibility** (availability, convenience, affordability, employment/work).
- **Attractiveness** (awareness of existing initiatives; factors that attract or do not attract organisations or potential users to adopt or access RRS initiatives).
- **Waste reduction and other impacts.**
- **Resilience** (financial and infrastructural).
- **Collaboration and partnership.**

The summary tables were presented using a traffic light system with the red column showing the main gaps. The tables also included a row underneath the traffic light that outlines the main opportunities and potential areas of focus highlighted by the gap analysis (including those directly suggested by interviewees). These summary tables were the key tool for connecting the findings of the gap analysis with the potential intervention options.

2.2.3 Potential intervention options

The final stage of the project involved proposing several intervention options to target the main gaps and key opportunities for strengthening and growing RRS in Wellington City. The process of identifying these interventions involved drawing on three key sources:

1. The gaps and opportunities that emerged from the stocktake and gap analysis.
2. A desktop review of actual interventions that have been implemented in Aotearoa NZ and overseas to support RRS initiatives, particularly by city or local government authorities.
3. A desktop review of interventions suggested in the grey literature for city or local governments to support RRS initiatives.

For the first source, the summary tables from the gap analysis were compiled into a numbered index of 56 gaps (coded G1 - G56) and a numbered index of 47 opportunities (coded O1 - O47). Several individual opportunities in the summary tables addressed multiple gaps across different themes/sections and were thus repeated in some form across the summary tables. Therefore, unlike the final Gaps Index, the opportunities in the final Opportunities Index were further summarised and then rearranged according to new themes:

- Supporting current and future clusters of RRS initiatives within individual sites, centres or facilities.
- Optimising existing RRS initiatives.
- Priority areas for new or increased activities.
- Incentivising use and adoption of RRS initiatives.
- Networking, knowledge-sharing, and collaboration.
- Advocacy.
- Space and infrastructure.
- Skills and training.
- Promotion, awareness and communication.
- Data capture and impact measurement.

The desktop review for the second two sources involved a light literature review to understand what has been implemented or proposed elsewhere. We drew on grey literature sources similar in nature to this study that had focused on what local and regional authorities and cities can do to increase RRS, or that focused on RRS in the Aotearoa NZ context.[13] From these sources, we sought to identify examples of interventions that have already been implemented by a local or regional authority ("actual interventions"), or interventions that have been suggested as potentially useful actions by other research projects ("suggested interventions").

All examples were copied into one of two tabs in a spreadsheet based on whether they were actual or suggested interventions. In both tabs, interventions were arranged according to the nature or focus of the intervention. Upon completion, interventions were then rearranged to reflect the themes of the Opportunities

[13] We note that there are many more sources focused on how local authorities and cities can increase circularity or zero waste. We generally only referred to these sources if substantial parts of the documents focused on RRS and/or in-depth discussion of practical actions.

Bike repair event: Image supplied by WCC

Index , and placed into a single table. This process helped to highlight the types of interventions that could best address the gaps and opportunities identified for Wellington. This table is included in the potential intervention options and interventions literature review spreadsheet appended as a supporting document to this report (**Appendix 6**).

Drawing on the interventions literature review and the Opportunities Index, a list of Wellington-specific intervention options for WCC was prepared. Each intervention option was coded according to the gaps and opportunities it related to, as set out in the Gaps and Opportunities indexes. Each intervention option also referenced the actual and suggested interventions from the literature review that inspired it (references were made to the relevant rows of the literature review spreadsheet, but for readability, a couple of examples were described in prose for each intervention option). Following feedback from Council, these intervention options were also grouped according to whether they were Cross-Cutting Activities, Areas of Work, or Projects. The full list of intervention options is set out in Section 5.2 of the report.

Intervention options have not been prioritised in this report. Rather, to support Council to assess and prioritise potential future intervention options, a list of suggested criteria was developed, in partnership with Council (and also drawing on the findings of the gap analysis and literature review), against which each option could be assessed:

- Alignment with the ZWS Principles
- Alignment with Outcome 2 of the EWS
- Alignment with Tūpiki Ora Strategy Outcomes
- Māori involvement
- # of gaps addressed
- # of opportunities addressed
- Works with existing initiatives & infrastructure
- Scalability, replicability and/or proximity to reach more residents, businesses, suburbs & neighbourhoods
- Enables data capture, monitoring & evaluation
- Ease of implementation.

3 STOCKTAKE OF RRS IN WELLINGTON CITY, PORIRUA AND LOWER HUTT

This section of the report sets out the high-level findings from the stocktake of existing RRS initiatives in within WCC, PCC and HCC territorial boundaries. These findings highlight the numeric prevalence of initiatives, the subcategory activities and products to which they relate, and the types of organisations running them. This section can be read alongside the complete stocktake spreadsheet, which is shared as a supporting document to this report (**Appendix 1**).

The stocktake research identified **608** discrete RRS initiatives across Wellington City, Porirua and Lower Hutt. Of these, **245** (40%) are reuse initiatives, **140** (23%) are repair initiatives, and **223** (37%) are share initiatives. The prevalence and accessibility of these initiatives was based on three slightly different measures: number of physical sites, service provision, and number of opportunities to access. These are defined as follows:

- **Physical sites:** An initiative was considered to have a physical site in a specific area if the organisation running the initiative has their head office located in the area; and/or the organisation has a branch that offers the initiative located in the area. Some initiatives operate from more than one site (e.g. a company that hires goods with multiple branches in the same area), which is why the number of physical sites exceeds the number of organisations/initiatives.
- **Servicing:** An initiative was considered to service an area if it has a physical site within the applicable territorial boundary, and/or if residents or businesses can access the service in-person within the relevant area. Examples of the latter include app-based companies located outside the relevant area whose apps enable product sharing within the area; providers outside the area that have a mobile service (e.g. onsite repairs) and their website specifically says they service the applicable area in this way; or providers outside the area that partner with local organisations to offer the service in the area (e.g. local retailers acting as a return point for reusable products or packaging from a producer located outside the area).
- **Opportunities to access:** The sum of the total number of physical sites an initiative has, plus one for service provision. Service provision only counts as one opportunity to access, even if the service is a takeback scheme with multiple partner organisation sites in the area.

Table 2 provides an overview of the high-level stocktake findings on prevalence and accessibility of RRS initiatives across the three territorial areas. Of the **608** initiatives identified, **456** (75%) offer their services to businesses and residents within the WCC territorial boundaries. Of these:

- **186** (41%) are reuse initiatives
- **157** (34%) are share initiatives
- **113** (25%) are repair initiatives

Further, across Wellington City, Porirua and Lower Hutt, there are **884** physical sites hosting RRS activities (see **Figure 2**). The majority (**545** or 62%) are in Wellington City, while a further 107 initiatives service this area, even if their sites are located in Porirua, Lower Hutt, or another jurisdiction. This amounts to **652** opportunities to access RRS services for businesses and residents within Wellington City.

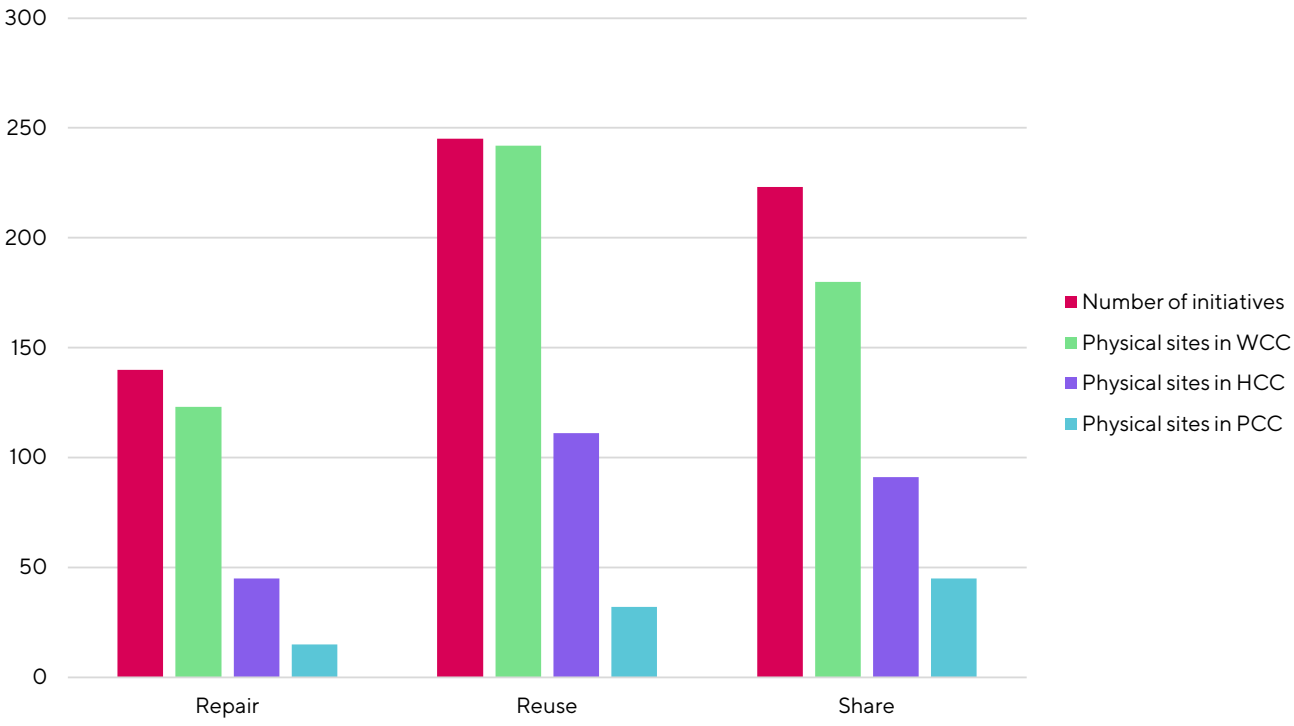
The types, prevalence and accessibility of subcategory activities within each group of initiatives are broken down further in the sections focused on reuse, repair or share below.

NB: In the interests of space, in the Tables and Figures of this section of the report we use the abbreviations "WCC", "HCC" and "PCC" as shorthand references to the geographical area sitting within those Councils' territorial boundaries, rather than the Councils themselves.

Table 2: High-level stocktake findings on prevalence of RRS initiatives

Reuse, repair, or share	Number of initiatives	Physical sites in WCC	Physical sites in HCC	Physical sites in PCC	# of initiatives servicing WCC	# of initiatives servicing HCC	# of initiatives servicing PCC	WCC Opportunities to Access	HCC Opportunities to Access	PCC Opportunities to Access
Repair	140	123	45	15	113	68	51	147	71	51
Reuse	245	242	111	32	186	130	88	288	162	90
Share	223	180	91	45	157	113	77	217	126	81
Grand Total	608	545	247	92	456	311	216	652	359	222

Figure 2: Number of initiatives and physical sites across the WCC, PCC and HCC territorial areas



3.1 Prevalence of reuse activities

Identified reuse initiatives were categorised according to one of 10 activity subcategories outlined in **Table 3**.

Across the WCC, HCC and PCC territorial areas, **304** reuse subcategory activities were identified,[14] of which **240** (**79%**) service Wellington City. **Table 4** shows that refill by bulk dispenser locations are the most prevalent reuse activity undertaken by the identified reuse initiatives across the three areas (**30%**), and secondhand sale is the second most prevalent activity (**25%**).

However, prevalence varies when the data is considered by location. Of the reuse initiatives servicing Wellington City, secondhand sale is the most prevalent activity (**60** initiatives), closely followed by refill by bulk dispenser (**59** initiatives). In Lower Hutt, an equal proportion of reuse initiatives offer secondhand sale and refill by bulk dispenser as the most prevalent activities (**21%**). In

Table 3: Reuse activity subcategories

Activity	Definition
Deconstruction (or other construction practice that enables reuse)	Practices in the building sector that involve deconstructing (rather than demolishing) buildings to enable the resale or redistribution of those materials, or relationships between builders that enable unwanted (but reusable) materials to be passed on to someone who can use them.
Packaging - Refill by bulk dispenser location	Locations where a product is sold loose (i.e. unpackaged), creating the opportunity for a customer to bring and fill their own bags or containers, thus avoiding the use of a single-use package.
Packaging - Returnable (third-party operator)	Organisations that own and manage the logistics for a standardised fleet of reusable packages that is shared amongst users (may or may not include washing the packaging between uses).
Packaging - Returnable (user)	Producers based in Wellington City, Porirua or Lower Hutt that use returnable reusable packaging for their own products in a vertically-integrated system. Initiatives based outside these areas are only included if their product is sold in the relevant area and the empty packaging can be returned for reuse within that area.
Product reuse (not packaging)	An operating model based on managing the repeated use of a product other than packaging on behalf of users, e.g. laundry services for clothing, linen and other textiles. Management includes undertaking the logistics of collecting and redistributing the product to and from users and a consistent process to prepare items for reuse between uses. The operator may own, rent and service the products for users, or service products on behalf of the owner. Product reuse systems are distinct from the share subcategory "library or shared community item", where users usually pick up and return the items themselves, and the owning organisation undertakes an inventory audit/inspection upon return, rather than a standardised process to prepare items for reuse.
Redistribution	Where secondhand goods are passed on to the next owner for free.
Repurpose	Using a product again for a different purpose to that for which it was originally designed, without significant reprocessing.
Third-party drop-off location for reuse initiative	A location other than the producer or retailer of the product in question, where the public can drop off items that are part of a product reuse system, returnable packaging system, product takeback for reuse scheme, or other third-party reuse initiative (e.g. repurposing). The drop-off location returns the relevant items to the producers or third-party.
Secondhand sale	Activities that involve the resale of previously owned goods.
Product takeback scheme for reuse	An organised scheme or programme where producers take back their own 'end-of-life' or unwanted products from consumers (or also the same category of product from other producers) in order to take responsibility for diverting that product from landfill or for disposing of it safely. Schemes are included if their avenues for diversion include reuse options for returned products that are not, in fact, end-of-life.

[14] NB this is greater than the total number of reuse initiatives because several of these initiatives involve more than one subcategory of reuse activity.

Table 4: Prevalence of reuse subcategory activities

REUSE	Number of initiatives	WCC sites	HCC sites	PCC sites	WCC Access opportunities	HCC Access opportunities	PCC Access opportunities	Initiatives servicing WCC	Initiatives servicing HCC	Initiatives servicing PCC
Deconstruction (or other construction practice that enables reuse)	8	1	3	2	7	7	8	7	7	8
Product takeback scheme for reuse	9	10	4	2	12	10	8	9	9	8
Packaging - Refill by bulk dispenser location	92	122	59	13	125	60	16	59	35	15
Packaging - Returnable (third-party operator)	10	5	3	0	10	11	9	10	10	9
Packaging - Returnable (user)	43	27	8	4	41	23	16	37	23	16
Product reuse (not packaging)	8	11	3	1	15	7	6	8	7	6
Redistribution	35	23	12	9	37	28	26	31	25	26
Repurpose	20	13	6	1	17	12	10	17	11	10
Third-party drop-off location for reuse initiative	3	2	1	0	2	1	0	2	1	0
Secondhand sale	76	72	26	11	83	38	26	60	35	25

Porirua, the most prevalent reuse activity undertaken by initiatives that service the area is redistribution (**21%**), closely followed by secondhand sale (**20%**).

The data also shows a slight variance in terms of access opportunities to different reuse activities. Refill by bulk dispenser locations are the most accessible reuse activity for WCC residents and businesses (**36%**), followed by secondhand sale (**24%**). In Lower Hutt, there is a similar pattern, with refill by bulk dispenser being the most accessible (**30%**), followed by secondhand sale (**19%**). In contrast, in Porirua, the most accessible reuse activities are, by equal proportion, redistribution and secondhand sale (both **21%**). The higher number of refill by bulk dispenser access points in the areas within the WCC and HCC territorial boundaries is attributable to the fact that these two councils have a map of council-provided water fountains on their websites, which account for 47 and 26 sites in Wellington City and Lower Hutt, respectively.

3.2 Prevalence of repair activities

Identified repair initiatives were categorised according to one of 6 activity subcategories outlined in **Table 5**.

Across the WCC, HCC and PCC territorial areas, **179** repair subcategory activities were identified,[15] of which **144** (**80%**) service Wellington City. **Table 6** shows that commercial repair/maintenance services are the most prevalent repair activity undertaken by all the repair initiatives identified (**59%**), and within all the territorial areas (at **59%** for WCC, **65%** for HCC, and **64%** for PCC). The availability of spare parts is the second most prevalent activity across the identified initiatives (**13%**),

Table 5: Repair activity subcategories

Activity	Definition
Access to repair facilities/ workshop space	An initiative that provides a workshop space that is available for the public to come and fix their own items. The product category that this activity relates to is the product that the workshop facility exists for fixing (e.g. bikes). This can be contrasted with the share subcategory "shared facility, workshop or equipment" where the product category the sharing activity relates to is the equipment in the space (e.g. tools).
Commercial repair/ maintenance service	A business that charges for the repair or maintenance of particular products.
Community repair or assisted/mentored repair (subsidised)	An initiative where particular products are repaired for free/by donation. Often involves the owner of the broken item being supported by a skilled person to participate in the repair.
Preparation for reuse (e.g. refurbish, recondition, restoration)	The undertaking of repair/refurbishing activity on an item that the repairer intends to then resell or as part of a product takeback for reuse/warranty scheme. This can be contrasted with "commercial repair/ maintenance service" where the repair activity is occurring on behalf of someone else who owns the item and the owner is paying for the service.
Spare parts available	An initiative where spare parts are made available (for sale or free) separate from the service of repair. This can be contrasted with "commercial repair/maintenance service" where the repairer may hold spare parts to enable their work, but not for separate resale.
Training/skills	An initiative that involves a programme of training or passing on repair skills that is not incidental to the repair activity itself. For example, holding training sessions or workshops.

Table 6: Prevalence of repair subcategory activities

REPAIR	Number of initiatives	WCC sites	HCC sites	PCC sites	WCC Access oppor-tunities	HCC Access oppor-tunities	PCC Access oppor-tunities	Initiatives servicing WCC	Initiatives servicing HCC	Initiatives servicing PCC
Access to repair facilities/workshop space	9	35	2	0	35	2	0	8	1	0
Commercial repair/ maintenance service	105	72	34	10	90	54	37	85	53	37
Community repair or assisted/mentored repair (subsidised)	12	10	2	1	10	3	2	10	2	2
Preparation for reuse (e.g. refurbish, recondition, restoration)	21	13	8	3	18	14	12	16	13	12
Spare parts available	24	19	10	1	21	12	5	19	11	5
Training/skills	8	6	2	1	6	3	2	6	2	2

[15] NB this is greater than the total number of repair initiatives because several of these initiatives involve more than one subcategory of repair activity.

and the second most prevalent activity in Wellington City (**13%**). However, in both Lower Hutt and Porirua, preparation for reuse is the second most prevalent repair activity at **16%** and **21%**, respectively.

In terms of accessibility, commercial repair/maintenance services are still the most accessible repair activity in Wellington City (**50%**), but the second most accessible activity for WCC residents is having access to repair facilities or workshop space (**19%**) rather than spare parts (**12%**). This is because of the council's network of ~26 Fix-it Stands for bikes.

3.3 Prevalence of share activities

Identified share initiatives were categorised according to one of 10 activity subcategories outlined in **Table 7**.

Across the WCC, HCC and PCC territorial areas, **279** share subcategory activities are offered across the share initiatives identified,[16] of which **193** (**69%**) service Wellington City. Compared to the reuse and repair categories, the prevalence of the more common sharing activities is more evenly distributed. **Table 8** shows that shared facilities, workshops or equipment (where equipment is fixed to the space) are the most common activity offered across share initiatives (**35%**), followed by commercial hire/rental activities (**30%**), and then library or shared community items (**21%**).

The most common share activity offered by the share initiatives that service Wellington City is commercial hire/rental (**37%**), followed by shared facilities with fixed equipment (**31%**). Libraries and shared community items are the third-most common activity offered (**19%**). However, in terms of accessibility, shared facilities with fixed equipment are the most accessible share activity (**43%**), commercial hire/rental is the second-most accessible (**31%**), followed by libraries and shared community items (**16%**).

Table 7: Share activity subcategories

Activity	Definition
App-based sharing platform	An online platform or app that enables individuals or businesses to access, share or exchange physical products in their local place with strangers or with people in their community.
Commercial hire/rental	A business that charges others to borrow products the business owns.
Library or shared community item (free or membership)	An organisation or group of people that collectively own a category of items that members or others in the group can borrow, usually for free or a minimal fee. Membership may be free or via paid subscription.
Shared facility, workshop or equipment (where equipment is fixed to space)	A space with fixed equipment that people visit in order to access/use the equipment (this can be contrasted with the library or commercial hire subcategories where loaners can take items away and return them later). Access/use may be free or paid, may require a membership/subscription, or a per-use/entry charge.
Skills exchange (e.g. Timebank or community courses)	Initiatives that facilitate the sharing of skills or expertise without the exchange of money. These are only included in the report where the skills/expertise shared can include those related to reuse and repair.
Venue hire (marae)	Similar to the shared facility above, but the space can be hired for exclusive use. Venue hire was out-of-scope for this project, but an exception was made to retain this subcategory exclusively for marae, as an expression of Māori-led sharing and reuse activity.

[16] NB this is greater than the total number of share initiatives because several of these initiatives involve more than one subcategory of share activity.

Spinfresh Karori Laundromat and Laundry Service: Image supplied

Table 8: Prevalence of share activity subcategories

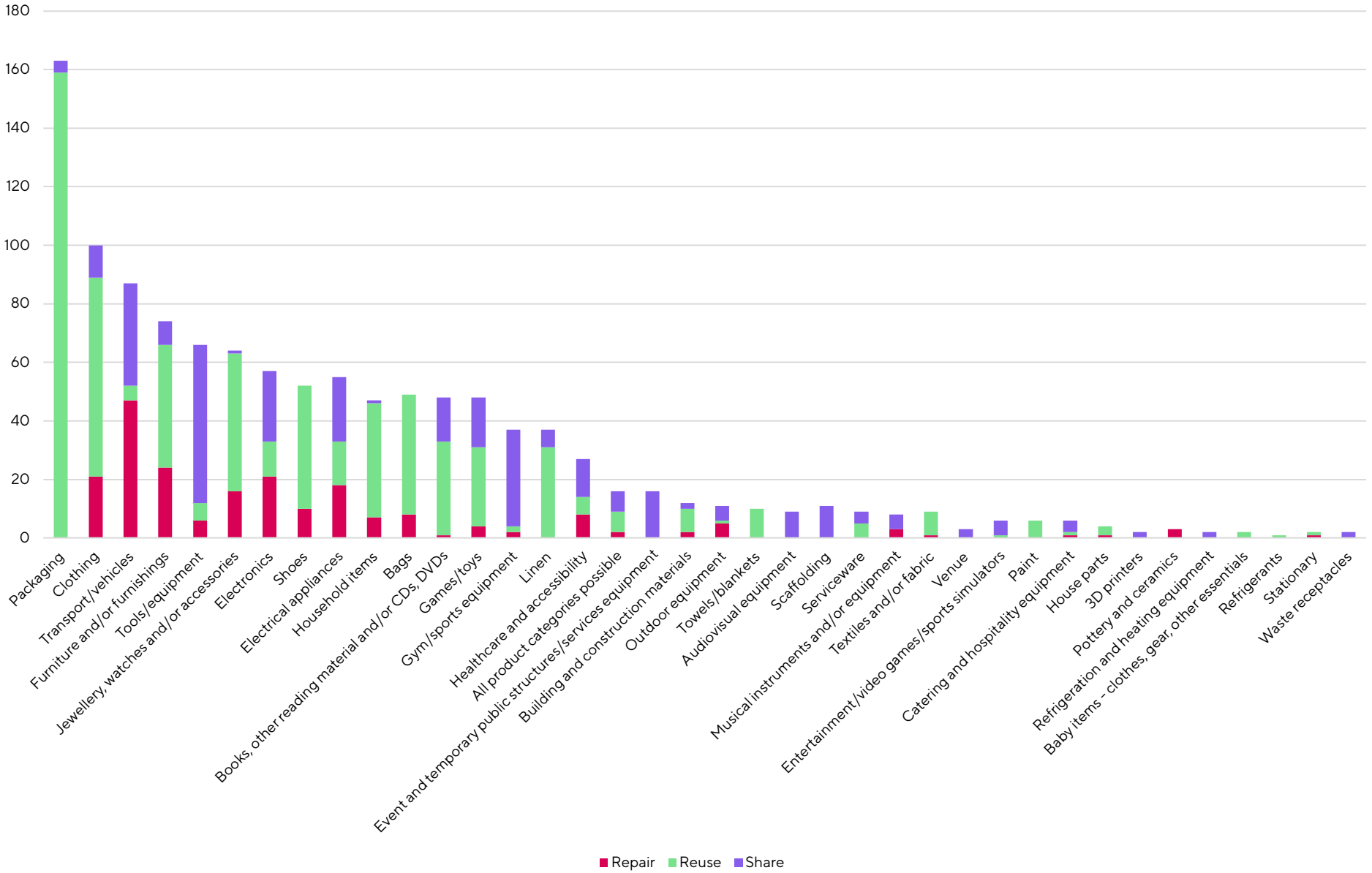
SHARE	Number of initiatives	WCC sites	HCC sites	PCC sites	WCC Access oppor-tunities	HCC Access oppor-tunities	PCC Access oppor-tunities	Initiatives servicing WCC	Initiatives servicing HCC	Initiatives servicing PCC
App-based sharing platform	11	1	1	0	11	9	10	11	9	10
Commercial hire/rental	83	51	29	15	79	54	43	71	52	43
Library or shared community item (free or membership)	58	36	19	8	40	25	12	36	24	11
Shared facility, workshop or equipment (where equipment is fixed to space)	98	111	49	22	111	50	22	60	39	19
Skills exchange (e.g. Timebank or community courses)	19	11	5	2	12	7	3	12	6	3
Venue hire (marae)	10	3	6	1	3	6	1	3	6	1

3.4 Product categories

All activities identified were input into the stocktake spreadsheet with the product categories involved. We worked with 37 product categories and 92 subcategories (although not all product categories had subcategories), which are set out in **Appendix 4**. **Figure 3** shows the opportunities to access RRS initiatives in Wellington City according to the product categories involved. Aside from packaging, the top three most well-served product categories are Clothing, Transport/vehicles and Furniture and/or Furnishings.

Clothing is the product with the most accessible reuse options (with the most relevant subcategory activity being secondhand sale), whereas **Transport/vehicles** are the most commonly repaired product due to the large number of commercial and community bike repair initiatives (note that this is the case even though repair of motorised vehicles was out-of-scope for this project and therefore not considered in the stocktake). **Tools/Equipment** is the product category with the most accessible sharing options, due to a combination of commercial hire businesses for construction, landscaping and heavy equipment supplies, and makerspaces and community workshops. **Furniture and/or Furnishings** arrives in the top three due to a range of options for both reuse (e.g. secondhand sale and redistribution) and repair (e.g. commercial repair and maintenance services, such as upholstery and antique restoration).

Figure 3: Opportunities to access RRS initiatives in Wellington City according to product categories



3.5 Who is running the initiatives?

For each initiative, we identified whether it was run by an organisation that was a non-profit, commercial, or public/council entity. In addition, we noted if the initiative was operated by an organisation that could be classed as a resource recovery centre/operator.[17] As resource recovery centres/operators can be commercial, non-profit or public/council-run, this classifier was relevant for each organisation type. We also noted if initiatives were led by an organisation that could be identified as Māori-led, with such organisations able to be either commercial or non-profit. The breakdown of organisation types is set out in **Table 9**. The figures are presented according to initiatives; as some organisations run multiple initiatives, the numbers presented are greater than the overall number of organisations involved.

The stocktake indicates that almost three-quarters (**73%**) of the identified RRS initiatives across the WCC, HCC and PCC territorial areas are run by commercial organisations. This rises to 78% for initiatives in Wellington City. Only 5% of RRS initiatives are run by public-council facilities in Wellington City, and 18% by non-profits.

Very few of the initiatives (**3.5%**) are run by organisations that can be classed as resource recovery centres or operators. Where resource recovery centres or operators are running such initiatives, reuse is the most commonly undertaken activity, whereas share initiatives are the least commonly undertaken activity by resource recovery centres and operators.

Only **3%** of the initiatives identified in the stocktake are Māori-led, half of which are sharing initiatives related to marae venue hire. Just **2%** of the reuse initiatives in Wellington City are Māori-led. We found no examples of Māori-led repair initiatives. We note the potential limitations of our desktop-research approach for identifying Māori-led initiatives, in that there may be more initiatives operating at the marae-level that are for whānau/hapū and/or not publicly promoted online.

Table 9: Initiatives according to organisation-type operating them

Org Type	Reuse, repair, or share	# of initiatives	# that service WCC	# initiatives run by resource recovery centres/ operators	# initiatives in WCC run by resource recovery centres/ operators	Māori led initiatives	Māori led initiatives that service WCC
Commercial	Repair	121	97	2	2	0	0
	Reuse	194	147	4	4	2	2
	Share	129	106	1	1	4	2
Total		**444**	**350**	**7**	**7**	**6**	**4**
Non-profit	Repair	17	14	3	3	0	0
	Reuse	47	36	6	3	3	2
	Share	55	33	1	1	9	2
Total		**119**	**83**	**10**	**7**	**12**	**4**
Public/ council facility	Repair	2	2	1	1	0	0
	Reuse	4	3	2	1	0	0
	Share	39	18	0	0	0	0
Total		**45**	**23**	**3**	**2**	**0**	**0**
Grand Total		**608**	**456**	**20**	**16**	**18**	**8**

[17] Organisations were classified as resource recovery operators if their primary activity involved receiving or salvaging items that would otherwise be discarded, in order to direct them towards reuse or recycling. We did not list organisations that operate a product takeback for reuse scheme as resource recovery operators.

4 GAP ANALYSIS: BARRIERS AND OPPORTUNITIES

The gap analysis findings from our observation of stocktake results and interview analysis are presented in this section according to the five thematic areas of:

- **Accessibility** (availability, convenience, affordability, employment/work).
- **Attractiveness** (awareness of existing initiatives; factors that attract or do not attract organisations or potential users to adopt or access RRS initiatives).
- **Waste reduction and other impacts.**
- **Resilience** (financial and infrastructural).
- **Collaboration and partnership.**

Each sub-section concludes with a table that summarises the findings of the sub-section. The summary tables use a traffic light system that highlights the main gaps in the red column, and all feature a blue row that outlines the key opportunities or potential areas of focus that surfaced during the research. The accessibility and attractiveness themes had a broader range of discrete indicators and so within these themes, each subsection has its own summary table. The other thematic areas have one summary table each that brings together the findings across the subsections.

4.1 Are RRS initiatives accessible, equitable and convenient for Wellingtonians?

4.1.1 Availability

The stocktake shows that residents do have options to access many RRS services across Wellington City for a wide range of products. However, the number and type of services could still be expanded. For example, initiatives are unevenly spread across product categories, with service provision gaps for certain products.

Wellington City has 210,800 residents and 77,004 households (Stats NZ, 2025; Infometrics, 2025a). The population is spread across 57 suburbs, which are divided between six wards for the purposes of electoral representation (Wellington City Council, n.d., "Ward maps and boundaries"). For the city, our stocktake identified:

- 2 resource recovery/reuse centres, equating to 1 per 105,400 residents.
- 45 accessible repair events or initiatives, including 6 regularly scheduled repair cafes and 39 shared workshop spaces or access to repair facilities (NB 28 of these are WCC bike fix-it stands), equating to 1 repair event/initiative per 4,684 residents or 1 per 1,711 households.
- 12 resource libraries (e.g. tool or toy libraries), equating to 1 per 17,567 residents or 1 per 6,417 households.
- 8 peer-to-peer sharing platforms (7 online platforms and 1 Timebank that includes resource sharing), equating to 1 per 26,350 residents, or 1 per 9,626 households.

To our knowledge, no agreed numeric benchmarks exist for determining the sufficiency of RRS initiatives, e.g. on a citywide, per capita or suburb basis (Kapoor et al, 2023). In the Wellington context, more information may be needed about existing services to determine whether they are sufficiently available to meet the population's needs. For example, we do not know the market penetration of RRS activities for comparatively well-served products, relative to the retail of equivalent new products, nor do we know the number of active users across all the sharing initiatives.[18]

Despite this, we suggest our stocktake findings indicate a base level of RRS activity in Wellington City, but with plenty of room to increase the number and range of initiatives in order to improve availability relative to the city's population.

[18] These information gaps could begin to be addressed through improved data capture, which is discussed in relation to measuring waste reduction and other impacts later in the gap analysis.

In deciding where to focus efforts, we note both our stocktake and other research show some products are comparatively well provided for by RRS in Wellington. For example, bike repairs are reasonably available via both community and commercial initiatives, while loaning books is relatively easy due to public libraries. In fact, Wellington has a relatively high ratio of 1 public library per 17,000 people, compared to 1 per 31,000 in Auckland, and 1 per 19,000 in Christchurch (Coy-Macken et al, 2024, p.5). On the other hand, 'libraries of things' or other resource hire and access options are underrepresented, as are commercial and community repair options for a broader range of consumer products beyond bikes. Our stocktake also indicates a lack of resource recovery centres and facilities to provide RRS initiatives, resulting in the resource recovery sector being underrepresented in the provision of RRS activities compared to other commercial and non-profit organisations. Māori-led initiatives are also underrepresented.

To supplement our stocktake findings, we explored interviewees' perception of the availability of the particular RRS services they provide. These are informed perspectives because interviewees understand the market and sectors within which they operate. When asked whether the services they provided are otherwise easily or widely available in Wellington, interviewees' responses differed depending on the type of organisation, initiative, and/or product involved.

Interviewees offering commercial or community repair services and those offering community or council sharing initiatives (e.g. libraries, makerspaces, shared facilities or timebanking) generally felt that availability was poor. Sometimes the initiatives they ran were the only example of that service in Wellington. As one interviewee noted, "I can't think of anyone else that does what we do." Several interviewees thought that continuing to build initiatives that gave people the ability to repair items was a key opportunity. Some interviewees thought some community-based repair initiatives, particularly repair cafes, were reasonably available.

"There are so many repair cafes happening around Wellington City now, it's so exciting, and all on different times and days. So, really, the community or communities can pick and choose." (Non-profit interviewee)

However, one resource recovery operator felt that community initiatives were not sufficient to make repair an easily available activity for most people. In their view, this would require more large commercial entities to offer repair services too:

> ...the big people need to come into the game and participate in it because if they start talking that language it makes life easier for us as well, and the community.

This was reinforced by a commercial repairer who said there was a lack of manufacturers that provided access to spare parts or created service agent opportunities for third-party repairers. This interviewee thought that the issue needed to be addressed through legislation.

The underprovision of accessible resource hire and shared workshops was raised by several interviewees. A public/council interviewee that operates a shared workshop space felt that there was a need for more shared workshop spaces, as well as tool libraries, so that individuals could repair their own items:

> ... at the end of the day it comes down to access to the spaces because not a lot of people have a workshop at home... if they had access to somewhere where they could go to do this, more people would be involved.

Another interviewee operating a reuse shop felt this was a gap in their own service provision. They expressed a desire to set up a repair station in their space with sewing machines and other tools that the public and other secondhand sellers could use to fix or prepare items for reuse, noting that "I can confidently say there's a need for it". This interviewee also said that "a shared library of resources, not just of books, but also tools and other things" was "lacking in the city" and that it would be worth exploring opportunities for the public library to help fill this gap.

Our stocktake findings mostly reinforced the perception that repair services or community or council sharing initiatives are not widely available, except for certain products noted above (e.g. bike repair and book loans). These perceptions were also shared in a survey of New Zealanders' attitudes and experiences of repair, where most felt that "there is minimal repair service in the marketplace and repair service is too expensive" (Ozanne, Prayag & Sistig, 2025, p.2). In terms of Council sharing initiatives, while book libraries are reasonably available, Wellington City has low levels of provision for shared community recreation centres and swimming pools; and, when surveyed, Wellingtonians communicated a desire for all community facilities to expand their range of offerings (Coy-Macken et al, 2024, p.66).

We interviewed two commercial entities offering product takeback schemes for reuse. Both believed most businesses do not provide such schemes, so they were unlikely to be widely available, which our stocktake results supported.

"We need more brands thinking in the same way of moving away from this take-make-waste linear economy and moving into the circular economy and understanding the value-add for their customers and also for themselves as a business." (Commercial interviewee)

The barriers cited by these interviewees included the "absence of supportive policy frameworks" to encourage or require product stewardship. A non-profit interviewee that redirects corporate items also felt that "product stewardship programs", especially those that emphasise reuse, was a key gap. In the absence of these policies, interviewees felt that most businesses are unwilling to absorb the additional costs or to work together to create

MugCycle reusable mug return point at Te Aro Zero Waste
Image supplied

standardised logistics systems for any takeback scheme (even if just for recycling). In this context, opting for reuse pathways for recovered products was even more unlikely given the extra logistical complexity and cost associated with handling products for reuse compared to recycling, and limited end markets. Interviewees also noted the absence of shared reverse logistics infrastructure, such as resource recovery locations with return points for reuse, which makes it difficult for businesses to offer this service in a practical way to customers.

Commercial interviewees with a more targeted offering in product reuse or commercial hire/rental felt Wellington was well-serviced in the areas they specialised in, as evidenced by the existence of competitors. This success may relate to these interviewees focusing on a niche that meets a need for a specific cohort of commercial clients, usually creating efficiencies for those clients compared with buying items new or servicing the items themselves. Our interviewees in these areas represented branches of international businesses that had operated for decades. The demand for their services, combined with well-established infrastructure and logistics systems, facilitated their viable business models. These success factors suggest possible constraints in applying the model to a wider scope of products and/or to new entrants without subsidies for both operational and capital costs.

Indeed, our stocktake findings showed few product reuse initiatives overall, and that commercial hire/rental systems tend to: constellate around a narrow range of products that are expensive to buy new (tools/equipment); target visitors to the city rather than residents (motor vehicles); or focus on providing temporary equipment for clients undergoing repair, upgrades or large procurement processes (e.g. leasing office furniture while new offices are constructed or refurbished, or renting domestic appliances while a broken appliance is repaired). We also heard from one commercial provider of a product reuse system that their service worked well for large businesses, but smaller businesses that used smaller volumes of product were less likely to be able to access these types of services for an affordable price.

The concentration of commercial hire and product reuse systems in a small number of businesses that have built their fleet over time is a risk for the overall availability of these services in Wellington. For example, during the course of this research project, Hiremaster, a significant Wellington-based event equipment hire company established in 1948, went into liquidation. A Radio New Zealand article on the liquidation outlined how if the business could not find a buyer, this would likely reduce the availability of rental services for the products they hired (Gibbens, 2025). The article noted that compared to Auckland, there are a "limited amount of suppliers in Wellington that could provide things like decor, furniture, props, and large amounts of glassware and plates" and that have "the resources to handle some larger scale projects". The article quoted two event and wedding planners who used Hiremaster for 50% or more of their events, who stated that "losing Hiremaster in Wellington would really [have] an impact on the industry in terms of what's available" and that "I don't think there's much competition for a lot of what they do." We note that at the time of finalising this report, a buyer for Hiremaster was found. However, we have included this story as an illustration of the precarity of ongoing service provision where availability is concentrated in few providers.

Interviewees offering secondhand sale or redistribution initiatives were more positive about the availability of options across Wellington. This was the case whether the initiatives were led by commercial, non-profit or public/council entities. Initiatives are available to the community both in-person and online, with good representation of brick and mortar stores, sales platforms on organisations' websites, or via Trademe. Collectively, these initiatives recirculate items from a range of product categories. Our interviews suggest that the availability of secondhand sale and redistribution initiatives stems from the fact that these activities are generally financially viable and/or generate cost savings.

Secondhand sale and redistribution activities also seem to enable some repair activities (preparation for reuse and spare parts available). This is because repairing an item for resale is often more financially viable than a standalone repair service. Furthermore, the receipt

Bike repair at Bikespace. Image supplied by WCC

of high volumes of donated items, combined with preparation for reuse activities, facilitates the harvesting and retail of spare parts where donated items are not fixable. We heard from three organisations undertaking these ancillary repair activities (two resource recovery operators and one non-profit organisation) that electronics are the most viable items to prepare for reuse or to harvest spare parts from due to their resale value and the small size of both the products and parts, making storage easier.

