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Title: Co-Designing Resilient Transport Solutions in Resource-Constrained Environments

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Abstract: Faced with a funding shortfall for a proposed bus service connecting three peri- urban communities to Hamilton, Waikato Regional Council and Waikato District Council took a collaborative and community-led approach to deliver a solution. When NZ Transport Agency / Waka Kotahi declined to co-fund the service, WDC stepped in to fully fund a trial, recognising the social and economic need for improved connectivity.

Given the funding constraints, trade-offs were inevitable - including service hours, frequency, vehicle type, and weekend coverage. This made early and meaningful community engagement essential. Through co-design workshops with the Tamahere Community Board, the Matangi Community Committee, and a hui at Tauwhare Pā supported by WRC's Tai-ranga-whenua team, a shared service design was developed. Each community brought unique cultural and socio-economic perspectives, and all made compromises to achieve a common goal.

A key outcome of the co-design process was the decision to avoid duplicating Ministry of Education school services. Timetables were carefully designed to ensure the new service did not meet the definition of 'suitable public transport', preserving existing school routes.

At its 18-month review, the results exceeded expectations:

- Patronage reached 10,531 passengers - 41% above forecast.
- Farebox revenue totalled $23,613 - 63% above projections (but influenced by changes in fares over this time).
- Passenger behaviour showed a high tolerance for trip chaining, indicating strong demand despite service limitations.

This case demonstrates that resilient, community-supported transport solutions are achievable even in resource-constrained settings. Despite a farebox recovery of only ~6.5% on this peri-urban service, assessments and service evaluations should not rest solely on economic metrics: co-designed, fit-for-purpose routes in rural areas deliver critical social connection, equitable access, and strategic connectivity that strengthen community wellbeing and economic opportunity - ultimately building a more resilient transport future for Aotearoa.

Introduction

The paper explores a community-led transport initiative in the Waikato, New Zealand, which was developed within a funding-constrained environment. It examines how co-design and early engagement enabled the creation of a bus service that enhances community resilience connecting three peri-urban communities in the Waikato District to Hamilton. It highlights the journey and inevitable compromises that occurred along the way and ultimately reflects on how limited resources can be leveraged to deliver impactful transport solutions and how less cost-effective services can still be recognised as essential components of an equitable public transport network.

Background

Public transport plays a vital role in building urban resilience, particularly in the face of environmental, social, and economic challenges. Resilient cities, towns or communities are those that can adapt to disruptions - whether caused by climate change, economic shifts, or social inequality - while continuing to provide essential services and maintain quality of life. Public transport systems, especially buses, are central to this adaptability. They offer flexible, scalable, and low-carbon mobility options that reduce dependence on private vehicles, lower greenhouse gas emissions, and help cities manage congestion and land use more efficiently.

Buses, in particular, address resilience issues by being highly adaptable and cost-effective. Unlike fixed rail systems, bus routes can be adjusted in response to changing population patterns, emerging employment hubs, or infrastructure disruptions. This flexibility allows cities to respond quickly to crises - such as natural disasters or pandemics - by rerouting services, increasing frequency in high-demand areas, or providing emergency transport. Buses also support social resilience by connecting underserved communities to education, healthcare, and employment, thereby reducing transport disadvantage and promoting equity. In semi-rural and peri-urban areas, like those in the Waikato region, buses can bridge gaps between isolated communities and urban centres, fostering inclusion and economic participation.

Public transport also contributes to economic resilience by supporting workforce mobility and reducing household transport costs. It enables people to access jobs and services without the financial burden of car ownership, which is especially important during economic downturns. When integrated with other modes such as cycling, walking, and rail, bus networks become part of a multi-modal transport ecosystem that enhances redundancy and reliability. In short, buses are not just a mode of transport; they are a strategic asset in building cities that are inclusive, sustainable, and prepared for future shocks.

Funding, planning, and community engagement are foundational pillars in building resilient bus networks and public transport systems. Funding ensures that services are not only launched but sustained and scaled to meet evolving needs - supporting infrastructure upgrades, service frequency, and accessibility features. Planning plays a critical role in aligning transport routes with key destinations such as employment hubs, schools, medical centres, and community facilities, ensuring that services are both efficient and equitable. However, resilience is most effectively achieved when communities are actively involved in shaping these services. Local input helps identify gaps, prioritise stops, and tailor services to reflect cultural, social, and economic realities. When funding is stable, planning is responsive, and communities are empowered, bus routes become more than transport - they become lifelines that support social inclusion, economic participation, and adaptability in the face of change.

Funding Context

New Zealand's transport network faces increasing challenges due to climate change, infrastructure deficits, and funding limitations which threaten its resilience and long-term sustainability. Climate change impacts, in particular extreme weather events and our increased vulnerability to landslide and flooding, significantly disrupts our transport networks. Aging roading assets and limited connectivity hinder access to economic opportunities and essential services in many areas of the Waikato region. Funding limitations for public transport, at both a local and national level, constrain the ability of regional authorities to maintain, renew and expand transport services.

The National Land Transport Programme (NLTP), administered by NZ Transport Agency Waka Kotahi (NZTA), is the primary mechanism for allocating transport funding. It operates on a three-year cycle and is guided by the Government Policy Statement (GPS) on Land Transport, which sets strategic priorities and funding ranges across activity classes (e.g., public transport services, state highway improvements, local road improvements etc.). However, the GPS is subject to change with each government and shifts in political priorities can significantly affect funding availability and project eligibility.

This presents several challenges, namely: projects aligned with the previous GPS priorities may lose funding, Councils face uncertainty in long-term planning, and co-funding gaps emerge as seen in Waikato Regional Councils (WRC) declined - by NZTA - $20 million funding request for bus service expansion for Low Cost Low Risk services in the 2024-2027 NLTP. This creates a planning environment where resilience must also mean adaptability. And so, with constraints and limitations can come opportunity.

