

Business Report – August 2021

This business report summarises activities undertaken in this reporting period by Auckland Transport (AT) which contribute to the six outcome areas of the Auckland Plan. The six outcome areas of the Auckland Plan are:

Auckland Plan Outcome	Description
Belonging and participation	Focussed on Aucklanders being able to contribute to their city and its direction for the future. It aims to improve accessibility to the resources and opportunities that Aucklanders need to grow and reach their full potential and is about working towards an inclusive and equitable region, focused on improving the health and wellbeing of all Aucklanders. This outcome also covers wellbeing and health, a thriving and prosperous Auckland is a safe and healthy Auckland.
Māori identity and wellbeing	Seeks to advance Māori wellbeing at all levels from whānau, hapū and iwi and across all areas of life: housing, employment, education and health.
Homes and places	Focussed on accessibility to healthy and affordable homes as well as inclusive public places.
Transport and access	Providing easy, safe and sustainable transport modes across an integrated network, in alignment with the Auckland Transport Alignment Project (ATAP).
Environment and cultural heritage	Preserving and protecting the natural environment and significant land marks and cultural heritage unique to Auckland.
Opportunity and prosperity	Ensuring adaptability in the face of a rapidly changing economy and taking advantage of technological developments through collaboration and participation.

Recommendation

That the Chief Executive's report be received.

Prepared by:

Shane Ellison, Chief Executive

Belonging and participation

For AT, this outcome area is focussed on improving accessibility, inclusivity and the well-being and safety of Aucklanders.

Mentemia Wellbeing Support

In August 2021, AT partnered with Mentemia, an integrated mental wellbeing programme that is focused on improving business outcomes by creating a culture of wellbeing. Our key goal with this service is to improve the holistic mental wellbeing of our people. Mentemia was co-founded by mental health advocate and former All Black, Sir John Kirwan and Dr. Fiona Crichton, a health psychology specialist. The programme is supported by a digital platform designed to guide our people on their mental wellbeing journey and enables us to tailor a clinically proven programme that supports AT, our leaders and our people.

Ngā Kaihoe Graduate Programme

Applications for our Ngā Kaihoe graduate programme closed on 8 August 2021 after being open for three weeks. We received a great response to the recruitment drive with 528 people applying (400 New Zealand citizens and 128 students on a New Zealand visa) to the newly designed programme which combines exciting learning opportunities with real business projects. Our candidates will now go through our enhanced selection process which removes Grade Point Average (GPA) and is focused on values and behaviours to create more inclusion and diversity, with the final step being assessment centres taking place between 8 and 15 September 2021. The plan is to welcome 30 – 35 Ngā Kaihoe graduates to the programme in February 2022 for their 18-month journey through the programme.

Brain Badge Neurodiversity Certification

AT is pleased to be partnering with Brain Badge, a new organisation dedicated to pushing the limits of diversity and inclusion to include neurodiversity. Brain Badge is partnering with large organisations to collaborate and co-create a workplace certification programme supporting neurodiversity in the workplace (a similar concept to Gender Tick and Rainbow Tick). AT will be the founding partner with Brain Badge and will co-design the programme which will begin with Brain Badge delivering innovation and human-centred design workshops from October 2021.

Dominion Road Motorcycle Safety Trial

Work is underway on the Dominion Road motorcycle trial project which has been developed to address the issue of motorcycles colliding with right turning vehicles from Dominion Road across the bus lane. The project includes safety improvements such as crosshatch road marking, active warning signs, active warning road studs and infrared cameras. These are located at priority-controlled intersections along Dominion Road where

vehicle queuing is prominent. Five of the eleven sites have started construction for enabling infrastructure and active road studs. The remaining six sites will commence once the technology testing has been completed for the first set of sites.

Residential Speed Management Prioritisation

The Residential Speed Management Prioritisation work is the prioritisation of the roads to be speed managed in the next phase of the Speed Management Programme. Customer Relationship Management (CRM) data has been added as an extra layer for Residential Speed Management, and cross validation of data with the Safe Speeds programme is complete. A user defined widget has been added to determine map distance measurement.

Speed Management Programme

The Speed Management Programme is being delivered in multiple tranches. Following the delivery last year of Tranche 1, we are now starting the preparation works for the first part of Tranche 2, known as Tranche 2A. It is proposed to commence public consultation on this tranche in September 2021. In anticipation of this, local board workshops are underway. The workshops include an explanation of the process undertaken when deciding on a safe and appropriate speed limit. Over the past month, workshops have been held with the Albert-Eden and Franklin Local Boards to discuss several roads impacted by the Tranche 2A speed management proposals. Discussions with other affected local boards have also occurred over April and June 2021. At least one follow-up workshop is anticipated following public consultation with the Franklin Local Board, due to the size and scale of the project.