Nevertheless, the availability of secondhand sale or redistribution activities was still product- and customer-specific, with limitations on the ability of these activities to divert waste from landfill or offer a commercial substitute to new products. For example, while Wellington residents are reasonably well-served for secondhand consumer goods, this does not always apply to commercial customers that need large quantities of consistent product. One interviewee used the example of construction materials, noting that, while they diverted these through their shop, it was "not enough to make it accessible for builders who want to buy secondhand goods, secondhand timber." Similarly, a commercial operator reselling preowned office furniture noted limits to the size of businesses they could service because getting enough consistent furniture to fit out an office above a particular size was difficult:

> ... we often can't match a fit out for 60 of the same desks, or 60 of the same chairs. So that's why anything under sort of 30 or 40 is a more realistic target for us.

Furthermore, even for products like clothing with many options available, interviewees noted that the number of initiatives and outlets did not match the quantity of product they received. As one noted: "the amount of stuff we have, we could open another store, probably".

Across all initiative types, we also noted that many interviewees made comments that indicated they serviced populations across geographic areas much wider than intended when they first established. We heard from one interviewee with a brick and mortar reuse shop that people would travel from outside the city (as far as Upper Hutt) to access particular items from

their store. A commercial repairer told us they picked up items to repair from across the Wellington region and also received couriered items from other regions, including Bay of Plenty, Hawkes Bay, the Central North Island, and even the South Island. One interviewee that runs various sharing initiatives out of a particular suburb in Wellington noted that the membership and users of their services spanned the whole city. The wide distance users or products travel to access the initiatives suggests underprovision of services to meet demand.

The impact of community and council facilities on availability

Our research also indicates that the availability of RRS services is connected to the availability of community and council facilities that establish and host these initiatives. Although commercial organisations provide 78% of the RRS activities in Wellington City, they tend to focus on one particular subcategory activity (e.g. commercial repair/maintenance or commercial hire/rental) and/or a narrow range of products. In contrast, our stocktake showed a clustering of multiple (e.g. 4+) RRS initiatives at the sites of a small number of community or public/council organisations (some of which are resource recovery facilities). Aside from making more than one initiative available, these clusters usually featured innovative initiatives not offered by many other organisations. For example, creating community workshop spaces, or applying RRS activities to underserved products or a wider range of product types than might occur in commercial settings, such as tool and toy libraries, or repair opportunities for clothing, electronics, toys and appliances. Recognising this, at least one interviewee thought that a key opportunity lay in developing more "multifunctional hubs" offering a range of RRS services.

We were interested to understand why RRS initiatives clustered in community and council facilities, especially for those organisations that did not have an explicit waste reduction focus. Interviewee responses pointed to several interrelated factors. First, community and council organisations are responsive to issues that matter to their communities and seek to provide a platform for those things to happen. As one interviewee explained "it's basically that we look at the need", asking the community what they want in a space, and creating programmes to meet that need. One non-profit interviewee explained that "many people are deeply, deeply concerned about climate change and about the failings of capitalism" and RRS activities often feel like an "actionable" way to respond to these issues, so it made sense that community and council organisations support their constituents to establish these initiatives.

Second, these initiatives often are not commercially viable. So, unless community organisations host them, they may not happen elsewhere. One interviewee explained:

> ... where else would they possibly do them? ... if you want cheap rent, if you want access to resources... Not to say that we just do any old thing, but if something's going to have community benefit... if there's the capacity to do it... we'll put resource behind it.

Interviewees explained that the resourcing community and council organisations can (and do) put behind RRS initiatives include providing space and other benefits in-kind, such as advisory support, help with communications, brokering relationships and networks within the wider community, or project administration and management.

Third, RRS activities often have intrinsic social and community-building benefits, alongside environmental benefits. So, they can be used to deliver social impact, which is often the primary goal of community and council organisations. As one interviewee told us:

> Community organisations are all about social impact... Providing quirky, fun, but also necessary services from one place really allows all walks of life to come and join in and enjoy. And... the cost of living is diabolical right now. So, having community groups offering these kinds of services just feels, I think, to the community, safer and better... We have people coming just to have tea and coffee, and to be surrounded by people, not necessarily to get things repaired at repair cafes. We are a hub for social interaction, and people need this... that's why I think you find these things in community organisations...

Fourth, the clustering phenomenon partially reflects the collaborative and interdependent nature of projects that run within and between community organisations, causing initiatives to grow organically over time. Different projects open opportunities to work with others in the community doing similar things, or to create new initiatives within the organisation that are mutually reinforcing. One example that arose during the stocktake research is the community-led resource recovery centre, Te Aro Zero Waste, which operates at the same site as Sustainability Trust, which runs the Wellington Curtain Bank. Te Aro Zero Waste can receive drop-offs of usable curtains for the curtain bank, while selling the curtain bank's fabric offcuts through their reuse shop or using them in their Just Sew textile repair workshops. This internal reinforcement of RRS initiatives in single sites suggests that investing in community organisations that can host clusters of RRS services can have multiplier effects.

Finally, the clustering of different initiatives is also more convenient for communities as it develops one-stop-shops for a range of services. A 2024 study into existing community facilities in Wellington found that amongst the public, both users and non-users of community facilities indicated a preference for more community facility hubs, as seen in Johnsonville/Waitohi, where a range of different community services are clustered together (Coy-Macken et al, 2024, p.71).

Community and council facilities are currently playing a key role in the availability of a diverse range of RRS services in Wellington. Working with these facilities is a key opportunity to increase the availability of RRS services across the city. However, we heard from non-profit interviewees that capacity to deliver even existing services is resource constrained. Therefore, any extension to current services would need to be matched with appropriate resourcing. Furthermore, the primary purpose of these organisations is not always resource recovery and waste minimisation. Therefore, any proposals to introduce or increase RRS in these facilities should be co-created with the organisations themselves to ensure the initiatives align with the ethos and focus of the organisations and meet the needs of the communities they exist for.

Secondhand curtain bank fabric for resale at Te Aro Zero Waste: Image supplied

Availability of Māori-led RRS initiatives

Our stocktake showed that across Wellington City, Porirua and Lower Hutt, only **18** (3%) of the RRS initiatives are Māori-led, and only **8** (1.7%) of the initiatives servicing Wellington City are Māori-led. This is an underrepresentation of Māori in running RRS initiatives, given Māori make up approximately 9% of Wellington City's resident population (Infometrics, 2025b), and 7.7% of businesses in the city are Māori-led (Infometrics, 2021).

Half of the Māori-led RRS initiatives across the three cities were attached to marae activities, such as venue hire (marae with kitchen and catering equipment and/or meeting/events equipment, such as IT and audiovisual), while one marae also runs a secondhand clothing sale initiative to help fund their Pātaka Kai, which is a priority for the marae community. The central role of marae in many Māori-led RRS services reflects the comments of one interviewee:

> I would say that Māori are the leaders in reuse, in that they're used to caring for, feeding, and sleeping hundreds of people. The whole marae system is a reuse system.

However, within Wellington City itself, marae spaces are not sufficiently available to meet community demand and a 2024 survey of Wellingtonians found a community desire for "a significant marae facility to serve Pōneke" (Coy-Macken et al, 2024, p.92).

A third of the Māori-led initiatives our stocktake identified were Māori-owned businesses. One was a company that produces oral hygiene products and uses reusable packaging (both returnable and refill by bulk dispenser). Two businesses were commercial hire/rental companies, including one company that hires out and services office IT, printing, and robotic cleaning equipment for a lease fee, and another company that hires out hospitality and audiovisual equipment for events.

We asked interviewees to reflect on why Māori-led RRS initiatives are not more widely available. Most of our interviewees were not Māori-led and struggled to answer this question. However, several did note that they actively collaborate with Māori-led or iwi organisations to deliver certain RRS initiatives, indicating that Māori involvement may be greater than our stocktake has shown, but occurring in a way that is not as easily discerned through the type of desktop study we undertook.

Only one of our interviewees represented a Māori-led organisation.[19] This interviewee explained that the impacts of colonisation have resulted in Māori being deprived of resources over a prolonged period, so that many Māori communities are still in survival mode today. This interviewee reflected that this has led to some marae communities "not having the luxury to focus on broader activities such as repair and reuse". A commercial business offering product reuse and rental services in New Zealand for decades also noted that often these initiatives demand "very large capital... to start", which is prohibitive for many businesses and organisations. For Māori, in particular, who have faced theft of, and forced alienation from, their land and resources, having the capital wealth to initiate RRS activities, or to choose to prioritise available wealth on these activities rather than other kaupapa, is likely to be a particular barrier.

[19] We extended the invitation to two additional Māori organisations/marae who declined due to a combination of the key person not being available, not seeing direct benefits to participation in the project and/or being focused on other more urgent priorities. However, the organisation we interviewed has broad experience working directly with marae and Māori organisations across the country for 20+ years.

Table 10: Summary table of findings on the availability of RRS initiatives in Wellington City

Good availability	Some availability	Underprovision
• Book sharing (public/ council) • Bike repairs & spare parts (non-profit & commercial) • Secondhand sale of clothing (non-profit & commercial) • Commercial vehicle hire	• Repair cafes and makerspaces for consumer goods, clothing and domestic projects (non-profit) • Toy libraries (non-profit) • Secondhand sale furniture & corporate/office items (non-profit & commercial) • Tailoring & upholstery (commercial) • Electronics preparation for reuse (non-profit, public/council & commercial) • Commercial tool/equipment hire • Gyms/sports facilities	• Commercial repair services for consumer goods • Libraries of things/ resource hire • Secondhand sale construction materials • Māori-led initiatives • Product reuse or product takeback for reuse • Furniture repair (non-profit & commercial) • Clusters of RRS in one space/facility (non-profit, council or commercial) • Spare parts available (non-profit, council or commercial) • Resource recovery centres or operators to run RRS initiatives.

Key opportunities/potential areas of focus

- Support community and council facilities already offering clusters of RRS initiatives to continue to do so, and support other community and council facilities to adopt RRS initiatives too.
- Fund current community, council and commercial providers to offer guidance and peer support to new initiatives, including provision of advisory services and/or development of resources, e.g. case studies about current RRS initiatives, and 'how to' guides for setting up RRS initiatives.
- Work with organisations offering options that are more available (e.g. libraries, secondhand sale) to expand their initiatives to a broader product range, particularly products that are underprovided for.
- Invest in RRS initiatives led by mana whenua, hapori Māori or Māori-led businesses.
- Expand resource recovery network and ensure RRS services are an established and growing part of all resource recovery sites and activities.
- Invest in/partner to support the establishment of new community and council centres in return for guaranteed provision of some RRS initiatives.
- Invest in/partner to support RRS incubation hubs for new commercial and community initiatives.
- Increase grants and other support for more repair cafes, shared workshop facilities, libraries of things, and spare parts warehousing to occur across the city and in suburbs with limited provision.
- Introduce initiatives to increase commercial repair services for consumer goods.
- Advocate for repair legislation that will increase the availability of spare parts and diagnostic information, and for more regulated product stewardship schemes and the inclusion of reuse, repair and reduction outcomes in these schemes.
- Facilitate business forums where existing providers can share information with others about underprovided commercial systems, such as product reuse and product takeback for reuse and repair schemes.

4.1.2 Convenience

Overall, RRS in Wellington is not as convenient as it could be to attract more residents and businesses to choose to access or operate these services rather than simply buying or retailing new items. However, the organisations we interviewed do recognise this barrier and are taking what steps they can to try and make their services more practically accessible for residents and businesses. Initiatives and investment to support these efforts could be helpful.

We assessed the convenience of RRS initiatives in Wellington based on various factors. First, convenience partly relates to availability because the more options there are, the higher the chance initiatives will be proximate to different communities across the city. In contrast, initiatives that are less available may be more inconvenient or require some residents to go out of their way to access them. Interviews highlighted other factors that also affect the convenience of existing RRS services, including the circumstances of the organisations offering these initiatives. For example, their site/location or opening hours, and the surrounding public transport or parking options. As one non-profit operating successful reuse shops told us "the right site is everything, location is key". Additionally, for both service users and service operators intrinsic aspects of RRS as business models play a role in either creating or reducing convenience compared to individual purchase and ownership of new products.

Several interviewees said their organisation is outside the central city and poorly connected to transport options. One interviewee said: "We need more hubs, especially in the CBD where we can interact more with the general public." A commercial repairer noted that margins are often too small for repair businesses to cover the more expensive rent for central city commercial premises. Another interviewee described how the inconvenience of their out-of-town location was compounded by their site not being on a public transport route and bike and walking access also not being permitted. This interviewee thought working with regional council to create bus routes that better served their area could be an opportunity to increase access. Two interviewees said the lack of parking space for both themselves and customers was inconvenient. While other research has rated Wellington City's libraries and community centres highly for transport accessibility (in terms of public transport, carparking and other forms of transport) (Coy-Macken et al, 2024, p.51), individuals who do not use libraries cite their inconvenient location as a key reason (Coy-Macken et al, 2024, p.67).

We also found that, for non-profits and public/council facilities, under-staffing or reliance on volunteers to deliver RRS initiatives often leads to reduced opening hours or infrequency of events, like repair cafes, which is less convenient for potential users. Other studies have made similar findings. For example, community centre participants in a study of Wellington's community facilities reported insufficient budgets to enable appropriate staffing levels and longer opening hours (Coy-Macken et al, 2024, p.54). Meanwhile, both users and non-users of the city's libraries reported the opening hours as "not convenient" and expressed a desire for opening hours to be extended (Coy-Macken et al, 2024, pp.5, 66-67). A 2024 study into repair cafe participants in Aotearoa noted that some visitors felt repair cafes should be run more frequently (Ozanne, 2024, p.16).

> "As infrequent, community events staffed by volunteers, repair cafés are limited by time, tools, equipment, materials and the skills of volunteers." (Ozanne, 2024, p.18)

Interviews also demonstrated that for consumers, inconvenience is sometimes intrinsic to the RRS business models. Compared to visiting a store and purchasing a new item off the shelf, repairing a broken item takes time, with a delay between the customer dropping off the item and picking it up. For example, one business that offers a product takeback for reuse scheme that includes repair said that repairs can take up to four weeks. Sharing items rather than owning them requires people to leave their home to access equipment in shared facilities, or, in the case of borrowing items, requires a trip to pick up the item, and a trip to return it. Planning to purchase a specific item secondhand rather than new is also more

Secondhand books for sale at The Tip Shop. Image supplied by WCC

time consuming and unpredictable given there is no guarantee an item that matches the customer's criteria will be available when visiting secondhand retailers.

"We live in this take-make-dispose world, and everything is just so easy to go out and get [new] if you need it." (Non-profit interviewee)

Operating RRS business models is also comparatively inconvenient vis-a-vis business models based on selling and/or using new and/or single-use items. The two commercial entities we spoke to who offer product takeback schemes for reuse, highlighted logistical challenges associated with any takeback scheme given the lack of standardised and shared systems for this. However, coordinating reuse avenues for recovered products was an additional layer of "logistical complexity" that led one interviewee to describe the reuse aspect of their takeback scheme as "a pain in the butt". Both noted that recovering a product for reuse rather than recycling requires more time and care to maintain the value of the product, which is challenging when operating within commercial timeframes:

> ... consider a situation where you're working in a public space... You might have a six-month window to carry out the work, you need to get in there quickly. But if the other contractors fill the space with all kinds of debris—chip dust, demolition waste, and general rubbish—it becomes extremely difficult to clean it out and prepare the [product] for someone else to use. A lot of time and effort go into ensuring that materials are properly removed... [and] protected during the process.

Similarly, another commercial operator that rents, sells and relocates office furniture with a subsidiary programme to reuse furniture acquired during office

relocations noted that identifying buyers or donees is not always possible in the timeframes in which furniture is expected to be removed from office spaces. A non-profit operator offering similar services noted that these types of friction in the system mean that "some corporates still opt for landfill because it's easier".

On the other hand, we heard from some interviewees that some intrinsic aspects of RRS can increase customer convenience. For example, a commercial interviewee operating a product reuse system for commercial linen noted that the alternative for businesses to wash on-site or use single-use disposable items is less efficient and more time-consuming, and/or more expensive, so outsourcing the service makes sense. Interviewees operating libraries and shared facilities where individuals can access equipment noted that borrowing items for a short time, or accessing them in a shared space, could be more convenient than owning these items and having to dedicate permanent space at home for them, especially if the items in question are large or only used occasionally. For example, an interviewee operating an app for sharing noted the inconvenience of everyone owning their own set of tools when they might only use each tool occasionally and then the rest of the time it is unutilised, taking up space. Another interviewee that operated a shared workshop space explained how their decisions about what equipment to put in the space were based on similar types of convenience-related suggestions proposed by the community:

> ... what most people wanted was actually an overlocker because they only do one thing and they're like 1,500 bucks and people don't want to buy an overlocker for doing this one thing every 6 months. So, naturally we got decent sewing machines and an overlocker...

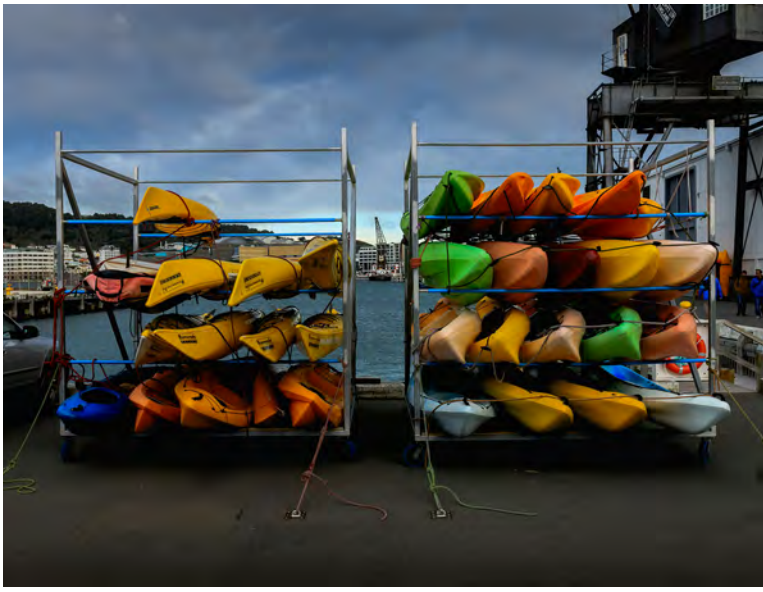
We also found that organisations are cognisant of convenience barriers to access their services, and often work to implement compensating strategies. One interviewee that resells donated items has sought to mitigate their inconvenient location by adopting a "you can't come to us, we will come to you" philosophy, partnering with a central city organisation where the public can drop-off items that the interviewee picks up by truck once a week. Other interviewees that accept donations of bulkier secondhand goods for redistribution or resale (e.g. furniture) may offer pick-up and delivery services. Similarly, a commercial repairer told us that a staff member picks-up broken items from customer's homes and returns them when fixed, and that they also open on Saturday to enable working people to visit on the weekend. During our stocktake research we also noted that in-home servicing of large, heavy items like whiteware was also common. A resource recovery operator thought they could further increase convenience of their waste diversion efforts through an inorganics collection:

> ... if there is opportunity, if there is money... I would love some money to build infrastructure like Auckland does where we are providing inorganics collection. I think it's a most practical way of doing things.

One interviewee with a reuse shop recognised that the items people seek might not always be available when they visit a secondhand store, which could lead them to go and buy the items new instead. To accommodate this, the interviewee's organisation created a dedicated enquiries mailbox where members of the public (particularly those with creative or community projects) could write in advance to request that staff look out for, and put aside, specific items as they are donated to the store. The interviewee gave examples of such requests, including fleets of crockery and cutlery for groups wanting to set up reusable serviceware kits for their community. Similarly, a non-profit interviewee that redirects preowned corporate items said they had built "expression-of-interest systems" for recipients to enable a form of preordering, and they also sought to make the experience more convenient for corporates by tailoring solutions with them. Another interviewee offering a product takeback for reuse system acknowledged that their digital-based returns system was a barrier for their biggest cohort of customers (aged 60+) who "don't want to engage with forms on their phones". The business established an in-store service to support those customers who preferred to do the process in-person.

We also noted that some of the interviewees' initiatives were specifically established or designed in order to increase the convenience of RRS. For example, one

interviewee that manages a shared kit of reusable serviceware items that can be hired for less than the purchase price of an equivalent number of disposable items, was motivated to establish the kit in order to make it easier for community groups and households to avoid using disposable serviceware (by removing the inconvenience of groups otherwise having to purchase and store their own large fleet of reusable crockery and cutlery). Another interviewee operating a peer-to-peer sharing platform described their app-based approach as "intended to eliminate barriers to sharing", particularly removing the awkwardness that otherwise can be associated with asking strangers or neighbours if they can borrow items (because everyone on the app can be assumed to want to participate in the peer-to-peer sharing the app facilitates).



Kayaks for rent on Wellington Waterfront: Photo by James Coleman on Unsplash

Table 11:
Summary table of findings on factors that enable or reduce convenience of RRS initiatives in Wellington City

Convenience factors	Measures to mitigate inconvenience factors	Inconvenience factors
• Good availability • Public-facing site in prominent location • Extensive opening hours • Good access via public, private and active transport routes and infrastructure • Initiative reduces the inconvenience or cost associated with owning and servicing a product	• Service to pick-up or drop-off items at customer/client homes or workspace • Serviced drop-off points • Ability for consumers to express interest in items in advance	• Limited availability • Restricted opening hours or infrequent events • No public-facing site • Site not located centrally or unconnected to public, private and active transport routes and infrastructure • Lack of reverse logistics/returns infrastructure for reuse initiatives • Delay or uncertainty in service's fulfilment of user needs

Key opportunities/potential areas of focus

- Support existing initiatives, especially in community and council facilities, to increase their convenience factors and overcome inconvenience factors.
- Ensure new initiatives are visible, in convenient locations or have more than one public access point, are on good public, private and active transport routes, and have extensive opening hours.
- Increase RRS events, mobile facilities or hub-and-spoke services in different suburbs around the city. For example, regular repair cafes in a different suburb each time, mobile libraries of things, inorganic collections, or increased drop-off points for product takeback systems, broken items for repair or donated reusable items.
- Work with regional council to develop new bus routes to key RRS hubs and infrastructure.
- Broker internal and external council relationships to connect RRS initiatives with available long-term lease at central city premises, or short-term commercial space available for RRS events.
- Invest in/partner to deliver a RRS shopping centre complex or precinct in the CBD with reserved retail spaces for existing initiatives.

4.1.3 Affordability

The affordability of RRS services is critical to their accessibility for Wellington residents and businesses. We asked interviewees whether they charged users to access their services, and/or ran or participated in programmes or other financial support arrangements to increase access for individuals or groups who might otherwise be shut out by price. Overall, we found that RRS services in Wellington are comparatively more affordable than buying new items, especially secondhand sale and redistribution reuse models, and Council-provided sharing systems. We also found that all types of organisations offer or participate in programmes to increase the accessibility of the RRS initiatives that they charge for. However, in some cases, especially repair, but sometimes sharing models too, affordability depends on community and council organisations offering subsidised programmes and initiatives.

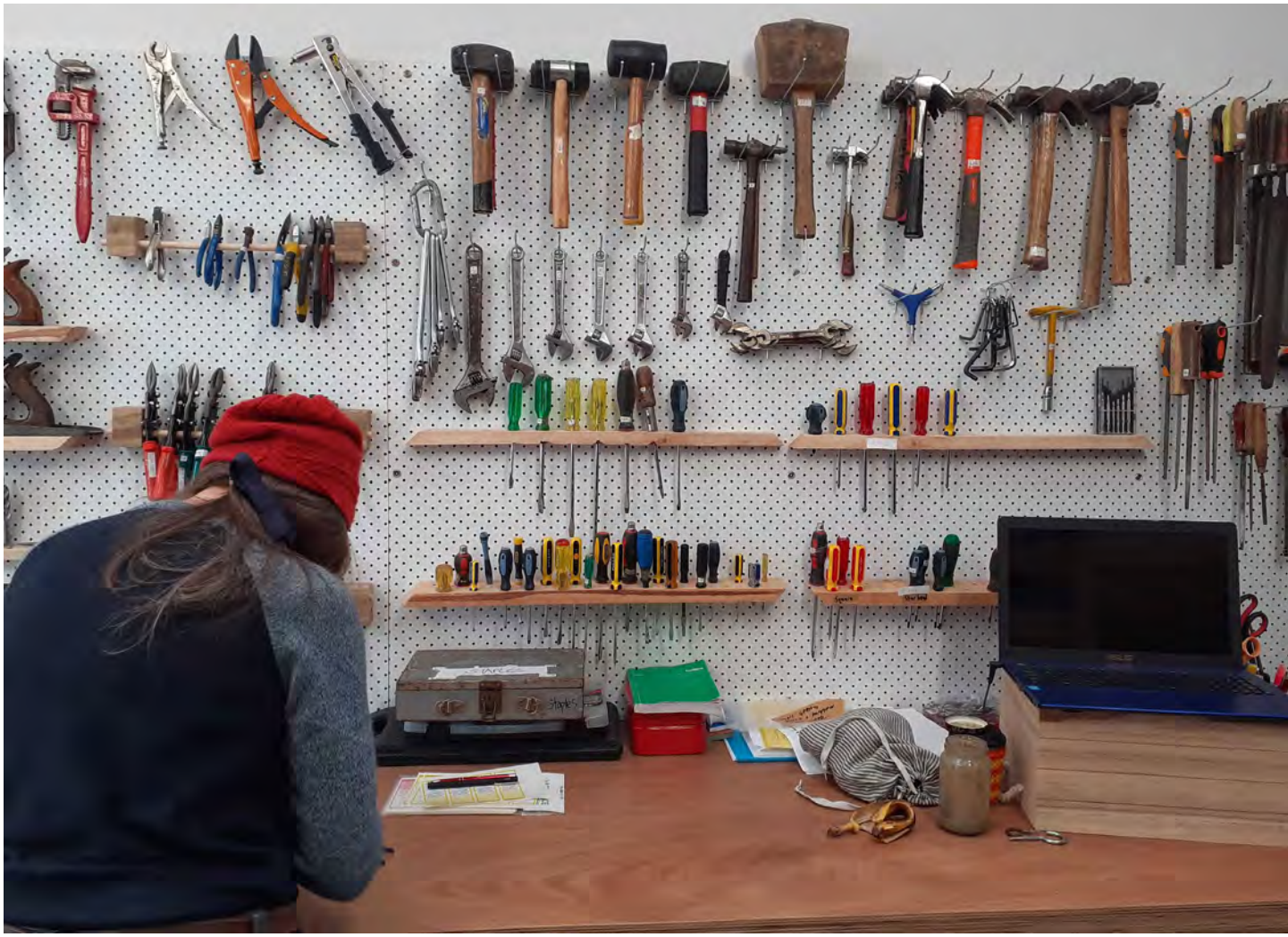
As a starting point, RRS initiatives often involve providing access to an item at a cheaper price than buying that item new. However, this does not always make these initiatives affordable for everyone. Affordability depends on the product types involved, the motivations for establishing the initiative, and/or the price to access (including whether that price accumulates over time, as is the case with some sharing models like rental). For example, Wellington has many secondhand clothes shops that sell high quality designer clothes on consignment; the clothes are cheaper than buying the same item new, but even secondhand they cost more than other brands of new clothing. Similarly, one of our interviewees that sells secondhand furniture noted that "we are selling high-quality furniture. So that will be cost-prohibitive for quite a few people."

Similarly, repairing often is not cheaper than replacement due to the range of low quality products on the market that outcompete the labour required to fix items (Ozanne, 2024, p.11). A survey of New Zealanders' attitudes towards and experiences of repair found "strong agreement that professional repair service is too expensive (76.7%)" (Ozanne, Prayag, Sistig, 2025, p.15). Several interviewees told us that repairing is often only economic for keeping more expensive, premium products in circulation, so that is often what they focus on. For example, a commercial repairer told us that one of the key products they repair costs about $4,000 to buy new. One interviewee felt that a key opportunity to increase repair activity would be to set up subsidised repair hubs.

> "... if we had hubs that were set up so people could easily drop off items and pay a reasonable price and get these fixed then more people would engage." (Commercial interviewee)

In terms of sharing activities, borrowing or paying to access an item once will generally cost much less than buying the item outright, but this can become more expensive if rental is a long-term option for a frequently used item. For example, Wellington has a range of appliance rental companies and laundromats, but over time an individual will spend more on these services than simply buying an appliance.

As with new items, it is important that RRS initiatives are available for products and services across all segments of the market and at different price points. In this sense, affordability and availability can reinforce each other because the RRS subcategory activities and the products to which they apply are often more affordable when various options exist that target different market segments. For example, for secondhand sale, our stocktake and interviews showed comparatively many options for various different products, with affordable options operating alongside more premium options, such as op shops that sell secondhand clothing and furniture, alongside antique dealers or traders in designer clothes on consignment. Similarly, bike repair initiatives also cut across market segments, being widely available via many commercial repairers, as well as community and council provided free or koha-based initiatives. In relation to books, Wellington has many secondhand bookstores that are cheaper than buying books new, as well as access to free book loans via council-run libraries.



Newtown Tool Library. Image supplied

We found that reuse and share models are often adopted by organisations as a way of widening access to goods to members of the community that might otherwise struggle to afford them (with waste reducing outcomes being incidental). Such initiatives are usually free or come with minimal charges that undercut the price of buying items new. For example, toy libraries offer families more affordable access to a wide variety of toys compared to purchasing and owning the same number of toys outright. Libraries and other non-profits provide free access to shared computers in order to support digital inclusion. The nonprofit Orange Sky uses a mobile laundromat model to make clothes washing and drying accessible to people without permanent accommodation or who otherwise cannot afford to clean their clothes through commercial laundromats or laundry services.

We spoke to one non-profit organisation that umbrellas several sharing initiatives who conveyed a strong focus on providing access to items or services that would otherwise be expensive or difficult to own for people on low-incomes and/or in insecure housing situations. For one service they noted that "[w]e've never considered charging" because "a huge barrier to anyone using that service would be money", while other initiatives have very low membership fees. Similarly, one public/council interviewee that offers sharing-based initiatives explained that "we were going for accessible; that's kind of what drives everything we do, is giving people access." While secondhand sale inherently involves a charge, several of the organisations we spoke to were motivated to resell preowned items to make them available to the community at a more affordable price than new items.

Where waste reduction is a key goal, community- and council-operated initiatives are often more likely to be affordable than commercial alternatives given they are usually subsidised to increase access and participation in order to reduce more waste. In these cases, community and council organisations may be filling a gap in both the accessibility and availability of RRS. A notable example are community and council-run repair initiatives, as explained by a non-profit interviewee that runs repair

cafes (where individuals can bring faulty items to be fixed for free or a koha):

> ... you come to a repair cafe to get an electrician to replace a plug; it costs you whatever you want to donate. You go to a shop to get an electrician to replace the plug, it costs you $80 an hour or whatever it is. So, we get all walks of life that come in; there are people that could probably afford the $80 an hour, and people who could not... obviously people who can't afford or don't want to afford or can't even get their things fixed, a repair cafe becomes that option.

This sentiment is validated by a 2024 study of participants in 14 repair cafes across Aotearoa that found that "[p]articipating in the repair cafe provides visitors with affordable access to repair" (Ozanne, 2024, p.5).

Similarly, resource recovery operators that resell donated items (who have the twin goals of diverting usable products from landfill and providing affordable goods to their community) are strongly motivated to set affordable prices:

> ... our priority is, divert as much as you can, and because we are diverting, we are keeping the prices low because we want the items to go out of the shop, and therefore our focus is divert, divert, divert, reuse, reuse, reuse.

In order to ensure they are pricing for affordability, one resource recovery operator said that they actively research prices for secondhand products across various online platforms and local op shops, and prices for equivalent items brand new, in order to choose a price that is affordable. If they are selling items via Trademe, they "keep the reserve at a dollar and let the community decide what they want to pay." A non-profit interviewee that charges corporates to redirect their unwanted items through reuse channels aimed to keep their fees comparable to landfill costs.

Some RRS activities are inherently affordable, such as redistribution, which involves transferring a preowned item for free, rather than at a price. The stocktake identified many redistribution activities in Wellington that keep usable goods circulating without charge. Often these transfers are peer-to-peer, occurring between organisations or between individuals (e.g. via online platforms such as Freecycle or Facebook Marketplace), rather than between organisations and individuals. We heard from one resource recovery operator that they put aside household goods to be redistributed to charities to pass on to individuals they work with, for example, newly resettled refugees. A commercial interviewee that runs a product takeback for reuse scheme noted that one of the key beneficiaries of their reusable items were "nonprofits and charitable trusts" who either resold the products themselves for revenue or put them to "direct use in community projects". This interviewee noted that their redistribution programme "is not financially self-sustaining and often requires additional efforts and resources" and the business covers the cost rather than passing it on to the recipients.

Programmes to increase affordability

Most interviewees were cognisant of the need to ensure their services' affordability, particularly given these services are often not the most convenient option for potential users. These interviewees went beyond price setting to implement additional programmes or efforts to increase affordability. For example, one commercial repairer said that rather than charging customers upfront for the cost of fixing a product, they charge a small, non-refundable amount to diagnose the problem, after which they provide a quote to fix it and if the customer goes ahead, the non-refundable amount is removed from the final price. They also had flexible charging depending on the complexity of the repair and the skill required to fix the item, in some cases not charging at all if it was a very basic fix.

Two nonprofit retailers of secondhand goods told us they registered with WINZ so they can accept the WINZ green cards for certain items within a certain price bracket (meaning WINZ will pay for the item on behalf of the green card holder). Another secondhand goods retailer that had unsuccessfully sought to partner with WINZ to offer a similar initiative (they reported giving up due to the overly onerous registration process) instead offers customers discounted rates on items on a case-by-case informal process if the customer indicates they cannot afford the stated price. A public/council

interviewee explained how council facilities like libraries and pools offer discounts for community service card holders.

Commercial operators also described different programmes or initiatives to increase the affordability of their RRS initiatives. A commercial operator that offers a product reuse and rental service has a community partner programme where organisations that wish to use their service but cannot afford to can apply to the local branch of the business to become a community partner. If approved, they can access the service for free. Another commercial operator that offers a takeback for reuse and repair scheme for their own products not only does so for free, in the case of repairs, but offers rewards (in the form of store vouchers) for other types of customer participation beyond accessing this free service. For example, customers can receive vouchers if they send a video of them repairing the broken product themselves, or if they participate in the product takeback for reuse programme by returning their unwanted products for resale.

Another commercial operator who resells preowned furniture acquired during office fitouts explained that even though the items they sell "are probably of a higher quality than most people in a lower socioeconomic area could afford", if their volumes build up, they will "run a relatively strong sale for six weeks" to make the pricing more accessible. They also redistribute a portion of the furniture to nonprofits and schools across the country; over time, the volume of redistributed furniture has grown to double the volume that is resold given "there's a huge need out there".

Table 12: Summary table of findings on the affordability of RRS initiatives in Wellington City

Affordable	Partially affordable/shows potential	Main gaps in affordability
• Public libraries (public/council) • Secondhand sale at resource recovery sites (clothing, consumer items, furniture) • Shared facilities and workshop spaces run by non-profits • Repair cafes (non-profit) • Subsidised product takeback for reuse and repair schemes	• Secondhand sale at non-profits • Non-profit tool and toy libraries with membership fees • Sales on surplus premium secondhand products • Initiatives collaborating with WINZ to offer subsidies • Although secondhand sale on consignment and antiques are less affordable, there are affordable alternatives for similar products (furniture, clothes)	• Commercial hire/rental often not affordable • Commercial repair services often not affordable

Key opportunities/potential areas of focus

- Expand existing council and community-led sharing initiatives and support new council and community-led RRS initiatives.
- Prioritise RRS initiatives that are designed for communities with the highest and greatest financial need.
- Subsidise residents to access commercial repair services and commercial hire/rental services.
- Increase grants for repair cafes.
- Broker relationships between WINZ and other community providers with non-profits operating secondhand sale to increase accessibility of goods to those with most need.
- Facilitate business forums where existing providers can share information with others about best-practice commercial systems such as product reuse and product takeback for reuse and repair schemes.
- Advocate for repair legislation, more regulated product stewardship schemes, and the inclusion of reuse, repair and reduction outcomes in these schemes.
- Increasing availability of RRS for a broad range of product types may help with increasing affordability.

4.1.4 Employment, work and skills

As part of our consideration of the accessibility of RRS initiatives in Wellington we were interested in the nature of the work opportunities created and any training opportunities. Based on our interviews, the types of tasks workers perform vary between initiatives and subcategory activities, and require different skillsets and, in some cases, qualifications. Most interviewees reported having teams with quite varied skillsets and levels of education. Non-profit organisations were more likely to have wide job descriptions with numerous responsibilities that put pressure on employees, whereas repairers or commercial operators with a more niche focus might have more bespoke tasks, such as coding for app-based sharing systems or fixing particular products.

In terms of qualifications, for reuse and sharing initiatives, we heard that technical skills or professional qualifications are usually nice-to-have, rather than requirements. As such, reuse and sharing work is relatively accessible and interviewees did not struggle to find workers. In contrast, the barriers to entry for repair work are higher, especially repairs of electrical and electronic items, where a license and electrician registration are required. Interviewees that undertook repair generally seemed to have more trouble finding appropriately skilled workers and noted fewer training pathways or opportunities for young people to get experience.

For reuse and sharing operations, roles in logistics and warehousing, inventory management, customer service and retail were commonly described. Commercial product reuse systems, product takeback for reuse services or initiatives that involve redirecting corporate items generally demand considerable logistical efforts to manage and coordinate both the takeback/returns, preparation for reuse and recirculation aspects. Sharing and secondhand sale activities were most likely to involve tasks in retail and customer service, regardless of the organisation type. However, most reuse and share interviewees reported being more interested in character and values-alignment from potential workers than technical skills, and were willing to train staff on the job to support them to acquire any necessary qualifications or experience. For example, two interviewees with a resource recovery focus noted that commitment to the organisational mission was more important when hiring than specific technical knowledge, as most skills "can be learned on the job". One told us: "as a manager, I'm someone who believes that skills can be taught. I just need someone who's ready to commit and that's it." Another noted:

> If... you are willing to pick up and learn it and you are values-aligned and excel in other areas like customer service, because that's really important, then, yay, come find a job here.

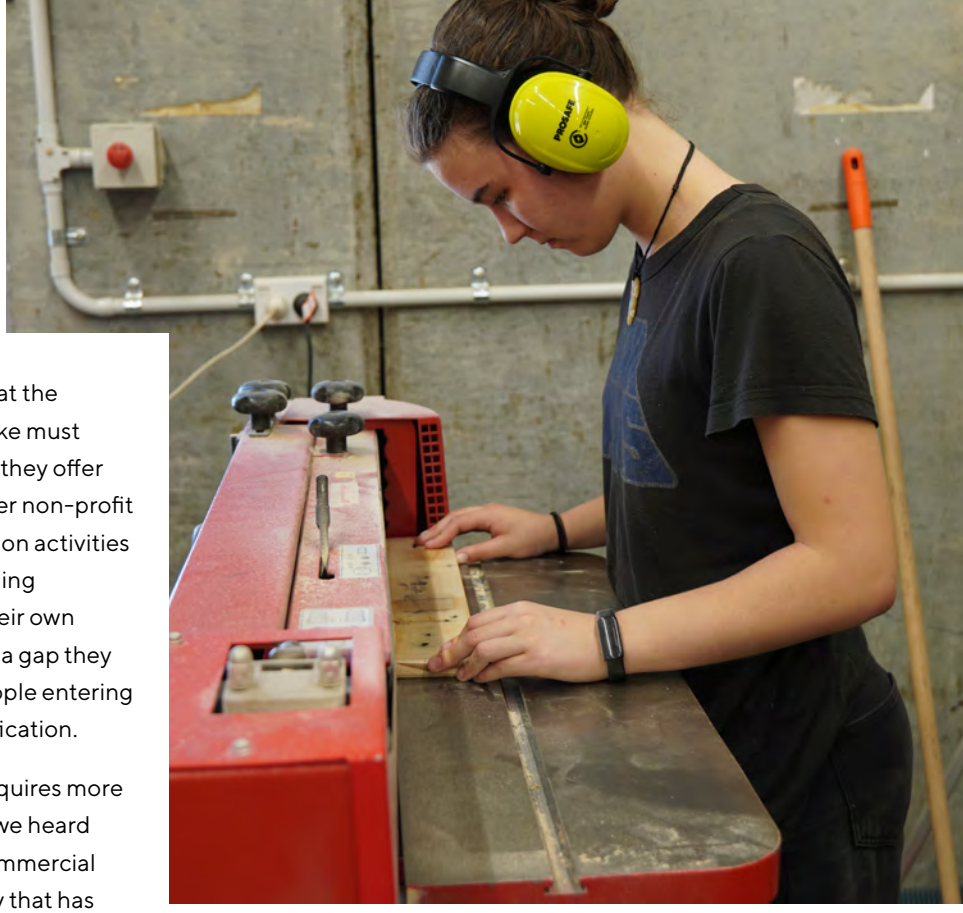
This sentiment was also echoed by an operator of a shared workshop space who said that when considering the skills of potential employees "there are interchangeable skills everywhere... most people will have something that they could probably use in that space". Accordingly, for them, the key skillset they look for is:

> ... a willingness to learn, problem-solve... there's not really anywhere you can go to train on this stuff, it's mostly all hobbyists, and we've just put that into our job descriptions: "have an interest in".