Firstly, regions can innovate with local share funding or trial services, and while this requires local Councils to absorb the full cost of any service in the short-term, it enables regions to trial services that would otherwise be delayed or dismissed if they were seeking co-funding. Successful trials can build a case for future central funding or integration into the next NLTP. Secondly, community-led planning and service co-design can ensure that services are fit-for-purpose from the outset, reducing the risk of underutilisation and increasing the likelihood of long-term viability. Community buy-in can also strengthen advocacy for funding. Lastly, having flexibility in service design allows for tailored, fit-for-purpose solutions which can allow for incremental growth particularly if starting off with limited coverage or frequency. Starting small and scaling based on demand and performance data can also be more palatable to funders and stakeholders.

While community-led planning and co-design are increasingly recognised as best practice in transport planning, they are not consistently embedded in projects which are submitted for NZTA funding. This is often due to the tight timeframes and the prescriptive nature of the funding cycle, which prioritises technical feasibility and alignment with the current GPS over deep community engagement. Additionally, limited resources and capacity within councils can mean that early engagement is deprioritised in favour of meeting submission deadlines or securing funding for shovel-ready projects.

As a result, some transport solutions risk being designed without fully understanding the lived experiences, needs, and aspirations of the communities they aim to serve. This can lead to services that are underutilised or misaligned with local priorities - ultimately undermining resilience and long-term value by failing to deliver meaningful value and reduce future support for investment.

Embedding co-design earlier in the planning and funding process, even in constrained environments, offers an opportunity to deliver more fit-for-purpose, sustainable outcomes that communities support and use. In this context, this Waikato case study demonstrates how local collaboration and co-design can, and has, delivered a resilient transport outcome despite systemic constraints.

Context

In the Waikato region, connecting peri-urban and rural communities is essential for social cohesion and economic growth. This case study focuses on Tamahere, Matangi, and Tauwhare - three culturally and socio-economically distinct communities - and the collaborative efforts between Waikato Regional Council (WRC) and Waikato District Council (WDC) to address transport gaps within and between these locations.

Tauwhare, Matangi, and Tamahere are three communities located southeast of Hamilton within the Waikato District. Tamahere, immediately adjacent to Hamilton and the Waikato Expressway with a population of 6,940 people (as of 2023), is a rapidly growing peri-urban area identified in Waikato 2070 and local blueprints as a strategic growth node due to its infrastructure readiness and proximity to urban services. Matangi, situated east of Tamahere, is a semi-rural settlement characterised by lifestyle blocks and ecological restoration efforts, and shares planning considerations with Tamahere through the Tamahere-Woodlands Ward. Tauwhare, further east, is a culturally significant Māori community with strong ties to Ngāti Hauā and has a more rural character. While less densely populated, Tauwhare has been recognised in local planning documents for its need to improve access to services and preserve its identity. While a public transport connection between Tauwhare community and Hamilton has not been established through this process, a service connection between Tauwhare Pā, a small but culturally important location 3km west of Tauwhare town, was established. Matangi and Tauwhare Pā have a combined population of 2,690 people (as of 2023), however, this also includes the Pukemoremore area. All three communities have been highlighted in strategic documents such as Waikato 2070, Future Proof, or local area blueprints as areas requiring improved connectivity to Hamilton.

Until July 2025, public transport services in the Waikato region were funded through a mixed model, where some territorial authorities - including WDC - rated independently for public transport. This allowed WDC to allocate and manage a dedicated pool of local share funding for new public transport services or enhancements within its district. It was through this mechanism that WDC approached WRC in 2023 with $600,000 in upfront funding to be able to fully fund public transport services connecting Tamahere, Matangi, and Tauwhare Pā to Hamilton.

The proposed bus service lacked matched funding from NZTA in both the 2021-2024 and 2024-2027 NLTPs, creating a barrier to implementation. WDC's decision to fully fund a trial service presented an opportunity to explore alternative planning, funding and implementation approaches. However, funding constraints required trade-offs in service design, making community involvement critical to ensure the solution met local needs.

Methodology and Service Design

Acknowledging the constrained fiscal environment and wanting to maximise community impact a co-design approach was adopted involving workshops with the Tamahere Community Board, the Matangi Community Committee and a hui at the Tauwhare Pā marae. WRC's Tai-ranga-whenua team facilitated engagement with the iwi Māori. Key stakeholders in the community were identified and invited to join the workshops which included the General Managers for key retirement villages in the area (Tamahere Eventide, Tamahere County Club, and Atawhai Assisi Home and Hospital) and WDC staff.

Two workshops were held with both the Tamahere Community Board and the Matangi Community Committee on the 2nd and 9th of May 2023. A hui with the Tauwhare community was also held at the Tauwhare Pā marae. The purpose of the workshops was to understand the public transport needs of the communities, key locations for connections and current transport and connection challenges faced by the communities. Limitations and constraints to the service were shared with the communities from the outset. Due to the service being funded fully through local share contributions,

the service was anticipated to be constrained in route design, frequency, vehicle size, days and hours of operation, and trial duration. Alerting the community to these constraints from the start helped manage expectations and initiate trade-off discussions early.

Community feedback and input

Community feedback from Tamahere highlighted a strong desire for more frequent and direct public transport connections to Hamilton, particularly to the Hillcrest suburb and the CBD. Hillcrest was identified as a key location of interest due to the Hillcrest Medical Centre and the New World Supermarket. Residents expressed interest in a Saturday service to support access to local markets and weekend activities, including school sports. Parking challenges at existing informal park-and-ride locations were noted, with suggestions to formalise stops at the Tamahere Village Hub and other key community facilities. There was also interest in ensuring the service connects to local retirement villages and rest homes, reflecting the area's diverse mobility needs. The community emphasised the importance of reliable connections to existing Hamilton services if direct routes were not feasible.

