

How QA & testing helped AT deliver a flawless new payment system



To modernise fare payment and improve commuter access, Auckland Transport set out to introduce contactless payments across its network. The technical and reputational risks were high: integrating legacy infrastructure with new payment systems and third-party vendors, while ensuring a seamless user experience.

Assurity Consulting was brought in to lead testing, delivering a robust strategy across all phases – from system to beta testing – under the leadership of Rachel Hughes. The result: a smooth rollout, zero go-live errors, strong public uptake, and a solid foundation for the nationwide National Ticketing Solution.

Results ✨

Zero go-live issues and a payment system commuters trust from day one.

Public transport use increased due to easier, more accessible payment options.

Assurity's testing laid the groundwork for the National Ticketing Solution planned for 2026.

About

Organisation

Auckland Transport

Industry

Public Sector

Solution

Test Analysis/Execution

Auckland Transport (AT) is the heartbeat of the city's public transit, managing buses, trains, and ferries. With a bold vision to boost ridership and reduce emissions, AT is pioneering innovative solutions, such as Open Loop contactless payments, making commuting easier and driving Auckland towards a greener, more connected future.



Challenges

By late 2023, AT's vision was clear: to make public transport more accessible by allowing commuters to pay with contactless debit or credit cards, Apple Pay, or Google Pay. But the stakes were high.

The existing AT HOP infrastructure needed to integrate with new payment technologies, third-party providers such as Windcave, PCI PAL, and PHL, and a national framework, all while meeting commuter expectations.

The challenge wasn't just technical, but also experiential. A failed tap could frustrate commuters, while security gaps could erode trust. As a result, AT sought more than basic testing; it required a partner to navigate complexity and deliver under pressure. "Our previous approaches weren't enough for this scale," Emani explains. "We needed expertise that could handle the full testing lifecycle and keep us on track."

Furthermore, AT is a high-profile organisation. "We're always under scrutiny," he notes. "A failure could jeopardise not just the project but our reputation and discourage people from using our services – the opposite of what we're looking to achieve."

AT needed a partner to navigate this complexity and deliver under pressure. Assurity Consulting, with prior success in AT's bus route scheduling and test automation, was the clear choice. "Assurity showed maturity and experience to handle such a massive, complex project," Emani recalls. "Their prior quality work made them the first we reached out to." The case was further strengthened on the back of Assurity Test Manager Rachel Hughes' experience in retail software testing, including working across multiple payment providers and external vendors.

"We're aiming to simplify travel and encourage more people onto public transport. That means a system that's seamless, secure, and works every time."

— Hari Emani
Test Manager, Auckland Transport



Solution

In November 2023, AT engaged Assurity with Hughes as Test Manager for the delivery of Core Testing Services underpinning the rollout of Open Loop by November 2024. “Reliability is non-negotiable when you’re transforming how people pay,” Emani notes. “And we wanted Assurity to bring the rigour necessary for a trouble-free customer experience from day one.”

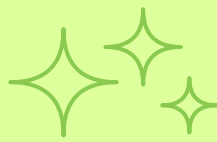
There was a level of alignment in approaches, too. The ‘shift left’ philosophy, championed by Emani and embraced by Assurity Consulting, embeds rigorous testing early in the project lifecycle. “Shift left prioritises thorough testing at every stage of solution development, and that ultimately translates into fewer defects by the time you get into UAT.”

Assurity’s approach was comprehensive, encompassing System Testing to validate hardware and payment systems, User Acceptance Testing (UAT) to mirror commuter needs, Production Verification Testing (PVT) for real-world readiness, and Beta Testing to refine the solution based on user feedback. It also crafted a Test Strategy for Open Loop, Early Integration, and NTS, coordinating with third parties to ensure smooth handoffs.

“Assurity’s ability to align with our goals was critical. They didn’t just test, they built confidence.”