Similarly, a non-profit operator of a reuse shop said that "people learn once they start... it's kind of like, on the job you figure it out", with the main focus being understanding "how secondhand marketplaces work... what the worth of each item would be". One commercial operator that resells and redistributes corporate items notes that they have staff dedicated to preparing items for reuse, which has "a hands-on element", but noted:

> ... most of it can be trained. You don't need a formal qualification... that experience as a joiner or a hammer hand or a carpenter is definitely very advantageous, [but] generally it's trainable into existing staff.

Testing and tagging was the most commonly cited formal qualification that was required for reuse operators reselling secondhand items with a plug. We heard from interviewees that they put staff through this training if they had not done it already, and that there are plenty of opportunities to access this training. A commercial



Cahoots Workshop
Image supplied

operator of a product reuse system noted that the preparation for reuse activities they undertake must be done to the relevant ASNZ standard, and they offer on-site training to staff to ensure this. Another non-profit operator of secondhand sale and redistribution activities felt there were "some opportunities" for training available, but they had worked to develop their own "pathways program" that was designed to fill a gap they had identified for "accessible training for people entering the reuse sector", including basic retail certification.

In contrast to reuse and sharing, repairing requires more specific skills, training and qualification and we heard that it was often difficult to find staff. One commercial repairer said: "It's pretty hard to find anybody that has the skills to do this", noting that workers have to have completed an electrical technician apprenticeship and, each year, potentially only ten people complete this across the whole country because "there's not the customer demand, and not the availability of technicians". Even then, the qualification "is just the theory side of things", but "putting it into practice" requires experience. They explained that in five years they have only had one worker that could do the job: "We've had other people come through here, and we've had three or four that we've given work trials to, and they just cannot do the job."

The inability to find suitably qualified repairers is impacting on repair's current and future viability and growth. The commercial repairer identified how the inability to find suitably qualified staff was impeding the growth of their business:

> ... if I had two or three electrical technicians that were quite capable of doing the job, I'd just go lease another workshop down Thorndon Quay, or on the outskirts of Wellington, or Porirua or somewhere like that. And open another workshop so people are not having to travel to pick stuff up and drop stuff off.

We also heard from another interviewee with a repair initiative that vocational training is not adequate to support the next generation of workers to perform circular economy jobs like repair:

> ...the fashion industry, they pump out designers, but there is the need for technical skills like machinists and that knowledge of how a product is created... tailoring programmes to be more relevant to industry.

For this interviewee, they worried that these skills were becoming "a dying industry", which would undermine repair's long-term viability if they were not actively invested in and prioritised.

Across the board, we noted that most interviewees emphasised interpersonal skills as especially important for delivering RRS services because they generally all require interaction with customers. For example: many reuse operations involve retail; repair operations involve diagnosing problems with broken items on behalf of owners or supporting people to fix their own things; sharing services include supervising facilities and helping visitors to use equipment or find what they are looking for in rental or library contexts (and potentially teaching them how to use items too). An interviewee that operates a reuse shop noted there is "a lot of work just like dealing with the public and that's quite a skill, especially in the op shop arena... there's a lot of social skills required". A non-profit that operates a range of sharing initiatives noted that when hiring a new staff member, they "definitely need to be a people person with a huge amount of people skills." An interviewee that runs a facility with shared equipment visitors can access described how customer service is central to their role:

FillGood reusable serviceware washing facility
Image supplied

> ...the [facility] is staffed by myself and my offsider ... and we basically help people where it's needed. So, whenever someone comes in we're like "hey, how's it going, what do you need, what can we do, how can we help?" A lot of the time if people are coming in to use [the equipment], they really do need our help...

Similarly, another interviewee with a range of sharing initiatives noted that the daily number of customer interactions meant having a receptionist and admin support was "no longer... negotiable - this role is required". This same interviewee also noted that more training for interpersonal skills would be helpful, particularly "training in dealing with challenging folks that come through the doors - I am constantly looking for training for my staff around this."

Nature of the work, work conditions and remuneration

Providing quality jobs, maintaining good working conditions and ensuring workers feel valued promotes worker retention and is ultimately important for the resilience of organisations and their RRS initiatives. Many interviewees told us that the single biggest factor behind their ability to establish and run successful initiatives came down to the enthusiasm and quality of their staff and volunteers. As one interviewee explained: "we're lucky to have talented people that are "good at it all"! This is key to the success of our [organisation] and its various programmes."

"The kind of people you work with is everything at the end of the day... that's the main important aspect - it's the team and the people who are helping me around the show here, if they are taken care of, I think we'll get the results." (Resource recovery operator interviewee)

Worker retention was also described by one interviewee as something that has helped them achieve higher levels of programme capacity due to not having to retrain critical staff constantly. They felt that without this "longevity of staff", they might have been unable to sustain many of their initiatives.

Most interviewees commented that the initiatives they run are "labour-intensive", "time-intensive", "quite manual", "laborious" or require a lot of "people power" compared to linear business models. On the one hand, such comments suggest these activities have job creation potential and that increasing RRS initiatives can support a just transition, as has been posited by other research (Interreg Europe, 2022, p.3). One interviewee explained that by expanding their reuse and repair activities:

> ... we've been able to employ our test and tag specialist... who came from [name of op shop] when it became hard for the secondhand shops to be doing these things. He walked in the doors and said "I am here, I can volunteer." We're now in a position where we can pay him. How good is that? To be able to give someone financial support and, in return, we get fantastic work from him and we can supply the community with sound things that won't cause harm and damage.

However, on the other hand, we also heard that many activities struggle to generate sufficient revenue to cover labour costs. Consequently, many activities either do not happen (leading to no new work opportunities), or, occur at a cost to the organisation running them. For example, a medium-sized enterprise with a product takeback for reuse programme undertaking both repairs and resale noted that the repair programme costs the business "because we are using someone's time and materials to repair something". They noted that this cost was "hidden" because rather than having a dedicated resale and repair team, the tasks were "spread across everybody's job

roles".

Where RRS activities cost an organisation or make minimal profit margins, this can result in variable ability to offer staff secure contracts or proper remuneration for their skills and contribution. One non-profit that operates various community sharing activities stressed that the roles in their organisation are demanding, requiring a broad skillset, and that their staff are "capable, community-minded and creative", but funding constraints mean they struggle to pay them "a fair and liveable wage".

"I need a hugely capable all-rounder in almost every single area of managing an organisation. And I need them to be willing to be paid absolutely pittance for that level of skill." (Non-profit interviewee)

Some interviewees said that the inability to remunerate staff properly can create difficulties recruiting or retaining skilled staff. One commercial repairer who had previously worked for another business explained that "working for wages in this industry" was what drove them to leave their previous repair job to establish their own repair business. They explained that the job requires high skill levels and qualifications that can take years to acquire and ongoing examination, and yet, "if you're working for somebody else, $30 an hour is it".

All the non-profit organisations we interviewed relied on volunteers to deliver their RRS initiatives. One told us that "volunteers are a vital part of our model", contributing to various parts of the organisation's daily operations and its reuse activities. Two other interviewees said they'd be "screwed" without their volunteers, with one saying that at least one of their initiatives would fall over. An interviewee who runs several sharing initiatives reported that in one year, across two of these initiatives (one a shared facility with fixed equipment, the other a library), 31 individual volunteers contributed almost 1,000 hours to enable the initiatives to function. This equates to approximately $27,000 of unpaid labour (assuming the current living wage hourly rate). Another interviewee that organises regular repair cafes said these events are only possible, financially, because of volunteer hours (for which they estimated ~30 volunteer hours per event).

"... you can't run [repair cafes] without your volunteers. If you were to put a price on all of the volunteer hours, they would be a very expensive beast to run." (Non-profit interviewee)

Reliance on volunteers creates opportunities that can be socially beneficial. Research into volunteer opportunities in RRS demonstrates that people who choose to volunteer in these activities derive non-monetary benefits from doing so. For example, a 2024 study into participants of repair cafes across Aotearoa NZ found that (Ozanne, 2024, p.5):

> For volunteers, the repair café provides a positive social opportunity to support their local community, meet likeminded people, feel appreciated, and share their knowledge of repair with visitors. Volunteers enjoy the pleasure of doing something they enjoy, and the satisfaction they experience when they successfully repair a damaged item.

This study also found that some volunteers did not want monetary payment because this would "change the nature of [their] participation, making it feel more like work" (Ozanne, 2024, p.15). Interviewees certainly acknowledged the social benefits and community building potential of the volunteer opportunities they provided. One non-profit organisation described it as a "mutually beneficial arrangement", in which the volunteers supported their work, while the organisation offered "work experience, references, [and a] healthy and fun working environment", and aimed to "celebrate and recognise... volunteers regularly". However, some interviewees also expressed discomfort that while they benefit from volunteers, they often cannot reciprocate with pathways to secure paid work for those who might want this:

> ... volunteers all come with these incredible skills and

> expertise... from that perspective the volunteer aspect is super valuable, but from an economic perspective... I'm not a fan. Volunteering offers some wonderful things for people, but often our volunteers come in, they want to volunteer, but they would like some work, paid work, and we can't exactly always give that for them.... we are taking on two more volunteers under casual contracts in the next month. But casual work is casual work. These people are all really passionate about the work we do, and community-centric themselves. It is a wonderful thing and it's great to be able to have the volunteers around... but when they want... to contribute to society from an economic perspective, that makes it really difficult for us.

We also heard that it is sometimes inappropriate to rely on volunteers for certain roles or accord unpaid people key responsibilities and that, over time, these either need to be paid for, or organisational growth will be impeded. For example, one non-profit explained that while they do use volunteers, they recognised "that the business model needed to be driven... we needed to rely on people being here... the volunteers usually are pretty good, but you couldn't absolutely rely on them". Another organisation operating a lending library noted that for managing returns, inspections and repairs of items, you need "good processes" that are "actively managed" and therefore "it helps if you pay people". Overreliance on volunteers can also be a constraint on growth because this labour model obscures the cost of running the operation. Furthermore, there are costs associated with volunteers. For example, one non-profit explained that volunteers for their organisation still require coordination from a paid person and, in some cases, volunteers have "high and complex needs".

Reservations around reliance on volunteers are to some extent validated by the fact that public/council interviewees explained that they cannot have volunteers, while none of the commercial interviewees relied on volunteers for their RRS operations.

Alongside inadequate remuneration or use of unpaid labour, understaffing was also reported by both non-profit and public/council organisations. One non-profit interviewee explained that their crew was "very skeleton" and at times "it's tiresome; it would be good to have more people." Both public/council interviewees described understaffing as issues. One specifically highlighted "staffing" as the "big issue", not due to a lack of experience or training amongst potential workers, but due to an "unwillingness... to hire more people" even though "we're really stretched". A 2024 study of Wellington's community facilities also found that most community centre participants reported "insufficient operating budgets to enable appropriate staffing levels" (Coy-Macken et al, 2024, p.53).

Understaffing can create pressured working conditions, which can undermine worker safety and job satisfaction. One interviewee described attempting to change job descriptions to reduce the expectations on staff, but this resulted in the shortfall being reallocated to managers who are also overworked and underpaid. One interviewee noted that when organisations who are funded by council are facing these conditions, council needs to ensure that any new responsibilities that might be placed on these organisations in the area of RRS are accompanied by appropriate levels of increased resourcing.

Despite these challenges, when we asked interviewees to reflect on times when they were recruiting staff, most reported high levels of interest. This indicates that work in the RRS sector is perceived to be good quality and meaningful, with the potential to provide job satisfaction.

"We find it a very popular pathway for people. So when we do advertise, we get quite a few applicants... there is no shortage of people wanting to work in a resource recovery zero waste system." (Resource recovery operator interviewee)

One interviewee from a public/council facility said that:

> Whenever we have had applications or needed to hire someone to help in these spaces, we've never had a problem, there are people everywhere..., whenever we have a job going, the applications are through the roof, it's unbelievable.

This interviewee noted that interest in working at their facilities had grown over time; their view was that this stemmed from the way the job had expanded to include a wider range of products and subcategory activities, indicating that RRS are seen as attractive and exciting activities. A commercial interviewee that redirects corporate furniture also felt that their secondhand sale and redistribution activities played a role in their ability to retain staff because "we're actually doing the right thing and we're not just taking trucks and trucks to the landfill". They noted:

> ... the teams that are delivering to schools and that sort of stuff, they really love that day that they are assigned to the sustainability team to go and drop off furniture, to schools and places that actually need it, often to schools in the lower socioeconomic areas that their kids attend...

On the other hand, we also heard from some interviewees that some aspects of RRS work can be unpleasant for workers. For example, dealing with secondhand donations, reusable products, or product takeback for reuse can be unpleasant. A commercial operator running a product reuse system noted that sorting items prior to preparation for reuse is "difficult work... it's not the cleanest of jobs". Another interviewee noted:

> We find that a lot of [products] that come back to us are quite dirty and it's kind of like people forget that there's the human behind the repair programme. We are still human and we don't necessarily want to be handling people's dirty items.

An interviewee that uninstalls their products as part of their takeback for reuse scheme said that:

> ... it can be a real hassle and gross, especially in a high-traffic facility where [the product]... has been exposed to everything from vomit to other unpleasant substances.

Table 13: Summary table of findings in relation to employment, work and skills in RRS initiatives in Wellington City

Working well	Shows potential/more could be done	Main gaps
• Many share and reuse skills are successfully developed on the job • Varied work available • Values aligned kaimahi • Use of volunteers • High interest in job openings	• Required theoretical qualification for repairs does not necessarily come with practical skills • Interpersonal skills development for public-facing roles required for many RRS initiatives • Unpleasant aspects managing donations and returned products in takeback schemes	• Not enough qualified and skilled workers to repair electrical and electronic products • Insufficient vocational training opportunities or formal qualifications for repair sector • Insufficient budget to pay all workers and reduce reliance on volunteers, especially for non-profit initiatives • Insufficient budget to ensure fair wages and maintain adequate staffing levels, especially for non-profit initiatives

Key opportunities/potential areas of focus
• Partner with training institutes and existing commercial repairers to increase vocational training opportunities in the area of repair, and address shortage of qualified and skilled workers to repair specific products, e.g. electrical and electronics. • Targeted funding support to existing RRS initiatives so they can increase staff wages and hire more staff. • Grants for existing RRS initiatives so they can run the professional development courses they see fit, for both paid staff and volunteers. • Support establishment and operation of a networking and knowledge-sharing members platform or forum (online and/or in-person) for organisations running RRS initiatives that could enable peer support and professional development or training opportunities. • Subsidise residents to access commercial repair services to increase the attractiveness of repair as a viable career.

4.2 Are RRS initiatives attractive to Wellingtonians?

When considering whether RRS initiatives are attractive to Wellingtonians, we were interested to know how organisations get the word out about their initiatives. We were also interested in the factors that make RRS attractive or unattractive to businesses and residents, compared to the alternative of simply buying or selling brand new items. We asked our interviewees about what compelled them to establish their own initiatives, the level of public demand for their initiatives, any positive feedback, and what they thought inspired people to access their services, or deterred them from doing so.

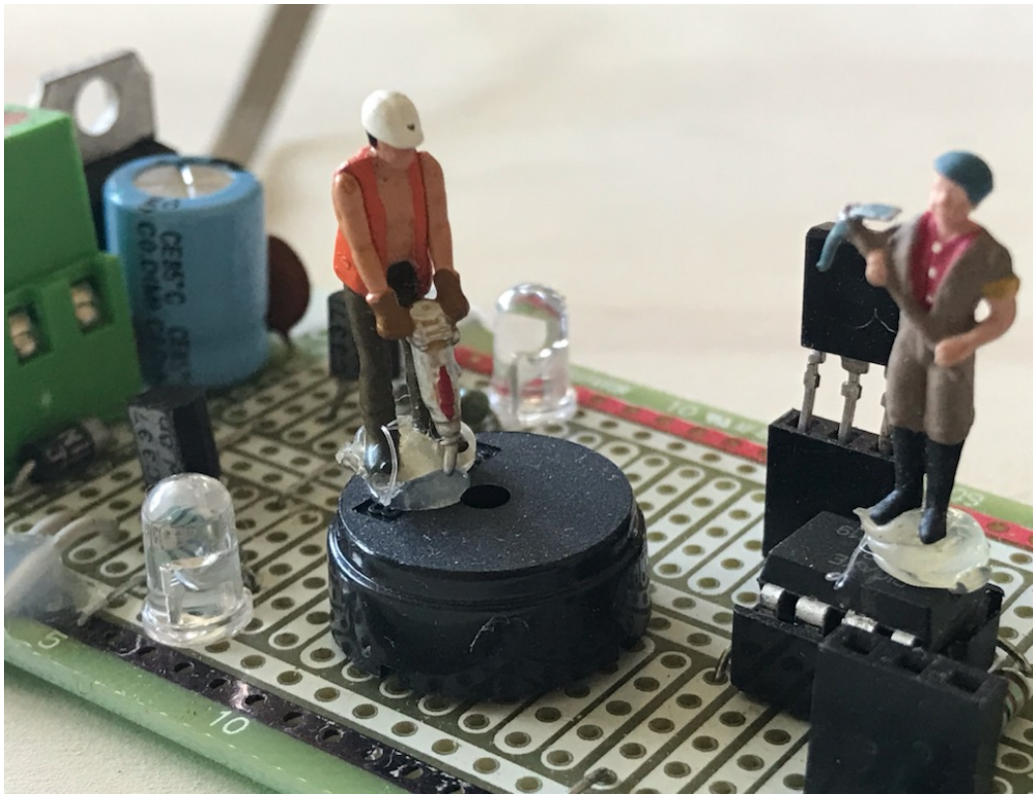
4.2.1 How organisations get the word out about their initiatives

The first step to assessing whether RRS initiatives are attractive to Wellingtonians is understanding the nature and extent of current messaging to raise awareness of existing initiatives. We asked interviewees how individuals and businesses might learn about their initiatives, and the different approaches they took to get the word out. Some organisations have offered a form of their RRS initiatives for a long time, so are well-known and benefit from a loyal customer base. However, most interviewees saw proactive promotion as an ongoing necessity to reach Wellingtonians. We heard about a wide range of strategies, but overall we noted that most initiatives would benefit from more financial support for marketing and communications. Additionally, it would help to build the public's conceptual connection between these services and waste minimisation by listing them on existing Council platforms that inform residents and businesses about where to access recycling and disposal services.

Almost all interviewees cited word-of-mouth or other "organic promo" (e.g., referrals or mentions by other businesses or organisations) as an important way that people found out about their initiatives. The fact this was common across interviewees, regardless of the initiatives they ran or the organisation type, suggests a base level of community knowledge and enthusiasm about RRS initiatives, but also an opportunistic approach to communications that may reflect underinvestment. One public/council interviewee admitted to doing virtually no promotion and relying almost entirely on word-of-mouth. A non-profit interviewee explained how "word-of-mouth is powerful, especially among community groups", while a commercial operator pointed to the value of "word-of-mouth through existing customers". An interviewee with a reuse shop described how staff at big box retailers sometimes directed people to their shop to find what they were after secondhand instead of new, while a commercial repairer described having customers referred to them by repair cafes. Interviewees also gave examples of word-of-mouth occurring in online forums. For example, a resource recovery operator described being listed in travel blogs as one of the 'top ten' places to visit in Wellington, while another interviewee running a shared workshop space said: "We are mentioned in a few threads on reddit and a lot of people have been coming to us via that, which is weird, but hey, I'll take it".

Organic awareness-raising can also arise from a visible brick and mortar site. For example, the key reuse site of one interviewee is both highly visible and proximate to target customers, such as university students, which meant "the window is a really good advertisement". Other research projects have found that Wellington City's community facilities, especially libraries and community centres, performed well in terms of visibility, being both prominent and easy to find (Coy-Macken et al, 2024, p.51). While this form of organic promotion works for those with well-located sites, most interviewees we spoke to were not located in a prominent space or did not have a public-facing brick and mortar site.

In terms of proactive promotion, most interviewees specifically mentioned using their own websites, social media and other online media, such as blogs and newsletters, to promote their RRS offerings. In fact, websites were usually the key tool organisations used to communicate their services, overall. Public/council interviewees noted that council would promote their activities through the council website and social media.



Repurposed artwork

Other interviewees supported by council also cited occasionally receiving this type of promotional support from Council for their RRS initiatives. One public/council facility told us that "social media has been our biggest advantage" and that they were one of the few Council facilities with its own social media page, enabling them to share publicly about their initiative more directly and frequently.

Unlike organic promotion, website, social media and newsletter content all require organisational resource to produce. Some interviewees told us that marcomms was a ballooning area of work that they struggled to keep up with. Social media was cited as particularly difficult, with the range of potential platforms and the amount of content required to maintain interest. One non-profit explained:

> ... you have to put it out there in so many ways to all the different people... You just have to be across everywhere. We are not... because of the capacity, but then that does mean that you're not reaching young people because you're only on Facebook, but you can't also manage TikTok, Instagram, Snapchat.

While not being online can mean missing young demographics, withdrawing from other media channels can result in other demographics missing out on messaging. Unlike online communications, very few interviewees reported use of physical media to promote their initiatives, or appearance on traditional media platforms (either as guests or via paid advertising). One public/council facility interviewee told us they were "looking at bringing back some pamphlets... because we've been getting complaints from older customers who are missing all these advertisements online." Only one interviewee mentioned using more traditional forms of advertising, noting their success with advertising on radio for donors for their secondhand store, which "really captures the older demographic." One interviewee mentioned being invited for interviews about their initiative by print and radio media outlets.

In addition to generating specific communication content, organisations also recounted other more indirect ways they drew attention to their initiatives. For example, organisations offering various initiatives noted that running and promoting one initiative (e.g. a repair cafe) might attract certain people who would then learn about the other initiatives. To facilitate this process, organisations used promotional media inside their spaces, such as display screens, to advertise their full service range to all visitors. Resource recovery operators also noted that offering recycling services alongside RRS services was effective for attracting people to their sites, who would then be exposed to the other opportunities higher up the waste hierarchy.[20]

[20] Although, both resource recovery operators also noted that recycling services diverted some staff time and resource away from activities higher up the waste hierarchy, where they really wanted to focus.

"... the recycling is a nice-to-have because it brings people through the door... you have people that are wanting to start a journey in zero waste, so the recycling comes up on Google and in they wander and they get a surprise when they see so much else happening." (Resource recovery operator interviewee)

Similarly, we heard from both non-profit and commercial interviewees that they participated in, or ran, events in order to attract and connect with wider communities. For example, one non-profit interviewee explained that their organisation occasionally ran markets to sell secondhand goods for their own reuse shop and offered stalls to other local businesses selling products with a RRS ethos. These events "brought in people who didn't know we existed", while also building relationships with other organisations working towards similar goals. Another non-profit said they "host sustainability lunch series, waste tours and collaborate with local networks to spread the word." A commercial organisation said they ran events like repair workshops and clothes swaps to promote their takeback for reuse initiatives.

Several organisations were proactive about outreach and/or collaborative opportunities to raise awareness about their RRS initiatives. One non-profit interviewee told us that connecting with other organisations and having "awesome, solid networks" raised the profile of their initiatives. One resource recovery operator described reaching out to community centres across the city, particularly in suburbs further away from their site, to run collaborative events, such as e-waste days, or presentations with centre staff and the local community to outline the services they offer, including their reuse and repair initiatives. In this way, the operator could raise awareness with a broader audience both in-person and through the social media pages of the relevant community centres.

Commercial organisations, or organisations whose RRS initiatives involve interacting with businesses, described more targeted forms of outreach. For example, a commercial operator with a product takeback for reuse initiative said they mostly build awareness "through professional networks rather than public marketing", targeting professions that design or procure the items they take back for reuse. Another interviewee said they informed customers at the time of purchase about their product takeback for reuse scheme. A resource recovery operator told us they do "quite a bit of cold calling to businesses... just to introduce ourselves, talk about our services", while a commercial interviewee that runs a product reuse business said they had "a massive sales team" that contacts newly launched organisations and businesses to sell their services. A non-profit that resells and redistributes unwanted corporate items noted that "direct corporate engagement" is central to their communication strategy, alongside efforts to "partner with resellers". Meanwhile, a commercial repairer gives business cards to retailers of the products they fix to display at their sales desks, are listed as a service agent on retailer and manufacturer websites, and has retailers and manufacturers direct relevant customer care service calls to the repairer.

Despite these various channels, several interviewees across the various organisation types noted that, alongside resourcing their initiatives, getting the word out about them remained one of their biggest challenges. For example, one commercial operator running a product takeback for reuse initiative noted that they can only resource very "limited marketing" because the programme "already costs too much" just to run. Another business said one of their main challenges was "getting the word out there - we do our best efforts throughout marketing and stuff, but you don't necessarily capture all those customers." Consequently, these interviewees believed there were almost certainly people in Wellington who would be likely to access their services, if only they knew they existed. For example, one public/council interviewee said that a key gap related to "visibility" and that "if people knew that a lot of this stuff was out there, they would do it, especially the repair." This aligns with a 2024 analysis of community facilities in Wellington, which found that one of the key reasons non-users cited for not using these facilities (especially

WCC Public Library
Image supplied by WCC

community centres and recreation centres), was "a lack of awareness of the facilities, e.g. where they are and what they offer" (Coy-Macken et al, 2024, p.67).

Accordingly, most interviewees thought help with raising awareness about existing initiatives would be useful, as one said: "Look, it's always good to get it shouted from the rooftops occasionally". Another interviewee noted how impressed they were by repair cafes and how many were occurring around Wellington and said: "That's probably something that council probably needs to get more vocal about, shout a bit louder about these kinds of things that are happening to get more people on board." Another interviewee thought it could be useful for Council to do "case studies on businesses that were providing these services to try and stretch the word out there a bit further":

> ...running public campaigns to normalise reuse and waste-free living, promote case studies and successful business stories that are leading the way in this space, to get the word out there more... providing more guidance for residents around what they can do at home and at work to reduce their waste.

Several commercial interviewees specifically suggested Council support them by promoting their initiatives internally, and to targeted groups such as other businesses. For example, one interviewee that redirects corporate furniture through resale and redistribution said they would like Council support with "those communications and making it known to their subsidiaries that the service is out there":

> ...[for] the donation side of things, whether there was a grant system there or communication avenues we can tap into that would go out to these not-for-profits and those sorts of things. On the secondhand furniture it would be your SMEs... Just advertising our services to those smaller business sizes.

This interviewee also thought it would be useful if Council could use levers to incentivise local businesses and organisations to buy refurbished and pre-owned furniture, or better quality furniture that can be refurbished, rather than low quality furniture. Another interviewee with a product reuse system said the Council could share more information about services like theirs that are available "to new restaurants and businesses that are opening up, especially new offices, and guidance for the public service and the councils and their offices."

Some interviewees also felt that the gaps in their messaging related not just to a lack of awareness about the existence of their services, but also a lack of awareness about why those services were valuable or useful. As one interviewee noted "some don't understand the value of reuse or the impact of waste." These interviewees usually also called for more creative ways to present information that supported wider behavioural and mindset change, amongst the public, but also within Council. For example, one resource recovery operator thought that organisations already operating RRS initiatives should collaborate with businesses to shift their focus up the waste hierarchy and connect these efforts with the wider goals of reducing waste in the city.

> "... in Wellington where we are seriously advocating for a Zero Waste Strategy, where we're seriously advocating for 'let's focus on reuse and repair a lot more before we recycle', I think it's just shifting organisations' mindset to look at it that way and align their values with some of our Zero Waste Strategy..." (Resource recovery operator interviewee)

Another interviewee thought that Council marketing should also involve:

> ... highlighting to the community what cost-savings could be made by engaging in some of these services, whether it's from being able to use a product for longer and not have to buy a new one, but also the cost to the environment of all that stuff going to landfill or causing climate problems.

These comments were validated by other interviewees who explained the success they had had from communications that built narratives around the purpose and value of their RRS initiatives. For example, one non-profit attributed their successful model, in part, to their "strong storytelling and reinvestment into communities", while another noted:

> I think we do really well with our advertising... we talk about what happens to the money that the store generates and they can see it in their community, it's extremely localised.

On some level these comments suggest that it is not sufficient to rely on RRS being intrinsically attractive vis-a-vis simply buying a personal item new. Rather, a broader campaign that connects these initiatives to ethical or values-based rationales, including waste minimisation outcomes, would be helpful. This is also reinforced by what we heard about the factors that motivate organisations to establish RRS initiatives, and the factors that pull Wellingtonians to access them.

Table 14: Summary table of findings about promotion of RRS initiatives in Wellington City

Working well	Shows potential/more work needed	Main gaps
• Word-of-mouth, organic promotion • Websites, newsletters • High traffic/visible locations	• Storytelling about the 'why' and the value of RRS • Social media, constant updating of content • Outreach and collaboration between initiatives and other organisations to engage more people in existing initiatives	• Resourcing for professional marketing and communications support. • Integration of RRS in Council rubbish, recycling and waste minimisation communications with residents and businesses. • Internal Council comprehension of RRS options in Wellington City. • Visibility and prominence of initiatives. • Traditional media stories about RRS initiatives in the city.

Key opportunities/potential areas of focus
• Grants and other in-kind promotional support to existing services for marketing and communication. • Support existing and new providers to develop template 'outreach' RRS events (e.g. clothes swaps, repair events, mobile resource libraries etc.) that can roam across the city to different community, council or commercial facilities each week/ fortnight/month. • Promote existing and future RRS services in Wellington via regular waste minimisation channels. For example, a user-friendly list of RRS services on the waste minimisation, recycling and rubbish section of the Council website. • Positive RRS public information campaign and marketing that promotes existing initiatives, raises awareness of RRS, communicates the waste reduction outcomes of RRS, as well as wider environmental and social benefits that are attractive to people. • Invest in a large RRS event/festival/fair/showcase. • Include RRS expectations in Council procurement policies, contracts and tenders, and in advice to local businesses for their own procurement policies.

4.2.2 Factors that attract organisations to set-up and run RRS initiatives

To help us understand whether RRS business models are attractive to organisations to run, we asked interviewees to explain what drove them to establish their initiatives. The motivations cited were quite varied and depended on the organisation or initiative type, as well as whether or not the initiative was the organisation's primary purpose.

Except in the case of secondhand sale, direct revenue generation was hardly ever the key motivator for initiating a RRS initiative that was not the organisation's key purpose. However, cost-savings from reduced landfill fees or indirect business benefit derived from positive marketing (e.g. highlighting the value-add or point-of-difference), were sometimes cited as motivators for an existing organisation to adopt a RRS activity. In the case of reuse and sharing initiatives, social outcomes were just as likely to motivate organisations as environmental outcomes like waste reduction. For most interviewees, repair was usually ancillary to another reuse or share initiative they were providing (e.g. preparation for reuse prior to resale, or ongoing repair/maintenance of a fleet of shared items). However, in community contexts, standalone repair initiatives were usually driven by a waste reduction ethos, with social outcomes being co-benefits. We only spoke to two commercial operators whose primary business model is RRS. In both cases, the main driver was revenue generation. We therefore assume that gaps in service provision indicate that the business model is not sufficiently attractive.

Secondhand sale and redistribution activities often had a combined financial, environmental and social impetus, but what came to the fore depended on the organisation type. Interviewees who identified as resource recovery operators saw reuse as effective for diverting waste from landfill, and this was their primary reason for pursuing these activities. However, social and financial outcomes were key secondary drivers. A nonprofit operator of secondhand stores explained that they were motivated by the twin social and financial goals of providing accessible goods to people who struggled to afford things, and as "a form of fundraising" to support the organisation's core social activities, with the latter being the primary driver. Whereas another non-profit operator spoke to twin social and environmental goals, explaining that:

> We saw a massive gap: corporate waste going to landfill while communities lacked basic resources. Our founder was driven by the idea that surplus could be a solution, not a problem. We wanted to create a circular model that delivers both environmental and social impact.

Commercial operators tended to highlight secondhand sale and redistribution activities as a triple win-win-win in terms of being good for business, people and planet. For example, one commercial operator said that the desire to reduce the large amount of waste sent to landfill from their commercial operations led them to establish their resale arm for preowned product because "if you're not offering a sustainable option for surplus [product], you're putting yourself out of the market". The resale programme brought both environmental and financial benefits to their business. The redistribution programme followed as an additional pathway for excess product that could not be sold. Overall, the reuse initiatives enabled the interviewee to offer clients "a better service... both financially and morally". A resource recovery operator also explained that redistribution was a useful outlet for surplus products to avoid waste while delivering a social outcome:

> ... we can't sell all of it through the shop... sometimes we end up dumping it, but not if there is another avenue where someone else might need it for their project.

In terms of sharing activities, we heard from a non-profit organisation running several sharing programmes (alongside other initiatives) that these programmes were effective ways of achieving the organisation's core goals of "pulling people together" and providing access to items that might not otherwise be affordable to community members. A public/council facility that offers sharing services explained that their decision to expand into new types of sharing activities applied to a broader scope of products was driven by the community's desire or need for greater access to those particular resources. These comments reinforced that while RRS are

positioned as some of the most effective waste reduction measures on the waste hierarchy, in other sectors they are seen as effective ways of delivering social outcomes.

When it comes to sharing in commercial contexts, e.g. rental/hire services or app platforms, interviewees often described the motivation in purely commercial terms or as a purpose-driven effort to fill a gap in the market for both environmental and financial goals.

"The solution to our waste crisis is not about bettering our recycling system, but finding ways to move to zero waste. One way is to revitalise the power of sharing." (Commercial interviewee)

In terms of the motivation for running product takeback for reuse programmes, one interviewee told us that their programme was "driven by a desire to 'do the right thing'", alongside "a hope that government or local agencies would reward the effort through future work". Another interviewee told us that they established their takeback for resale programme in order to resolve the tension between "wanting to be part of the circular economy" and recognising this could not be authentically achieved while continually making new products, yet knowing "we are still a business at the end of the day". They explained that "for us to be able to get [our product] back and resell and make money on it again, it's kind of a no-brainer." Though the programme makes a "very small profit", they emphasised that it was "much more than a profit making thing, it's more connected to the values of the business".

Public/council interviewees operating various RRS initiatives situated their motivations in the context of the public service they were tasked with providing, alongside delivering wider "social and community benefits". For example, one interviewee specifically explained:

> ... the main intention is to reduce waste that ends up in the landfill, the other ethos is making sure that the goods are affordable to the community who can't otherwise go to brand new shops or whatever and buy something brand new... and then the other thing is around making sure that secondhand is good practice before you buy something brand new... and then also catering to various social sectors, I would say. It's more of a social benefit than just focusing on revenue kind of thing...

Any council mandates and strategies relating to the area they worked in also drove the pursuit of certain initiatives for public/council interviewees. One explained that, alongside customer demand for more reuse and repair services, the council's ZWS and WMMP influenced their decision to "push ourselves to do more" reuse and repair to try and divert more material from landfill. This included expanding beyond tagging and testing of donated electronics towards increased preparation for reuse activities, and the harvesting of spare parts for resale to other repairers.

Additionally, public/council organisations often look to each other for new ideas or innovations in how they deliver their services, and this can drive new RRS activities. Overseas, knowledge-sharing between councils has been observed as an enabler for growing RRS initiatives (Share, Reuse, Repair Initiative, 2025, p.27). This was reflected in our interviews, with both public/council interviewees recounting being inspired by their counterparts in other councils to adopt or develop new RRS services. For example, one public/council interviewee told us that:

> The addition of the Makerspace [in WCC libraries]... came about mainly because Christchurch City Libraries did it... and it worked so well. Since then, pretty much all modern libraries are putting a Makerspace in. So, Feilding have just put in a new library... they've got a makerspace in there... And Palmerston North have one that's been running for about 10 years as well.

These comments also highlight the potential leadership role public/council facilities can play in adopting RRS initiatives, which also helps to build the wider attractiveness of these activities through a process of normalisation.

We also considered factors that might make current RRS initiatives attractive or unattractive to Māori

Secondhand sports gear at The Tip Shop. Image supplied by WCC

organisations. As previously noted, Māori-led RRS initiatives are underrepresented. However, the kaupapa Māori organisation we interviewed identified cultural values that make these types of activities attractive from a Te Ao Māori perspective. For example, the practice of sharing relates well to the "culture of looking after the collective". The interviewee also explained that, from their perspective, "all iwi are thinking and planning for the wellbeing and the health of their own people". Therefore, working to connect RRS (as well as wider environmental initiatives) to the "principles of mana motuhake" and "caring for the whānau and the hapū" are likely to be important factors in whether these initiatives are attractive for Māori organisations to run.

This interviewee also felt that normalising Māori values in order to restore connections to each other and te Taiao would be an enabler for reuse and share systems more generally, from libraries to clothes swaps. This notion was echoed by another non-profit interviewee that partners with Māori-led organisations to deliver some of its reuse initiatives who believes there is an untapped but "huge potential for community-led models grounded in tikanga". They thought that Māori participation in running RRS initiatives could be lifted through funding for "culturally-grounded models... marae-based reuse hubs, papakāinga initiatives, and kohanga reo partnerships".

These ideas have been reflected in other research projects. For example, the Rautāpatu Foundation undertook research into a possible Indigenous entrepreneurship and enterprise support programme to empower Māori leadership within a circular cultural economy. In a presentation sharing their findings (Rautāpatu, 2024), they identified creative reuse ventures, repair services and product-as-a-service as opportunities that could be attractive for Māori-led businesses and entrepreneurs (ibid, slide 9). However, the wider support ecosystem to realise these opportunities is not necessarily attractive. Specifically, the research found that mainstream entrepreneur and business support programmes and incubators are often not fit-for-purpose for Māori-led organisations (ibid, slide 8). For example, they often do not centre the aspirations identified in the literature as a priority for Indigenous entrepreneurs. This includes creating benefits for the Indigenous community, such as profit distribution, job creation, self-determination, preservation of indigenous culture, and protection of local environments (ibid, slides 4-5). Additionally, these support programmes often do not match well with Māori cultural values or lack Māori role models or mentors from the business support community. This suggests there is a specific need for training and mentorship specifically for Māori entrepreneurs to improve the attractiveness of circular business opportunities like RRS for Māori-led enterprises (ibid, slide 6).

Table 15: Summary table of findings on what attracts organisations to set-up RRS initiatives in Wellington City

Attractive factors	Partially attractive	Main gaps
• Social outcomes, such as community connection, providing affordable access to products and repair services, particularly to those in need • Environmental outcomes, such as reducing waste (especially for resource recovery operators) • Cost savings from avoided landfill fees.	• Revenue generation (secondhand sale and commercial initiatives) • Waste reduction ethos (repair) • RRS initiatives (especially reuse) align with corporate social and sustainability goals and may offer point of difference from competitors. • RRS and waste hierarchy vision-setting in ZWS and WMMP. • Potential alignment of RRS with some Māori cultural values and aspirations to support whānau, hapū wellbeing.	• More inconvenient and expensive than linear business models. • Waste minimisation benefits of sharing initiatives not well understood. • Recognition of social co-benefits of RRS in Council waste minimisation communications. • Not enough promotion of existing initiatives to inspire other organisations. • Potential for Māori leadership and innovation in RRS not well served by current support systems for businesses, start-ups and entrepreneurs.