Matangi and Tauwhare residents similarly advocated for improved connectivity, with specific suggestions for stops at community hubs such as Matangi School, Woodside Estate, the Matangi Sports Club, and Atawhai Assisi Home and Hospital. The importance of linking to employment and education centres, such as the Ruakura Superhub, Livestock Improvement Corporation (LIC), Newstead, and Hillcrest was noted. Feedback also included ideas for a loop service connecting Tauwhare, Matangi, and Tamahere during off-peak hours. The community stressed that Matangi should not only be connected outward but also made accessible for visitors. Overall, both communities sought peak-time connections to Hamilton, weekend services, and inter-community links to support social inclusion, particularly for older residents.

Overall, this feedback reveals a shared set of resilience challenges typical of semi-rural areas experiencing growth and demographic shifts. A key concern across all three communities is limited connectivity particularly to Hamilton's CBD, Hillcrest, and key destinations such as medical centres, supermarkets, and employment hubs like Ruakura Superhub and LIC. The lack of reliable and frequent transport options to these locations creates transport disadvantage, especially for older adults, youth, and those without access to private vehicles. Suggestions to formalise stops at community hubs such as Tamahere Village, Matangi School, Woodside Estate, and Atawhai Assisi Home and Hospital reflect the importance of place-based accessibility, ensuring that transport is embedded in the rhythms of daily life.

Additionally, the emphasis on connecting retirement villages and rest homes reflects the area's diverse mobility needs, particularly for ageing populations who may face physical, cognitive, or financial barriers to transport. The community's request for reliable connections to existing Hamilton services - even if direct routes aren't feasible - demonstrates an understanding of network resilience, where integration and coordination across services are essential to ensure continuity and accessibility. The suggestion of a loop service connecting Tauwhare, Matangi, and Tamahere during off-peak hours demonstrates a community-driven solution to spatial and temporal gaps in mobility. It reflects an understanding that resilience is not only about peak time commuting but also about maintaining social ties and access throughout the day. The emphasis on making Matangi accessible for visitors, not just residents, points to a broader vision of inter-community connectivity, which supports social inclusion and local vitality.

A resilient public transport service in these locations would therefore need to be inclusive and well-integrated, addressing both spatial and temporal gaps while responding to the evolving needs of a diverse population.

Key Trade-offs in the Service Design

The final route design was an area of extensive discussion and compromise. Each community had strong arguments for direct and efficient connections to Hamilton, particularly Tamahere, which has the largest catchment area. However, there was also a clear need to prioritise inter-community connections, especially for residents and staff at aged care facilities. One of the initial route concepts connected Tamahere directly to Hamilton meaning Tauwhare Pā passengers would transfer through Matangi. This option came at the expense of bypassing Newstead and LIC, both identified as key destinations. The final route (**figure 1**) instead connected Tamahere to Hamilton (at the University of Waikato) via Matangi, with Tauwhare Pā connecting to Hamilton via Newstead. This route reflected a balance between geographic realities, community priorities, and operational feasibility.