Results



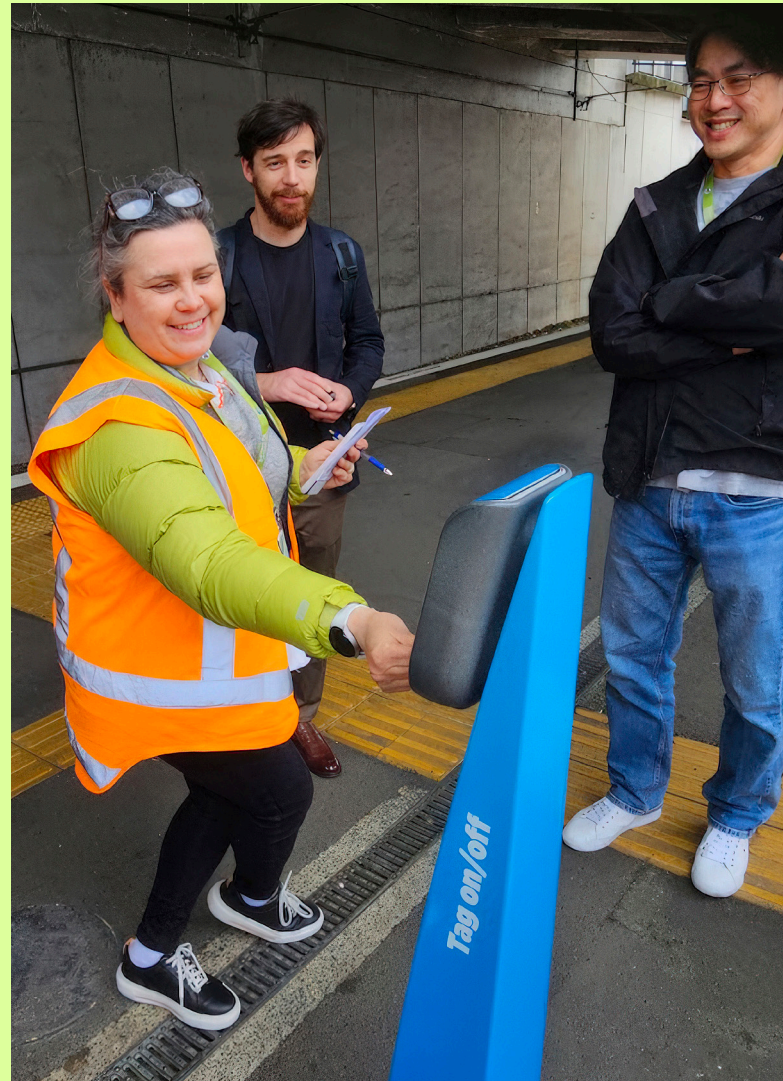
Four months and several million successful ‘taps’ later, the impact is striking. “It’s been a game-changer,” Emani says. “Assurity’s work gave us a payment system we can rely on, and more importantly, that our commuters can depend on too.”

He adds that there were zero errors during the go-live, with satisfying feedback from commuters who were able to tap on and off effortlessly, resulting in reduced reliance on AT HOP cards and making public transport more accessible. “Open loop reduces barriers, encouraging more people to use trains, ferries and buses,” Emani observes, noting increased patronage, particularly around Pukekohe with the reopening of stations in the southern suburb.

In complex and demanding environments, Rachel Hughes’ exceptional leadership is credited with Assurity’s successful delivery. AT commented ‘Throughout the project, Rachel exhibited unparalleled commitment and professionalism as the Test Manager on the project. Her exemplary leadership and expertise in testing ensured the seamless execution of the project while maintaining the highest quality standards.’

Emani adds that lessons from Hughes’ retrospective are already shaping AT’s NTS integration. “Those lessons are guiding our strategy for the next phase,” he confirms.

The effort has not only modernised Auckland’s transport but also set a benchmark for quality assurance in public infrastructure. The effort also has wider implications, supporting AT’s climate goals by boosting public transport use. It’s also a stepping stone for NTS,



which aims to create a unified, interoperable ticketing system for public transport passengers using buses, trains, ferries, and other modes of transit in various regions. The eventual single payment system will work everywhere as a “pay once, travel anywhere” solution.

“Assurity’s testing lays the foundation for nationwide expansion, earning them a perfect “10 out of 10” rating. They went the extra mile, treating the project like their own.”

— Hari Emani
Test Manager, Auckland Transport

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