Key opportunities/potential areas of focus

- Increase focus on social outcomes of RRS in Council waste minimisation communications and contestable waste minimisation fund priorities to attract more organisations to explore these activities.
- Improve communication of the waste reduction outcomes of RRS initiatives, particularly sharing, and their role in the Council's ZWS and WMMP, to attract more organisations to adopt these activities as part of their sustainability goals.
- Initiatives to increase potential cost savings and revenue generation potential of RRS initiatives, such as landfill fee waivers for waste generated from RRS initiatives (or increased landfill costs to incentivise diversion activities), and subsidies for RRS initiatives.
- Invest in/partner to support RRS incubation hubs and other business support programmes for both commercial and community initiatives. Ensure provision of Māori-led and kaupapa-led programmes.
- Develop case studies about current RRS initiatives and 'how to' guides for setting-up RRS initiatives.
- Facilitate business forums where existing providers of RRS initiatives can share information with others about their initiatives.

4.2.3 Levels of demand and positive reception to RRS

Reuse, repair and share services can be seen to be attractive if Wellingtonians display a demand for them, or respond to them positively through usage or positive feedback. All interviewees indicated that their RRS services were meeting a demand in the community, which is reflected in both their existence and their growth over time. Many noted positive feedback too. However, this demand does not always translate into a willingness or ability to pay the true cost. Furthermore, the demand is not always evenly felt; demand for different initiatives may come from different segments of the community. Finally, while various factors drive demand for RRS initiatives, interviewees also described competing factors that might make RRS unattractive to potential users.

Generally, interviewees perceived a demand for their services. One commercial operator that includes reuse and rental initiatives as part of their overall offering explained that they were responding to a "market demand within New Zealand" for sustainable business practices, and that their reuse and redistribution activities were a factor in "why a number of clients stay with us". Another operator believed that some large corporate customers expect initiatives like product takeback for reuse to be available for the goods and services supplied to them. A commercial operator running a successful product reuse service for organisational and corporate clients noted that demand is sufficient for both them and their competitors to run viable business models in Wellington City. They also noted that "larger businesses go out to tender for these services because they really need it". One nationwide operator that reuses corporate waste streams noted that the demand in Wellington City was sufficient to constitute 20% of their overall reuse service. They described this demand as coming from a wide range of corporate partners, many of whom are repeat customers. The operator also believed there was still unmet demand in Wellington, noting "Wellington has a high volume of corporate surplus and a real need in community spaces."

Interviewees that run resource recovery operations described a positive public response to services that go beyond recycling. For example, one interviewee explained that they expanded their repair activities after directly seeking the feedback of customers who pointed them in this direction. This interviewee also sells spare parts from donated items they cannot repair and reported high numbers of revisiting customers and 99.9% positive feedback on their Trademe site. One resource recovery operator with a secondhand store also noted that they have seen "an increase in the kind of people who are visiting us" since they increased promotion of their reuse offerings. They also reflected that their customers did not fit into any particular demographic and ranged "from someone who rides a bike... to someone who drives a Jaguar". The range of items that they resell, including electrical and electronic items and furniture, attracts people from a wide geographic area, indicating that the level of demand to purchase these products secondhand is not currently fully met. A public/council facility operator that runs a number of sharing initiatives also felt the demand for sharing services was generalised across the population, and continually growing:

> I haven't really noticed any distinct trends in what people are after in the [shared facility]. I do get asked that a lot - what age group, what are people wanting? And the only answer I can give is 'all ages and everything'.

Other research projects have shown Wellingtonians display a clear demand for the types of public/council facilities where sharing occurs, e.g. libraries, community centres, swimming pools and recreation centres. The authors of a 2024 study of Wellington's community facilities observed that "libraries are highly valued" by Wellingtonians, with 73% of the population accessing them, and library participants reporting a "high demand" for their space and resources, such as shared computers (Coy-Macken et al, 2024, p.87). Furthermore, visitor statistics show Wellington City's libraries receive 5.5 visits per capita, which is "good in comparison to other cities" and 51 visits per square metre of library space "which is high for the space" (Coy-Macken et al, 2024,

p.87). Of library users, 72% attended to browse or use books, 19% to access shared computers or wifi, and 6% to access other shared resources or equipment, like a 3D printer (Coy-Macken et al, 2024, p.64). The percentage of Wellingtonians using community centres (many of whom operate sharing initiatives) was only 26%, but this is reported to be similar or slightly higher than other cities, while the percentage using swimming pools and recreation centres was 42% and 27% respectively, with the swimming pool usage being higher than other cities (Coy-Macken et al, 2024, p.62).

Community organisations tended to think their RRS services were meeting a need or a demand, otherwise they would not be prioritising their limited resources towards running them. They also reported positive feedback and reception to the services. One non-profit interviewee noted how "priceless" it was to see how "stoked" people are to have access to the repair and share services their organisation provides. A public/council interviewee also noted that "repair cafes... are becoming really popular and really common". Another non-profit interviewee told us that, as a community-centred organisation, a big part of their focus was to:

> ... support the incubation of other people's ideas because ideally the best community development is done by the community themselves, right?

For this reason, this interviewee felt the initiatives they did run were intrinsically attractive to the community. These initiatives were mostly sharing-based projects centred around improving access to useful items for the community and/or building community connection. This interviewee also noted that while they did perceive a community demand for initiatives that address environmental issues like waste reduction, for many people, more immediate "pressing concerns" relate to food, housing and health. For this interviewee, if proposed RRS initiatives are not sensitive to addressing these concerns on some level, the community may not prioritise them.

"...there's so many barriers just in how tough everything is for everyone now, particularly for our most vulnerable... to be honest, if... I was given some extra capacity, I probably would not be looking at reuse, repair stuff..." (Non-profit interviewee)

This sentiment was also echoed by another non-profit interviewee who said that RRS is "a kaupapa that attracts... people once they're out of survival mode." However, currently, "it's pretty dire out there". While RRS initiatives can be an important means of supporting people and "addressing inequities", investment should be specifically applied to initiatives that are about "providing to the people with the highest... strongest needs". This could be achieved through considering the types of locations that receive investment to run RRS initiatives (e.g. community housing or marae) or designing programmes that are accessible and follow principles of universal design.

The reflections of these interviewees provides some insight into the type of RRS programmes that are attractive to Wellington residents. They also underscore the importance of ensuring meaningful community-led project ideation and design to result in initiatives that attract residents because they are relevant to their needs. This concept aligns with one of the six zero waste principles in the Council's ZWS - "community participation" - which recognises that actively involving the community in design and delivery of resource efficiency systems contributes to a culture shift towards waste reduction. This was repeatedly echoed through interviews, for example, one resource recovery operator said that when setting up new RRS initiatives:

> ... the first thing that you need to do is read up a little bit more about what your community needs, and if it's not cups and plates and saucers, if it's more furniture, and if it's more timber, and if it's more electrical items, then you can focus just purely on that and you can be specialised and known just for that.

Some interviewees described the demand for their RRS services outstripping their capacity, to the extent that some interviewees were deterred from promoting their initiatives. One interviewee said "my site is running on

Bike repair tools:
Image supplied by WCC

steroids at the moment, we don't have enough parking available." Another commercial interviewee said that every time they promoted their product takeback for reuse initiative they got "flooded" with repair and resale items, which was difficult for them to manage. Another public/council interviewee said:

> I think that if I did too much advertising we would have too much work and would be really under the pump. As it stands at the moment, we are just managing everything...

The demand for RRS services is also reflected in the number of interviewees who told us that their initiatives have grown over time. Two initiatives, one commercial and one non-profit, were described as having "started in a cupboard", and then quickly expanded into new, bigger spaces. The commercial operator said their reuse and repair initiatives had "taken over a substantial part of our workroom... it's really starting to pump and people are really starting to engage". Another non-profit interviewee redirecting unwanted corporate items reported "growing steadily through partnerships and community demand", and successfully expanding the range of corporate products they recirculate over time. As of 2024, the loaning of books from libraries had also been increasing, with 2 million book issues a year across Wellington City libraries (Coy-Macken et al, 2024, p.87). A public/council facility that operates a shared workshop space said that the initiative was such a success that they were about to open a second, larger workshop in the central city. A resource recovery operator recounted how their expansion into increased repair activity was going so well that "the entire space is being revamped and I'm getting a massive shed so that we can stock more parts and bits and bobs."

One area where demand was less reliable was amongst organisations whose key clients and/or sources of reusable items were public agencies or corporate office spaces. Commercial operators reported that government policies or office purchasing practices caused unpredictable fluctuations in demand that can disrupt the reuse business models in Wellington City that are based around corporate offices. A commercial operator of a product reuse system whose clients are predominantly office spaces, including government agencies, said they experienced a drop in demand for their services due to the current government's monetary policy and a decrease in government agency spending, even for the basic services that make an office function. This had created "a barrier to expansion" for their services, leading them to pause planned upgrades to some of their infrastructure and equipment. Another interviewee that resells and redistributes corporate items explained how the drop in government spending, layoffs and increased working from home means that "the trend has been to consolidate and that obviously provides a huge amount of surplus furniture" for which there is a smaller market because "there's very little growth in Wellington at the moment, as a market for office furniture."

Two other commercial operators singled out public agencies as generally more difficult to engage in RRS. One expressed "disillusionment" with the lack of demand for their product takeback for reuse service from local and central government agencies. Another operator said that public agencies seemed less inclined to support their redistribution and reuse efforts than corporates, who are more "willing to pay" than "the government taxpayers' money". These comments suggest that government agencies do not always lead by example where the cost to 'do the right thing' is higher. One interviewee felt this gap could be addressed through procurement policies that prioritise reuse.

"Certified recycling schemes and procurement policies that mandate reuse/recycling are critical to success. Policy changes, especially in local procurement, could significantly increase uptake and accessibility. Mandate certified recycling and reuse in procurement policies. This would create immediate demand and recognition." (Commercial interviewee)

Another agreed saying the Council could help by ensuring that "when they're purchasing their own furniture that they are purchasing things of high quality... that we can easily repurpose and repair for them".

Table 16: Summary table of findings on demand for RRS initiatives in Wellington City

High demand levels well met	Positive demand levels not fully met	Main gaps in demand or in service provision to meet demand
• Public libraries	• Sustainable corporate practices like RRS. • Initiatives to reduce and redirect unwanted corporate items. • Community-based sharing initiatives. • RRS initiatives at resource recovery sites.	• Local and central government demand for RRS products and services. • Understanding of target users. • Operational and capital limitations of existing RRS initiatives to expand to meet demand.
Key opportunities/potential areas of focus		
• Include RRS expectations in Council procurement policies, contracts and tenders, and in advice to local businesses for their own procurement policies. • Prioritise growing RRS services at well-utilised and well-loved facilities and in community housing to reach more people and people with highest need. • Co-design expanded or new RRS initiatives with community to ensure new initiatives align with community needs and the community participation principle of the ZWS. • Ensure RRS services are an established and growing part of all resource recovery sites and activities. • Invest in market research into the type of users of RRS services. • Financial support to existing RRS initiatives so they can increase their operational or capital capacity to meet demand.		

4.2.4 | Factors that attract users (residents and businesses) to choose RRS

Interviewees suggested various reasons for residents choosing to access RRS before buying new items. As with the motivators for organisations to establish these initiatives, user motivations likely vary between different demographics or the type of initiative or organisation that runs them. Reducing waste and environmental footprint was certainly raised by several interviewees, but so too was a desire to save money or avoid costs, connect with community or access a welcoming space, alongside intangible factors such as sentimental attachment to items or a sense of reward or satisfaction from participating or learning.

Resource recovery centre interviewees felt they were likely to attract environmentally motivated "people that are wanting to start a journey in zero waste". These organisations are also potentially more likely to promote their initiatives through a waste reduction lens, which in turn suggests they attract users for whom this message resonates. Nevertheless, even these initiatives thought their clientele had multiple motivations for visiting. For example, one resource recovery operator that sells secondhand items said that while they had "a solid following of like-minded people with an environmental focus to keep as much in circulation as... humanely possible, whether through donating or buying", they also had many "hunters and gatherers who are looking for another place to find a good bargain."

In corporate contexts, while sustainability goals and commitments may be important, corporate clients are more likely to pay for reuse and rental services or procure from providers with reuse pathways built into their services if this saves money compared to buying single-use items, owning and servicing items themselves, or landfilling unwanted items. Some interviews suggested that corporates may still be willing to cover the costs for redistribution of unwanted items, but not alterations or repairs, suggesting social outcomes might be a stronger driver for businesses than environmental outcomes:

> ... there's more avenues for the donation side of things and a lot of the corporates are willing to pay for that if any costs are associated with it.

Motivations to access particular services may also depend on the initiative in question. For example, the choice to access repair over buying a replacement could more likely be environmentally motivated given repairing is often more costly and inconvenient. An operator of repair cafes reported that:

> ... the majority of our repair cafe interaction... are, people who are really into sustainability... who want to keep whatever it is they have in circulation. And they know that potentially a paid repairer probably wouldn't bother going there.

However, for some participants, social drivers are a pull factor to attend a repair cafe. A study on Aotearoa NZ repair cafes found that while all participants were driven by environmental motivators "such as not contributing to the waste stream and extending the product's life" (Ozanne, 2024, p.11), many were also attracted by the prospect of saving money, and the "positive social experience that allows visitors to meet others in their community and be part of a community event" (Ozanne, 2024, p.5). Intangible emotive or values-based drivers were also cited, such as "fun, happiness, or gratitude" (Ozanne, 2024, p.11).

Cost motivations cannot be discounted, even in commercial repair contexts. For example, a commercial repairer said they focused on repairing items that are expensive to buy new, thus the potential to save money attracted customers to their repair service. They gave an example of an appliance they typically repair that can cost up to $4,000 new:

> ... people are not so inclined to just put them in the bin and go buy a new one at $4000. We can usually repair them fairly cheaply as compared to the replacement cost... the chances of it costing more than about $300 to repair is pretty slim..., which is less than 1/10 the replacement cost... So, it is cost-effective.

If cost savings are a motivator, this suggests that where repairs cannot compete with the replacement cost, repair may become unattractive. Some research suggests that people are usually willing to pay to repair items up to 20% of the cost of buying new, beyond which, repair becomes unattractive (Litjens,

Matrai & Varga, 2018, p.13). However, as with repair cafes, we also heard about intangible drivers that can play a role in attracting people to repair, despite the expense. The same commercial repairer described "a trend towards repairing, which is becoming stronger", alongside particular attachments or sentimentalities that individuals have with particular items.

"... we occasionally do get people bringing stuff in that you just cannot buy new anymore. They can't go to the shop and buy a new one because they don't make them anymore. And they're quite happy to spend more than what it actually costs to buy in the first place to get it repaired... So, yeah, there are times that we take stuff in and repair it that's really not worth it. But the customer wants to do it, so that's what they want. We do it." (Commercial interviewee)

Similarly, another interviewee offering a repair service explained that:

> ... people attach a memory or a feeling to an item that they want to keep. So, it might be you're repairing a dress that someone wore to a special event and they just want to keep that memory alive - it's not just about fixing the product but the journey of that garment and conserving it.

Intangible attractive aspects were also described in relation to reuse. For example, a commercial interviewee with a product takeback for reuse initiative with stores that sell both new products and preowned products notices that many customers enter the store and "go straight to the [preowned] rack; it's bright and fun, and if you miss out on something full price and it's there, it's quite exciting for people". Another interviewee that operates a reuse shop also said there are Wellingtonians who actively seek these initiatives out and tell others about them too.

"I find people who love op shops just like, find out about it online... You know what I mean? Young people just tell each other, they turn up." (Interviewee that operates a reuse shop)

In terms of sharing initiatives, interviewees were less likely to identify environmental benefits as attracting users. A non-profit organisation that runs several sharing initiatives noted that "people who are passionate about sustainability and the environment" may be motivated to access the initiatives they run because they see the connection with reduced resource consumption, but this is likely not the primary attraction. This interviewee noted that some of their initiatives were primarily about waste minimisation and were advertised as such, which might then attract someone to access that service. This suggests that the motivation for establishing the initiative affects how it is promoted, which can then shape the type of people the initiative attracts.

Cost and practicality seem to be key drivers for accessing sharing initiatives. A non-profit interviewee noted that for at least one of their sharing initiatives, "one of its core demographics is low-income folks". Another interviewee that offers a free library service thought people were motivated to access the service to avoid having to buy otherwise "pricey" items. The interviewee also said they stocked items that were "harder to come by" or otherwise not available to buy, which also drew people to borrow the items from them out of necessity:

> I think it's giving people access to things that they wouldn't normally have. That's the big one... giving people access to cool gear and just the ability to do things that they wouldn't necessarily do at home or have space to do at home... not a lot of people have access to money to get all the books or information that they want, and that's where we come in. So we can kind of fill that gap, fill that need.

This interviewee also felt that because people have "limited storage space" at home, borrowing items rather than owning them is preferable as they can return them afterwards. The interviewee also stocks children's items and noted that "kids go off things pretty quickly,

Cahoots Workshop: Image supplied

and their tastes change", so borrowing is preferable to owning in this context too. An operator of a shared facility with fixed equipment, including sewing machines noted:

> The sewing machines see very heavy use and that's either because people don't have space to have one, or can't afford to buy one. I think mostly it's people not having the space. Someone came in doing something with curtains this morning - there's no way they could have done that kind of thing at home. They basically took over half the room, laid the curtains out, pinned things, stitched them all up.

Another interviewee that provides a commercial sharing service said that their greatest pool of customers are people in their thirties and forties, particularly those with young families with more than one child. This is also the demographic most likely to use Wellington's community facilities, such as libraries (Coy-Macken et al, 2024). When both users and non-users of libraries were asked to rate the importance of the different functions libraries perform, access to information, learning, and a free, safe, and warm place to study, or a place for young people, children and families to be, ranked as more important than access to resources (Coy-Macken et al, 2024, p.69). Library staff also perceived the reasons people access libraries as "a blend between the book library (access to resources), the social library (relaxing and interaction) and learning (programmes and events)" (Coy-Macken et al, 2024, p.54).

This blend of motivations was also expressed by our interviewees that run sharing initiatives and spaces. One of our interviewees reflected that "some people are here just because it's warm and we have newspapers and there's a cafe". A non-profit interviewee that operates several sharing initiatives listed the "multifaceted" reasons people access these services, which included environmental drivers, but also "connection to community", "money or it aligns to their ethics, they're into the resource sharing... or it's cheaper for them... for some people it's a storage thing... so, cost or convenience". A commercial interviewee with a sharing app said that "in addition to environmental gains and saving users money, we create a community and connect likeminded people." Overall, these findings suggest that the motivation to share resources may be just as connected to the space or organisation that hosts the sharing initiative, the type of experience that sharing enables at a relatively low price compared to buying and owning items outright, or the fact sharing opens access to resources to those who may not have lots of storage space or may not need the items over the long-term.

Despite the various attractive aspects of RRS to Wellingtonians, interviewees also noted challenges with engaging the general public, indicating that for some people, these activities are still not appealing enough to overcome cost and convenience barriers (e.g. in the form or increased time, effort and/or price). One commercial operator said:

> ... some people are too lazy to engage with resale. Then there are consumers who consume too much and throw away what they don't want anymore. We need behavior change and that needs to be embedded in society. I feel like it was embedded in society, but it's not anymore.

"... it's so hard reaching everyone in the community. Not everyone cares." (Non-profit interviewee)

Beyond cost and inconvenience, several interviewees spoke of aspects of RRS that might put off potential customers. These included intangible social concepts, such as stigma associated with buying preowned items or borrowing items that are shared amongst many people. One commercial interviewee that retails preowned furniture noted that if corporates have the budget, they tend to prefer to buy new furniture even if it costs more, suggesting that 'new' carries a higher social value.

"... there's a little bit of a misconception out there, that pre-owned furniture, secondhand furniture, is really grubby and horrible or stuff that's only going to last a year because it's been around 10 years already." (Commercial interviewee)

The same interviewee also noted that "trends in the market" change over time and secondhand furniture might reflect outdated styles or office fit-outs, making them difficult to sell. Research into barriers to repair activity has also found that amongst consumers, "novelty-seeking behaviour, the desire for new products, is an important predictor for non-repair" (Ozanne, 2024, p.7).

Negative perceptions can be amplified if initiatives are hosted in spaces run by organisations with fewer resources to invest in attractive facilities. When surveyed, users of Wellington's swimming pools, recreation centres and community centres noted that the "poor appearance of the facilities" impacts their use of the facilities, while non-users explained that quality and appearance of some facilities was "not appealing" (Coy-Macken et al, 2024, pp.66-67). The survey also found room to improve council-run community facilities (including community centres and libraries) to support universal design and inclusiveness of the spaces to make them more attractive (and accessible) to more people (Coy-Macken et al, 2024, p.51).

Interviewees operating secondhand sale outlets were aware of these types of preconceptions and noted efforts they made to offset them. For example, one interviewee told us they work hard on their in-store presentation of items, cleaning, continually working to improve "shop layout" so that visitors can find what they

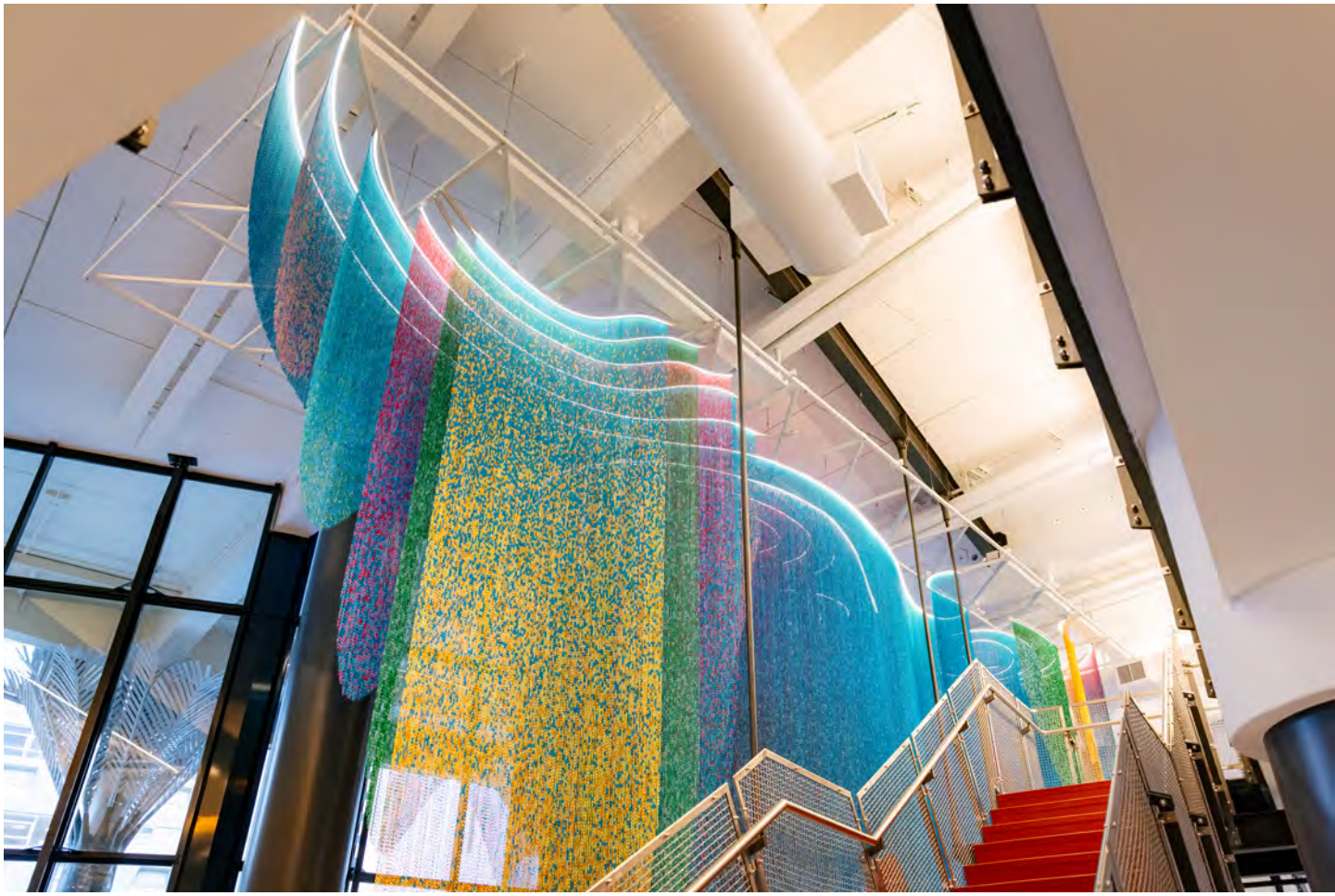
The Tip Shop: Image supplied by WCC

need easily, and ensuring high levels of customer service.

"We provide consistent services and consistent deliverables of whatever our customers need. We are well-mannered and evenly making sure that everything is running smoothly, customers can see what they want to buy and where it is all placed, and not like a messy space." (Interviewee with a reuse shop)

This interviewee noted that these efforts had paid off and they had observed an ongoing increase in customers. Other interviewees felt negative perceptions could be dispelled as part of a broader communications and awareness-raising campaign.

In relation to repair, one interviewee felt that many of the community repair initiatives were focused on DIY or assisted repair, which was not appealing to all people. In their view, people who did not know how to fix their own items want to be able to drop-off broken items to have them repaired by someone else, or be able to buy refurbished preowned items. For this interviewee, filling this gap is more likely to deter people from buying new replacement goods when their items break. This was reflected in data gathered by the business that offered a product takeback repair programme with two options for customers: the ability to return the item for a free repair; or the receipt of vouchers if people shared evidence of having repaired their own product. The interviewee found that the people opting for free repair vastly outnumbered the people repairing their own items, despite the voucher incentive. Similarly, a survey of New Zealanders' attitudes towards and experiences of repair



Rawa by Ngahina Hohaia in Te Matapihi ki te Ao Nui Central Library: Image supplied by WCC

found that of the 46.9% of respondents that repair items (Ozanne, Prayag & Sistig, 2025, p.10):

> ...most try to repair themselves (59%), ask family or friends to help (57.9%), pay to have the item repaired (53%), or take it back to the retailer for repair (52.9%). Few have used a repair café (8.9%).

Interviewees also noted that the attractiveness of RRS initiatives for Māori users, as well as the population more generally, is connected to the cultural appropriateness of the spaces and organisations that host them. For this reason, one interviewee emphasised the importance of ensuring more initiatives are Māori-led, uphold tino rangatiratanga and pursue both social and environmental benefits (as intrinsically interconnected outcomes). This could be achieved through:

> ... well-thought-out, mana-enhancing design of kaupapa that are underpinned by values, positive outcomes, wellbeing and honouring whakapapa.

Another interviewee reflected on the inadequacy of their shared workshop space in meeting cultural needs and that this potentially reduces its attractiveness for Māori. This was also reflected in the 2024 study of Wellington City's community facilities, in which most council-run community facilities (community centres, libraries, swimming pools and recreation centres) rated poorly for celebrating Te Ao Māori, for example, through the buildings' aesthetics, the feeling of tūrangawaewae and the significance of the location (Coy-Macken et al, 2024, p.51). The study also found that facilities' design and sense of welcomeness was a greater issue for Māori than any other ethnic group, and there was a "desire to

acknowledge and recognise cultural outcomes across all types of community facilities" (Coy-Macken et al, 2024, p.92).

Where spaces are culturally appropriate, this can make the initiatives more attractive. One interviewee noted that when they discussed the idea of inviting Māori carvers into their shared workshop space, a Māori representative present responded "we already have that space, it's called the marae". The study of Wellington's community facilities found that Māori and Pasifika peoples were much more likely than the general population to visit marae facilities, with all survey respondents expressing "high levels of satisfaction" with their experiences on marae (Coy-Macken et al, 2024, p.92). As previously noted, marae are already places that intrinsically embed RRS. However, the motivation and drive for undertaking these RRS activities may not be described or communicated in a way that reflects the Council's waste minimisation objectives and therefore they may be underappreciated when it comes to receipt of grants or other support.

Table 17: Summary table of findings on attractive factors for users of RRS initiatives in Wellington City

Attractive or potentially attractive factors[21]	Unattractive factors
• Opportunity to reduce environmental footprint, including waste. • Save money or avoid cost. • Convenience of some sharing initiatives. • Increased community connection. • Initiatives run out of welcoming, well-maintained spaces (particularly sharing initiatives) and 'one-stop-shop' hubs where more than one initiative is located. • Positive feelings related to fixing treasured items, finding bargains	• More inconvenient or expensive than buying an item new. • If spaces from which initiatives are run are unmaintained and unwelcoming. • If initiatives are not designed for accessibility or do not reflect Te Ao Māori. • Stigma associated with preowned items or sharing items with strangers.
Key opportunities/potential areas of focus	
• Funding to support existing initiatives to enhance the appearance of spaces and product presentation. • Invest in RRS initiatives led by mana whenua, hapori Māori or Māori-led businesses. • Funding to increase cultural competence and/or invest in cultural advisor to ensure spaces and initiatives are culturally appropriate, welcoming and reflective of Te Ao Māori. • Support community and council facilities to continue or start to offer RRS initiatives to support ongoing clustering of initiatives. • Invest in/partner to support establishment of new community and council centres/facilities in return for guaranteed provision of some RRS initiatives. • Subsidise residents to access commercial repair services and commercial hire/rental services. • Incentives for businesses to procure RRS products and services. • Positive RRS public information campaign and marketing that promotes existing initiatives, raises awareness of RRS, communicates their waste reduction and other environmental outcomes, and also emphasises social benefits that are attractive to people, including cost-saving, convenience, social benefits, community connection, caring for treasured items, satisfaction of learning new skills.	

[21] The green and yellow columns were merged for this section because whether these factors were strongly or partially attractive would vary between individuals; quantitative surveys directly with users would be useful to determine which of these attractive factors hold greater and lesser sway.

4.3 The waste reduction impact of RRS initiatives in Wellington

Both quantitative and qualitative approaches can offer insight into the waste reduction impact of Wellington's RRS initiatives. Interviewees described the impacts they perceived their initiatives created, many of which reflect the factors that motivated them to establish these initiatives and that attract Wellingtonians. As discussed, these include waste reduction, but also social and wider environmental impacts.

However, quantifying impacts depends on relevant and consistent data capture and analysis. Wellington City Council has already identified good data collection to support decision-making on waste minimisation as a gap for achieving the four objectives of the ZWS. Furthermore, a dedicated objective related to improving data collection is also included in the regional WMMP. In relation to activities like RRS, the WMMP also states (p.29):

> While the Councils have objectives and actions directed at the upper two levels of the waste hierarchy, the data to support measuring targets associated with this is sparse and very limited. The Councils will continue to, over the course of this WMMP, identify how to gain data and measure activity in the upper two levels of the waste hierarchy.

Our interviews confirmed that data collection and impact measurement is both a gap and an opportunity currently faced in Wellington City for RRS. Most interviewees are collecting some type of data to report on either their social or environmental impact, or both. However, between organisations, there is inconsistency in the data being recorded, for what purpose, and the methodologies applied (including whether they use their own software/apps to capture data or other platforms like MyTurn or Restarters). Almost all interviewees wanted to improve their data capture and receive support to do so consistently with other organisations. Such support could include the provision of an appropriate methodology and data capture system, and coordination so that all organisations with RRS initiatives collect the same data to interpret in the same ways.

4.3.1 Qualitative and quantitative evidence and data collection for waste reduction impact of RRS business models

We asked interviewees whether they captured data to help them measure the environmental impact of their RRS initiatives. Several interviewees (both non-profit and commercial) told us they collected data for their environmental reporting requirements for external certifications, such as Toitū Envirocare or B Corp. This data is used to measure and report on their internal organisational environmental impact, such as the carbon emissions, resource usage, and waste generation arising from their daily operations. However, this does not extend to the environmental impact that comes from their customers or users choosing their RRS services instead of buying new products. Therefore, organisations' environmental reporting does not necessarily capture the societal waste and emissions avoidance due to RRS activities. However, given these certifications are widely used, they could be a useful framework into which the measures needed to understand the wider waste avoidance impact of RRS business models could be integrated. This would require some collaboration with the organisations that operate these certifications to understand whether and how this could be done.

Several interviewees described how their RRS initiatives drove upstream design factors or product life extension practices, creating a waste reduction impact. Organisations were not necessarily collecting data to verify this, so descriptions were qualitative. For example, organisations running product reuse systems, shared facilities with equipment that the public can access, or library or commercial rental activities, all reported an incentive to invest in good quality products and equipment that they maintained and repaired because they owned them and wanted them to last as long as possible. A company operating a product reuse system explained that they have business units that manage overseas procurement to source the products ethically "and make sure that they've got the right composition to be reused later on, or recycled or repurposed." Furthermore, higher quality, more durable products

were also more likely to attract rental customers compared to lower quality items that customers could easily buy for themselves.

"... as long as you've got good quality items like we use... it has that opportunity to be reused more... So, it's the initial quality which enables you to be able to undertake your services." (Commercial interviewee)

Organisations that run product takeback for reuse or repair schemes also noted the importance of designing higher quality products that maintain a resale value after pre-ownership or are easily repaired. One business explained in detail how their repair and reuse programmes influenced their product design, stating "we really are thinking about repair and design together... we're design-led so it makes repair easy down the track". They shared examples, such as phasing out certain parts that are "notorious for breaking", designing with a smaller range of parts to minimise what needs to be kept in stock for repair jobs, and using "good quality [base materials] so we can reuse them" and that require fewer repairs. They also explained that:

> ... for every repair we keep a record and then that information is quantified and fed back to design or production because if it's a production flaw that needs to be communicated back to factories, or if it's a design flaw, communicated back to design.

The organisations who did specifically capture data in order to communicate about a wider waste reduction impact of their RRS services were usually:

- resource recovery operators;
- organisations who had established these initiatives primarily to reduce waste and marketed this as a point of difference; and/or
- organisations that received funding on the basis they would generate this impact.

One such interviewee said they collected "detailed data" because it was "essential for transparency and impact reporting", which "builds trust and credibility". Two commercial operators said that they calculated waste and emissions avoided from their service in order to report back to customers choosing the service "so that they can feel good about the decision that they've made".

Organisations that operate RRS business models for revenue generation did have a high-level sense of the quantity of items they are repairing, reselling or loaning. However, they did not have systems in place to interpret that information in terms of waste reduced or other societal impacts. They also did not think others were likely to either, given this would be a costly task without an immediate and obvious benefit to most organisations.

"I don't think many people are capturing data, I mean, I'm not really sure how that would work here. You almost need to put one person on it fulltime just to do that. The amount of transactions we do in a day... it would be a massive undertaking." (Reuse shop operator interviewee)

These comments indicate that the information these organisations currently hold could be used to understand the waste reduction impact of their operations. However, there is a need for appropriate support and incentives to enable this.

Across the board, we noted that where data was collected, this was often for the purpose of communicating outcomes beyond simply waste reduction, including the socioeconomic impact of interviewees' RRS initiatives. For example, a non-profit that redistributes unwanted corporate waste

had calculated the total equivalent value of items redistributed to communities. A commercial operator that redistributed items on behalf of clients kept a record of exactly where items were distributed so they could report on the number of organisations they had benefited. Several interviewees calculated not only the number of people using their services, but also total staff or volunteer hours (where relevant). One organisation had calculated the cost savings for their members from their sharing programme as equating to roughly $133 per year, per member.

4.3.2 Impact measurement methodologies: approaches and limitations

The approach to data capture and analysis varied between the RRS categories, and the subcategory activities. Reuse activities like secondhand sale and redistribution are usually measured based on the number of products sold or redistributed (although one commercial operator calculated redistribution in volume rather than number of products), with tonnage generally extrapolated based on the average weight of items in the relevant product categories. The impact is then communicated as waste diversion from landfill (although one organisation referred to it as 'products circulated back to market'), with some interviewees noting that they also estimate emissions avoided from that diversion.

Using the methodology described, one organisation reported that in the previous year their secondhand sale and redistribution activities (supported by preparation for reuse repair activity) had diverted close to 780 tonnes from landfill, with household items being the biggest product category diverted, followed by furniture, and then electronics. Another interviewee told us that in Wellington last year they diverted nearly 6,000 unwanted corporate items from landfill through secondhand sale and redistribution, totalling 17 tonnes. This data capture and analysis clearly demonstrates that reuse activities that keep existing products in circulation reduce waste and without such initiatives these products might otherwise be landfilled.

Despite commonalities in approach to data capture and analysis across these reuse organisations, and some useful findings about waste diversion for individual organisations, we did not find strong evidence of collaboration towards using the same methodological approach or categorising products in the same way. Consequently, impact data is not sufficiently consistent between organisations to paint a reliable overall picture of the scale of impact, or to compare different initiatives with each other.

For example, one resource recovery operator explained that data capture for "resale diversion" was still emergent amongst resource recovery operators compared to data capture for recycling diversion, which drove a lack of certainty, consistency and coordination in measuring this impact. Both resource recovery operators we spoke to said they had connected with other resource recovery sites with reuse shops around the country to learn about their data capture and measurement approaches. However, this knowledge sharing occurred informally, rather than through an organised process to streamline data measurement. One interviewee said that when establishing their data management system for reuse: "we kind of just winged it based on what we knew [other operator] was doing well... measuring the same kind of measures". Both interviewees noted that while they had learned from others, they still adapted the methodologies used elsewhere because approaches in other locations had not suited their own site's workflows. The "early stage", "ad hoc" nature of current data gathering and the lack of a "fully implemented reporting system" in Aotearoa NZ's reuse sector has been noted in international studies (EPA Research et al., 2024, p.13).

Systems for gathering repair data reflected similar patterns of inconsistency, but also some pockets of stronger alignment, particularly amongst community repair initiatives. One commercial interviewee offering product takeback for reuse that involved repairing items captured repair data similarly to resale data, recording the number of items repaired in a given time period through their programme. A commercial repairer noted that while they know how many items they have repaired in a given time period, they do not have time to translate that into an impact report to communicate with others and have no reason to do so.

Te Aro Zero Waste repair stations: Image supplied

In contrast, community repair initiatives, specifically repair cafes, benefit from a coordinated national effort to enter data through the same open-source toolkit developed by a group called Restarters.[22] This has created transferable and useful information on the impact of repair events. For example, in 2023, six months of collecting data on the Restarters platform across Aotearoa NZ repair cafes found that 73% of items presented across 160 repair events were fixed (RCANZ, 2023). More details about the findings from this research, as well as Wellington-specific data, are shared in **Box 1**.[23]

Overall, this data collection clearly shows that repair activities in Wellington have a direct waste reduction impact for items that fall within one of the focus waste streams in the WCC ZWS. Specifically, just 36 events over one year avoided more than three tonnes of waste by keeping common consumer items like clothing and tools in circulation. The data also shows that these events engaged almost 1,500 residents in the activity of repair, and more than 500 volunteers. Aside from reducing waste, these engagement and participation rates support other outcomes in the ZWS. Given the usefulness of the Restarters data, potentially other repair initiatives could utilise similar data capture methods to enable a more consistent picture about the impact of repair across community and commercial repair activities.

Organisations operating sharing initiatives usually gathered data about engagement and use rather than material savings or waste avoidance. Compared to reuse

[22] Restarters is a global community of people who run local repair events. See https://restarters.net/.

[23] In addition to Restarters, repair cafes have also been the subject of focused research projects that have included impact measurement. A 2024 study of participants at 14 repair cafes in Aotearoa NZ (of which three were based in Wellington City) found that, despite various constraints, over 60% of items brought to repair cafe events are successfully repaired (Ozanne, 2024, p.5).