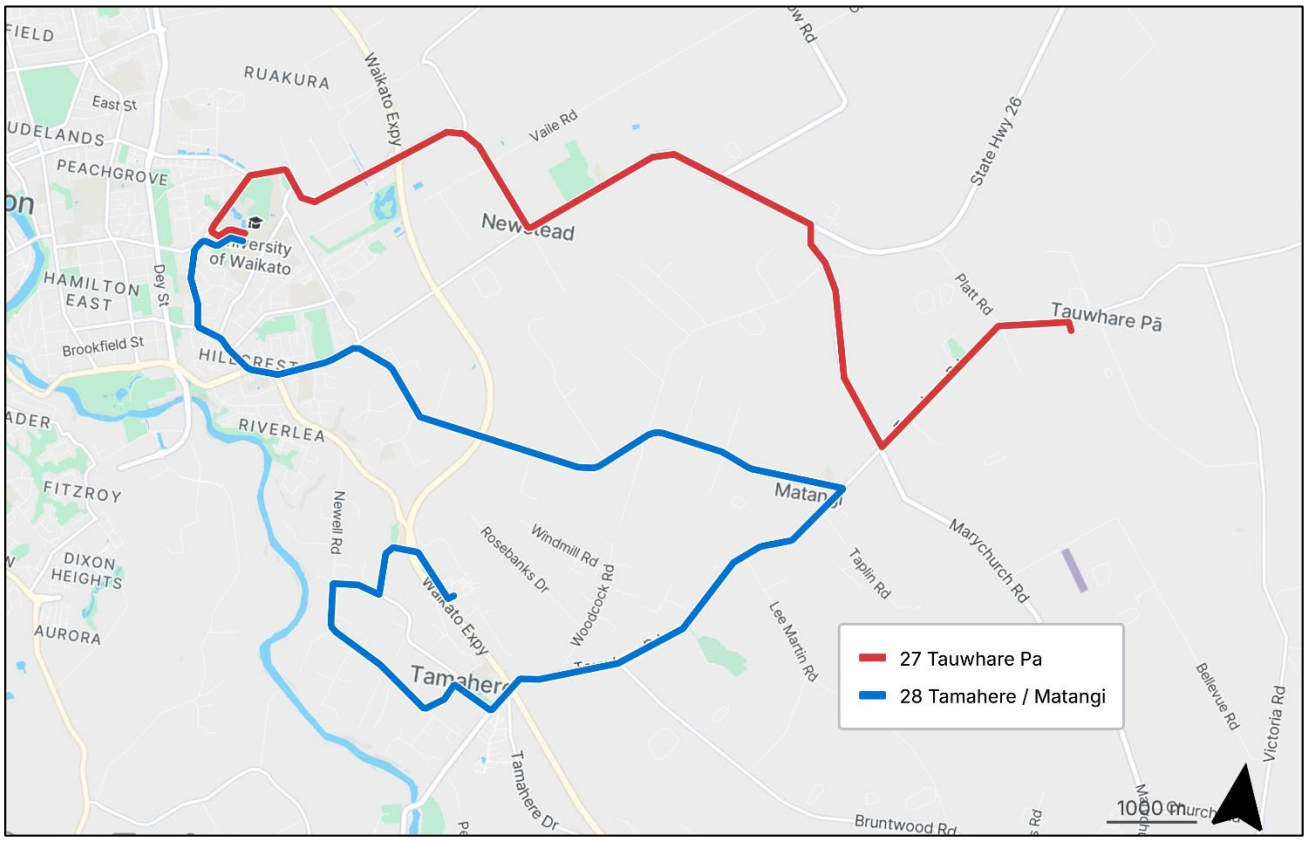

Figure 1. The final bus routes for the #27 Tauwhare Pā and #28 Tamahere/Matangi services.

One of the most significant trade-offs involved service timing in relation to Ministry of Education (MoE) school bus services. These services provide a stable and reliable transport option for students, particularly in semi-rural areas where public transport coverage may be limited or inconsistent. Their continued operation ensures that young people can access education safely and independently, which is essential for long-term social and economic resilience. All three communities were clear from the outset that they did not want the new public transport service to jeopardise existing school transport. To ensure this, the timetable was carefully designed so that the service would not meet the MoE's definition of 'suitable public transport', which would otherwise trigger the potential removal of school services. Timetables were shared with MoE for confirmation prior to final approval, ensuring that the new service complemented rather than replaced existing provisions.

Lastly, a strategic trade-off was made in choosing to terminate the service at the University of Waikato transport hub rather than continuing into the Hamilton CBD. This decision allowed the service to complete more trips per day over a shorter distance, making better use of limited resources. While this may require passengers to transfer onto other Hamilton services to reach their

destination, the university hub offers strong connectivity and was seen as a practical compromise that maintained access while preserving operational efficiency.

Service limitations

One of the primary constraints in designing the service was frequency and duration. With limited funding available, the number of trips the service could offer and the length of time the service could operate was directly tied to vehicle availability and/or operational costs. The available budget could either support a higher-frequency service for a shorter period (18-24 months) or a lower-frequency service with no weekend services that could operate for longer (24-36 months). The latter option was preferred, as it provided a more sustainable opportunity to evaluate the service's effectiveness and gather meaningful data over more time. This approach also allowed the community to adapt to the new service and demonstrate its value, potentially strengthening the case for future funding.

The vehicle itself posed another constraint. The only readily available option was a spare 12-seater shuttle from the Hamilton fleet which was wheelchair accessible but limited in seating capacity. This single vehicle had to serve all three communities, meaning route planning had to be efficient and carefully timed to ensure equitable access. While the shuttle's accessibility was a positive feature, its size could restrict the number of passengers per trip, which could affect peak-time demand and future scalability. Operating hours were also limited by the vehicle's dual role. On Friday and Saturday evenings, the shuttle was required for Hamilton's Night Flex service, meaning the trial service could not run late into the evening on those days. This constraint influenced the scheduling and meant that evening connectivity was restricted.

Ultimately, stakeholders collaboratively identified key destinations and debated the service limitations and compromises necessary to deliver a viable and resilient transport solution unique to their communities. The following section explores the outcomes and provides an evaluation of the services since its launch in February 2024.

Outcomes and Evaluation

Service performance

The 18-month review of the Tauwhare Pā (#27) and Tamahere/Mātangi (#28) services reveals promising results in terms of patronage, farebox revenue, and community impact. Since their launch in February 2024, the services have collectively transported over 10,531 passengers, exceeding the 2024/25 financial year forecast of 4,680 by 41%. Route #28, which serves a larger catchment area, recorded 7,548 passengers since launch (**figure 2**) while Route #27 saw 2,983 passengers (**figure 3**). Despite seasonal variability and a 11.4% fare increase in July 2025, both services show modest but steady growth, indicating increasing community reliance and awareness.

Data on passenger behaviour highlights distinct usage patterns between the two routes. Route #27 is primarily commuter-focused, with 76% of trips occurring during AM and PM peaks and dominated by adult and tertiary users. In contrast, Route #28 shows more diverse usage, with 40% of trips occurring off-peak, and a broader demographic including a larger portion of SuperGold, Accessibility, Youth, and Child ticket holders. This indicates that Route #28 supports a wider range of travel needs, such as errands, appointments, and flexible work schedules, reinforcing its role in promoting social equity.

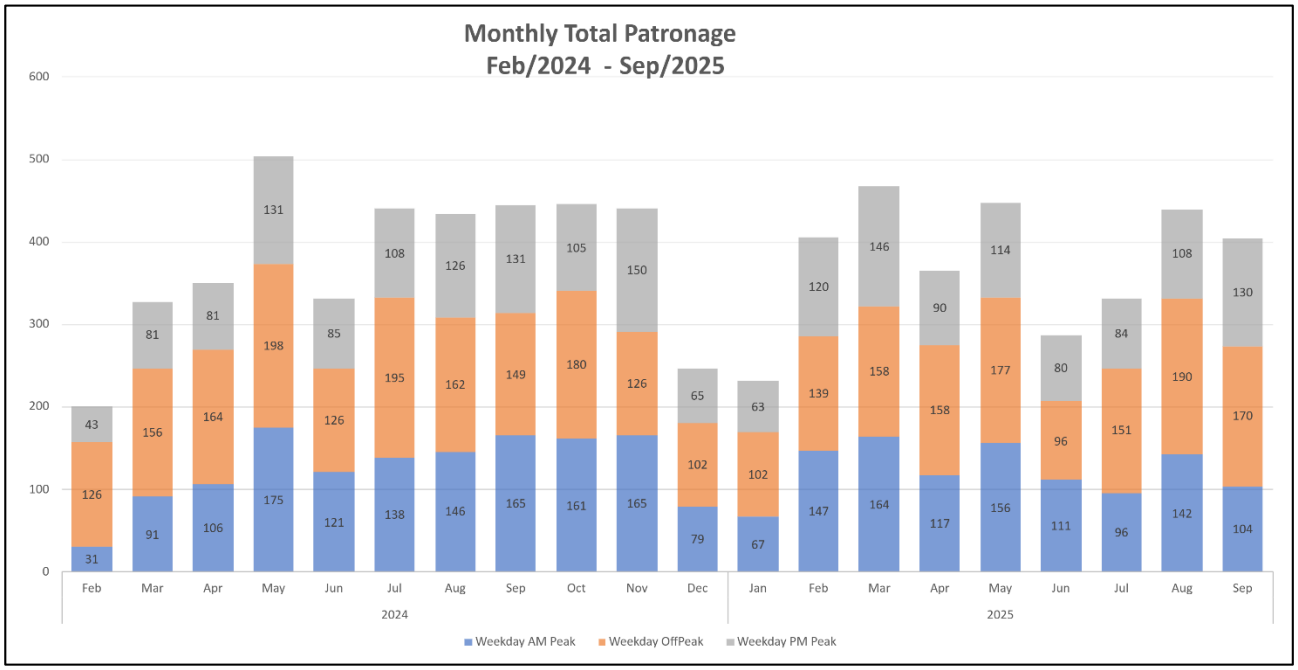

Figure 2. #28 Tamahere/Matangi patronage data (February 2024 – September 2025).

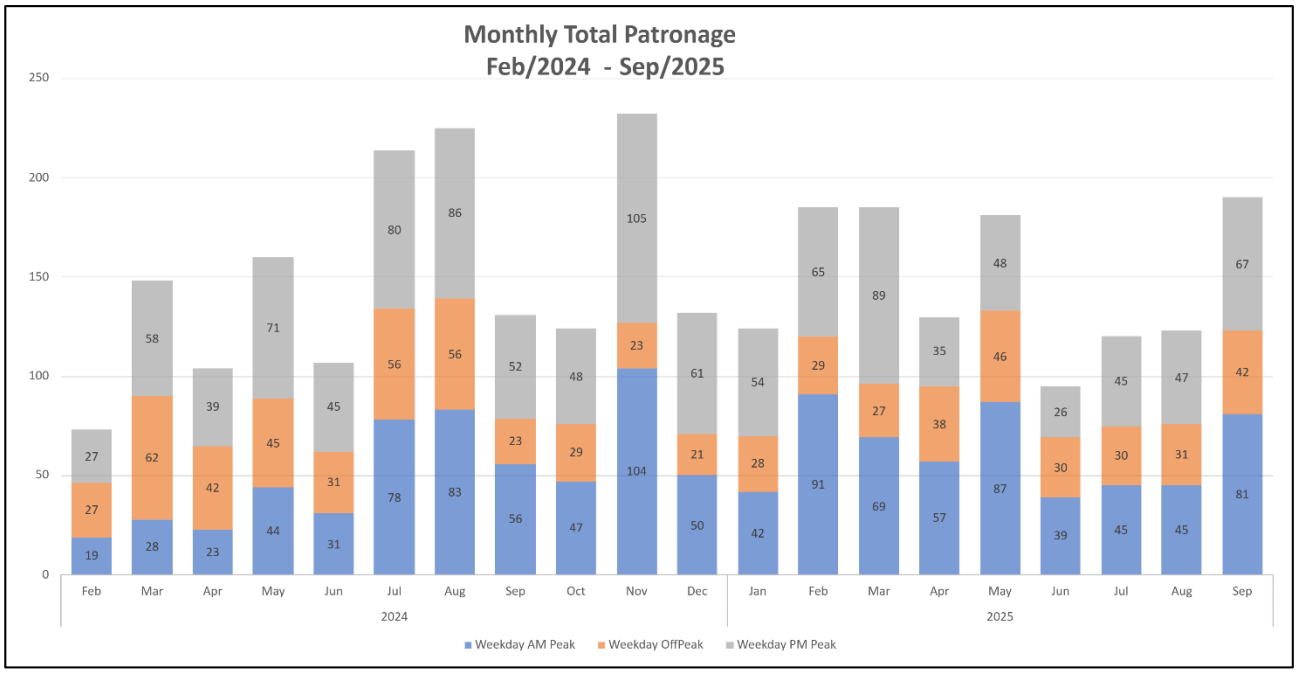

Figure 3. #27 Tauwhare Pa patronage data (February 2024 – September 2025).

Transfer behaviour also provides insight into network integration. While most passengers do not interchange (63%), a significant portion do - particularly between the #27 and #28 services as well as onto high-frequency routes like the Orbiter and Meteor services in Hamilton. This suggests that the service is able to get most passengers either directly to, or close to, their destination. Passengers are also evidently willing to navigate multiple connections to reach their destinations and that the trial services are effectively linking peri-urban communities to the broader Hamilton network despite the route limitations.