Repair Cafe at Te Aro Zero Waste
Image supplied

BOX 1: Insights from Repair Cafe data via Restarters database for Aotearoa New Zealand and Wellington

Repair cafes enter data through a free, open-source data recording toolkit developed by a group called Restarters. This toolkit is used by repair cafes across Aotearoa NZ thanks to a partnership with Repair Cafe Aotearoa New Zealand (RCANZ, 2023, p.2). The tool calculates how much the particular repair cafe has diverted from landfill, and how much CO^2 is avoided. A six month project to gather data from 37 repair cafes (of which 6 were in Wellington) across 160 events (of which 25 occurred in Wellington), and input it into the Restarter toolkit generated the following results (RCANZ, 2023):

- The most common frequency of events was monthly.
- The average number of items presented at each event was 29 items.
- More frequently held repair cafes showed fewer items, and less frequently run repair cafes showed more items.
- There were 4,705 items recorded with a repair outcome. Of these, 73% were repaired, 15% were repairable, and only 11.5% were unable to be repaired.
- Sixty-four percent of the items presented at repair events were unpowered (e.g. clothing, hand tools, furniture and jewellery), and 80% of these items were fixed.
- Thirty-six percent of the items presented at repair events were powered, of which 50% were fixed.
- Clothing and textiles are the most commonly presented (28%) and most commonly fixed (92%). Hand tools were less commonly presented (9%), but also had a high rate of repair (93%).
- Small kitchen items were the most common powered items presented (including general items, kettles and toasters), but the repair rates were much lower than for unpowered items (45% for small kitchen items, 46% for kettles, 33% for toasters).

The Restarters toolkit calculates the environmental impact of repair cafes based on the data provided about the type and weight of items fixed. Across the 160 events that took place between May and October 2023, **8,938kg of waste was prevented** which equates to **52,906kg of CO^2 diverted**. The carbon diverted is based on Restarters' "substantial research into the carbon footprints of common products at repair events" (RCANZ, 2023, p.5). The model also assumes that for each successful repair, the useful life of an item is extended by 50% (ibid).

On request, Repair Network Aotearoa (2025) also shared data for the eight Wellington region repair cafes registered with Restarters for the period of **1 July 2024 to 30 June 2025** (six of which are in WCC). **Thirty-six events** occurred, attracting a total of **1,440 attendees** and **505 volunteers**. Of the **2,470 items** presented:

- 1,948 (79%) were fixed, preventing 3,424kg of waste (an average of 95kg per event) and 23,605kg of CO2.
- Twenty-five percent of the items presented at repair events were powered.
- Seventy-five percent of the items presented at repair events were unpowered (e.g. clothing, hand tools, furniture and jewellery).
- Clothing and textiles are the most commonly presented item (26%), with an 87% repair rate. The second most presented item was hand tools (25%) and these had a 96% repair rate.
- Small kitchen items were the most common powered items presented, including general items, toasters, kettles and coffee makers, but had lower repair rates (47% for small kitchen items, 50% for toasters and kettles, and 25% for coffee makers).

and repair initiatives, data collection in sharing contexts is often more integrated into the business model or supported by databases and platforms. For example, app-based sharing systems usually track the number of interactions/uses of the app and what was shared or accessed. In-person sharing organisations like libraries usually keep data on numbers of members and loans and communicate their impact in this way too and have software and inventory management systems that record this information. Other sharing organisations, such as those that offer shared facilities with fixed equipment, e.g. makerspaces (or the repair subcategory that involves access to workshop spaces or repair stations), record the number of jobs or transactions that come through their programmes, e.g. the number of visitors to a facility to complete a project that requires staff time and support, or the number of visitors to a space to use a repair station.[24]

As with repair cafes, there are shared platforms that libraries and rental services can use for inventory management and tracking loans, such as MyTurn. One organisation (outside of Wellington) uses MyTurn to track the total number of "unique loans" from their library. Using this information, they have calculated the number of "unnecessary purchases" avoided from their initiative, which is then communicated in dollar terms. The amount saved, when divided by the number of active members, equated to more than $1,000 per member. While this is a social impact, the avoidance of unnecessary purchases could also be used to estimate waste avoided. We also heard that MyTurn enables calculation of CO^2 avoidance. The approach of using unique loans to measure unnecessary purchases avoided and then extrapolating cost and waste savings could also be applied to any organisation in Wellington with a sharing initiative where individuals can access items.

Even though data collection may be better embedded in the sharing model, there is still inconsistency between organisations regarding what data is collected and how it is interpreted. In the 2024 analysis of Wellington City's community facilities (many of which are organisations with a sharing component, such as libraries and recreation facilities), the report highlighted the need "to establish a network-wide data collection system so there is better understanding of facility utilisation" (Coy-Macken et al, 2024, p.53).

Overall, even if organisations collect data from which the waste reduction impact of their RRS initiative could be calculated, the scale of this impact relative to the quantity of products going to landfill is still not well understood. Partly, this is because many initiatives do not calculate their waste reduction or diversion as a percentage of the total number of products they handle. For example, one commercial repairer noted that while they know the number of items they have repaired, they do not know what that represents in terms of the total number of items they have seen, including those they did not repair. Similarly, while the methodology for calculating diversion from reuse and redistribution is often based on the tonnage sold and redistributed, it is unclear what this represents in terms of the total amount dropped off.

Some initiatives do keep track of both the items they successfully recirculate and those they could not recirculate. For example, one resource recovery operator that repairs items in order to resell them (preparation for reuse) estimated that they repaired about 40 percent of the electrical items dropped off to them. The Restarters dataset also tracks the percentage of items presented to repair cafes that are not repaired. However, in these cases, the figures are based on the overall number of items presented to the initiatives, but what this represents as a percentage of all discarded or broken items in Wellington is unknown. A commercial repairer also noted that customers are unlikely to bring items to them that have a low chance of being repairable and so no one is keeping data on these broken items, how many of them go to landfill, and what this represents in terms of the total waste stream. This highlights a key data gap in the lack of a clear baseline of waste to landfill in Wellington categorised by product type (not just material types), from which the potential waste diversion impact of RRS could then be derived.

[24] We heard that this usually did not extend to recording the outcome of that access, i.e. whether or not the use of a repair station led to a fixed product.

In addition to the lack of consistency in impact measurement approaches, we noted that regardless of whether or not interviewees were collecting data to analyse impact and communicate this, most were either not particularly confident in the robustness of their current approaches, or were unsure how they might go about starting to measure their impact (or how they might measure impact in new ways). One interviewee told us that their approach was "kind of holistic, not so sciencey... The waste avoidance is a very interesting one. I don't even know how you would measure that?" In almost all cases, interviewees were interested in support to improve their data collection methods or to start collecting data to measure the waste avoidance impact of their RRS initiatives. As one interviewee said in relation to their sharing initiative:

> ... off the top of my brain I don't know how [measuring waste avoidance] would work... But, by all means, if you had an idea, send it through!

We also heard from resource recovery operators that they would like support to report on the social impact of their RRS initiatives, which they saw as "equally as important" as measuring waste diversion.

"...social impact is something we would really love to report more on. Tonnage, diversion, all of those things are very important, but I think so is social impact, and you can't put a price on social impact..." (Resource recovery operator interviewee)

However, all interviewees wanted guidance and coordination to improve the data they collected and did not want onerous reporting requirements. This was encapsulated by one non-profit interviewee who said "we could probably do some data collection better, but everything's hard." One non-profit organisation noted that it would be a big undertaking to collect waste reduction impact for their initiative and that, in order to do it "you have to have a system and a person, a resourced person". Another non-profit interviewee also noted that their reporting requirements for funding are already quite onerous so, while they would be open to implementing new data collection methods, this would need to be made easy for them through a system and appropriate resourcing. Only one interviewee was vocally reluctant to gather data as they thought it would not add value for their organisation, but could impose significant costs:

> No, I don't see really any point in that. You know, it's up to the government to help me. I'm doing my best to bloody stop the stuff going onto the landfill, so you know.... I can't really do any more than what I'm doing, and no, I don't want to capture data. We haven't got time and that's not really part of the business I guess.

It should also be noted that while organisations that operate RRS initiatives would require support to collect and share relevant waste avoidance data in a consistent way, efforts to contextualise such data is likely to require more detailed information about the waste currently going to landfill, in terms of product categories, not just material types. There is currently a gap in terms of a city-wide commitment to measure the impact of RRS activities, and an agreed methodology.

Some international studies and methodologies to measure the impact of RRS activities in particular jurisdictions do exist that could provide inspiration. For example, in the United States, the NGO Reuse Minnesota contracted Eunomia Research and Consulting (Eunomia) to create a user-friendly methodology tool to measure the impacts of reuse in Minnesota (where the definition of reuse included rental and repair activities as well as resale, redistribution and repurposing activities), with the intention that Reuse Minnesota could use this tool to regularly measure impacts of its members' repair, resale and rental activities over time (Eunomia & Reuse Minnesota, 2022). In Australia, Charitable Reuse Australia partnered with Monash University and Western Sydney University to develop the National Reuse Measurement Guidelines to enable a standardised approach to collecting, interpreting and reporting on reuse impact data (Allen, Lane & Healy, 2024). The open-source guidelines have led to several states across Australia applying the methodology to measure reuse impact in their own

states. For example, New South Wales (Heinrich, De Garis & Rawson, 2024), Tasmania (De Garis, Heinrich & Ellis, 2025), and South Australia (De Garis & Ellis, 2025). Both the Reuse Minnesota and the Charitable Reuse Australia methodologies consider the environmental impact of reuse activities (including waste reduction and avoided energy and other resource consumption), as well as economic and social impacts, such as job creation, education, social value expressed in dollar terms, and wider community benefit.

Table 18: Summary table of findings on waste reduction impact of RRS initiatives in Wellington City

Some quantitative evidence of waste reduction impact	Some qualitative evidence of waste reduction impact	Gaps in waste reduction impact understanding
• Secondhand sale • Redistribution • Repair cafes • App-based systems • Initiatives where funding or participation in environmental certification requires data capture for reporting. • Resource recovery operators measuring diversion from landfill. • Organisations seeking to verify sustainability or social benefit claims to customers and corporate clients.	• Anecdotal evidence that RRS drives product redesign for durability, repairability and quality	• Waste reduction impact of sharing initiatives • Waste reduction impact of commercial repair • No consistent data capture methodology and platforms for all initiatives, including resource recovery operators. • Waste to landfill according to product categories • Connection between waste reduction impact measurement and social impact measurement.
Key opportunities/potential areas of focus		
• Audit waste to landfill in Wellington City based on product categories. • Provide guidance and coordination to initiatives on how to start organised data gathering and appropriate impact measurement methodologies (could include development of shared data gathering platform) • Measure both waste reduction impact and social impact of RRS. • Collaborate with existing environmental or corporate responsibility certification schemes to include calculations and reporting on how organisations' business models avoid or reduce waste for consumers/society. • Incentivise or directly fund organisations to collect data to report on the impact of their RRS initiatives.		

4.4 Are RRS initiatives resilient and do they have what they need to sustain themselves and grow?

The resilience of RRS initiatives affects both their long-term availability to Wellington residents and businesses, and the attractiveness of accessing or operating them. To understand the resilience of existing initiatives, we asked our interviewees how long their initiatives had been operating, whether they were self-sustaining, if interviewees had everything they needed to operate and/or grow these initiatives, any key barriers, and the factors that helped them succeed or overcome identified barriers. The two main risks to interviewees' existing services are: funding constraints due to most initiatives not being self-sustaining; and a lack of appropriate space to conduct their activities. Both barriers have flow-on effects for capacity to deliver existing services and grow them in line with most interviewees' aspirations. They suggest a need for financial support to help with operational and capital costs, and creative solutions to connect initiatives with available space across Wellington City. Given the interrelated nature of financial and infrastructural capacity of RRS initiatives, the findings from the interviews are grouped together into one summary table focused on resilience at the end of this subsection.

4.4.1 The duration of RRS initiatives and their resilience as standalone activities

Three-quarters of our interviewees run initiatives that have existed for at least five years, with some in place for a decade or more, and one in operation for several decades. Many interviewees were operating more than one RRS subcategory activity. These activities were often progressively added over time in response to community need or demand. For example, one interviewee that has had a reuse shop for 25 years, added redistribution and repair activities eight years ago and five years ago, respectively. Another interviewee running several sharing initiatives launched all of them more than 5 years ago, with two in existence more than ten years. Very few interviewees were running initiatives less than 5 years old. These included one interviewee that had opened a new site in the last five years (although many of the initiatives it runs predate the site), a sharing app, and a commercial operator with a product takeback scheme for reuse and repair that added its reuse service less than five years ago.

Overall, the durability of our interviewees' initiatives demonstrate that RRS activities can be resilient. However, we also heard about activities that were discontinued or reduced over time. Various reasons were cited for this, including the financial, infrastructural and capacity constraints discussed below. However, interviewees also told us that many reuse or repair initiatives involve working with products manufactured by others, and that poor product design has sometimes led organisations to give up trying to apply reuse and repair practices to certain products. For example, a non-profit interviewee that sells donated secondhand items discontinued previous attempts to repair donated furniture for resale due to the decreasing quality of furniture in circulation, with a large proportion now made of custom wood/MDF that is not viable to repair and resell:

> Back then we had rimu and native timber that we could reuse all that stuff and not dump any of it. We would repurpose it and turn it into drawers or dressing tables, but that's not possible now just because the timber is not good quality.

Another interviewee cited their desire to follow other resource recovery operators elsewhere in Aotearoa NZ (see Checkpoint, 2025) and stop accepting fast fashion in their reuse shop because even though the diversion potential is theoretically significant given the volumes, it is difficult to resell due to the speed at which it arrives in the store and the poor quality of the items. One interviewee offering a product takeback scheme for reuse and repair noted that they were only able to offer the repair service because, although their products are manufactured overseas, they have a workroom in Wellington where product design occurs. As a result, repairs can be undertaken in the workroom by staff with the necessary skillset to complete them. However, the interviewee noted that this was unusual:

> We have a real knowledge of what we are making here; understanding your product, how it gets put together is key to be able to build the repair service, and the skills onshore to do it.

Reuse, repair and share also seem to be difficult to operate as standalone initiatives. Less than half of the interviewees were solely focused on RRS. These included a shared workshop facility and library, a commercial repair service, an organisation focused on reselling and redistributing corporate items, an app-based sharing service, and a product reuse system. Most interviewees operated RRS as only part of their overall work. For example: resource recovery operators that also offer recycling services; commercial businesses that are primarily focused on selling products, but run a supplementary product takeback for reuse system; or non-profit organisations that offer a range of services and initiatives to the community. Compared to standalone initiatives, RRS that are 'umbrellaed' within a wider organisation can leverage off that organisation's wider infrastructure, systems and staff. One commercial operator that resells and redistributes corporate furniture noted that the ability of those initiatives to leverage off the wider business was:

> ... probably the only way you could do it. If you were trying to set up a second-hand furniture business at the moment and you had all those overheads running just on that business, it would be very, very hard to do.

In contrast, standalone initiatives seem to be most successful where they are operating in a niche filling a market need, or where they have been in operation for a very long time and already have a strong foundation of capital infrastructure in place so they can operate a viable business model.

While RRS initiatives do benefit from being run by organisations that operate other initiatives that can cross-subsidise them, this can also be a double-edged sword. For example, while RRS seem natural activities for resource recovery operators to run, the expectation that these operators will also offer recycling and disposal services means that in these contexts RRS has to compete for staff time and site space. One resource recovery operator estimated that almost 40% of the organisation's time was spent on recycling rather than RRS. One operator noted that if they were to start their site from scratch again they would prefer to "reverse" their approach to balance the focus and "introduce a bit more of repair, and parts collection" rather than having resale and recycling as the central focus.

In relation to the durability of interviewees' RRS initiatives, we heard from most operators that these initiatives were either strongly tied to the organisation's values, or had been driven by particular individuals. If values are embedded in a structural way through the organisation, this can be a source of resilience for an initiative over time. One interviewee operating a product takeback for reuse system spoke to the "persistence" and "internal commitment" within their organisation to continue despite "external challenges". Another noted their organisational commitment to their reuse initiative was "something driven from the top down - the staff actually believe in it."

"... what is really special about our business is everyone has got sustainability embedded into their work, it's in all of our JDs so there's that collective sense of doing good together." (Commercial interviewee)

Cahoots Workshop: Image supplied

Other interviewees specifically noted particular individuals. For example, one non-profit interviewee said a single individual within the organisation was "the big motivator" for the increase in RRS initiatives that that organisation now undertakes. Another commercial operator said that:

> ...having a founder that's had sustainability embedded in the business from the get-go has been key to all of its success and putting money into the budget to make sure that we are keeping these services as part of the business.

While these individuals can be critical to getting initiatives off the ground and sustaining them while they are at the organisation, succession planning is important to embed that commitment in the organisation so that initiatives persist even if those individuals should leave.

4.4.2 Are RRS initiatives financially resilient?

The centrality of financial viability for resilience and growth was encapsulated by one interviewee who stated:

> ... it's good and important to make money because that basically also means that I can hire more people, we can do more projects, I don't have to be dependent on waste levy, I can just do my own thing.

However, as one resource recovery operator told us "reuse, repair, share comes at a cost". Resourcing this cost was the key challenge most interviewees reported facing, while most also thought financial issues explained the underprovision of RRS services in Wellington City more generally. One interviewee operating many RRS initiatives said "it is hard to turn this into a viable financial thing".

"I find it really frustrating that, whilst we want to do good, it would be awesome to see a quadruple bottom line business model[25] being implemented in a resource recovery or zero waste centre, but it just feels like it's very hard to achieve." (Resource recovery operator interviewee)

The critical difficulty with achieving financial viability when operating circular business models like RRS is having to compete on price in a market saturated with low-quality, low-cost new items, and low landfill costs. Additionally, because these business models are not normalised, gaps in supporting infrastructure, assets and logistics systems must be filled at the cost of the organisations operating the models. These challenges manifest in different ways across RRS activities.

In the case of repair, labour costs frequently outstrip the cost of new products (Ozanne, 2024, p.7). One public/council interviewee described repair as "quite an expensive affair" due to the labour involved. A 2025 survey of New Zealanders' attitudes towards and experiences of repair found that 55% of respondents thought "low prices of new products makes it less likely that they will repair items (55.2%)" (Ozanne, Prayag, Sistig, 2025, p.15). This was echoed by a commercial repairer who recounted a common interaction:

> ... you've got a customer that bought a [product] for $20 and thinks you are going to fix it for $5... You tell them it's $45 just to open it up and look at it. And they're like, 'well, you know, it only cost me $20 new'.

Additionally, the business model of third party repairers is often at the mercy of manufacturing and retail decisions outside their sphere of control. For example: the low rates and poor contractual conditions that manufacturers offer commercial repairers to be their service agents; products not designed for repair; a lack of spare parts or diagnostic information; and an overall "lack of capability, lack of parts, lack of infrastructure". One non-profit interviewee that offers community repair services noted that lack of spare parts is a "massive thing". This was echoed by a commercial repairer who said that when customers bring them broken products:

> Sometimes we'll open them up, pull them apart, and then figure out, no, we can't get that part, we can't repair that part, there is nothing we can do with it. Sometimes we just turn the customers away at the door. You know, 'the rubbish bin is outside on the street, mate; I can't do anything with that'.

As with repair, reuse activities are also disadvantaged by low cost linear production, consumption and disposal patterns. For example, in product reuse systems servicing a reusable item often costs more than purchasing disposable alternatives, particularly at smaller scales. In contrast, secondhand sale is much more likely to be self-sustaining or revenue generating, but the model still competes against low cost new items. For example, we heard from one commercial operator that sells or redistributes corporate items that they recirculate higher value items in order to breakeven, but then "the cost comparison between pre-owned and

[25] This is an extension of the concept of the corporate 'triple bottom line' (or 3Ps) that contends that businesses should be driven not only by Profit, but also by their impact on society (People) and the environment (Planet). The quadruple bottom line idea adds a fourth P relating to Purpose, meaning an organisation should also be driven to act in accordance with the reason it exists in the first place.

what people can purchase new is very, very close for lower quality new items."

Sharing business models require upfront investment, ongoing maintenance and risk, all of which can outweigh revenue. One interviewee running a shared workshop space said that such spaces demand large upfront start-up costs, without a reliable business model to guarantee return on investment. Another interviewee said that although "every community group should be looking to be sharing or providing resources for hire", this can be "financially onerous" due to the need to purchase and maintain items. Indeed, we heard from both commercial and non-commercial interviewees, that open-access to, and heavy usage of, items being shared requires organisations to regularly fix and maintain them.

"... [sharing is] fantastic, but it also comes with issues for us because we've had sewing machines burn out, so we foot the bill to fix and repair those. We've had items not be returned and again, we foot the bill." (Non-profit interviewee)

A public/council facility operator said "never underestimate the amount of time you need for maintenance - you always need more than you think, so budget it into your time." We also heard of the financial risk in library and rental models that items might not be returned or looked after while on loan. One interviewee recognised that while "there are libraries around the world that are lending out hammers and saws and instruments", choosing to expand beyond books to a wider range of more valuable items "depends how much risk you want to take" because "there is always a chance it's going to come back in pieces".

In any model involving either loaning, selling or redistributing items, quality control of goods in-between uses can take time and also introduce liability risks. For example, with electrical or electronic items, there are legal obligations around testing and tagging to ensure these items are safe to loan or recirculate into the community. Interviewees operating secondhand sale, particularly of donated items, also raised the issue of quality control of all goods, and the financial burden of paying to dispose of unsellable donated items. One interviewee said "we put a lot of rubbish through the tip in skips through the process of recovery and reuse". They also explained the sensitivities of quality control when the model relies on donors:

> If it is broken or it's badly stained we can't take it because all we are doing is taking it to the tip at a cost, but at the same time we rely on donors, so we are careful of how we manage relationships so we don't discourage people from future donations.

A commercial repairer also described customers not returning to pick up broken items they opted not to have repaired after receiving a quote, leaving the repairer to pay to dispose of them.

In light of the above, only a minority of the initiatives run by interviewees were both the sole activity they undertook and financially self-sustaining (e.g. through user donations or charges, sales, or membership fees). These included one product reuse system, one sharing app, and one commercial repairer. Factors that supported viability for these interviewees related to operating in a niche, only working with select items that are economic to recirculate or repair, and/or having limited competition and thus a captured market. For example, the commercial repairer attributed their ability to overcome barriers to: "providing a service that nobody else does, or that nobody else is interested in providing." The operator of the product reuse system said they operated "a niche model" and that "we only have two key competitors, so not many people are doing it". They also thought "the level of quality in terms of what we do" was important as well.

For the remaining initiatives, interviewees' ability to overcome the financial shortfall in order to operate their initiatives relied on different strategies depending on the organisation type:

- public/council initiatives are usually delivered as part of a core public service and therefore partly or wholly covered by council budget allocations;
- non-profit initiatives usually rely on grants from

council and other funders alongside significant amounts of volunteer labour or participant donations;
- commercial organisations generally use the revenue from their main activity to fund any RRS programmes; and
- across organisation types, where multiple RRS initiatives are offered, those with higher revenue generation potential (e.g. secondhand sale) may help to cross-subsidise the initiatives that run at a loss.

While these strategies help to sustain existing initiatives, they often come with uncertainty, are only partially effective at removing funding constraints, or limit the possibility of expanding RRS within organisations or to new organisations. For example, internal cross-subsidisation will not always cover all costs or allow initiatives to grow. Organisations who run multiple RRS initiatives are often motivated to do so for waste reduction or social outcomes, and find their ambition often cannot be fully resourced by their revenue generating activities alone. One organisation explained that while their reuse shop does generate revenue "it's not enough to keep [the rest of the organisation's RRS initiatives] at the scale it's running at currently... from paying the staff to keep the place open and provide the service that we provide... as many days of the week". They explained that they have covered the shortfall through grants from various sources, including participant donations, but noted that, ideally:

> ... we would be able to not have to always rely on funding, but it would be a miracle... especially in this day and age, without a big funder backing you.

Another non-profit interviewee that umbrellas several sharing initiatives as part of a broader range of core activities relies on external funding to cover its organisation's operational costs. They explained that the sharing initiatives receive various in-kind benefits from the hosting organisation, including project management support, volunteer coordination and free rent. Even so, some of the sharing initiatives operate at a loss and the interviewee "picks up the remainder of the bill". One of the initiatives is cost-neutral because it runs on a membership model with a fee, but still receives benefits in-kind, project management support and is fully reliant on volunteers. As such, "if it was to be run like an actual business, probably wouldn't be doing well."

Additionally, efforts to achieve or increase financial resilience of RRS initiatives often require trade-offs with the core values that drove establishment of the initiatives in the first place, such as accessibility or maximising waste reduction. For example, one organisation offering a sharing initiative planned to increase membership fees and the cost to loan items, which would reduce the accessibility of their service. Other organisations have to pick and choose what products they focus on for RRS initiatives, even those that are strongly motivated by keeping goods in circulation to avoid waste. A resource recovery operator offering secondhand sale explained:

> I hate to say it, but revenue generation is still important in this project. So, what we are offering and what we are selling is the kind of equipment that we can get bigger money for, but we can also offer at a much more discounted rate than people could go out and buy new. So, if I'm being completely honest with you, there has to be a viable business model. For that to happen, we needed to pick stuff that didn't just align with the things we were already doing, but the stuff we could get top dollar from...

The need for selectivity to generate revenue through secondhand sale was confirmed by another non-profit that runs an op shop for fundraising. This interviewee noted that for secondhand sale to be "sustainable as a business model" and still generate revenue after "the cost of the space, overheads, the staff... the quality of the goods that you offer, that's really important".

Commercial organisations may be deterred from establishing or continuing RRS initiatives given their reliance on internal or external subsidies. We heard from commercial interviewees where RRS was supplementary to their core business (e.g. product takeback for reuse) that these activities were a fraction of the overall workstream and would be difficult to expand, financially. Where products were redirected for resale, they usually paid for themselves and sometimes generated a small profit (though they leverage off existing infrastructure

and staff from the organisations' core business and might not be self-sustaining as a standalone initiative). However, redistribution or repair activities such as preparation for reuse usually came at a cost, or simply broke even. One interviewee explained that for their product takeback initiative, even though the reuse component represents just 10-15% of the overall recovered product, it "is not financially self-sustaining" and costs the business, requiring them to budget to retain it each year. Another commercial entity that redirects items for resale said "we wear that cost, so the client doesn't wear that cost". Another commercial business with a product takeback initiative said "it actually costs us quite a lot of money".

Non-profit interviewees were the most dependent on external funding both for their own operational costs and the costs of the RRS initiatives they run. Often non-profit organisations are driven to provide accessible services, so they have limited avenues for revenue generation to cross-subsidise their initiatives or to cover wider organisational operational costs. One interviewee explained the predicament: "we actually are locked into never being able to charge very much for things because our core purpose is to not charge very much for things." The lack of revenue generation for facilities like community centres that often host RRS initiatives was also highlighted by the 2024 study into Wellington's community facilities (Coy-Macken et al, 2024, p.54).

Reliance on external funding creates uncertainty and precarity for the initiatives non-profits run, many of which are initiatives that are under-provided, or not otherwise provided by anyone else in the city, thus affecting the overall resilience of RRS in Wellington. One non-profit interviewee observed, "funding is not a never-ending pool", so "[t]he fact that you do have to rely on funding for these types of things is a bit frustrating." Another interviewee offering several sharing initiatives explained that they face a major shortfall in operational funding, requiring them to fundraise just to stay open. Meanwhile, the sharing initiatives they run are "large projects that involve people management and project management and budgets, and there's not enough money".

Council funding is currently critical to the survival of some key RRS initiatives in Wellington. Several interviewees that rely on Council funding (both public/council facilities and non-profits) attributed their ability to run their initiatives to this funding and expressed gratitude for this. One interviewee said they were "extremely grateful" for the finances they receive from Council to operate their activities "because it wouldn't be what it is without them; it may still exist, but not at this scale."

"We are very grateful for the support that we get from council. And blessed to have a council that sees value in waste minimisation strategies and supporting community organisations and understand they're confined by all this stuff..." (Non-profit interviewee)

However, interviewees also noted that Council funding did not guarantee resilience and often came with its own challenges, especially the mismatch between expected outcomes and the extent of the funding allocated. For example, one interviewee said the funding they receive from Council has "never been enough" for their initiatives, while the outcomes they are expected to deliver are "quite unrealistic". Interviewees also noted that because council funding is stretched, performing well on insufficient funds can paradoxically undermine efforts to increase an organisation's share of funding over time by creating an impression that high performance is achievable despite under-resourcing. For example, one public/council interviewee said:

> ... when things are functioning well and if it's not an urgent need, other things take a priority... I guess that's where there is a massive gap between what we need at the bottom to what our superiors think are the needs of the moment.

Another interviewee felt they offered "a lot of bang for your buck", but "I worry if the overachieving then becomes an expectation ... I'm not sure if the challenges we face to make it all happen are as heard".

Public/council facilities also noted that reliance on council budget allocations can, at times, make innovating or expanding services in new directions more difficult. One interviewee noted how their sharing initiatives included relatively novel activities that required investment. However, in order to justify offering them as a subsidised service through council, the interviewee explained that it was important to connect it to existing and accepted activities that council undertakes. For example, providing access to a music recording studio was equated to hiring out meeting rooms, while offering access to a 3D printer was framed as "an extension of the printing service we already offer, only in a slightly different medium". In some cases, the ability to make such translations might be more difficult and this could act as a constraint on innovation or evolution of RRS services operated by organisations that rely on council funding.

Across organisation types, the lack of financial viability has flow-on or compounding effects. For example, several organisations noted that operating within stretched budgets reduces the resilience of their initiatives in economic downturns, which are also occasions where many feel communities need them the most. One interviewee had to shut down a secondhand store in the city "due to the impacts of Covid and the financial impact, which saw expenses for running the site outstrip income." Other research has found that the operating costs of Wellington's community facilities increased by 37% between 2016 and 2023, due to "increasing staff costs, greater maintenance and declining revenue due to the Covid-19 pandemic" (Coy-Macken et al, 2024, p.72). A non-profit interviewee also noted the rising costs of running their operations, their own desire to pay staff a living wage in a cost of living crisis, but an inability to access the funding to achieve this.

The inability to pay staff leads to some of the employment challenges previously noted, which can then become issues for the long-term resilience of initiatives. For example, understaffing is not only a matter of job quality, recruitment and retention, it also constrains organisational capacity, which can lead to certain activities being contracted or discontinued. An interviewee that runs repair cafes noted that despite developing them to be "a well-oiled machine", nevertheless "they are quite onerous" to run and they have had to reduce the size of these events over time. Another interviewee that used to run repair cafes explained that they had to stop them altogether due to the time-consuming workload. One non-profit cited their organisational capacity as a constraint on existing services, noting "we simply have too many things to do in the day and not enough time to do it in" and that this capacity constraint had grown over time as finances have constricted. Similarly, an operator of a reuse shop said:

> I had to cut down the percentage of textiles that we receive by 60% because... we have no capacity to sort through them, I have no capacity to repair them, even though there's a market for it.

Lack of capacity can also prevent exploration of opportunities that could increase resilience over time. For example, many community centres in Wellington report limited collaboration between centres, even co-located centres, due to a lack of time to pursue these collaborations (Coy-Macken et al, 2024, p.54). This was reflected by one interviewee who described ideas for potential collaborations and outreach activities to bring more users to their location and thus enable wider participation in their sharing initiatives. However, a lack of time and capacity made implementing these "blue sky" ideas very difficult. Another interviewee that operates a shared workshop space noted that they collaborate with and support other organisations with their RRS initiatives, such as Menzsheds and repair cafes, and would love to collaborate with more organisations, but needed more staff to be able to do this effectively.

The financial struggles that RRS initiatives face clearly show that targeted financial support would help to increase the resilience of existing initiatives. Some of the ideas for financial support raised by interviewees included more direct grants and funding allocations to cover initiatives' operational costs. Indirect measures could include subsidies to customers to access RRS services, council procurement policies that prioritise RRS, and efforts to decrease the costs Council imposes

on RRS initiatives, such as waiving landfill fees for unavoidable waste from RRS. Some interviewees also suggested increased charges for linear business models, such as increasing landfill gate fees, to help level the financial playing field with circular models.

Arrangements that offer longer-term security were favoured over grants that need to be continually reapplied for. For example, one non-profit wanted to develop "strategic investments and partnerships" with corporate and local and central government in order to increase their financial resilience. There was also a strong call from interviewees to focus on strengthening existing initiatives and the organisations that run them, rather than seeking to establish new initiatives or organisations from scratch. This sentiment was shared in various ways, but particularly strongly by one non-profit interviewee who said:

> The biggest thing I think this waste minimisation policy needs is just to fund us better, just to fund the people that are already doing the stuff better. Don't throw new things at it because stuff's closing down! .... I don't know why everyone's obsessed with new stuff. Meanwhile, everybody's just trying to make survive the things that's already successful.

Connected to this, interviewees are proud of the initiatives they run and are also generally enthusiastic to keep delivering and building upon RRS initiatives to support the city's waste minimisation goals. However, many stressed that any effort to expand the services currently offered by organisations in Wellington should be accompanied by additional resourcing.

"... it just needs to be heard super loud and clear that the funding is such a concern... we are underfunded. If we're delivering all these services and things on behalf of council then to have an increase in funding so that we can pay our people fairly and aligning to council rates, would be fantastic. Don't put more outcomes on a plate without increased funding." (Non-profit interviewee)

4.4.3 Infrastructure needs and constraints

"I think space restrictions are frustrating because even expanding on the things we do well is hard, let alone expand on other things that would be good for the community to support them to be more zero waste focused. So, I think that's probably the biggest barrier, biggest frustration." (Resource recovery operator interviewee)

The lack of appropriate physical space in Wellington to carry out RRS operations was cited by many interviewees, across non-profit, council and commercial organisation types. Reuse, repair and share initiatives often require a lot of space, and these needs were not being met for most of our interviewees, particularly for back-of-house sorting, storing and warehousing activities. These spaces are hard to come by, particularly in the CBD, and rents are expensive. We heard that this was making operating existing initiatives more challenging, as well as constraining both the expansion of existing initiatives and the establishment of new ones. This issue is even greater when the products in question are larger and bulkier, such as furniture, construction materials, or medium-to-large pieces of equipment.

Interviewees operating secondhand sale and redistribution activities explained that they require areas to store and sort donated items prior to inspection and preparation for reuse. We heard from one interviewee that:

> We need more hubs, especially in the CBD where most of our goods come from. Better storage and sorting infrastructure, access to affordable transport and warehousing is critical.

Those undertaking repair and product reuse activities require space to store products before and after service, to house spare parts, workshops and relevant equipment or infrastructure. As one commercial repairer told us, "a bigger workshop would be nice". Shared facilities require large areas to set-up their equipment that are

also appropriate for public use, e.g. sufficiently spacious to allow room between stations. Hire/rental and library services require areas to store and display their inventory of items both back-of-house and in public-facing areas. One library interviewee told us that "space and storage" and "having enough shelves" were all "massive issues".

Fitness-for-purpose of sites is also critical. We heard that, even if space is available, it may not be an appropriate space for RRS initiatives. In other cases, interviewees reported having to make do in sites that were not designed for the initiatives they have now expanded into. An operator of a reuse shop noted that they were "losing on resources and revenue" because their site could not keep up with the services provided. One example they provided was that, while they have outdoor space for storage, this is not ideal for their activities:

> ...everything is quite exposed... we just need to get, as much as possible, a little bit more weatherproof and weathertight to maintain the integrity of the items that we are trying to sell.

Other interviewees noted that in any initiative that involves the public, there may be a need for more than one site to distinguish between public-facing and non-public-facing activities, or else sites need to be big enough to enable storage, sorting, preparation for reuse and repair activities to be conducted in areas separated from customer-facing retail areas. The latter also often require considerable space in order to display items effectively and ensure accessibility. Space is also needed for health and safety reasons, with one interviewee noting that "[i]t's hard to keep things tidy and hard to keep things always safe when you are working from a confined area."

The idea of 'making do' to run RRS in pre-existing spaces and how this can constrain new initiatives is highlighted in the study of Wellington's community facilities in relation to running these activities in community housing. On the one hand, running RRS initiatives in community housing complexes offer a potential opportunity to bring these activities to the places where people live. In fact, some complexes already have libraries and makerspaces, and newer community housing spaces have larger facilities that could feasibly accommodate RRS initiatives. However, many spaces are not custom built nor fit-for-purpose for this (Coy-Macken et al, 2024, p.55). This does highlight the need for greater normalisation of RRS (and waste minimisation more generally) so that future spaces are more likely to be designed to support these activities.

Indeed, comments from an interviewee that runs a shared makerspace and is about to launch a second reinforced the importance of planning ahead to enable fit-for-purpose spaces for RRS. They explained that many aspects of their original makerspace are not optimised to the nature of the workflows and activities that occur there (e.g. too many windows relative to walls and inadequate heating/cooling and ventilation systems). They said they applied their learnings from working in this space to the design of the second, noting that having "a makerspace that's actually been designed from the ground up as a makerspace by someone who has worked in that space - that's really important."

Given these requirements, difficulties finding appropriate space can prevent RRS activities from occurring in Wellington City. One non-profit interviewee noted that most of the rescued products they recirculate are sourced from Wellington City, but need to be taken out of the city because the cost of opening a central city site is "prohibitive" and there is a "lack of commercial/warehouse premises available at a reasonable rate". This organisation also noted that the cost and complexity of moving items out of Wellington City for sorting and storing was a financial drain on the organisation. Other interviewees also noted how accessing appropriate space compounds existing financial viability issues. For example, one organisation operating a sharing service noted that rent was their main expense.

In other cases, space constraints at existing sites limit organisations' ability to expand their RRS offerings to meet consumer demand. For example, one non-profit organisation noted they had had to reduce the size of their repair cafes to accommodate their secondhand sale activities. Another interviewee said "I'd love to have a library of things, it's just you're constrained by space, by

Green Impact Clothes Swap event at Te Herenga Waka - Victoria University of Wellington: Image supplied

resource... we'd run out of room if we became a library of things". A public/council facility that loans items said the lack of display shelving as well as back-of-house space for storage inhibits the ability to grow a collection over time. A study of Wellington's community facilities also found that space constraints are hindering the evolution of the sharing initiatives these facilities enable. For example, the study found Wellington has relatively high provision of libraries, but these libraries have "insufficient library footprint" (Coy-Macken et al, 2024, p.83) and this "limits the ability to provide a wide range of activities and does not reflect changing use of modern libraries" (Coy-Macken et al, 2024, p.5), specifically, "the evolution of libraries from book repositories to interactive community roles" (Coy-Macken et al, 2024, p.83).

The lack of space also impacts some products' viability in a RRS model more than others. Space constraints were highlighted as an obstacle for secondhand sale, redistribution and preparation for reuse activities for furniture, which might help to explain the limited availability of these services relative to the amount of furniture waste in the city. For example, one interviewee reselling and redistributing large amounts of furniture noted that the volumes make it "resource-intensive" and that "storage and sorting infrastructure are major constraints" for managing these items in Wellington City (even though this is where a lot of secondhand furniture is sourced given the preponderance of office spaces). Two resource recovery interviewees with reuse shops undertaking preparation for reuse activities noted they had confined themselves mostly to electronic and electrical items because the items themselves, and the spare parts, took up less space. One explained they had tried to expand into furniture repair in order to keep more usable furniture in circulation and because they have staff "who are quite capable of fixing furniture". However, they quickly discontinued this because within a fortnight the volume of donated furniture had already exceeded their capacity to store it before their staff were able to start repairing it or harvesting it for spare parts.

A lack of space for these bulkier items reduces flexibility to respond to uneven flows of material, particularly surpluses, and this can reduce waste diversion impacts. For example, one commercial interviewee that recirculates unwanted corporate furniture noted that government spending cuts, changes in trends for office layout and increased working from home has resulted in "consolidating office footprints... reducing the need for office furniture" and triggering "a huge amount of surplus furniture... that we just couldn't move as fast as we liked and it cost us to store... that volume". Another resource recovery operator noted that observing other

sites around the country they were "jealous of their capacity... they have so much stock in hold", enabling those sites to divert a "serious" amount of waste that the interviewee said was just not possible with their current space constraints.

As a result, the provision of appropriate and well-located space was highlighted by several interviewees as an area where they would like to see support from Council. Opening up more spaces to RRS activities was also an action interviewees thought Council could take to support more new initiatives to set-up and thrive. For example, one interviewee running sharing initiatives said "the biggest thing council could do is providing space":

> I would say space. Give us a place to do it and give us the tools to do it... just giving people a chance to do this stuff, a space to do it.

Support to "revamp" existing spaces to be more fit-for-purpose was also suggested by interviewees who had existing sites, but were facing limits to their ongoing success or expansion. This included constructing more covered structures in outdoor storing areas, and providing more car parking or loading and unloading zones.

Besides from space, there were other infrastructural needs that some interviewees, particularly commercial operators, highlighted. Commercial organisations were more likely to note infrastructural needs regarding reverse logistics services for circular business models, which enable usable products to recirculate effectively and efficiently. Product takeback for reuse schemes and organisations that seek to recover and recirculate corporate items cannot function properly without such reverse logistics processes and infrastructure. However, there is currently a lack of such systems, infrastructure and networks to tap into given that most businesses operate linear models that do not require them. Although packaging was out-of-scope for the gap analysis, it is illustrative of the systemic gap in shared reverse logistics infrastructure and services that while our stocktake identified a large number of reusable packaging systems operating in Wellington, there was a notable comparative underprovision of return points for reusable packaging outside of the retailers who sell the products in this packaging.

As noted elsewhere in this report, many of the product reuse or takeback initiatives we identified are offered by large businesses that can leverage their own infrastructure and logistics systems, or otherwise are businesses that have been in operation for a long time and have been able to build up the networks and systems they need to recirculate their products. However, the lack of shared systems is a barrier to entry for new product reuse or takeback for reuse initiatives or those run by SMEs who are likely to struggle with the undertaking of establishing their own reverse logistics and redistribution systems. As one such operator explained:

> ... we did dream of doing something with Uber or NZ post, to offer free couriers or something like that to incentivise people to actually send items back to us because even though it's a free programme, people still have to get the item to us, and some people might not want to pay $8 to get an item to us safely. Even if there were depots that people could drop items off to around the country to get them back to the brands that can reuse or recycle them.

Commercial organisations also noted that reuse business models still need end-of-life solutions for their reusable products, which cannot last forever. These organisations noted that there were infrastructural gaps for the end-of-life solutions for durable consumer products and that previous government support to develop solutions had "stalled".

"... some [products] go for 80, 100 washes, 100 turns, but some only go way lower than that... we do have repair on site... we've got people that actually do the repairs... so, rather than chucking it away we do... extend the lifecycle of it, and we do that until it reaches the end-of-life and we know that it's not acceptable to the customer anymore, and then we try and divert it from landfill." (Commercial interviewee)

In light of the above, interviewees thought Council support to increase avenues for end-of-life products and shared reverse logistics systems would be useful for their own operations, and for normalising RRS in Wellington.

Table 19: Summary table of findings on resilience of RRS initiatives in Wellington City

Resilience factors	Resilience risks	Resilience gaps
• Financially self-sustaining initiatives due to working with high value products, in a niche with market demand and/or limited competition. • Longer-term financial security from consistent budget allocations (public/council facilities) or long-term strategic investment/ partnership with funders (non-profits). • Ability to cross-subsidise RRS initiatives that operate at a loss with revenue generating activities. • Collaboration with others. • Pride and enthusiasm to work in the sector. • Ability for RRS initiatives to leverage off the staff, infrastructure and services of parent organisation.	• Dependence on external funding or internal cross-subsidisation. • When RRS initiatives have to compete with other functions in the organisation. • Reliance on volunteers/unpaid labour. • Initiative driven by key person in the organisation. • Operational models cannot cover upfront capital costs (especially product reuse and sharing initiatives). • Funder's expectations exceed provided resourcing. • Funding and capacity constraints reduce ability to weather uncertain product streams or unpredicted economic shocks.	• Lack of financial viability/self-sustaining RRS operations. • Burdensome to secure funding for initiatives that need it • Appropriate, affordable and fit-for-purpose space for existing RRS initiatives to carry out (or expand) essential front-of-house and back-of-house activities. • Appropriate, affordable and fit-for-purpose space, infrastructure and services for new/emerging initiatives. • Understaffing and capacity constraints from inability to cover labour costs. • Lack of shared reverse logistics services and infrastructure for product reuse systems and product takeback schemes. • Poor product design affecting ability to operate/sustain some initiatives, but sits outside their control.

Key opportunities/potential areas of focus
• Invest in/partner to support RRS incubation hubs for both commercial and community initiatives. • Partner with and/or invest in existing RRS initiatives to ensure they have targeted, secure and long-term financial support to guarantee the viability of their current services and be in a position to build on these over time. • Broker internal and external council relationships to connect RRS initiatives with available long-term lease at central city premises, or short-term commercial space available for RRS events. • Advocate for product policy legislation to improve product repairability and durability, and for the inclusion of reuse, repair and reduction outcomes in regulated product stewardship schemes. • Subsidise residents to access commercial repair services and commercial hire/rental services. • Increase grants for repair cafes, shared workshop facilities and community resource hire. • Support establishment of networking and knowledge-sharing platforms for RRS initiatives to enable peer support and innovation • Facilitate business forums and the wider RRS sector to engage and create relationships. • Build RRS expectations into Council procurement policies, contracts and tenders. • Ensure RRS services are an established and growing part of all resource recovery sites and activities, including Council facilitating/leading development and implementation of shared reverse logistics services and infrastructure for circular business models. • Work on including permanent community spaces that can support RRS into any new residential, council, and commercial buildings. • Subsidies to organisations offering RRS initiatives, such as waived landfill fees for unavoidable waste arising from these activities.

4.5 Collaboration and partnership

Collaboration and partnership between Councils, mana whenua, businesses, community organisations and NGOs is recognised in the Wellington Regional WMMP as important for achieving waste minimisation goals in the region (p.35). During our stocktake research and interviews we found examples of both formal and informal collaborations and partnerships between commercial and community organisations, as well as between Council and some organisations. Interviewee descriptions indicated that collaboration and partnership are key success factors for RRS initiatives, and also enable growth and innovation for these activities. Interviewees generally showed high levels of willingness to increase collaboration and partnership both between their organisations and with Council. In particular, we heard a desire for more strategic partnerships between Council and existing RRS initiatives, and platforms to enable: networking with likeminded organisations; the sharing of resources, services, infrastructure or surplus product; and knowledge-sharing. Non-profit interviewees also expressed a desire for Council to better utilise community expertise and advice when planning new RRS initiatives (accompanied by resourcing).

We also identified gaps in collaboration and partnership to deliver RRS. In particular, between all organisations and Māori groups, and between Council and community organisations with commercial organisations. We also noted a need for greater internal collaboration within Council to align its approach to RRS across different divisions, teams and Council Controlled Organisations (CCOs), which would increase impact, avoid duplication and protect existing relationships.

4.5.1 The nature and value of current collaboration and partnership

Collaborating and partnering with others is an important way that interviewees spread their impact, engage more people, and build their resilience. Collaborations and partnerships can occur in many ways. Interviewees described examples such as co-hosting RRS events like repair cafes or secondhand markets with other organisations; sharing learnings, surplus resources or their space and equipment with each other; collecting reusable products on behalf of other organisations or establishing drop-off points at the sites of other organisations to recover items for reuse; using their communication channels to raise awareness about other organisations' initiatives; or conducting outreach with the community based at other organisations' sites. One organisation noted that they collaborated with social housing and other social services providers in the city to bring their sharing initiatives to those spaces.

Collaborations and partnerships between community organisations and commercial entities are common, for example, where commercial organisations redistribute items to community groups. One non-profit organisation also described receiving in-kind support from commercial partners for their resale and redistribution operations, such as transport and storage. While it might be assumed that competition would be a barrier, collaboration and partnership also occurs between commercial organisations. For example, one interviewee that runs a product takeback for reuse and repair scheme said that their Australian branch partners with local social enterprises to do product repairs rather than shipping products to Aotearoa NZ for fixing. A commercial product reuse system operator noted that "even with competitors, there's partnerships", explaining how they provide freight, transport and even servicing of reusable products for other businesses that offer reuse services for the same product.

Interviewees clearly described the value of collaboration and partnership for the resilience of initiatives. One non-profit interviewee noted that they consistently seek collaborations and partnerships "because that only strengthens what we do". Another non-profit interviewee attributed their success, in part, to the fact they had "built strong partnerships" with iwi, corporate entities, and other NGOs. Another interviewee described how, when they struggled to find a site from which to operate some services in Wellington, they partnered with a local community enterprise to operate these services instead. This not only allowed the service to go ahead, but also attracted higher levels of "community engagement and support". We also heard

Bike repair event at Bikespace. Image supplied by WCC

that some initiatives only exist due to collaborations. For example, an interviewee that now runs regular repair cafes explained that they originally started these after joining an existing collaboration between Repair Cafe Aotearoa New Zealand and a local community hub and retailer. When that retailer closed, the interviewee took over running the repair cafes in their own space in order to keep the initiative going.

Additionally, many sharing initiatives are inherently collaborative in nature and strengthen relationships over time by building community connection. For example, systems such as Timebanking enable both individuals and organisations to collaborate with each other to share both skills and resources. Because organisations can become Timebank members, it is a useful platform to formalise new and existing cooperation between organisations that operate RRS initiatives. Furthermore, we heard that shared facilities, such as workshops and makerspaces, tended to connect routinely with many organisations, making their spaces available for community courses and also to other RRS initiatives. One operator of a shared workshop outlined how they collaborated with and supported Menzsheds and repair cafes.

4.5.2 Opportunities to increase collaboration and partnership to grow RRS further

Many organisations had aspirations to collaborate more and develop further partnerships. Resource recovery operators were particularly keen to collaborate with other such operators across the region to increase their RRS initiatives, increase impact, and fill gaps. A non-profit interviewee that redirects corporate items also felt that "a more unified approach between the local councils" would help them and other organisations that operate across the region. Various commercial, non-profit and public/council interviewees that were involved in managing secondhand items described collaborating with each other, noting that if they had excess of a product, they would seek to share it with others that had a shortfall in that area. One of these interviewees said they'd like to see a network of these organisations "to increase the ease of sharing when we have too much stock... [or] share product that hasn't moved in our store that might actually move better in another store".

Another non-profit interviewee described a desire for more practical collaboration with other community

groups to run more "outreach" with their sharing initiatives so they can reach more people, "going out to communities or bringing community to us", through shuttling, mobile services or buddy systems. One non-profit interviewee described how "strategic partnerships" had been critical to their success to date, and felt that more collaboration could occur between the resource recovery sector and "NGOs, resellers, universities, and iwi", and also that "we'd love to see more collaboration with Council and local businesses". Commercial entities running product takeback for reuse schemes felt that collaboration and cooperation across supply chains was needed to recover products effectively for reuse, and to implement effective reverse logistics networks.

Interviews revealed specific relationships that need more attention, particularly relationships with mana whenua and Māori-led initiatives, and relationships with local businesses. Only one interviewee directly mentioned proactively forming existing partnerships with Māori organisations. We heard that, when approached by Māori-led organisations, interviewees were happy to collaborate, but seemed less likely to proactively seek these relationships. For example, one interviewee noted that, where collaboration between their organisation and Māori initiatives occur, "it's not something that has happened from our end." The lack of strong existing relationships was demonstrated by the difficulty most interviewees displayed when asked why Māori and mana whenua groups were underrepresented in the provision of RRS activities. One public/council interviewee felt that this lack of insight pointed to "a massive disconnect as to what is happening within [Te Ao Māori]" in relation to RRS; they reflected that "if we made the time to know what's happening, we would work with organisations who are Māori-led and who share the same ethos. But I guess we just never prioritise or don't have the time to."

The need to strengthen relationships with businesses around RRS was also echoed through many interviews. For example, a resource recovery operator described this gap in the relationship between Council and organisations that are active in waste minimisation, on the one hand, and commercial businesses that are selling products, on the other. This interviewee thought more work was needed to connect with businesses and support them to understand their role in realising Council's waste minimisation goals set out in the ZWS and WMMP, and how they can work with community groups and council to support activity up the waste hierarchy, like RRS. One commercial repairer also indicated an interest in working more closely with community repair initiatives, but noted it was "pretty hard to figure out who they are", indicating a disconnect between community initiatives and local businesses working in the same types of areas.

Non-profit organisations were particularly keen to see more formal partnerships between community and councils to deliver RRS initiatives to achieve shared waste minimisation goals. These partnerships could enable more direct support with infrastructure, policy and funding, which one interviewee noted would "make a huge difference". There was a strong call for support and collaboration to be directed towards initiatives that already exist, and towards community initiatives. One interviewee thought investment and resources should be directed to community groups and mana whenua, who the interviewee thought "can just do so much more with the resources and money" than council or corporates.

Two interviewees thought that community experience should be better integrated and respected in Council efforts to grow RRS and wider resource recovery activity. One said "we have valuable community insight, so that's what I could ask from council - use us for our strengths, and keep giving us money." This interviewee also felt that collaboration, honouring what exists and growing RRS could be achieved through more formalised efforts to share knowledge with others. They thought that a key opportunity to increase RRS in Wellington would involve a more organised approach to knowledge-sharing:

> ... packaging what is happening here, in a way that it can be shared nationally... Take the package for what we are doing here - tidy up the operation here and then if that works we can share that with everybody else so that others can also do what we do.

Another interviewee said that they often "have supported and done so many interviews and shared so many resources with different organisations that

Brooklyn Toy Library. Image supplied

are all wanting to start their own [versions of the sharing initiatives this organisation runs]". However, these repeated engagements are an unfunded, overduplication of effort and they thought Council could provide financial support to rationalise and/or share this expertise, and also value the advice as they would with paid consultants.

In this vein, it was noted that lack of time, staff, capacity and financial resources can constrain effective collaboration. As such, one non-profit interviewee said "it is cool when collabs happen that we don't have to do anything for". This could look like Council or another organisation organising a RRS event or initiative, with the interviewee having low-effort involvement, such as providing the space for it to happen.

Our research also suggests some need for Council introspection to strengthen and rationalise both internal and external relationships in order to develop a more intentional, coordinated and efficient approach to RRS initiatives in the city. We noted that existing formal collaborations and partnerships between Council and external organisations to deliver RRS initiatives *as waste minimisation initiatives* are usually with organisations that have an express resource recovery and/or recycling focus. However, our stocktake shows that the majority of RRS initiatives in the city are not run by such organisations. Furthermore, waste minimisation might be an outcome of these initiatives, but is not necessarily the primary focus. There is an opportunity for the Council waste team to form relationships with these wider organisations as part of its work supporting activity up the waste hierarchy. This could be initiated through simple steps such as: listing RRS initiatives on the parts of the Council website that direct individuals towards waste minimisation services; directly contacting these organisations to raise their awareness about potential funding opportunities in the Council's contestable waste minimisation fund; and inviting these organisations to join the Wellington Regional Waste Forum and/or participate at the forum by sharing what they are doing and its waste minimisation impact.

Reuse in Newtown: Aunty Dana's Op Shop and Book Hound seller of new and used books: Image by Aunty Dana's Op Shop

When reaching out to form new relationships, it is important to recognise that in some cases, other branches of Council are already supporting these organisations. For example, Council provides operational funding to community centres, many of whom run RRS initiatives, the climate team provides funding for RRS in relation to active transport initiatives, like bikes. In other cases, RRS initiatives are actually run by other divisions of Council. An obvious example is public libraries, many of whom are actively innovating with the sharing model to expand beyond books into loaning resources like electronic devices or audiovisual equipment or establishing shared workshops like makerspaces. Other examples are the Climate Change team, who run the community bike repair shop, Bikespace, and the Transport team who have installed shared bike fix-it stations across the city.

The existing activity of other divisions of WCC in various RRS initiatives highlights the need for internal collaboration across Council teams in relation to RRS. One public/council interviewee specifically noted that such internal collaboration would be good, but:

> ... a lot of departments within Council don't really like communicating with other departments... they like keeping to themselves and their own little world...

However, internal communication needs to be worked towards because collaboration is valuable to "minimise duplication and maximise benefits" from existing

initiatives (Coy-Macken et al, 2024, p.5). The 2024 study of Wellington's community facilities specifically noted the need for greater collaboration between community centres. We believe this also applies to Council in relation to RRS. There is a specific need to collaborate across divisions of WCC and CCOs to understand existing RRS initiatives the council runs and existing relationships held with external operators of RRS initiatives. Communication is also important to align Council's strategic focus towards these activities across departments, including ensuring that waste minimisation is integrated as a strategic goal (in terms of the ZWS and the WMMP), regardless of which division of Council is running the initiative, providing support or holding the relationship.

Table 20: Summary table of findings on collaboration and partnership amongst RRS initiatives in Wellington City

Working well	Shows potential	Main gaps
• Existing collaborations and partnerships are strengthening RRS resilience. • High levels of enthusiasm to collaborate and partner more. • Sharing initiatives are building community connection and opening the door to further collaborations.	• Informal collaborations between organisations offering RRS initiatives. • Co-hosting RRS events across different sites in the city and other outreach collaborations to bring more people to access RRS initiatives. • Strategic partnerships between Council and those delivering RRS initiatives. • In-kind support (logistics, warehousing) between corporate entities, or from corporate entities to non-profits.	• Collaboration and partnerships with Māori-led and mana whenua organisations • Relationships between Council and waste minimisation focused organisations, and local businesses. • Networking and knowledge-sharing platforms or forums for providers of RRS initiatives. • Valuing and remuneration of community organisations' expertise in RRS. • Regional collaboration between Councils and resource recovery operators. • Internal Council collaboration across teams in relation to RRS activities or relationships with external organisations running RRS initiatives.

Key opportunities/potential areas of focus
• Internal Council collaboration to rationalise in-house RRS initiatives and relationships with external organisations offering RRS initiatives, and to ensure waste minimisation is a strategic focus across WCC divisions supporting or operating RRS activities. • Council to recognise existing RRS initiatives as waste minimisation services on its website and through involving these initiatives in existing waste minimisation networks, such as the Wellington Regional Waste Forum. • Invest in RRS initiatives led by mana whenua, hapori Māori or Māori-led businesses. • Budget for Council to contract existing community expertise in the development and delivery of further RRS initiatives. • Co-design expanded or new RRS initiatives with community to ensure new initiatives align with community needs. • Fund current community, council and commercial providers to offer guidance and peer support to new initiatives, including provision of advisory services and/or development of resources, e.g. case studies about current RRS initiatives, and 'how to' guides for setting-up RRS initiatives. • Support establishment and operation of a networking and knowledge-sharing members platform or forum (online and/or in-person) for organisations running RRS initiatives to facilitate collaboration, in-person networking and learning events, and peer support. • Broker collaborations and partnerships to increase in-kind support from commercial organisations towards non-profits offering RRS to address known barriers (space, warehousing, transport, logistics etc.). • Embed RRS as specific agenda items and separate areas of focus from recycling and waste management in standing waste-related networking and planning meetings, such as the Wellington Regional Waste Forum.

4.6 Summary of main gaps/potential issues and opportunities: Gaps Index and Opportunities Index

The gap analysis has identified 56 main gaps or potential issues faced by RRS initiatives in Wellington City in relation to the themes of accessibility, attractiveness, waste reduction and other impact measurement, resilience, and collaboration and partnership. These gaps and potential issues are listed in **Table 21**, which is the Gaps Index for the purpose of developing and coding the intervention options.

For each theme area we identified key opportunities or potential focus areas that could help address these gaps. When listed, many of these opportunities overlapped or repeated across the five thematic areas of the gap analysis, so we amalgamated these overlaps and removed repetitions. The resulting streamlined list of opportunities was then regrouped into new thematic areas. **Table 22** presents this list, which is the Opportunities Index for the purpose of developing and coding the intervention options.

Table 21: Gaps Index

Main gaps/potential issues
Gaps in availability of RRS initiatives
1. Commercial repair services for consumer goods
2. Libraries of things/resource hire
3. Secondhand sale for construction materials
4. Māori-led initiatives
5. Commercial product reuse or product takeback for reuse
6. Furniture repair (non-profit & commercial)
7. Not many clusters of RRS initiatives in single spaces/ facilities (non-profit, council or commercial)
8. Initiatives making spare parts available (non-profit, council or commercial)
9. Resource recovery centres or operators to run RRS initiatives
Issues that contribute to inconvenience of RRS initiatives
10. Limited availability of certain RRS initiatives
11. Restricted opening hours or infrequent events
12. No public-facing site for many initiatives
13. When sites not located centrally or unconnected to public, private and active transport routes and infrastructure
14. Lack of reverse logistics/returns infrastructure
15. Delay or uncertainty in service's fulfilment of user needs
Gaps in affordability of RRS initiatives
16. Commercial hire/rental often not affordable.
17. Commercial repair services often not affordable.
Gaps relating to employment, skills and community participation
18. Not enough qualified and skilled workers to repair electrical and electronic products.
19. Insufficient vocational training opportunities or formal qualifications for the repair sector.
20. Insufficient budget to pay all workers and reduce reliance on volunteers, especially for non-profit initiatives.
21. Insufficient budget to ensure fair wages and maintain adequate staffing levels, especially for non-profit initiatives.
Gaps in promotion of existing RRS initiatives
22. Inadequate resourcing for professional marketing and communications support.

Te Aro Zero Waste. Image supplied

23. Reuse, repair and share not well integrated in Council rubbish, recycling and waste minimisation communications with residents and businesses.
24. Not strong internal Council comprehension of RRS options in Wellington City.
25. Initiatives not sufficiently visible and prominent.
26. Lack of traditional media stories about RRS initiatives in the city.

Gaps or barriers to perception of RRS initiatives as attractive by organisations

27. Reuse, repair, share more inconvenient and expensive than linear business models.
28. Waste minimisation benefits of sharing initiatives not well understood.
29. Insufficient recognition of social co-benefits of RRS in Council waste minimisation communications.
30. Not enough promotion of existing initiatives to inspire other organisations.
31. Potential for Māori leadership and innovation in RRS not well served by current support systems for businesses, start-ups and entrepreneurs.

Gaps in demand or provision of service to meet demand

32. Lack of local and central government demand for RRS products and services.
33. Lack of understanding of target users of RRS initiatives.
34. Operational and capital limitations on ability of existing RRS initiatives to expand to meet demand.

Gaps or barriers to perception of RRS initiatives as attractive by users

35. Accessing RRS more inconvenient or expensive than buying items new.
36. If spaces from which initiatives are run are unmaintained and unwelcoming, this is unattractive.
37. If initiatives are not designed for accessibility or do not reflect Te Ao Māori this is unattractive.
38. Some stigma associated with preowned items or sharing items with strangers.

Gaps in understanding the waste reduction impact of RRS

39. Poor understanding of waste reduction impact of sharing initiatives
40. Poor understanding of waste reduction impact of commercial repair
41. No consistent data capture methodology and platforms for all initiatives, including resource recovery operators.
42. Lack of understanding of waste to landfill according to product categories
43. Connection between waste reduction impact measurement and social impact measurement.

Gaps in the resilience of existing RRS initiatives and their ability to grow

44. Lack of financial viability/self-sustaining RRS operations.
45. Burdensome to secure funding for initiatives that need it.
46. Lack of appropriate, affordable and fit-for-purpose space for existing RRS initiatives to carry out (or expand) essential front-of-house and back-of-house activities.
47. Lack of appropriate, affordable and fit-for-purpose space, infrastructure and services for new/emerging initiatives.
48. Understaffing and capacity constraints from inability to cover labour costs.
49. Lack of shared reverse logistics services and infrastructure for product reuse systems and product takeback schemes.
50. Poor product design, which affects ability to operate/sustain some initiatives, but sits outside the control of those operating initiatives.

Gaps in relation to collaboration and partnerships

51. Collaboration and partnerships with Māori-led and mana whenua organisations
52. Relationships between Council and waste minimisation focused organisations, and local businesses.
53. Networking and knowledge-sharing platforms for providers of RRS initiatives.
54. Valuing and remuneration of community expertise in RRS.
55. Regional collaboration between Councils and resource recovery operators.
56. Internal Council collaboration across teams in relation to RRS activities or relationships with external organisations running RRS initiatives.

Table 22: Opportunities Index

Opportunities/potential areas of focus

Supporting current and future clusters of RRS initiatives within individual sites, centres or facilities

1. Support, partner with and/or invest in community and council facilities already offering clusters of RRS initiatives to ensure they have what they need to maintain and optimise current services (i.e. for accessibility, attractiveness, data capture and impact measurement, and resilience), and be in a position to expand and build on these over time.
2. Ensure RRS services are an established and growing part of all resource recovery sites and activities, including Council facilitating/leading development and implementation of shared reverse logistics services and infrastructure for circular business models.
3. Work with organisations offering options that are more available (e.g. libraries, secondhand sale) to expand their initiatives to a broader product range, particularly products that are underprovided for.
4. Support community and council facilities not already doing so to adopt RRS initiatives.
5. Invest in/partner to support RRS incubation hubs for new commercial, community and Māori-led initiatives.
6. Invest in/partner to support establishment of new community and council centres/facilities in return for guaranteed provision of some RRS initiatives.
7. Invest in/partner to deliver a RRS shopping centre complex or precinct in the CBD with reserved retail spaces for existing initiatives.

Optimising existing RRS initiatives

8. Support, partner with and/or invest in existing RRS initiatives to ensure they have secure, long-term financial support to guarantee the viability of their current services, increase operational or capital capacity, and to increase staff wages and undertake any necessary site upgrades.
9. Funding to support existing initiatives to increase cultural competence and/or invest in a cultural advisor to ensure spaces and initiatives are culturally appropriate, welcoming and reflective of Te Ao Māori.
10. Support and enable RRS initiatives to run the professional development courses they see fit, for both paid staff and volunteers.
11. Grants, funding or other in-kind promotional support to existing services for marketing and communication.
12. Broker relationships between WINZ and other community providers with non-profits operating secondhand sale to increase accessibility of goods to those with most need.

Priority areas for new or increased activities

13. Invest in RRS initiatives led by mana whenua, hapori Māori or Māori-led businesses, as well as Māori-led and kaupapa-led support programmes for organisations innovating in these areas.
14. Increase grants and other support for more repair cafes, shared workshop facilities, libraries of things, and spare parts warehousing to occur across the city and in suburbs with limited provision.
15. Initiatives to increase commercial repair services for consumer goods.
16. Reuse, repair and share initiatives that are designed for communities with the highest and greatest financial need, run out of well-utilised or well-loved facilities.
17. Increase RRS events, mobile facilities, or hub-and-spoke services that can occur in different suburbs around the city. For example, mobile libraries of things, regular scheduled repair cafes or clothes swaps that can roam across the city and be held in different suburbs each week/fortnight/month, inorganic collections, or increased drop-off points for product takeback systems, broken items for repair or donated reusable items.
18. Invest in/partner with others to support larger, one-off RRS events/festivals/fairs/showcases.

Incentivising use and adoption of RRS initiatives

19. Subsidise residents to access commercial repair services and commercial hire/rental services.
20. Initiatives to increase potential cost savings and revenue generation potential of RRS initiatives. For example, subsidies to organisations offering RRS initiatives, such as rates rebates, waived landfill fees for unavoidable waste arising from these activities (or increased landfill costs for other businesses to incentivise diversion activities).
21. Include RRS expectations in Council procurement policies, contracts and tenders, and in advice to local businesses for their own procurement policies.
22. Incentives, advice or other support for businesses to procure RRS products and services.

Networking, knowledge-sharing, collaboration

23. Fund or otherwise enable and empower current community, council and commercial providers to offer guidance and peer support to new initiatives, including provision of advisory services and/or development of resources, e.g. case studies about current RRS initiatives, and 'how to' guides for setting-up RRS initiatives.
24. Budget for Council to contract existing community expertise in the development and delivery of further RRS initiatives.
25. Community participation: Co-design expanded or new RRS initiatives with community to ensure new initiatives

The Hive Johnsonville, Waitohi Makerspace. Image taken by Justin Hoenke, supplied by WCC

align with community needs.

26. Support establishment and operation of a networking and knowledge-sharing members platform or forum (online and/or in-person) for organisations running RRS initiatives. Forum could be used to enable peer support and professional development or training opportunities, facilitate collaboration and spark innovation, organise in-person networking and learning events, and to develop and house resources such as case studies about current RRS initiatives and 'how to' guides for setting-up RRS initiatives.
27. Facilitate business forums where existing providers of RRS initiatives can share information with others about their initiatives, particularly underprovided commercial systems such as product reuse and product takeback for reuse and repair schemes.
28. Internal council collaboration to rationalise in-house RRS initiatives and relationships with external organisations offering RRS initiatives, and to ensure waste minimisation is a strategic focus across WCC divisions supporting or operating RRS activities.
29. Involve RRS initiatives in existing waste minimisation networks, such as the Wellington Regional Waste Forum.
30. Broker relationships to increase in-kind support from commercial organisations towards non-profits offering RRS to address known barriers (space, warehousing, transport, logistics etc.).
31. Embed RRS as specific agenda items and separate areas of focus from recycling and waste management in standing waste networking and planning meetings, such as the Wellington Regional Waste Forum.

Advocacy

32. Advocacy to central government for: more regulated product stewardship schemes and the inclusion of reduction, reuse and repair outcomes in these schemes; and for product policy legislation and repair legislation to improve product repairability and durability and increase the availability of spare parts and diagnostic information.

Space and infrastructure

33. Broker internal and external council relationships to connect RRS initiatives with available long-term lease at central city premises, or short-term commercial space available for RRS events.
34. Work on including permanent community spaces that can support RRS into any new residential, council, and commercial buildings.
35. Work with regional council to develop new bus routes to key RRS hubs and infrastructure.

Skills and training

36. Partner with training institutes and existing commercial repairers to increase vocational training opportunities in the area of repair, and address shortage of qualified and skilled workers to repair specific products, e.g. electrical and electronics.
37. Enable more Māori-led and kaupapa-led support programmes, masterclasses and incubators for organisations, businesses and entrepreneurs to innovate and adopt RRS operating models.

Promotion, awareness and communication

38. Promote existing and future RRS services in Wellington via regular waste minimisation channels. For example, a live user-friendly list of RRS services on the waste minimisation, recycling and rubbish section of the Council website.
39. Positive RRS public information campaign and marketing that promotes existing initiatives, raises awareness of RRS, communicates the waste reduction outcomes of RRS, as well as wider environmental and social benefits that are attractive to people.
40. Improve communication of the waste reduction outcomes of RRS initiatives, particularly sharing, and their role in the Council's ZWS and WMMP, to attract more organisations to adopt these activities as part of their sustainability goals.
41. Increase focus on social outcomes of RRS in Council waste minimisation communications and contestable waste minimisation fund priorities to attract more organisations to explore these activities.
42. Invest in market research into the type of users of RRS services.

Data capture and impact measurement

43. Audit waste to landfill in Wellington City based on product categories.
44. Provide guidance and coordination to initiatives on how to start organised data gathering and appropriate impact measurement methodologies (could include development of shared data gathering platform).
45. Measure both waste reduction impact and social impact of RRS.
46. Collaborate with existing environmental or corporate responsibility certification schemes to include calculations and reporting on how RRS business models avoid or reduce waste for consumers/society.
47. Incentivise or directly fund organisations to collect data to report on the impact of their RRS initiatives.

Image supplied by WCC

5 POTENTIAL INTERVENTION OPTIONS

This section of the report sets out potential intervention options that WCC can consider adopting to improve the accessibility and attractiveness of waste reduction activities like RRS. These are set out in Section 5.2 below and can also be found in the potential intervention options and interventions literature review spreadsheet (**Appendix 6**). Each intervention option is named and described, alongside the following additional information for each option:

- Selected examples of similar interventions that have been implemented elsewhere in Aotearoa NZ or overseas.
- The gaps and opportunities addressed by the intervention option (coded according to the Gaps and Opportunity Indexes from the gap analysis).
- References to the full range of actual and suggested interventions[26] that inspired the intervention, as identified in a literature review (references are provided by referring to the relevant rows of the literature review sheet in the potential intervention options and interventions literature review spreadsheet (**Appendix 6**)).

The intervention options are grouped according to whether they are Cross-Cutting Activities, Areas of Work or Projects. Options are not listed in order of priority and have not been evaluated in this way by Reuse Aotearoa. Instead, we have provided a list of suggested criteria that Council could use to prioritise the options. These criteria were developed in partnership with Council and also draw on the findings of the gap analysis and the interventions literature review:

- Alignment with the ZWS Principles
- Alignment with Outcome 2 of the EWS
- Alignment with Tūpiki Ora Strategy Outcomes
- Māori involvement
- # of gaps addressed
- # of opportunities addressed
- Works with existing initiatives & infrastructure
- Scalability, replicability and/or proximity to reach more residents, businesses, suburbs & neighbourhoods
- Enables data capture, monitoring & evaluation
- Ease of implementation

[26] "Actual interventions" refers to interventions that have already been implemented by a local or regional authority in Aotearoa NZ or overseas. "Suggested interventions" refers to interventions that have been suggested as potentially useful actions by other sources.

5.1 Reflections on broader learnings from the literature review

The actual and suggested interventions referred to in the intervention options were identified through a light review of grey literature sources similar in nature to this study that had focused on what local and regional authorities and cities can do to increase RRS, or that focused on RRS in the Aotearoa NZ context.[27] In addition to providing intervention examples and suggestions, this literature review also highlighted that many of the barriers and opportunities that arose in our gap analysis are also reflected in other jurisdictions. Some examples include:

- the decline in commercial repair services and the lack of spare parts and diagnostic information (Varshneya, Abbe & Danovitch, 2020, p.33; Munro et al, 2022);
- the difficulty of running RRS as standalone business models (Munro et al, 2022) due to products not being designed to enable RRS, these initiatives having to compete with dominant linear consumption practices and cheap, low-quality new goods, and also having to compete for government attention and investment against recycling and waste management (Interreg Europe, 2022, p.9; Vahldieck, 2022; Varshneya, Abbe & Danovitch, 2020, p.33; Gorenflo & Eskandari-Qajar, 2013, p.6; McQuibban, Zurkova & Rama, 2021, p.2; Munro et al, 2022, p.66; Bianchi & Yates, 2022, p.15; Szabo et al, 2024, pp.29-30, 51, 77-78);
- insufficient funding opportunities or economic incentives for circular consumption initiatives, such as RRS, reducing the financial resilience of, particularly, grassroots programmes and limiting their ability to grow or pay staff (Szabo et al, 2024, pp.47, 77-78; Circular City Centre & European Investment Bank, 2025, p.13)
- the lack of effective and convenient collection and return networks for reusable items (Interreg Europe, 2022, p.9; McQuibban, Zurkova & Rama, 2021; Bianchi & Yates, 2022, p.14; Circular City Centre & European Investment Bank, 2025, p.13);
- the poor visibility of existing RRS services and initiatives or lack of understanding about circular business models (Munro et al, 2022, p.66; Szabo et al, 2024, p.62);
- gaps in data collection, impact measurement and monitoring frameworks for waste avoidance activities like RRS (Collacott, 2023; OECD, 2023; Szabo et al, 2024, pp.22, 29-30; Kapoor et al, 2023);
- the need for greater collaboration and knowledge-sharing within and between councils, businesses and organisations exploring RRS (Gill et al, 2020, p.13; McQuibban, Zurkova & Rama, 2021, p. 19; OECD, 2020, p.51);
- the need to ensure initiatives are "attractive, desirable, affordable and convenient" (McQuibban, Zurkova & Rama, 2021, p.20; see also, Szabo et al, 2024, pp.29-30; Circular City Centre & European Investment Bank, 2025, p.12) and overcome stigma associated with buying secondhand, sharing items with strangers, or repairing (Munro et al, 2022, p.6; Szabo et al, 2024, pp.51,61; Circular City Centre & European Investment Bank, 2025, p.12);
- a mismatch between the demand for RRS initiatives and organisational capacity to deliver them (Gill et al, 2020, p.14; Szabo et al, pp.29-30, 52); and
- lack of official training or certification pathways for the RRS sectors (Munro et al, 2022, p.6; Szabo et al, 2024, p.30).

Many of the interventions explored or suggested in these sources were directed towards addressing these barriers, making them usefully relevant to this study too.

Sources also highlighted a range of high-level considerations for local authorities when deciding whether or how to intervene to support RRS in their jurisdictions. These considerations are relevant for framing and prioritising interventions, and taking them into account may increase the success and durability of interventions and any resulting initiatives. They included:

[27] We note that there are many more sources we could have referred to that focus on how local authorities and cities can increase circularity or zero waste. We generally only referred to these sources if substantial parts of the documents focused on RRS and/or in-depth discussion of practical actions.

- the social and economic benefits of RRS initiatives, including green job creation, work opportunities for people who struggle to find employment, reduced waste management burden and cost, enhanced community resilience and solidarity, increased affordability of goods, and support for the local economy (Interreg Europe, 2022, pp.3,7; Share Reuse Repair Initiative, 2025, pp.4-5; Circle Economy & EHERO, 2019, p.5; WeAll Aotearoa, 2025, p.52; McQuibban, Zurkova & Rama, 2021, pp.3-4; Gorenflo & Eskandari-Qajar, 2013; SPREP, 2023, p.8; Munro et al, 2022, p.5; Bianchi & Yates, 2022; Yorkshire Circular Lab, 2021; OECD, 2023, pp.16-17; Szabo et al, 2024, p.77; Circular City Centre & European Investment Bank, 2025, pp.10-11);
- the relevance of identifying and building on existing initiatives before creating new initiatives, and collaborating and partnering with organisations running existing initiatives given their existing expertise (McQuibban, Zurkova & Rama, 2021, p.19; Share Reuse Repair Initiative, 2025, p.72; Yorkshire Circular Lab, 2021; Waste Free Welly, 2020, p.2; Waste Free Welly, 2021, p.13; Szabo et al, 2024, p.31);
- the importance of ensuring a collaborative approach, including the participation of communities and local businesses in the design and delivery of RRS initiatives to ensure they are relevant to local context and align with community and local business priorities (Share Reuse Repair Initiative, 2025, pp.9, 73; Varshneya, Abbe & Danovitch, 2020, pp.17-19, 47; WeAll Aotearoa, 2025, pp.5,8; Bianchi & Yates, 2022, pp.10,18-19; Yorkshire Circular Lab, 2021; Waste Free Welly, 2020; Waste Free Welly, 2021, p.13; Szabo et al, 2024, pp.31,35);
- the importance of fit-for-purpose and accessible spaces and facilities for circularity initiatives like RRS to succeed (Szabo et al, 2024, pp.78-79; Circular City Centre & European Investment Bank, 2025, p.13);
- the critical and unique levers local authorities have to create supportive conditions for circular business models like RRS, including the power of public procurement; waste management and urban planning responsibilities; and the ability to broker relationships, collaborations and partnerships between different organisations and sectors of society to achieve RRS outcomes (Circle Economy & EHERO, 2019, pp.5,9; WeAll Aotearoa, 2025, pp.4,26; McQuibban, Zurkova & Rama, 2021, p.2; Gorenflo & Eskandari-Qajar, 2013, p.6; Bianchi & Yates, 2022, pp.7,10; OECD, 2020, p.16);
- recognition of the constraints on local authorities to influence systemic or large-scale shifts towards RRS in the absence of central government interventions and thus the need to focus on actions that local authorities can take in the absence of central government action, alongside advocating for national level interventions, such as extended producer responsibility, right to repair legislation, and changes to tax systems (Varshneya, Abbe & Danovitch, 2020, pp.70-71; Collacott, 2023; Bianchi & Yates, 2022; WeAll Aotearoa, 2025, p.8; Bianchi & Yates, 2022; Szabo et al, 2024, pp.29-32, 48-49, 79; Circular City Centre & European Investment Bank, 2025, pp.4, 23);
- the need to measure and track the performance of initiatives through good data collection, SMART metrics, and consistent impact methodology (Share Reuse Repair Initiative, 2025, p.72; Varshneya, Abbe & Danovitch, 2020, p.17; Szabo et al, 2024, p.32; Circular City Centre & European Investment Bank, 2025, p.27);
- the responsibility of local government to ensure that social outcomes are realised and that no community is left behind in the transition to circularity or the provision of zero waste or RRS services (Varshneya, Abbe & Danovitch, 2020, pp.47, 88-96; Circle Economy & EHERO, 2019, p.26; WeAll Aotearoa, 2025, pp.4,7; Friant et al, 2023);
- the value of taking a comprehensive, rather than incremental or piecemeal, approach to supporting RRS initiatives, by combining multiple interventions through a masterplan or programme of action (Share, Reuse, Repair Initiative, 2025, p.67; Circle Economy & EHERO, 2019, p.9; McQuibban, Zurkova & Rama, 2021, p.3; SPREP, 2023, pp.17-18; Varshneya, Abbe & Danovitch, 2020); and
- integrating any RRS efforts across local government's strategic plans, programmes and teams to ensure internal rationalisation (Share Reuse Repair Initiative,

The Tip Shop crew. Image supplied by WCC

2025, p.73; Varshneya, Abbe & Danovitch, 2020, p.17; Bianchi & Yates, 2022, p.10; Yorkshire Circular Lab, 2021).