Farebox revenue has also significantly exceeded expectations. Since service launch, total revenue (including concession contributions) has reached $23,613, which is 63% above the original forecast

for the same period (**figure 4** and **5**). This increase and significant exceedance from the forecast is attributed to several contributing factors, namely:

- The removal of subsidies for Youth (13-18) and Youth Plus (19-24) tickets in 24/25 (Central Government). The Youth Plus age group has now defaulted to being Adult tickets and therefore have a higher fare.
- The removal of Senior tickets in 24/25 (WRC). Passengers now either default to Adult ticket users or SuperGold depending on their age and whether they apply to be a SuperGold user.
- The removal of half price fares in July '23 (a Central Government Covid Recovery initiative).
- A 20% and 11.4% increase in fares in July '24 and July '25 respectively (WRC).

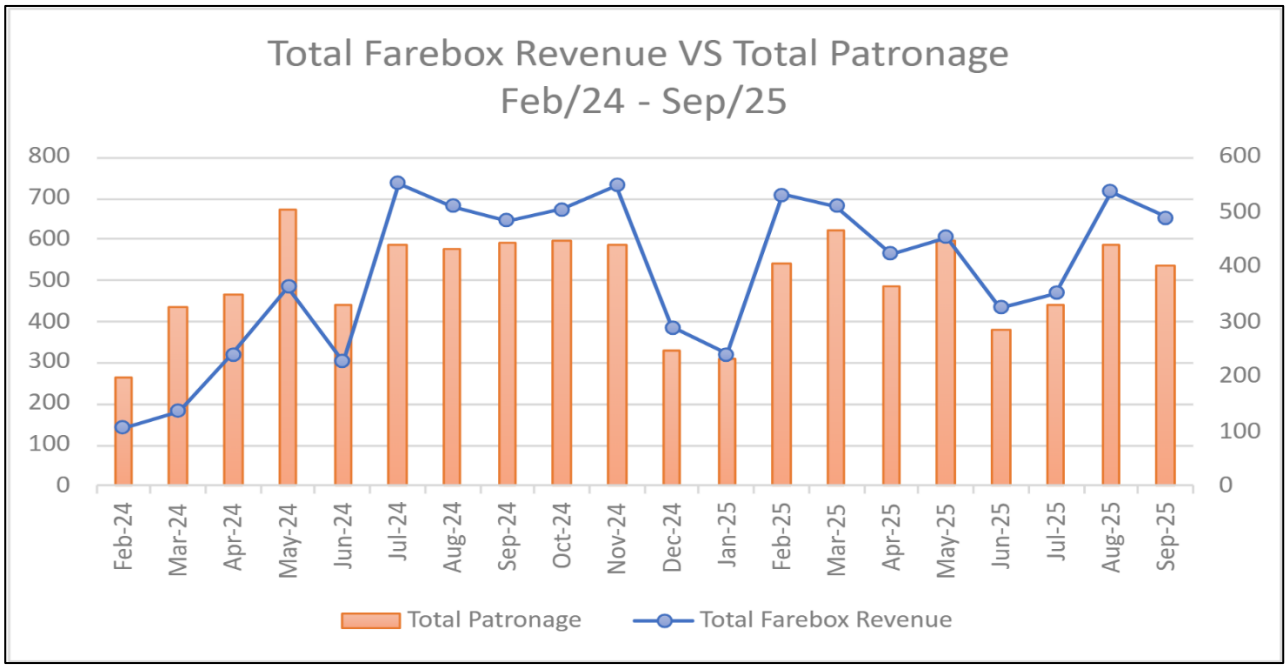

Figure 4. #28 Tamahere/Matangi farebox revenue data (February 2024 – September 2025).

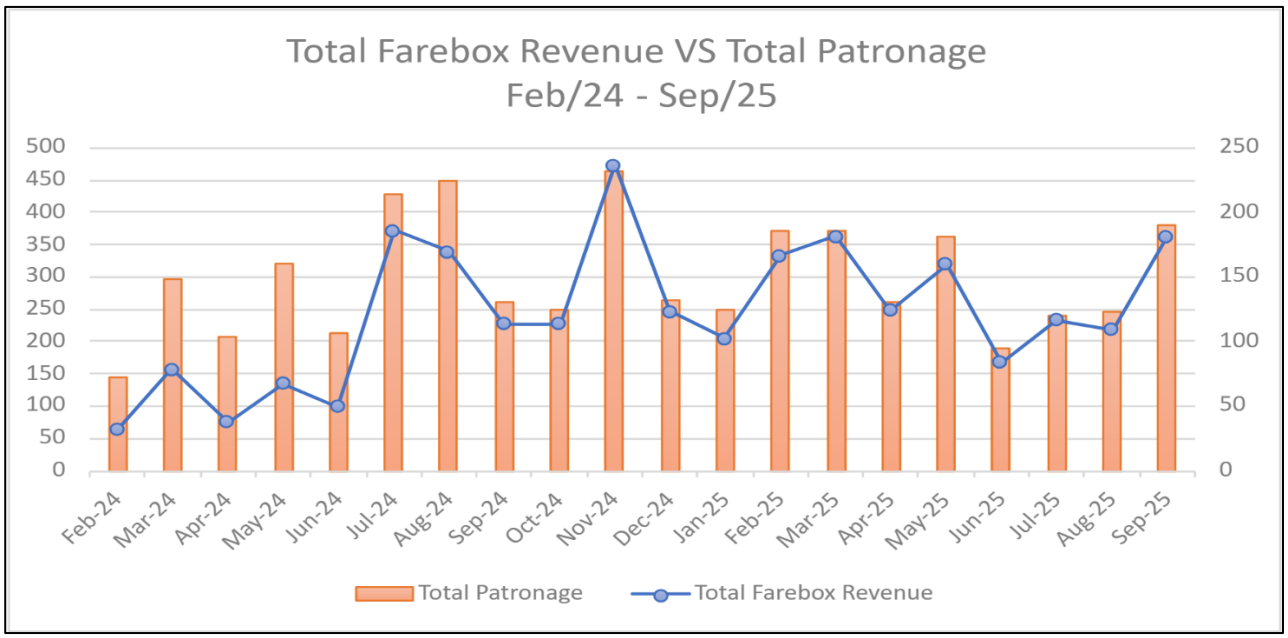

Figure 5. #27 Tauwhare Pa farebox revenue data (February 2024 – September 2025).