Furthermore, when researching and preparing the intervention options, it became apparent that, not only are there a range of existing RRS initiatives that could be prioritised for support before developing new initiatives, but also that WCC has already begun to implement promising actions and activities to support RRS. In these cases, we have recognised those actions either in the selected examples provided for specific intervention options, or by proposing intervention options that focus on continuing to implement and build upon these actions. We also note the actions that Council has already committed to in its various strategies and action plans that relate to RRS, zero waste and/or the circular economy (given the latter includes circular business models such as RRS). These include the 18 actions focused on the top two tiers of the waste hierarchy in WCC's action plan in the WMMP (pp.59-62), and the 11 Priority Actions and Additional Actions for achieving "Outcome 2: Transitioning to a zero carbon circular economy" in the EWS (p.68).

5.2 Potential intervention options

The following subsection outlines 30 potential intervention options for WCC to address the main gaps and embrace the key opportunities for RRS initiatives in WCC. These include two Cross-Cutting Activities, four Areas of Work, and 24 Projects. These can also be found in the Potential Interventions Options and Interventions Literature Review spreadsheet (**Appendix 6**).

The options have not been listed in order of priority. Each option is described, alongside selected examples of similar interventions that have been implemented already in Aotearoa NZ or overseas. The gaps and opportunities addressed by each option are also identified (referencing the Gaps and Opportunities Index). The relevant row of the interventions literature review examples sheet (**Appendix 6**) is also referenced to enable the reader to see the full range of actual and suggested interventions that each option draws on.

CROSS-CUTTING ACTIVITY 1:
Systemically prioritise Māori-led RRS initiatives

Description

Continue to invest and prioritise waste minimisation funding towards RRS initiatives led by mana whenua and hapori Māori in alignment with the Tūpiki Ora strategy (as per the 2025 round of the Waste Minimisation Fund that has signalled a focus on mana whenua or Māori-led projects). As part of this focus, work to strengthen requirements to evidence social outcomes across all contestable fund applications, and to weight social outcomes when prioritising applications.

Work closely with mana whenua or hapori Māori-led projects that emerge from the current and future rounds of the WCC contestable fund, including exploring the possibility of future partnerships. This will help council understand the priorities of Māori in relation to RRS, tailor RRS opportunities accordingly, and identify opportunities for future RRS initiatives and partnerships.

Selected examples from literature review

Wellington City Council has already begun by setting investment signals for the Waste Minimisation Fund that prioritises applications for projects that are mana whenua or Māori-led and/or aligned with the top two tiers of the waste hierarchy.

Auckland Council co-funded and partnered with Synergy Project trust to establish NZ's first Māori / Pasifika led Community Resource Recovery Centre, Onehunga Zero Waste.

Number of gaps addressed	**Number of opportunities addressed**	**Reference examples of actual and suggested interventions** (citing relevant rows in the interventions literature review spreadsheet)
8 (G4, G10, G29, G31, G37, G43, G45, G51)	5 (O5, O13, O16, O37, O41)	Rows 90-95, 135-138

CROSS-CUTTING ACTIVITY 2:

Internal rationalisation of WCC approach to RRS across teams and departments, and a commitment to continue, build on, and work to replicate Council's existing actions and interventions that support RRS, within a shared Council-wide strategic approach

Description

Wellington City Council has already begun investing in, operating and supporting various RRS initiatives through different interventions across council teams. These include:

- Allocating grants to RRS projects from various funds (including the Waste Minimisation Fund, the Social and Recreation Fund, the Climate Fund etc.).
- Signalling that the top two tiers of the waste hierarchy are priority areas for the 2025 round of contestable Waste Minimisation Fund applications.
- Working across council and public agencies to provide or broker space for RRS initiatives, such as BikeSpace and BenchSpace.
- Delivering RRS initiatives as part of council service, e.g. BikeSpace, The Tip Shop, public libraries.
- Partnering with community organisations to deliver RRS initiatives and support the long-term resilience of those initiatives, e.g. the partnership with Sustainability Trust to run Te Aro Zero Waste.
- Offering co-funding to an RRS initiative in order to unlock larger funding, e.g. FillGood.
- Participating in collaborative, multi-stakeholder working groups for an RRS initiative, e.g. FillGood.

Wellington City Council has also already committed to RRS-related actions in existing strategic documents, particularly 18 actions focused on the top two tiers of the waste hierarchy in WCC's action plan in the WMMP (pp.59-62), and 11 Priority Actions and Additional Actions for achieving "Outcome 2: Transitioning to a zero carbon circular economy" in the EWS (p.68).

Council should seek to build, strengthen, replicate and rationalise these efforts by working across teams to: develop a shared understanding of Council's current work to support or operate RRS initiatives; create systems to avoid duplication or working at cross-purposes; lift comprehension across teams of the various ways that RRS support Council's different strategic objectives (e.g. zero waste, economic wellbeing, emissions reduction, community outcomes etc.); and commit to continue existing initiatives, build on them and work to replicate them across the city. For example:

- Establish a cross-departmental role/officer for Reuse, Repair, Share (or Zero Waste/Circular Economy) in order to ensure connection and integration across teams, CCOs, future plans and strategies, and to monitor progress against all existing action plans.
- Establish a Reuse, Repair, Share internal Council check-in group that meets at regular intervals (e.g. quarterly) for teams to update each other and share ideas for future growth and replication (meetings could be facilitated by the RRS officer).
- Develop and run training for all Council staff on zero waste/circular economy, particularly as it relates to existing council strategic documents, to increase knowledge, capacity, capability, best practices and on-the-ground support (this could be organised by the RRS officer).
- Use the OECD Scoreboard on the Governance of the Circular Economy in Cities and Regions self-assessment tool as an opportunity to evaluate, monitor and improve WCC's support for the circular economy.
- Implement internal systems to monitor and evaluate progress towards existing RRS-related actions in Council strategic documents.

Selected examples from literature review

ReLondon is a partnership of the Mayor of London and London's 32 boroughs to improve waste and resource management in the city and accelerate the transition to a circular economy, including the increase of RRS initiatives. ReLondon supports all 32 boroughs of London to develop waste reduction and recycling plans and other circular economy strategies, and to embed circular economy in their procurement and local plans. It also supports economic development and regeneration teams to design and deliver small business support, circular neighbourhoods/communities and circular infrastructure projects.

Various city councils have created internal structures and processes to coordinate their circular economy initiatives. For example, the city of Toronto, Canada has a Cross-Divisional Circular Economy Working Group that comprises 11 city divisions (Solid Waste Management Services, Purchasing and Materials Management, Environment and Energy, Parks, Forestry and Recreation, City Planning, Economic Development and Culture, Corporate Real Estate Management, Toronto Public Health, Transportation Services, Toronto Water, and Engineering and Construction Services). The Metropolitan Area of Barcelona, Spain, created a "Roundtable for the circular economy" (Mesa de economía circular) where the city and the metropolitan area coordinate actions. The city of Rotterdam, Netherlands, co-created its four-year-long programme on the circular economy, involving all the departments concerned with circularity in the municipality.

The OECD Urban Studies project The Circular Economy in Cities and Regions produced a synthesis report in 2020 that outlines the roles and responsibilities of city and regional governments to act simultaneously as promoters, facilities and enablers of the circular economy (although the report is focused on the circular economy, it understands the circular economy in its transformative, systemic sense, stretching beyond recycling to include circular business models like RRS). To support the implementation of its recommendations, the report sets out a practical Checklist for Action and a Scoreboard on the Governance of the Circular Economy for governments of cities and regions to self-assess against.

Number of gaps addressed	**Number of opportunities addressed**	**Reference examples of actual and suggested interventions** (citing relevant rows in the interventions literature review spreadsheet)
6 (O23, O24, O29, O32, O52, O56)	10 (O2, O3, O4, O21, O28, O31, O33, O38, O43, O45)	Rows 157-159 and 164-175.

AREA OF WORK 1:
Optimise and build resilience of existing RRS initiatives that are part of clusters in community/council facilities

Description

Provide financial and practical support to existing community/council facilities that already offer clusters of RRS activities (as identified in the stocktake) to build resilience and capacity to grow initiatives over time. Focus support towards:

- increasing operational capacity
- filling infrastructure gaps
- efforts to optimise initiatives in terms of accessibility, attractiveness, data capture and impact measurement.

Note that support arrangements that offer long-term security (e.g. beyond one-off or fixed-term grants) will have a more durable impact. Also, support can be both financial and in-kind.

Clusters can also be enabled, through funding, administrative or other in-kind assistance, to develop peer support and mentoring resources (e.g. **Project 1**), advise on the development of promotional resources, or contracted to host networking and collaboration events and resources (**Projects 10-12**). Their initiatives should be included in an online directory (e.g. **Project 9**).

Selected examples from literature review

The local authority in Whitehorse, Yukon, Canada, supports Raven Recentre, a community resource recovery centre with a reuse shop and tool library that also runs reuse days, fairs, indoor community garage sales, clothing swaps and repair workshops. Grants and logistical assistance from local government have been essential for Raven to be able to offer, and continue expanding upon, these services.

Number of gaps addressed	Number of opportunities addressed	**Reference examples of actual and suggested interventions** (citing relevant rows in the interventions literature review spreadsheet)
24 (G7, G9, G11, G12, G13, G20, G21, G22, G25, G28, G30, G32, G34, G36, G37, G39, G41, G43, G44, G45, G46, G48, G53, G54)	16 (O1, O3, O8, O9, O10, O11, O23, O24, O25, O26, O33, O35, O38, O39, O44, O47)	Rows 3-10 & 11-26. Also, 46-54; 55-57; 58-63.

AREA OF WORK 2:
Expand provision of RRS initiatives in existing RRS clusters and/or in other community/council facilities

Description

Partner with/invest in community/council facilities already offering RRS initiatives to establish more priority initiatives (e.g. repair cafes, shared workshop facilities, libraries of things and spare parts warehousing) that focus on products, subcategory activities and/or suburbs/neighbourhoods where there is underprovision.

Identify and partner with/invest in existing community/council facilities (including council housing community spaces) that are not currently (but could be) hosting RRS clusters/activities. Work with these facilities, providing financial and practical support to enable them to establish RRS initiatives that make sense to them and their communities. Focus on initiatives that address underprovision in terms of products, subcategory activities and/or suburbs/neighbourhoods.

Support can involve grants for capital set-up (where needed); grants and longer term/secure funding arrangements for operational costs to run the initiatives; in-kind operational support for administration, staffing, volunteer coordination, and the scheduling of new and existing initiatives to avoid duplication or overlap; integration of the initiatives in an online directory (e.g. **Project 9**); funding to allow providers to receive peer support/advice from existing providers (**Project 1**).

Selected examples from literature review

Wellington City Council has previously provided seed funding to existing community-run facilities to launch and develop repair programmes such as RepairEd at Sustainability Trust (now run by Te Aro Zero Waste).

In Canada, the City of Halifax helped launch Halifax Tool Library with capital grant funding and logistical support, and continues to provide space, promotional support, and volunteer coordination.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
17 (G2, G6, G7, G9, G10, G20, G21, G27, G34, G35, G44, G45, G46, G47, G48, G53, G54)	16 (O1, O2, O3, O4, O5, O11, O12, O14, O16, O17, O23, O24, O25, O26, O34, O38)	Rows 3-10; 11-26; 38-45; 64-67; 68-74; 75-79; 80-82; 83-87; 88-89; 90-95 Also, 46-54; 55-57; 58-63; 149-152.

AREA OF WORK 3:
Integrate RRS into existing Resource Recovery Centres (RRCs) and planned Resource Recovery Network sites and activities

Description

Integrate RRS activities/initiatives into all existing, and planned, resource recovery sites for Wellington City so that clusters of initiatives are available at every site as normal resource recovery practice. In addition, resource recovery sites should actively seek to act as return points for product takeback for reuse schemes, and should collect data in a standardised way across sites to enable measurement of waste avoidance impact.

This area of work will require planning to ensure resource recovery spaces and facilities are fit-for-purpose for RRS services and events, and a budget to enable payment for the advice of existing providers (both community, council and commercial) to support best-practice in initiative set-up and operation (e.g. **Project 1**).

If site operation is outsourced or delivered in partnership with another organisation, RRS should be written into all contracts, tenders, and/or partnership agreements.

As part of this intervention, Council could explore whether there is interest amongst Māori-led groups to run or be involved in the delivery of any planned RRCs (as with Onehunga Zero Waste in Auckland).

Selected examples from literature review

Auckland Council is developing their Resource Recovery Network alongside social enterprises, featuring sites that enable reuse, repair and upcycling alongside traditional recycling. For example, Onehunga Zero Waste, Waiuku Zero Waste, Wairau Zero Waste Hub etc. Sites are established in conjunction with community organisations with expertise in zero waste beyond recycling (e.g. Localised).

In the Netherlands, Almere Municipality is developing community-based "Circulair Craft Centres" (Circulaire Ambachtscenters), which are centres consisting of a recycling platform, a thrift store and a repair workshop.

Waikato Regional Council's Community Enterprise Peer Support programme funded Xtreme Zero Waste and Seagull Centre to provide business support and advice to emerging community-based resource recovery organisations in order to strengthen the network of community-based resource recovery, develop local employment and increase community knowledge and resilience.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
24 (G1, G2, G3, G4, G5, G6, G7, G8, G9, G10, G11, G14, G27, G32, G35, G39, G40, G41, G42, G49, G51, G52, G54, G55)	15 (O1, O2, O3, O4, O6, O13, O16, O21, O24, O31, O34, O43, O44, O45, O47)	Rows 11-26; 83-87; 139-148. Also, 3-10; 90-95; 103-106.

AREA OF WORK 4:

Work with others to advocate to central government for laws and policies to support RRS initiatives, and weave positive storytelling and data insights into advocacy materials

Description

Develop a programme of advocacy to central government for:

- more regulated product stewardship schemes and to ensure these schemes include reduction, reuse and repair outcomes as a matter of priority;
- product policy legislation and repair legislation that focuses on improving repairability and durability and increasing the availability of spare parts and diagnostic information;
- an increased waste disposal levy with hypothecation for RRS activities; and
- a central government procurement policy that includes RRS (given central government is such a large employer and spender in Wellington City).

Advocacy resources can be supported by positive storytelling developed through marketing and communications (e.g. **Project 11**) and evidence derived from improved data collection, monitoring and impact measurement (e.g. **Projects 20-22**).

Council advocacy can be most impactful when developed and disseminated alongside other councils, groups, forums, networks and coalitions to show broad support. Council can amplify the resources that already exist that promote RRS initiatives in the Aotearoa NZ context, as developed by groups such as Zero Waste Aotearoa, Para Kore, Repair Network Aotearoa, Consumer, and Sustainable Business Network. Council can also work with these groups and others, such as other TAs in the Wellington region, the Wellington Regional Waste Forum, the TAO Forum, WasteMINZ sector groups and the Reuse Working Group to develop and disseminate shared advocacy and key messages through joint events, RRS manifestos, briefings and policy documents, and meetings with central government officials and ministers. Council can also use its position and knowledge to encourage other organisations to amplify and share key messages about RRS topics through their own platforms, networks and communities.

Selected examples from literature review

A coalition of European cities, including Amsterdam, Copenhagen, Turku, Malmö, Vitoria-Gasteiz, Porto, Leuven and Milan, recently signed a letter to the European Parliament to advocate for stronger policies that reinforce the role of cities in the transition to a circular economy and enable circular urban practices across the European continent. The letter stresses the importance of broadening the use of economic and fiscal incentives and measures to support circular models, and promoting a multilevel governance approach that supports cities in deploying circular projects and initiatives.

In New Zealand, the WasteMINZ Territorial Authority Forum releases local government manifestos calling for particular central government policies. Among other things, the 2023 update of the manifesto called for increases to the waste levy, introduction of a beverage container return scheme, the ongoing implementation of product stewardship schemes, strengthened product policy that focuses on source reduction, right to repair legislation, reuse return networks, and preparation for reuse infrastructure.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
24 (G1, G2, G3, G4, G5, G6, G7, G8, G9, G10, G14, G16, G17, G19, G27, G32, G34, G35, G44, G48, G49, G50, G54, G55)	3 (O31, O32, O39)	Rows 164-175.

PROJECT 1:
Invest in existing RRS initiatives to develop, compile and share peer support/mentoring programmes and advisory services for new RRS initiatives

Description

Partner with/invest in local providers of existing RRS initiatives (as identified in the stocktake), and Māori zero waste/circular economy experts, to develop, compile or share peer support resources and mentoring programmes to help other organisations set up and run new RRS initiatives in community, council and commercial contexts. This could include:

- Developing How to Guides or training/workshop sessions on setting up a makerspace, a community workshop, a library of things or supporting the compilation and dissemination of existing guides (e.g. RCANZ's guidance on how to run a repair cafe).
- A programme of mentoring and ongoing advice to navigate common challenges/legal requirements with setting-up and running RRS initiatives.
- Developing shared operational or user-facing platforms/software for collaboration or data capture that all initiatives can use or hook into (e.g. **Project 10** and **Project 21**).
- Cultural advice on establishing and running RRS initiatives that are welcoming and reflective of Te Ao Māori.
- Business forums to share best practice information about commercial RRS initiatives.

Council could also allocate budget to ensure ability to procure advice from these organisations and advisors when seeking to expand RRS initiatives in its own operations.

Selected examples from literature review

Local and central authorities in Belgium provide financial support to Repair&Share, an NGO that provides resources, training and workshops to support the growth and ongoing mentoring of repair and share initiatives. Examples of the resources they have created include a Tool Library Manual that provides a step-by-step guide to organising a tool library, guidance on legal obligations for running repair cafes or sharing initiatives, advice on IT support for sharing initiatives, hosting a learning network, and advisory services.

In Wales, the Welsh Government part funds Benthyg Cymru, a non-profit that supports a network of Libraries of Things across Wales. Benthyg Cymru helps local groups set up libraries to suit their own community; provides establishment and ongoing advice and support on insurance, risk, venue, PAT testing, item maintenance, borrower fees and communications; delivers training sessions and workshops; and works in partnership with local authorities and community groups to offer in-kind support to manage certain aspects of setting up or running libraries of things (e.g. project management).

Waikato Regional Council previously operated a Community Enterprise Peer Support programme, through which community resource recovery organisations (that include a focus on reuse operations), Xtreme Zero Waste and Seagull Centre, were funded to provide business support and advice to emerging community-based resource recovery organisations.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
16 (G1, G2, G3, G4, G5, G6, G7, G8, G9, G31, G37, G41, G51, G52, G53, G54)	10 (O4, O5, O13, O23, O24, O26, O27, O29, O37, O44)	Rows 149-152. Also, 153-156; 160.

PROJECT 2:
Utilise internal council relationships to deliver RRS initiatives through other council facilities

Description

Work across other Council departments to increase the provision of sharing initiatives, particularly resource hire, libraries of things and shared workshop spaces, where there is in-house capacity, space and expertise, and to embed a waste minimisation focus into existing initiatives. A good starting point could be to focus on collaborating with WCC's network of libraries to:

- expand the range of resource types that can be loaned (e.g. tools, toys, sports equipment, etc.)
- support libraries with Makerspaces to host regular repair cafe events and/or to run outreach making and repair events at other community/council-owned facilities
- provide support to community and other organisations to establish and access loaning systems and software.

Selected examples from literature review

In Canada, York Region's 'Lendaries' are integrated into public libraries allowing residents with a valid library card to borrow tools, kitchen appliances, sports gear, etc for 14 days on a first-come, first-serve basis. This approach leverages off libraries' existing infrastructure, member base, and trusted service, while collaborations across municipalities support scaling and knowledge sharing.

In Sweden, Fritidsbanken Sverige is a nonprofit initiative operating in over 100 cities and municipalities, where residents can borrow sports and leisure equipment for free for 14 days. The majority of Fritidsbanken are run locally by the municipalities. They are recognised to promote inclusion, reduce consumption, and ensure access to physical activity for all, especially children and low-income families. As such, they are funded by municipalities, foundations, government grants and support from the Public Health Agency of Sweden.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
13 (G2, G8, G10, G11, G13, G16, G17, G35, G36, G39, G44, G47, G56)	12 (O1, O3, O4, O14, O16, O17, O23, O28, O29, O33, O34, O40)	Rows 38-45. Also: 3-10; 11-26; 68-74; 75-79; 80-82; 99-102; 176-188.

PROJECT 3:
Work with Te Toi Mahana and other community and social housing providers to offer RRS initiatives in housing

Description

Work with Te Toi Mahana and other community and social housing providers to identify available spaces in community and social housing complexes where RRS initiatives can be established. This could include 'libraries of things', makerspaces, and repair workshops; the initiatives could be made available to both residents and the wider public. The initiatives can be supported to establish through grants for capital set-up and secure funding arrangements to ensure ongoing operational support.

Selected examples from literature review

Wellington City Council and Te Toi Mahana have already worked together to offer BenchSpace (community woodworking organisation) a permanent workshop space in an underutilised room in Brooklyn's Central Park Apartments. Wellington City Council provided further support for BenchSpace through the provision of grants through two funds.

In Sweden, a municipal pilot project developed in collaboration with two public housing companies who provided the necessary commercial space enabled the establishment of four Fixoteks (centres for fixing, lending, swapping and recycling consumer products) within residential neighbourhoods.

In Milan, the Lab Barona repair cafe is located within a youth affordable housing project sponsored by the Lombardy Region and Municipality of Milan, "Milano 2035 – The Youth Housing Coalition", which comprises 22 housing projects to open up access to affordable rental residences in Milan for young people, including apartments in public housing. The repair cafe is managed with the support of neighborhood associations and volunteers, equipped with repair tools, and structured to accommodate initiatives and activities based around collaborative living and the circular economy, particularly the donation, exchange, reuse, and recycling of household goods and furnishings for the benefit of residents. Recovered furniture is donated to those who request it or used to furnish social housing projects for families experiencing housing hardship. The repair cafe also has a pedal-assisted cargo bike that is used to recover donated furniture or that can be borrowed for free by anyone needing to carry out small moves or transports.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
10 (G2, G6, G7, G10, G16, G17, G35, G44, G45, G47)	8 (O4, O12, O14, O16, O17, O25, O33, O34)	Rows 38-45; 176-188. Also: 68-74; 75-79; 80-82; 161-163.

PROJECT 4:
Establish an RRS shopping precinct, complex or 'mall' or support RRS spaces in retail centres and precincts

Description

Invest in and/or partner to deliver a RRS shopping centre complex or precinct in the CBD with reserved retail spaces/first right of refusal for existing initiatives. Or, alternatively, partner with existing retail complexes or precincts to make spaces available for RRS initiatives. The purpose would be to provide an alternative commercial retail experience centred around RRS that is attractive to Wellington residents and businesses and is located in the places where people already shop as a visible and convenient alternative to buying new.

Council could provide a site or sites for the precinct, work with community organisations, businesses, initiatives to develop a cluster of RRS retail experiences in one vicinity/suburb, and/or work with commercial property owners who are willing to make some spaces available for RRS initiatives (this could be incentivised through offering rates rebates or other incentives for participating property owners, e.g. **Projects 13 and 23**).

Selected examples from literature review

ReTuna, in the City of Estilstuna (Sweden), is a circular shopping mall established in 2015, with 13 different stores, including clothing stores, a flower shop, a bookstore, an electronics store, and furniture stores. All items sold are made of reused and up-cycled products. ReTuna is operated by a municipality-owned company, and the municipality initially invested approximately 5 million Swedish kronor (1.4 NZD) directly and another 75 million Swedish kronor (20 million NZD) indirectly. This covered construction costs and subsidies to shop owners. The park/centre is now self-sustaining and no longer requires economic support, breaking even in 2018 and has, so far, created 50 jobs.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
23 (G1, G2, G3, G4, G5, G6, G7, G8, G10, G11, G12, G13, G14, G25, G27, G30, G35, G36, G38, G46, G47, G49, G52)	6 (O6, O7, O15, O20, O30, O33)	Rows 27-29. Also: 126-134; 161-163; 176-196.

PROJECT 5:

Partner with others to establish an RRS incubation hub / innovation lab / accelerator programme that can support both existing and future RRS initiatives

In addition to funding, Council can also play a facilitative role, inviting commercial investors and other grant makers to support the RRS initiatives emerging from the incubation, innovation and accelerator programme.

Description

Explore partnerships with existing innovation hubs or organisations in the city, such as CreativeHQ or Young Enterprise, to develop a specialised incubation/accelerator programme focused on nurturing both existing and potential RRS initiatives. The purpose of this intervention would be to create an environment to foster SMEs, NGOs and start-ups focused on RRS activities in order to increase the provision and resilience of RRS initiatives for Wellington residents and businesses, while also making RRS ideas/businesses more attractive to pursue.

Council could provide earmarked funding to a partner organisation to develop the programme, which would include wraparound support such as a shared workplace, seed-funding, business mentoring and capability development, knowledge sharing and/or intensive training programmes. A proportion of funding or spaces in the programme should be reserved for Māori-led organisations, businesses or initiatives; projects in priority areas such as product reuse services, commercial repair, equipment sharing initiatives or data gathering platforms; kaupapa-led incubator programmes that reflect the needs, priorities and cultural values of mana whenua and Māori; and/or collaborative projects. The programme should be fit-for-purpose for organisations that are action-based and not solely tech-focused start-ups.

The hub would also be well-placed to host RRS networking events and business forums for peer support, networking and knowledge sharing.

Selected examples from literature review

Wellington City Council provided funding support for the annual Climathon events that sparked the emergence of RRS initiatives, among others, such as reusable packaging/serviceware ideas Reusabowl and Nude Grocer, and clothing subscription service idea, Closet Collective. Climathon winners received entry into a startup entrepreneurs programme, as well as cash prizes to go towards developing and implementing the idea, two-months free office space, and more.

As part of its Sharing City programme, the Seoul Metropolitan Government created a system of designating groups and companies as 'Sharing Groups and Sharing Companies of Seoul', allowing these companies to use the 'Sharing Seoul' branding and receive grants, subsidies, and administrative support.

ReLondon's "Circular Economy Matchmaker" connects London's innovative circular businesses (many of which are RRS initiatives) with investors looking to invest in circular businesses, and with public sector organisations looking to partner with circular businesses to achieve particular outcomes. The platform lists ~150 businesses; has made ~183 introductions between circular businesses and investors, boroughs and other businesses; and has 108 public sector users and investors looking for circular solutions.

Although not focused on RRS, Auckland Council supports the digital innovation hub South Advantage Collective in South Auckland by playing a facilitation role through The Southern Initiative.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
20 (G1, G2, G3, G4, G5, G6, G7, G8, G10, G14, G19, G31, G41, G44, G47, G49, G50, G51, G52, G53)	11 (O5, O8, O10, O13, O14, O15, O20, O23, O26, O27, O37)	Rows 30-37. Also: 46-54; 64-67; 68-74; 75-79; 80-82; 83-87; 88-89; 90-95; 200-202; 203-209.

PROJECT 6:
Resource Māori-led research, training and collaboration into RRS opportunities in Te Ao Māori

Description

Resource mana whenua and/or Māori-led consultancies or kaupapa Māori zero waste/circular economy expert groups to work directly with marae and hapori Māori to explore RRS opportunities in these contexts (including potential collaboration opportunities with the wider RRS community). This would help build a better understanding of how to connect RRS and the priorities of Māori, and highlight opportunities to support more Māori-led RRS training, collaboration and networking initiatives that reflect Māori cultural values.

Following the research, WCC should direct resources (via the Council's Waste Minimisation Fund and other sources) towards these opportunities and priorities, including for example marae interested in hosting RRS initiatives that also align and work well with other priorities for the marae community, or kaupapa-led business mentoring, collaboration or training in RRS for Māori organisations.

Selected examples from literature review

Auckland Council's The Southern Initiative commissioned a 'look book' focused on building Māori and Pasifika economic resilience through the circular economy, which was the beginning of the project "creating shared prosperity through the circular economy", a Māori and Pasifika business led movement for economic transformation. The look book detailed existing Māori and Pasifikia led businesses operating in the circular economy, and a three point plan to accelerate the circular economy, focusing on Māori and Pasifika innovators and businesses. The study was not solely focused on RRS, but did include case studies in these parts of the waste hierarchy.

New Plymouth District Council has provided funding to Rautāpatu for its indigenous-led circular economy knowledge sharing events. This includes Circular Economy Masterclasses (focused on raising an awareness of circular economy principles, engaging business owners, social enterprise representatives, and local iwi members), and He Kāhui Mano, a large tribal summit for indigenous communities to explore the possibilities of a community-led, kaupapa-driven circular economy, including discussing the circular economy from an indigenous perspective, business case studies, as well as accelerator sessions.

In Australia, the Sustainable Communities and Waste Hub is a consortium of research institutions and partners across industry, government and community groups. One of the research priorities in the "Waste and Circular Economy" focus area includes research projects focused on circular economy opportunities for indigenous communities. This will include: identifying circular economy opportunities that align with indigenous knowledge and business models; supporting indigenous enterprises in accessing circular economy markets; and providing policy and funding recommendations to enhance Indigenous participation. The project intends to produce: case studies of indigenous-led circular economy initiatives; practical guidance for supporting indigenous businesses in circular economy sectors; and policy recommendations to ensure equitable participation in circular economy opportunities.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
7 (G4, G10, G31, G37, G44, G45, G51)	7 (O4, O5, O13, O16, O25, O37, O41)	Rows 90-95. Also: 135-138.

PROJECT 7:

Increase the visibility and availability of RRS across Wellington City by investing in mobile/ touring/distributed initiatives, such as RRS events, mobile facilities and hub-and-spoke services

The purpose of this intervention would be to increase both the visibility, and the convenience and availability of RRS initiatives across the city. Mobile, touring or hub-and-spoke services can act as outreach or awareness raising events for RRS, increase participation of various organisations in running or hosting RRS events/initiatives, enable knowledge-sharing and peer support between providers, and increase the ability of Wellingtonians to engage with RRS in their suburbs and neighbourhoods. By lifting the reach of RRS initiatives and participation in them, this intervention may also increase the impact of RRS in terms of diverting more materials from landfill.

Description

Collaborate with existing and new community and commercial providers of RRS initiatives to increase RRS events, mobile facilities or hub-and-spoke services across different suburbs across the city. Some examples include:

- mobile libraries of things;
- a schedule of regular, touring repair cafes or clothes swaps held in different suburbs each week/fortnight/month;
- regular inorganic collections;
- increased drop-off points for product takeback systems, broken items for repair or donated reusable items; and
- pop-up secondhand markets/flea markets.

In addition to financial support, Council could help to coordinate the scheduling and locations of events and services to ensure provision is geographically well-distributed, that underserved products and services are prioritised, and that events are scheduled to avoid time clashes/overlaps.

Selected examples from literature review

In Canada, the York Region local government partners with community group NewMakeIt to run a schedule of repair cafes across public libraries and community spaces.

In Barcelona, Spain, the public waste agency finances a social enterprise, Solidança Treball, to operate a 'repair truck' - a mobile self-repair service that gives citizens the opportunity to learn how to fix and modify their things. The truck has regular 3 hour sessions in different places in Barcelona based on a fixed schedule; it is able to reach small municipalities on Barcelona's periphery and to participate in public fairs to reach a wider audience.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
20 (G1, G2, G3, G4, G6, G8, G9, G10, G11, G12, G13, G14, G25, G27, G35, G44, G45, G46, G47, G52)	8 (O2, O4, O14, O16, O17, O23, O25, O33)	Rows 96-98; 99-102; 103-106; 107-115. Also: 46-54; 55-57; 58-63; 68-74.

PROJECT 8:
Support a large-scale RRS event, such as a fair, festival or conference

Description

Support a large-scale RRS event, such as a fair, festival or conference. The purpose would be to increase visibility, raise awareness and have an opportunity to create broader impact and engagement with a wider audience/sector of society. The event may be best scheduled to link in with other events across the country or a relevant international day, such as the national events that occur for International Repair Day. Council support could include: providing or funding the event venue; offering staff time for coordination, administrative or project management support; marketing and promotion; and funding to enable the event to be zero waste (e.g. 100% reusable).

Selected examples from literature review

In Austria, the City of Vienna is a major sponsor and supporter of the annual Repair Festival, a three-week programme of repair-related events, workshops and exhibitions across the city.

New Plymouth District Council provided funding for a two-day tribal summit, He Kāhui Mano, for Māori communities from across the country to explore the possibilities of a community-led, kaupapa-driven circular economy. This included discussion of the circular economy from an indigenous perspective, business case studies, as well as accelerator sessions.

In Canada, the Squamish District Council supports the annual Squamish Reuse-it Fair, which enables the free exchange of household goods and large items in good condition. The District Council contracts Squamish Climate Action Network (CAN) to lead event planning and execution, logistics, and volunteer coordination. The municipality provides the venue, traffic control, waste handling and promotion. They also waive landfill tipping fees and $20,000 annually for outreach and education.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
5 (G22, G25, G26, G30, G52)	2 (O18, O39)	Rows 107-115. Also, 46-54; 55-57; 58-63.

PROJECT 9:
Build upon existing maps and lists to create and/or host a live online directory of Wellington RRS initiatives

Description

Fund and provide access to a user-friendly live online directory/listing, plus map, of RRS services and initiatives in Wellington City on the Council website, as is currently the case for waste and recycling services.

The directory could either be hosted and maintained by the Council, or contracted to another organisation to create and maintain. It makes sense for the directory to build upon existing directories, such as the Circular Wellington map; therefore, funding or a contract could be provided to the organisations that created these existing resources to further develop and maintain them in accordance with the purpose of this project.

In addition to procuring compilation, development and maintenance of the directory, Council could also pay for the licence fee or other online hosting costs.

The purpose of the directory is to provide some promotional/marketing support to RRS initiatives by helping to connect Wellington residents and business with existing (and, as they grow, new) RRS initiatives and enabling users to easily browse and locate available services. The Directory can also be used as a way of showcasing existing RRS initiatives to investors and central government agencies in order to potentially open investment or procurement opportunities for these initiatives. There is an opportunity to put conditions in place in return for being listed, e.g. initiatives might need to demonstrate compliance with certain criteria that ensure the initiatives are delivering RRS services and/or agree to collect data that will support WCC with RRS impact measurement (e.g. **Project 21**).

Selected examples from literature review

In Canada, the Share, Reuse, Repair Hub is supported by several regional municipalities.

In Sweden, the City of Gothenburg set up a Digital Smart Map of businesses where residents can hire, borrow, share and swap various goods and services.

In the state of Minnesota (US), Hennepin County operates a Choose to Reuse website that has a searchable directory, plus map, of more than 600 locations in the county where residents can buy, sell or donate secondhand items, or access repair, rental or sharing services.

ReLondon's "Circular Economy Matchmaker", which operates as both a directory and a platform for brokering relationships, showcases London's innovative circular businesses (many of which are RRS initiatives) and connects them with each other to enable new collaboration opportunities or peer-to-peer networking, with investors wanting to investing in circular businesses, and with public sector organisations looking to partner with circular businesses to achieve particular outcomes. The platform lists ~150 businesses; has made ~183 introductions between circular businesses and investors, boroughs and other businesses; and has 108 public sector users and investors looking for circular solutions.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
10 (G22, G23, G24, G25, G30, G39, G40, G44, G45, G52)	8 (O1, O11, O22, O30, O38, O40, O41, O47)	Rows 210-220.

PROJECT 10:

Create an online RRS resources hub with public-facing features and/or a members' portal with peer support and professional development resources for RRS operators

Description

Invest in the creation of an online RRS resources hub (with public-facing and members-only portals) that builds upon the directory (**Project 9**) and includes:

- Educational resources (videos and how-tos on RRS for residents).
- Toolkits and best practice guidance for businesses and organisations to set-up and run RRS initiatives, including peer support resources (**Project 1**).
- Advocacy resources or campaign materials for RRS in product stewardship, right-to-repair etc. that can be used by the public, RRS operators, other organisations, or councils (**Area of Work 4**).
- Professional development training resources, e.g. webinars (**Projects 18 and 19**).
- News stories, case studies and blogs about RRS initiatives in the city and how they relate to waste minimisation, specifically.
- RRS event listings (e.g. upcoming repair cafes, clothes swaps, manager's mixers, secondhand sale events etc.), which would support **Project 7 and Project 8**.
- A data collection portal to support WCC to gather the information needed to measure and report on the impact of RRS in the city (**Project 21**).

The purpose of the online hub should be to operate as: a useful, practical, promotional resource for residents and businesses to learn about and engage with RRS activities; a medium for bringing together and developing the positive story/narrative of RRS in Wellington; and a location for networking, peer support, knowledge-sharing and professional development that can build the resilience of RRS initiatives in the city over time.

Funding to develop resources for the hub could be allocated to existing community and commercial RRS initiatives. The hub could either be hosted and maintained by Council, or contracted to another organisation to create and maintain. As with the Directory, it makes sense to build on resources that already exist. However, the relevance of this project would be creating a location to which existing and future resources could be uploaded, in order to increase ease of access for the community and organisations operating RRS initiatives.

Selected examples from literature review

Examples include Saskatchewan's (Canada) Waste Reduction Hub, the York/Peel/Durham regions' (Canada) Share, Reuse, Repair Hub, or the Resources PDX hub (Portland, USA) which are run by non-profits funded by the local authorities. The hubs include not only searchable directories or maps, but also educational resources such as how-to videos and guides and tips for RRS, event-listings, toolkits for businesses, blogs and news stories, and case studies of existing RRS/circular businesses.

In the state of Minnesota (US), Hennepin County operates a Choose to Reuse website that, along with its searchable directory, plus map, of RRS initiatives, also includes RRS events listings and educational resources, tools and tips for RRS.

Zero Waste Scotland (Scotland's circular economy public body) has established the Revolve Reuse Knowledge Hub, a support programme for Scotland's reuse sector, with free resources and information to support reuse businesses to meet legal obligations, webinars, networking opportunities and advice sessions across the reuse sector, auditing and external validation/certification services, and tailored training, guidance and upskilling opportunities for staff at every level of reuse businesses.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
12 (G25, G26, G28, G29, G30, G39, G40, G41, G43, G52, G53, G55)	14 (O1, O10, O11, O22, O23, O26, O27, O29, O32, O39, O40, O41, O44, O47)	Rows 153-156; 221-227. Also: 149-152; 210-220; 228-234.

PROJECT 11:
Offer or facilitate grants and in-kind support to RRS initiatives for marcomms, promotion and positive, place-based storytelling

Description

Support existing providers of RRS initiatives with marketing and comms to tell the story of their initiatives in a way that is engaging and promotes the attractiveness and appeal of RRS to their target audience, and to Wellington residents and businesses more generally. Such support could include:

- grants for RRS initiatives to spend on marketing and comms;
- encouraging WellingtonNZ (Wellington Region's Economic Development Agency) to develop a project of positive storytelling about Wellington's existing circular/RRS initiatives as part of its work promoting Wellington businesses;
- in-kind promotional support, such as developing case studies about RRS initiatives to share on Council platforms (website, social media etc) or a future RRS online hub (**Project 10**); and/or
- working with others who are connected into the creative and arts sector to identify opportunities to involve this sector in communication, engagement, storytelling and public art projects that relate to RRS.

A proviso of such support could include an agreement to begin gathering and sharing data to support WCC to measure the impact of RRS (**Project 21**).

Selected examples from literature review

The city of Toronto developed a series of case studies to highlight small businesses and organisations in Toronto that support the circular economy, including RRS initiatives.

Squamish District Council allocates $20,000 annually to run outreach and education about the Squamish Reuse-it Fair and swap events run by Squamish Climate Action Network.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
13 (G22, G25, G26, G28, G29, G30, G38, G39, G40, G41, G43, G52, G56)	8 (O1, O8, O11, O28, O39, O40, O41, O47)	Rows 228-243. Also: 46-54; 58-63; 221-227; 238-239.

PROJECT 12:

Intraregional collaborative forum on RRS involving council representatives, mana whenua, resource recovery operators, businesses, non-profits, central government agencies etc.

Description

Promote intraregional collaboration between Councils, mana whenua, resource recovery operators, businesses, non-profits and central government agencies on RRS initiatives, including in existing networking and knowledge-sharing platforms, such as the Wellington Regional Waste Forum, or through establishing a new group focused on RRS.

A key focus of this collaboration could be bringing people together to share knowledge and build connections, align approaches and strategic focus on RRS across organisations and councils, coordinate advocacy, and improve methods of effective and standardised data capture and impact measurement. The group could start informally through in-person meetings held at regular intervals (e.g. 2-3 a year).

Selected examples from literature review

As part of its Sharing city programme, the Seoul Metropolitan Government collaborates with the local governments of the 25 autonomous districts of Seoul to promote and expand sharing initiatives, and also organised a public-private governance model to implement its Sharing City programme.

ReLondon is a partnership of the Mayor of London and London's boroughs to improve waste and resource management in the city and accelerate the transition to a circular economy. Among many activities, ReLondon coordinates a range of local authorities networks and working groups related to the circular economy, supporting the 32 boroughs of London to work together to advance circularity initiatives, many of which relate to RRS.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
11 (G24, G28, G29, G39, G40, G41, G43, G51, G62, G53, G55)	15 (O1, O2, O12, O26, O27, O28, O29, O30, O31, O32, O33, O35, O40, O44, O45)	Rows 157-159; 160; 161-163.

PROJECT 13:
A Waiver and Subsidy Scheme for Council fees for accredited RRS initiatives and landlords that support them

Description

Implement a Waiver and Subsidy Scheme for accredited RRS initiatives or landlords that support them. Under this scheme, participating organisations would receive either full waivers or reductions in fees that sit within the purview of Council. This could include rates rebates, reduced landfill fees for residual waste that arises unavoidably from RRS activities (e.g. stripped components, unrepairable items or unsaleable donated goods), or reduced permitting costs for spaces used for RRS initiatives. The Council could allocate a dedicated annual budget to cover the waived fees or subsidies. Similarly, landlords that make commercial premises available to RRS initiatives could be offered rates rebates or remissions.

Accrediting as an RRS initiative could be a precondition of eligibility for this waiver, and accreditation could require compliance with data reporting requirements. This would support WCC to improve data collection and impact measurement of RRS initiatives (**Project 21**), and to maintain the live online directory (**Project 9**).

Selected examples from literature review

San Francisco and Washington DC offered free or discounted carparking to carshare operators.

In the UK, many local authorities will offer landlords relief on vacant business property rates if the landlords offer their commercial property to a non-profit or charity (rent-free) while it is unoccupied, via schemes such as Astop that are accepted by local authorities. NB this is available for any non-profit or charity and is not limited to RRS initiatives.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
15 (G16, G17, G20, G21, G24, G27, G34, G39, G40, G41, G44, G46, G47, G48, G52)	9 (O1, O4, O8, O20, O33, O38, O44, O45, O47)	Rows 126-134. Also: 189-196; 238-239.

PROJECT 14:
Introduce a Repair Voucher Scheme to subsidise residents' costs to repair

Description

Introduce a Repair Voucher Scheme, under which residents can access Council-funded vouchers that cover a proportion of the price of repairing items at accredited local repair businesses. By subsidising consumer demand while simultaneously channelling those resources to organisations already delivering repair services, the Council would create a self-reinforcing ecosystem that helps successful initiatives survive and scale, while making repair more affordable and accessible for Wellingtonians. Having an accreditation process for businesses to accept vouchers would help with upkeep of the live directory (**Project 9**). It could also incentivise improved repair performance, data keeping, impact measurement and project monitoring and evaluation if accreditation required some data gathering similar to the Restarters platform (**Project 21**).

Selected examples from literature review

Repair voucher schemes have been implemented in several towns, cities and/or states in Austria, Germany and the UK, including Graz (Austria), Vienna (Austria), Aschaffenburg (Germany), Starnberg (Germany), Thuringia (Germany), Saxony (Germany) and North London (UK). The size of the subsidy and the eligible products varies. They generally cover up to a certain maximum value (e.g. 100 euros), or 50% of the price. Each year, customers might be able to access unlimited vouchers, or up to a fixed number. The budget allocation to fund the scheme also varies, ranging from 5,000 euros a year (Starnberg, Germany) to 250,000 euros a year (Vienna, Austria). Under most systems, vouchers are issued until the allocation runs out. Items covered can include household items, including or excluding electrical appliances or electronics. In Vienna (Austria), businesses must join the Repair Network Vienna to be able to accept vouchers. To join the network they need to demonstrate they match three criteria: at least 50% of the workplace positions in the business are dedicated to repair; repair services are offered for at least three different brands; the maximum cost for a repair estimate in the workshop is €60. In North London, the repair voucher scheme was implemented as a 6-month pilot programme to test the concept and assess impact.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
15 (G1, G6, G17, G18, G19, G21, H23, G24, G27, G34, G35, G40, G44, G45, G48)	8 (O8, O15, O16, O19, O38, O40, O44, O47)	Rows 116-125. Also, 238-239.

PROJECT 15:
Partner with local businesses and organisations offering RRS initiatives to deliver a Reuse, Repair Share Coupon book

Description

Partner with local businesses and organisations offering RRS initiatives to establish a Wellington Reuse, Repair Share Book - a book of coupon discounts and offers for RRS services across the Wellington Region (along the lines of the Entertainment Book) - and provide funding to subsidise the coupons.

To be included in the book, initiatives would need to be accredited RRS initiatives and agree to data collection and sharing to support with WCC's impact measurement and reporting.

The purpose of the book would be to promote RRS initiatives while also subsidising and incentivising Wellingtonians to participate in them.

Selected examples from literature review

Over several years, Hennepin County in Minnesota partnered with local businesses and organisations with RRS services to create and distribute free Choose to Reuse coupon books that offered discounts and deals for rental, repair, resale, consignment and used goods exchange across the local area. The coupon books were available for online download, on a smartphone app, or for residents to pick up at participating retail locations, county service centres and county libraries, and coupons remained valid for a period of time (~2 months).

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
18 (G16, G17, G20, G21, G23, G24, G25, G27, G28, G30, G35, G39, G40, G41, G44, G45, G48, G52)	11 (O1, O8, O14, O15, O16, O19, O38, O39, O40, O44, O47)	Rows 116-125. Also, 238-239.

PROJECT 16:
RRS criteria in Council procurement policies, tenders and contracts

Description

Update WCC procurement policies to ensure RRS options are prioritised when procuring goods and services for Council.

When issuing tenders and contracts, ensure these include RRS expectations, especially tenders and contracts for resource recovery and waste management services.

Share learnings from implementing these policies in sustainable procurement guidelines or in advice for businesses and other organisations to consider for their own procurement policies (including central government, given they are such a large employer and spender in Wellington City).

The purpose of this intervention would be to normalise RRS across Council departments and the wider Wellington economy, while also investing in the growth and resilience of RRS by directing Council's considerable purchasing power towards organisations that offer these services.

Selected examples from literature review

The cities of Helsinki (Finland) and Malmo (Sweden) have incorporated reuse and repair into their procurement policies for office and public furniture, and IT (in the case of Malmo), which have driven changes in manufacturing practices and services.

In Brussels (Belgium), the city's decision to adopt reusable nappies in all municipal-run creches led to a tender and public service contract for the delivery of a reusable nappy service. The Brussels-based company to which the contract was awarded has considerably upscaled to deliver the contract.

In Scotland, the Reuse Consortium, a network of over 170 charities and social enterprises that operate in RRS activities, offer high-quality reused furniture and white goods to Scottish local authorities. The Consortium enables Housing Associations, Local Authorities, and public bodies to buy directly from certified reuse providers without needing to go through lengthy tendering processes. All products meet strict safety and quality standards and are compliant with the Scotland Excel Domestic Furniture Framework Contract. In 2019, the Consortium reached the milestone of over £1 million of public spending on reused furniture with social enterprises.

Other city local authorities with procurement strategies that include references to reuse, repair and/or share or the top of the waste hierarchy are Bendigo (Australia) and Auckland (New Zealand).

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
19 (G1, G2, G3, G5, G6, G8, G9, G14, G16, G17, G20, G21, G27, G32, G44, G48, G49, G52, G56)	10 (O2, O6, O8, O12, O20, O21, O22, O24, O28, O32)	Rows 139-148

PROJECT 17:
Facilitate and support the establishment of a professional association for RRS organisations

Description

Partner with existing providers of RRS initiatives, polytechnic vocational training institutes and relevant university departments to explore the possibility of a professional association for RRS organisations (e.g. remanufacturers).

The purpose of such an association is the role it can play in awareness-raising and facilitation of RRS initiatives, and supporting the ongoing development and formalisation of the sector through professional development training, accreditations, auditing, support services etc.

Council can support by bringing relevant stakeholders together to explore the possibility of such an association, outlining its role and value, supporting with identifying and brokering potential co-funders (as well as offering co-funding) to get it off the ground, and providing ongoing practical, financial and in-kind support, where needed.

Selected examples from literature review

Zero Waste Scotland (Scotland's circular economy public body), partnered with the University of Strathclyde and the Scottish Funding Council to create and offer ongoing funding for a Scottish Institute for Remanufacturing (SIR). The Institute is hosted at the University and funded by the Scottish Funding Council and Zero Waste Scotland. The SIR acts as an innovative hub of expertise, stimulating and supporting the remanufacturing community in Scotland by connecting companies with academia to find sustainable and effective solutions to manufacturing problems through product remanufacture, reconditioning, repair and reuse. It also offers remanufacturers funding opportunities, education and training, and a central hub of knowledge and expertise to allow business to develop and sustain remanufacturing business models. The Institute has helped many companies implement new business models, product design and manufacturing processes that have resulted in improved product performance and longevity, and reduced environmental impact and production costs. SIR also provides training and Continued Professional Development and undertakes research to ensure remanufacturing techniques evolve in line with advances within traditional manufacturing.

In France, the Chambers of Trade and Crafts, with the support of ADEME (National Agency for Environment), created the Répar'acteurs network of repairers and makers in circular economy and waste management. It currently has 4500+ certified members. New members must complete a free training course and sign a sustainable commitment charter, and receive a physical and digital communication kit. The network mobilises repairers, promotes the know-how of companies, facilitates contact with consumers, organises events dedicated to sustainable development, sets up local clubs of repairers and has a dedicated website that allows citizens to find nearby repair services.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
9 (G18, G19, G30, G39, G40, G41, G43, G52, G53)	8 (O1, O10, O23, O26, O27, O36, O44, O47)	Rows 153-156. Also, 149-152; 203-209.

PROJECT 18:

Partner with training institutes, RRS initiatives and professional associations and sector bodies to develop and offer industry training programmes and apprenticeships

Description

Partner with existing providers of RRS initiatives, polytechnic vocational training institutes, wānanga, relevant university departments, professional associations, sector bodies, and national umbrella organisations for RRS or resource recovery activities, to curate and develop courses or accreditations focused on relevant skills for RRS, including electrical repair skills, artisanal and furniture repair/repurposing skills, tailoring and mending, or reuse activities. Ensure kaupapa Māori-led institutes and programmes are included. Broker collaboration to support existing RRS initiatives to offer apprenticeships and formalised training, professional development programmes and career progression opportunities in these initiatives and future initiatives.

In addition, work to ensure that all new RRS initiatives (including those at resource recovery sites), and any RRS initiatives that Council funds, receive relevant training and/or are required to consider how they will incorporate training and vocational pathways or offer professional development opportunities for others in the sector.

Over time, Council can offer support to coordinate the various training and development opportunities emerging across multiple initiatives with a view to supporting the development of standardised training courses, which would ensure both consistency and cost savings.

Selected examples from literature review

Auckland Council's The Southern Initiative has funded a bike mechanic training pilot, which is a 12-week programme combining classroom learning, hands-on mechanic experience, and wraparound pastoral care. The programme is delivered in partnership with a community bike organisation (Triple Teez) and NZ Bicycle Training Academy. The project objectives include growing the number of skilled local bike mechanics in the community, aligning training with industry standards and creating pathways to jobs in the bike sector.

The Province of Flemish Brabant funded NGO Repair&Share to create and run the SPARK project, a comprehensive electrical repair training program tailored to the needs of targeted employees. The programme is developed and delivered in collaboration with training providers and supported by educational materials and professional tools to ensure accessible and practical learning pathways. The project was inspired by the shortage of dedicated repair employees in Flanders' reuse and repair centres and a lack of specific, customised training or guidance in the mainstream sector.

The Renew Hub in Manchester, England (a partnership between a resource recovery operator, and regional and local authorities) houses units focused on repairing and upcycling items. These units are run in partnership with qualified organisations who train apprentices and volunteers.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
11 (G1, G3, G6, G8, G18, G19, G31, G34, G51, G52, G54)	10 (O1, O2, O5, O10, O13, O23, O24, O27, O36, O37)	Rows 197-199; 200-202; 203-209.

PROJECT 19:
Fund/subsidise public skills and compliance workshops and professional development training

Description

Fund workshops/training for both public and professional audiences that focus on building relevant skills to support repair and reuse activities. Funding would cover the development and delivery of the workshops, as well as subsidised attendance. The workshops/training could either be targeted at increasing the general skills of the public, or be focused on professional development and compliance resources, such as training courses and webinars. Ensure kaupapa Māori providers of workshops are included.

Selected examples from literature review

The city of Amsterdam subsidises residents 50% of the cost of courses to learn how to repair appliances.

Zero Waste Scotland (Scotland's circular economy public body) has established the Revolve Reuse Knowledge Hub that, among other things, provides tailored training, guidance and upskilling opportunities for staff at every level of reuse businesses. The hub also includes resources and information to support reuse businesses to meet legal obligations, webinars, networking opportunities and advice sessions, and auditing and external validation/certification services.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
8 (G18, G19, G31, G34, G51, G52, G53, G54)	11 (O1, O2, O4, O5, O10, O13, O23, O24, O26, O36, O37)	Rows 200-202. Also, 153-156; 197-199; 203-209.

PROJECT 20:

Expand waste-to-landfill audits and work towards monitoring RRS activity in Wellington City as part of Council's waste minimisation data capture and reporting

Description

Expand WCC's data capture and reporting on waste generation and minimisation to enable future monitoring and reporting on RRS activities in Wellington City and assessment of their waste reduction impact, e.g. in Waste Assessments and SWAPs. Among other things, this would include:

- audits that measure waste-to-landfill in Wellington City based on product categories, not just material types;
- establishing some agreed indicators/monitoring tools and processes to ensure ongoing measurement of the prevalence, availability, growth and impact of different types of RRS activities in the city; and
- working towards using these indicators alongside some more in-depth analytical methodologies to measure the impact of the city's existing RRS sectors (including social, environmental and economic outcomes).

Setting a range of SMART targets and monitoring tools related to RRS would drive accurate data collection and measurement. Working towards including such targets in the next regional WMMP would also support a regional approach towards tracking and reporting on RRS.

Selected examples from literature review

The Interreg Central Europe NiCE project (From Niche to Centre - City Centres as Places of Circular Lifestyles) circular lifestyle monitor tool for cities compiles indicators from several pre-existing monitoring frameworks for tracking the progress and impact of the circular economy (including city/municipality circular economy plans or strategies). Of these indicators, 39 are dedicated to "Reuse, Repair and Share". NiCE suggests that municipal departments use this monitor tool as a guide for target-setting and evaluating progress towards the implementation of the circular economy.

In Australia, the state governments of New South Wales, Tasmania and South Australia have all used the National Reuse Measurement Guidelines developed by NGO Charitable Reuse Australia, Monash University and Sydney University to measure and report on the environmental, economic and social impacts of reuse activities in their states.

The Flanders region in Belgium has a reuse target of 7kg of material per capita and an employment target of 3000 FTEs in the reuse sector. These targets have driven data capture and measurement.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
7 (G28, G29, G29, G40, G41, G42, G43)	7 (O28, O31, O40, O41, O43, O44, O45)	Rows 235-237. Also: 164-175.

PROJECT 21:
Co-design a user-friendly platform for RRS initiatives to share standardised data points

Description

Partner with an external organisation to establish a simple Reuse, Repair and Share Data Platform that would enable RRS initiatives to input some key standard data points that Council could later use as a basis for impact measurement, e.g. number and type of items loaned, repaired or sold per month, number of FTEs, number of transactions.

The platform and selection of key data points could be co-designed with organisations that have already developed RRS measurement tools (e.g. Restarters, MyTurn, Charitable Reuse Australia, DonateNYC etc), existing providers of RRS initiatives in WCC, other territorial authorities across the region, and/or existing environmental certification programmes (see **Project 22**).

The purpose of this shared platform would be to create a simple interface that reduces the reporting burden on small operators, but enables consistent gathering of a small number of standardised data points across RRS initiatives to support WCC with accurate evaluation of current and future RRS activities. Council could then analyse the aggregated data to inform policy, measure progress against waste minimisation targets, and showcase the social and environmental value of RRS.

In order to facilitate participation by RRS initiatives to input data, Council should provide training, technical support and a helpdesk to build capacity. Organisations can be incentivised to participate if doing so is a condition of Council funding or partnership, or if grants/funding is made available to facilitate participation.

Selected examples from literature review

The Department of Sanitation in the City of New York provides analytical support to the City's reuse sector. This includes both the collection and analysis of data on the size, distribution and capacity of the materials used by organisations in the City.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
9 (G28, G29, G39, G40, G41, G43, G52, G53, G55)	8 (O1, O31, O40, O41, O44, O45, O46, O47)	Rows 235-237; 238-239. Also 153-156.

PROJECT 22:
Work with existing environmental certification programmes to develop and trial waste avoidance data capture and analysis methodologies

Description

Council could investigate the possibility of working with existing environmental certifications e.g., Toitū, B Corp, CoGo, to develop a data collection and analysis method for businesses and organisations to report on the waste avoidance and reduction impact of RRS business models. The resulting method could then be trialled with a cluster of businesses/ organisations currently reporting for these certifications (or businesses that are part of an incubation and innovation hub, see **Project 5**). If the trial is successful, this would encourage certification schemes to include it as a routine part of their reporting framework, which would greatly increase impact and consistency of RRS reporting beyond the initial organisations in the trial, and also beyond Wellington City.

Selected examples from literature review

None identified.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
6 (G28, G39, G40, G41, G52, G53)	7 (O1, O5, O40, O44, O45, O46, O47)	Rows 235-237; 238-239. Also: 30-37; 161-163.

PROJECT 23:

Invest in a collaborative RRS Development Project that brokers internal and external council relationships in order to connect RRS initiatives with each other to share assets and resources, and with other organisations willing to offer available spaces or in-kind support for logistics

- Identifying potential premises for an RRS incubation and innovation hub (**Project 5**).
- Exploring the potential to include an RRS retail complex or precinct in redevelopment projects or particular suburbs, or RRS spaces in existing retail locations and precincts (**Project 4**).
- Identifying opportunities for RRS initiatives to access or share items like vehicles, specialised tools and equipment, commercial kitchens or other workshop spaces with each other, or from commercial partners.

By involving a range of commercial, non-profit and council facilities in the co-design of the development project, the Council can generate buy-in for the project, as well as facilitating the brokering of relationships and arrangements that meet the needs of the RRS initiatives and match them to the premises or services available.

Description

Invest in a 'RRS city development project' focused on networking and collaboration to connect RRS initiatives with each other, to share assets and resources, to identify commercial partners with available spaces or other resources that could be shared with RRS initiatives, and/or to broker public-private partnerships to facilitate these arrangements.

The Council should seek to include existing initiatives with expertise in this area, such as Urban Dream Brokerage that connects the creative and arts sector (including those with a reuse and repair focus) with available commercial premises in Wellington City.

This project could include:

- Identifying appropriate premises available across the city (suburbs, central city etc.) where RRS spokes for existing initiatives could be established (collection points, warehousing of bulky products etc.), or where specific initiatives (e.g. repair initiatives, tool libraries, spare parts warehousing, product reuse systems) could be set up.
- Identifying opportunities to connect RRS initiatives with owners of premises, or with commercial organisations interested in supporting RRS initiatives with logistics, freight, warehousing or similar.

Selected examples from literature review

The cities of Toronto and Seoul both have public-private collaborative models for implementing their Reduce & Reuse Programs and their Sharing City programme, respectively. The Toronto model includes collaboration with multi-residential buildings and community hubs to create space for initiatives.

In Canada, the City of Vancouver connected The Thingery (a social enterprise that designs, installs and services equipment lending libraries in modified storage spaces) with a developer building a high-rise multi-family development in order to establish there and be available to the 1,800 residents. The SRRI Action Guide states that a key takeaway of this example is that "Local governments can help incubate Thingeries by providing introductions to developers seeking sustainable community amenities and by considering their inclusion in community plans, particularly those involving multi-family developments, as a way to support waste reduction, circular economy, and affordability." (2025, p.26).

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
21 (G1, G2, G3, G4, G5, G6, G7, G8, G9, G10, G12, G13, G14, G25, G34, G46, G47, G49, G52, G53, G55)	13 (O1, O2, O3, O4, O5, O6, O7, O14, O17, O25, O30, O33, O34)	Rows 160; 161-163; 176-188. Also: 3-10; 11-26; 27-29; 30-37; 38-45; 58-63; 157-159.

PROJECT 24:

Explore regulatory and other levers Council can use to make suitable Council property available to RRS initiatives, or to incentivise developers and other commercial landlords to make space for RRS initiatives

Description

Explore ways that Council can make its own property, as well as property held by CCOs, available to RRS initiatives to use for free or a peppercorn rental, either temporarily or for a long-term period.

Council could also make space in its control available for RRS initiatives by planning for product takeback logistics services/drop-off/pick-up points in new resource recovery network sites, other council-controlled locations or other appropriate facilities.

Council could also experiment with its ability to use planning, permitting and financial mechanisms to incentivise landlords with commercial premises to make these premises available to RRS projects when vacant (e.g. **Project 13**) or to set aside permanent space for RRS initiatives as part of the conditions in development contracts.

This intervention could be standalone or one part of a broader RRS Development Project (**Project 23**).

Selected examples from literature review

In the UK, many local authorities will offer landlords relief on vacant business property rates if the landlords offer their commercial property to a non-profit or charity (rent-free) while it is unoccupied, via schemes such as Astop that are accepted by local authorities. NB this is available for any non-profit or charity and is not limited to RRS initiatives.

Queenstown Lakes District Council has provided the land for the social enterprise, Wastebusters, in Wānaka, to operate its community resource recovery centre (including a reuse shop and various other RRS activities) for a long-term lease (35 years) at a peppercorn rental. In 2025, the Council also signed a letter of intent to provide Wastebusters with access to additional land through the existing lease so that Wastebusters can expand its site and services to become a next generation circular economy hub. Among other things, the expanded site will enable increased reuse operations, a construction and demolition hub, increased sharing economy activities, such as a tool library, as well as a permanent repair workshop facility.

Number of gaps addressed	Number of opportunities addressed	Reference examples of actual and suggested interventions (citing relevant rows in the interventions literature review spreadsheet)
21 (G1, G2, G3, G4, G5, G6, G7, G8, G9, G10, G12, G13, G14, G25, G34, G46, G47, G49, G52, G55, G56)	15 (O1, O2, O3, O4, O5, O6, O7, O14, O17, O20, O21, O28, O30, O33, O34)	Rows 189-196. Also: 126-134.

6 CONCLUSION

Reusing, repairing and sharing products is a practical and meaningful way that individuals and organisations can reduce waste and emissions and participate in increasing social and economic wellbeing. Providing practical, financial and regulatory support for the ongoing growth and resilience of RRS activities in Wellington City aligns with the vision, objectives, principles and actions of WCC's ZWS and EWS, and the Wellington region WMMP. When RRS systems and the mechanisms to support them are well-designed, kaupapa-led and delivered in Te Tiriti partnership, they also have the potential to centre and uplift Te Ao Māori values and priorities, in accordance with Tūpiki Ora.

Our stocktake identified at least 456 initiatives in Wellington City that are already providing residents and businesses with the opportunity to participate in RRS rather than buy new products or prematurely waste existing products. These initiatives include varied activities, such as secondhand stores, community and commercial repair services, hire/rental companies, libraries for books, tools and toys, shared workshop spaces and more. Commercial organisations run most initiatives, although community and council-run RRS initiatives often prioritise affordability and accessibility, and fill gaps left by the market in terms of underprovided services or products.

Analysis of stocktake results and interviews with representatives of organisations operating RRS initiatives showed plenty of opportunity to build upon the existing baseline of RRS activity. Established initiatives with viable and predictable funding streams, such as public libraries and op shops, are well-utilised by Wellingtonians, indicating that RRS initiatives are attractive if well-designed and understood. However, overall, provision of RRS services needs to diversify and expand to meet public demand, given gaps in the availability, convenience and affordability of existing services. Furthermore, both resource recovery organisations and Māori-led organisations are underrepresented in the provision of RRS initiatives, at just 3.5% and 1.7%, respectively, despite potential alignment between these groups and the purposes and outcomes of RRS.

The biggest barriers to the growth, affordability and convenience of RRS are the lack of viable financial models for RRS initiatives and appropriate spaces and premises for back-of-house and public-facing RRS operations. There is also a shortage of professional bodies and peer support initiatives, formalised vocational programmes and kaupapa-led industry training for the RRS sector. There is far more scope for collaboration and partnership within Council, and between Council and external organisations to scale RRS initiatives. Furthermore, despite the theoretical potential of RRS to deliver environmental, social and economic impacts, data capture and analysis is currently insufficient to enable current or future impact measurement, monitoring and evaluation. Alongside capacity and financial constraints and a market awash with low-cost, low-quality products, the lack of storytelling about the positive potential outcomes of RRS presents challenges for existing businesses and organisations to market and promote their RRS initiatives to a wider audience, even though this could help to foster financial viability, increase waste reduction impact and lift general comprehension about the value of RRS.

The list of potential intervention options proposed in this report takes into account these findings, as well as proposals from similar studies overseas and actual interventions implemented by local authorities around the world. The intervention options are designed to tackle the identified impediments to growth and unlock the opportunities that exist to scale RRS activities in Wellington City.

In particular, the opportunity to work with others who are already offering RRS initiatives in Wellington City in order to strengthen and build on existing services, infrastructure and expertise is significant. Through nurturing strong partnerships, offering targeted financial, practical and regulatory support, and empowering existing organisations to uplift others into the RRS sector, WCC can help to build Wellington City's leadership in the area of RRS and, in so doing, contribute to a national shift towards a low-waste, low-emissions circular economy that operates at the top of the waste hierarchy.

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APPENDIX 1: STOCKTAKE SPREADSHEET

The complete stocktake of Reuse, Repair and Share initiatives identified throughout Wellington City, Porirua and Lower Hutt is available here:

https://reuseaotearoa.org.nz/wp-content/uploads/2026/02/Reuse-Repair-Share-WCC-Stocktake-Spreadsheet-Reuse-Aotearoa.xlsx

APPENDIX 2: KEYWORD SEARCHES USED FOR STOCKTAKE RESEARCH

Keywords used for the stocktake research are set out below. Keywords were grouped into categories (Activity, Geography, Māori-led initiatives, Product types, Physical facilities, Online infrastructure, and RRS businesses/products). Combinations of the below keywords from each category group were used to identify in-scope RRS initiatives across the area within the WCC, PCC and HCC territorial boundaries.

Activity	
Theme	**Keywords**
Reuse	reuse, reusable, "return for reuse", redistribute, donating, regifting, rehome, secondhand, resale, "takeback for reuse"
Reuse (packaging)	"reusable packaging", refill, refillable, reusable, "return for reuse", "takeback for reuse", "swappa bottle", "refillable bottle", "bulk bins", "on tap"
Construction-related reuse	salvaging, deconstruction, "reusing materials"
Repurpose	repurpose, upcycling, recrafting, reprocessing
Repair / preparation for reuse	repair, "preparation for reuse", remanufacture, refurbish, reconditioning, DIY, fixing, restoration, mending
Share	sharing, hire, loan, borrow, rent, rental, exchange, leasing, product-as-a-service, subscriptions

Geography
Wellington, Porirua, Lower Hutt, "Wellington City", "Wellington region", "Poneke", "Whanganui a tara"

Māori-led initiatives	
Themes	**Keywords**
Māori-led	Māori owned, Māori-led, marae-based, hāpū/iwi led, Taranaki Whānui-led, Ngāti Toa Rangatira-led, tikanga-based, Para Kore, hokohoko, whānau-based, whānau collective
Marae/ runanga	Hongoeka marae, Maraenoa marae, Horouta marae, Takapūwāhia marae, Te Runanga o Toa Rangatira (Tribal Headquarters), Waiwhetū marae, Kōkiri marae, Kōraunui marae, Te Tatau o te Pō marae, Te Mangumangu marae, Te Kākano o te Aroha marae, Pipitea marae, Nga Hau e Wha o Paparangi marae

Product types
packaging, tools, toys, books, puzzles, equipment, "event equipment", clothes, "baby clothes", "household goods", electronics, "mobile phones", appliances, cars, scooters, vans, vehicles, bicycles, "sports equipment", "musical instruments", jewelry, kitchenware, utensils, "gardening equipment", "art supplies", "lighting fixtures", glassware, ceramics, "building materials", "construction materials", "refillable containers", paint, "camping and outdoor equipment", doors, windows, "recycled timber", wood, furniture, "reusable nappies", fabric, "mobility devices", "office furniture", buildings, textiles

Physical facilities or RRS specific businesses/products
library, libraries, makerspace, workshops, "community centre", "sports facilities", "spare parts", hardware, tailor, cobbler, "equipment hire", "party hire", "costume hire", "tools hire", "repair services", "resource recovery centres", op-shops, "secondhand shops", "vintage shops", "antiques, markets", e-waste, laundromats, "laundry services", "collection for reuse", "repair cafes", "community pantry", "sharing shelves", "pātaka kai", "sharing shelf", Menzshed, "refill station", "hokohoko shops", "Para Kore", "marae reuse initiatives", "repair workshop", "repair training", "repair courses"

Online infrastructure or RRS specific businesses/products:
Apps, networks, "community page", directory, Facebook (marketplace, "Buy Nothing NZ", "Swap Mamas", "Swap and Save", "Zero Waste Wellington"), Trademe, Civilshare, Freecycle

APPENDIX 3: RESOURCES USED TO HELP IDENTIFY RRS INITIATIVES FOR THE STOCKTAKE

1. Directories and maps

Wellington-specific

- Circular Wellington map (Sustainability Trust)
- Wellington Regional Zero Waste Shopping Guide (The Rubbish Trip)
- Community Climate Action Map (WCC)
- "What to do with your waste" directory (WCC)
- "Organisations that accept donated items" (WCC)
- "Recycling for businesses" (WCC)
- Wellington Yellow Pages (Thryv)

Māori-led businesses

- Whāriki business directory
- Amotai
- The Realness World (directory of owner-operated businesses with a filter for tangata whenua businesses)

Nationwide (filtered for Wellington options)

- Circular Economy Directory (Sustainable Business Network)
- Waste Hub (Environmental Innovation Centre and WasteX)
- Environment Hubs Aotearoa Interactive Member Map
- Resource Recovery Map (BRANZ)
- Guide to antique, vintage, secondhand and charity stores around Aotearoa New Zealand (Collectors Anonymous)

2. Wellington-specific reports with examples/case studies

- A Zero Waste Plan for Welly (Waste Free Welly)
- Yates A, Diprose G, Dombroski K & Nash T (2024) Transitions in Action: An Urban and Regional Transitions Guide for Te Upoko o Te Ika Wellington (Building Better Homes, Towns and Cities).

APPENDIX 4: PRODUCT CATEGORIES AND SUB-CATEGORIES

Product category (alphabetical)	Subcategories
3D Printers	No subcategories
Audiovisual equipment	No subcategories
Baby items – clothes, gear, other essentials	No subcategories
Bags	No subcategories
Books, other reading material and/or CDs, DVDs	No subcategories
Building and construction materials	No subcategories
Carpet and/or flooring	No subcategories
Catering and hospitality equipment	No subcategories
Clothing	Unspecified subcategory
	Academic dress
	Bras
	Corporate
Electrical appliances	Unspecified subcategory
	Commercial
	Other
	Sewing machines/overlockers
	Small appliances
	Whiteware
Electronics	Unspecified subcategory
	Corporate electronics and IT equipment
	IT, computers, laptops, phones, tablets
	Printers, photocopiers, scanners
	Other
	TVs, DVDs, stereos
	Video and photography gear
Entertainment/video games/sports simulators	No subcategories

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	IT, computers, laptops, phones, tablets
	Printers, photocopiers, scanners
	Other
	TVs, DVDs, stereos
	Video and photography gear
Entertainment/video games/sports simulators	No subcategories

Product category (alphabetical)	Subcategories
Event and temporary public structures/services equipment	Unspecified subcategory
	Decorations
	Fencing/barriers
	Power generation/distribution
	Marquees/shade cover
	Portable toilets
	Stage/flooring/backdrops
	Waste receptacles - rubbish, recycling, compost
	Water fountains and tankers
Furniture and/or furnishings	Unspecified subcategory
	Antique
	Blinds/curtains
	Carpet/flooring
	Corporate
	Vehicle interiors
Games/Toys	No subcategories
Gym/sports equipment	Unspecified subcategory
	Boxing and circuit training
	Climbing walls
	General fitness/exercise
	Other
	Pilates, reformers
	Poles
	Swimming pool
	Water sports
	Weights, cardio, crossfit

Product category (alphabetical)	Subcategories
Healthcare and accessibility	Unspecified subcategory
	First response items
	Hearing aids
	Hospital beds
	Medical/lab equipment
	Mobility devices
	Rehabilitation equipment
Household items	Unspecified subcategory
	Kitchenware
	Ornaments, decor, bric-a-brac
House parts	Unspecified subcategory
	Bolts, handles, hinges, switches
	Cabinetry, kitchenettes/laundry, vanities
	Doors, windows, flooring, tiles
	Plumbing, tapware
Jewellery, watches and/or accessories	No subcategories
Linen	Unspecified subcategory
	Commercial/corporate use
	Dining
	Household
Musical instruments and/or equipment	No subcategories
Outdoor equipment	Unspecified subcategory
	BBQs
	Camping, tramping gear

Product category (alphabetical)	Subcategories
Packaging	Unspecified subcategory
	Beverage
	Bread
	Cleaning or personal care products
	Deli items - cheese
	Deli items - chocolate
	Deli items - various
	Gardening supplies, e.g. soil, compost, bokashi flakes, mulch, seedlings
	Gas cylinders
	Groceries
	Meal prep
	Meat
	Milk
	Other
	Paint, oil, fuel, agrichemicals
	Seafood
	Tertiary/transport
	Water
Paint	No subcategories
Pottery and ceramics	No subcategories
Refrigerants	No subcategories
Refrigeration and heating equipment	No subcategories
Scaffolding	No subcategories
Serviceware (plates, cutlery, glassware, reusable takeaway packaging etc.)	No subcategories
Shoes	No subcategories
Stationary	Unspecified subcategory
	Corporate
Textiles and/or fabric	No subcategories

Product category (alphabetical)	Subcategories
Tools/equipment	Unspecified subcategory
	Bike servicing and repair
	Building and construction
	Carpet cleaning and/or floor sanding
	Electronics repair tools
	Heavy machinery
	Landscape, gardening
	Woodwork and/or metalwork
Towels/blankets	No subcategories
Transport/vehicles	Unspecified subcategory
	Bicycles
	Cargo bike
	Cars
	E-scooters
	Electric bicycles
	EVs
	Minibuses
	Mopeds/scooters
	Motorcycles
	Rollerblades, push-scooters
	Trailers
	Trucks
	Utes
	Vans
Venue	No subcategories
Waste receptacles (rubbish bins, recycling, compost)	No subcategories

APPENDIX 5: INTERVIEW QUESTIONS

General questions relating to business/ organisation/initiative

1. We have identified that your organisation undertakes the following reuse/repair/share activities [list/describe all of them]. Is this correct? Have we missed anything?
2. Are these reuse/repair/share activities your organisation's main purpose, or only part of your overall product/service offering? If only part, follow up with:
    a. What other activities does your organisation undertake?
    b. Estimate the percentage of time spent on the reuse/repair/share activities compared to other activities?
    c. Do the reuse/repair/share activities cover their costs or do they cost the business?
3. How long have you been operating and/or offering your reuse/repair/share initiative(s)?
4. What motivated/inspired the organisation to establish the reuse/repair/share initiative(s)?
    a. **For community/council providers only:** Our stocktake showed that access to a range of different reuse/repair/share activities are often clustered in community spaces/organisations like yours, of all the things you could have provided for your community, why did you choose to expand into reuse/repair/share?
5. Do you think that your reuse/repair/share initiative/ business model is specific to the product(s) that you work with, or is it more widely applicable?
6. Do you capture any data so you can measure the environmental impact of your reuse/repair/share initiative?
    a. **If yes,** could you share the types of data and how you use that to calculate impact?
    b. **If no,** are you interested in this, and is there anything that would help you to collect this type of data?
7. How many paid staff members (FTE) deliver your reuse/repair/share initiative?
8. Do you rely on volunteers?
    a. **If yes,** how many volunteer hours go into delivering your reuse/repair/share initiative?
9. Are there specific skillsets/training/qualifications you require from staff to deliver your reuse/repair/ share/initiative?
    a. **If yes:** are there sufficient opportunities locally for people to acquire these specific skillsets/ training/qualifications?

Accessibility and attractiveness

10. How do people find out about your reuse/repair/ share products/services?
    a. What marketing/comms channels do you use to get the word out about your reuse/repair/ share initiative(s)?
11. Do you have any data/research (or have any thoughts) on your customer base to understand the types of people that use your reuse/repair/share product/service, and why they use your services over other options (e.g. buying new)?
12. Do people need to pay to access your reuse/repair/ share products/services?
    a. **If yes,** how much or how are fees structured?
13. Do you or your customers/users receive any support (financial or in-kind) to increase access to your reuse/repair/share services?
14. Do you think the reuse/repair/share product/service

you provide is easily/widely available in Wellington?

   a. **If not,** why do you think that there aren't more businesses/organisations in your sector running initiatives like this?

15. Do you think there is anyone in Wellington who would like to access your reuse/repair/share products/services but currently don't?

   a. **If yes,** what would be the reasons for this?

   b. Have you taken any steps to make it easier for people to access your reuse/repair/share services?

16. The stocktake revealed that Māori-led initiatives/businesses are under-represented in the repair/share/reuse areas. Do you have any thoughts about why Māori-led initiatives/businesses are under-represented in the repair/share/reuse areas?

Barriers

17. What are the main barriers/challenges/lessons you have faced or continue to face in setting up, maintaining and/or expanding your reuse/repair/share initiative?

18. Do you have any specific infrastructural, equipment or asset needs to maintain or expand your reuse/repair/share initiative?

19. How have you overcome past barriers in order to sustain or grow your reuse/repair/share initiative?

20. Have you ever offered/run any other reuse/repair/share initiatives that you now no longer provide? If yes, what led you to stop offering that initiative?

Opportunities

21. In your view, what are the key things that make what you do (in relation to reuse/repair/share) successful?

22. What do you see as the key opportunities to increase the availability and accessibility of reuse/repair/share initiatives like yours in Wellington City?

23. If there were one thing that Council could do to help you with your reuse/repair/share initiatives and/or normalise the uptake and use of reuse/repair/share initiatives, what would it be?

24. Do you see opportunities to work with other organisations to deliver reuse/repair/share initiatives? Are there specific areas where cooperation would work well?

25. **For Māori-led organisations only:** What do you think would improve Māori participation, as either a user or a provider of reuse/repair/share activities? What opportunities do you think there are for more Māori-led initiatives in the reuse/repair/share space? (eg kohanga reo, marae, papakainga focused, other?)

Final wrap-up questions

26. Anything else you would like to share about your business/organisation/initiative that we haven't covered today?

27. Do you mind if we get back in touch if we need to clarify anything?

APPENDIX 6: POTENTIAL INTERVENTION OPTIONS AND INTERVENTIONS LITERATURE REVIEW SPREADSHEET

A spreadsheet setting out all the potential intervention options designed for this report, as well as a separate tab of all the actual and suggested intervention examples identified in the desktop review and links to the source materials for each example, is available here:

https://docs.google.com/spreadsheets/d/15zAKYenb9CBXOAOFN33AgLIHZzLy8uhOPJVeyzPTans/