When assessing farebox recovery for the service over an 18-month period, the total operating cost including indexation was approximately $360,000 while total fare revenue amounted to $23,613 resulting in a farebox recovery rate of 6.5%. While this figure is low compared to conventional targets, it is important to contextualize it within the nature and purpose of the service. Considering the assumed passenger profiles and service frequencies, farebox revenue was not anticipated to reach the levels typically expected on high-frequent, urban services. Notably, 29.6% of all passengers travelled using concessions, including 13.8% on Accessibility concessions, 4% via Community Connect, and 11.8% using SuperGold cards. The fare revenue figure includes $15,318 from ticketing machines and $8,294 from government contributions for concessionary travel highlighting that a significant portion of the service's value is supported through public investment in equitable access, rather than direct user payment.

From a resilience and equity perspective, this farebox recovery rate can be defended. The service is clearly reaching populations who are less likely to have access to private transport - older adults, people with disabilities, and those on lower incomes. These groups benefit most from reliable, affordable public transport, and their inclusion reflects the service's success in addressing transport disadvantage. Furthermore, pilot services often experience lower farebox recovery as they build ridership and community trust. Over time, with improved awareness, route refinement and potential enhancement, and integration with broader networks, fare revenue will likely increase. However, even at current levels, the service delivers high social value, supporting independence, inclusion, and access to essential services. In this context, farebox recovery should be viewed not just as a financial metric, but as part of a broader assessment of public benefit and transport resilience.

Nevertheless, it is important to recognize that a 6.5% farebox recovery rate may struggle to meet NZTAs expectations under the current GPS which "*expects that existing public transport services will continue to be funded, if they are cost effective, achieve value for money, and achieve the expected outcomes of less congestion and increased patronage. This GPS will expect greater farebox recovery and third-party revenue by Public Transport Authorities (PTAs)*". Given that WRCs private share target sits at 15.6% for 2025/26 and 18.4% for 2026/27 across the entire public transport network, it is clear that a low-frequency, peri-urban service such as this is unlikely to materially contribute to meeting these network-wide expectations. Viewed in isolation, the service's low farebox recovery highlights its limited revenue potential; however, as a peri-urban, low-frequency connector, it should not be expected to shoulder the same revenue burden as high-frequency, commuter-oriented services operating in dense urban areas. However, this does not in itself signal that the service is failing; rather, it highlights the structural limitations of rural and peri-urban services where catchments, land-use patterns, and trip purposes differ markedly from urban corridors.

In the context of the government's strengthened emphasis on enhancing private share funding contributions and improving cost recovery across the transport system, there will be ongoing challenges around the longer-term financial sustainability of services such as this one. While these services do not generate strong farebox returns, they can still represent good value for money by delivering essential access, social inclusion, and wider network and community benefits that would not otherwise be achieved in low-density or rural settings. The sustainability conversation therefore becomes less about achieving high-cost recovery and more about whether the region is willing to maintain a public good service whose benefits are not primarily financial. Transparent policy frameworks and clearly defined social outcome objectives will be increasingly important to support these investment decisions in a constrained fiscal environment.

Community Feedback

The Tamahere Community Board, Matangi Community Committee, iwi representatives for the Tauwhare Pā marae, and the General Manager for Tamahere Eventide and Atawhai Assisi Home and Hospital were contacted to provide feedback on their perspectives on the co-design process and what difference the service has made to their respective communities. At the time of writing this

paper only the Matangi Community Committee and the retirement village General Manager responded – their reflections are included here.

The Matangi Community

The Matangi Community Committee reflected positively on their involvement in the co-design process for the bus service, noting that while they had no specific expectations at the outset, they were pleased to be consulted and given the opportunity to influence route design. The ability to propose route options and participate in multiple feedback sessions was seen as empowering and the open, honest communication throughout the process helped build trust. While some community members felt their suggestions were not fully understood or incorporated, the overall experience was constructive and inclusive. The compromises made around service hours and vehicle type were well-communicated and accepted. The 12-seater shuttle was considered practical and residents appreciated the opportunity to receive a service they hadn't expected and were willing to work within the constraints.

The service has had a tangible impact on daily life, offering independence to those unable to drive, safer alternatives to walking on high-speed roads, and improved access to shopping, social contact, and university attendance. It has also supported seasonal employment and facilitated social outings among friends and families. The committee noted that the extended pilot period has helped build community support, with users valuing the reliability of the service. They felt the inclusion of Tauwhare Pā, retirement villages, and the hail-to-ride feature reflected local cultural and socio-economic needs. Looking ahead, they suggested route adjustments to better serve the Matangi area and expressed a strong desire to retain the service.

From a resilience perspective, this feedback provides compelling evidence of resilience across social, operational, and funding dimensions. The service has demonstrably enhanced community resilience by fostering independence among non-drivers, improving safety, and enabling access to essential services such as shopping, education, and employment. Its role in facilitating social connection and seasonal work further underscores its contribution to local well-being and economic stability. From a service resilience perspective, the community's appreciation of reliability and culturally responsive features - such as the inclusion of Tauwhare Pā, retirement villages, and a hail-to-ride option - reflects an adaptive and inclusive design. The extended pilot period has allowed trust and support to grow, positioning the service as a valued part of daily life. Importantly, the strong desire to retain the service and suggestions for route adjustments indicate a foundation for sustainable funding, driven by community endorsement and alignment with socio-economic needs.

Tamahere Eventide and Atawhai Assisi Home and Hospital

Feedback from Tamahere Eventide and Atawhai Assisi Home and Hospital reveals a deeply positive experience with the co-design process and the resulting transport service. Initially, there was concern that community voices might be overshadowed - "I thought that whilst we would be heard the Regional Council's voice would shout out our views" - but this was replaced by appreciation when ideas were genuinely incorporated: "I was pleasantly surprised to find we were listened to." The process was described as empowering, especially in how it acknowledged the perspectives of retirement village residents. The service has had a meaningful impact on daily life, enabling residents to visit friends, attend university lectures, and regain a sense of independence after losing their driver's licenses. Feedback noted, "We have enabled them to have freedom of not having to book into our vans or rely on others to get around" and highlighted the emotional significance of this, stating, "Those who lose their licence as they age go through a grief cycle." The route's connection to key amenities (shops, medical centres, and the university) along with culturally significant sites like the marae, was praised for reflecting diverse community values and needs. Lastly, feedback

included a desire to extend the service into weekends and to have more frequent services throughout the day.

From a resilience perspective, this feedback illustrates how transport services can strengthen social and cultural resilience. Socially, the service reduces isolation and supports mental well-being by enabling older adults to maintain relationships and engage in lifelong learning. Culturally, the inclusion of the marae and diverse suburbs demonstrates respect for local identity and values, fostering cohesion. The desire to extend service hours to support staff commuting and weekend use further indicates growing demand and potential for sustainable expansion. Overall, this feedback underscores that when transport is co-designed with communities, it becomes more than a mobility solution - it becomes a resilient social infrastructure that supports independence, inclusion, and wellbeing.

Conclusion and Recommendations

This case illustrates how co-design, when paired with strategic local funding decisions, can overcome resource constraints and deliver resilient transport solutions. While community engagement was central to shaping a service that reflected local priorities, it was the collaboration between Waikato District Council (WDC) and Waikato Regional Council (WRC) that made implementation possible. In the absence of NZTA funding support, WDC's ability to allocate local share funding from its own public transport rates enabled the trial to proceed. This flexibility in funding, combined with a shared commitment to community outcomes, demonstrates how regional and territorial authorities can work together to tailor solutions in constrained environments.

The co-design process itself was a powerful example of communities listening to one another, compromising, and prioritising collective benefit over individual preferences. Tamahere, Matangi, and Tauwhare Pā each brought unique needs and perspectives to the table, yet through open dialogue and shared decision-making, they agreed on a service design that balanced direct access to Hamilton with inter-community connectivity. This collaborative spirit ensured that the final service met a range of mobility needs - from students and commuters to elderly residents and those without access to private transport. The approach taken in this project offers a valuable model for other regions facing similar challenges. It highlights the importance of early engagement, transparent communication, and a willingness to adapt service design based on community input. It also underscores the need for flexible funding mechanisms that allow local authorities to respond to emerging needs, especially when central funding is unavailable or delayed.

The Waikato Regional Public Transport Plan (RPTP) recognises that different parts of the network require different public transport expectations by setting out a layered, tiered service model that accommodates the needs of rural and isolated communities alongside high-demand urban routes. In contrast, the NLTP groups funding into broad activity classes such as *Public Transport Services* and *Public Transport Infrastructure*, which classify investment by work category rather than by rural or urban context. NZTAs expectations for the former class, set through the GPS, apply uniformly across all public transport services and emphasise cost-effectiveness, value for money, and achieving outcomes such as increased patronage, without differentiating between service environments.

This means WRC's tiered framework is essential for contextualising coverage-focused rural or peri-urban services, which inevitably have lower farebox and private-share performance but still deliver important social and accessibility outcomes. Clearly articulating these differing objectives helps ensure such services are assessed against appropriate local benchmarks rather than the expectations applied to high-frequency urban routes. While the RPTP outlines a layered network approach to differentiate expectations across service types, it does not set specific patronage or farebox recovery targets for rural, peri-urban or urban services, meaning that establishing realistic, context-appropriate performance indicators focused on gradual patronage growth, improved

reliability, and incremental private-share improvements will be important both for internal monitoring and to support a robust case for continued investment.

Looking ahead, WRC intends to continue operating both services into the next NLTP period although co-funding from NZTA will likely be required to continue its operation past its initial trial. WRC will continue exploring opportunities to strengthen patronage and farebox recovery ahead of the 2027–2030 NLTP funding bid, however, any uplift must be understood within the operational constraints of the service. WRC has not had discussions with local communities, retirement villages, or businesses about potential financial contributions to the service; however, this is something WRC could consider in future should NZTA funding not be available, while recognising that direct local contributions should remain a last-resort option given the importance of maintaining equitable access and avoiding undue cost burdens on small communities.

The services have been incorporated into future network planning for Hamilton, reflecting their strategic value. However, future considerations must acknowledge that the initial trial was only possible because WDC had both the funding and the intent to invest in local public transport. Under the GPS 2024 direction to lift the private share of public transport funding to reduce the burden on taxpayers and ratepayers, ongoing reliance on local share or community contributions would be unsustainable. While community or institutional contributions may appear attractive where there is local willingness, relying on entities such as retirement villages or community organisations to fund ongoing public transport services would be neither a sustainable nor a just funding approach for what is, fundamentally, an essential public service. So where does this leave the many communities across Aotearoa when current funding models cannot - or do not - support the kinds of locally designed services they would make use of and benefit from? Lastly, it is also up to NZTA to ensure that less cost-effective services are still recognised as essential components of a balanced and equitable public transport network, reflecting their wider social value even when financial performance alone does not.

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