The investigation work for Tranche 2B has started and is progressing well. These works include schools, rural packages, rural marae and speed limit reductions associated with the Manurewa Coxhead Residential Speed Management (RSM) area. The conceptual design is underway for complementary infrastructure to support speed limit changes for 42 schools. The rural packages are focused on Waiheke and Northwest Auckland. The Franklin Local Board has indicated that they are supportive of AT investigating roads in Āwhitu Peninsula (Franklin West Package), due to the poor crash history of this area. The New Zealand Police and mana whenua have also requested that these roads be reviewed.

Beyond Tranche 2B, roads on Aotea Great Barrier Island are also under investigation for speed limit reviews. This investigation stage and the final timeframes on delivery have yet to be confirmed.

The Speed Management Programme project will enable the transfer of data between AT's Stakeholder Consultation platform (Engagement HQ) and the AT GIS (geospatial) environments from stakeholder consultations, and then consolidate the data into one easy to access viewer. CRM data has been added as an extra layer for Residential Speed Management and the client data validation is complete. Automating this previously manual process that usually takes four months to complete will save thousands of hours of effort and produce the outcome much faster than previously possible.

Māori identity and well-being

For AT, this outcome area is focussed on improving the well-being of Māori at all levels across all areas of life.

Ngā Kete Kiwai Māori Learning and Development

Two workshops from the Ngā Kete Kiwai programme were held, Tuia Ka Mana Māori - Māori Responsiveness and Hononga Ā-Tinana Ā-Wairua - Māori Engagement. There were 24 attendees from across AT.

Mana Ka Māori Staff Network

The Māori staff network, Mana Ka Māori, hosted a Matariki celebration that was attended by AT staff, Independent Māori Statutory Board staff and Māori staff from other businesses on the viaduct.

Road Safety Programme

Te Ara Haepapa delivered 15 activations, hui, events and educational workshops with 172 engagements in July 2021 and supported 46 attendees to achieve their licences:

- 20 Passed their restricted and 12 Passed their full from the Te Aroha Pa Wananga.
- 1 passed their full from the Hoani Waititi Wananga.
- 1 passed their restricted and 1 passed their full from the first Oruawharo Wananga.
- 7 passed their restricted from the second Oruawharo Wananga.
- 2 Passed their restricted and 2 passed their full from the Reweti Wananga.

Te Ara Haepapa held a licensing workshop in a wananga setting, which was held over the course of 5 days that allowed the team to effectively engage with the whanau in Kaipatiki. Te Ara Haepapa are working in partnership with Steps to Success, Northern Jobs and Skills, Accident Compensation Corporation, Waka Kotahi, Ministry of Business, Innovation and Employment, Kaipatiki Community Trust, Nga Pirihimana o Aotearoa and Class 1 Drivers on this Wananga to achieve progression throughout the licensing system for the whanau in Kaipatiki.

Marae Safety Programme

Project Delivery Plan FY 20/21	Status	Q1	Q2	Q3	Q4
Te Aroha Pa carpark	Construction is underway and due to be completed in August 2021.				
Motairehe Stage 2 road	Construction is underway and due to be completed in August 2021.				
Hoani Waititi Marae	The procurement process has commenced.				

AT contributes to mana whenua engagement through forums for operations and governance matters. Project Fora are held across various rohe on a fortnightly basis, focussing primarily on Resource Management matters. There were three mana whenua hui held in the south, central and north/west regions. There was one alliance hui that the Māori Policy and Engagement team support; Tupu Ngātahi (Supporting Growth). AT engaged with mana whenua on the following projects:

- Rakino Island seawall.
- Two bridge renewal projects on Gt Barrier update Regional Fuel Tax (RFT).
- Argent Lane.
- 2021 Cycling Programme update.
- Eastern Busway Alliance:-Stormwater design workshop.
- Manukau and Māngere East Cycling Single Stage Business Cases.
- Southwest Gateway Programme – early deliverables: Māngere West Cycling Improvements.

Homes and places

For AT, this outcome is focussed on improving accessibility to homes and inclusive public places.

Botany Road and Millhouse Drive Intersection Upgrade

The construction of the Botany Road and Millhouse Drive intersection upgrade in Golfland started in late June 2021 and will continue over the next couple of months. The intersection upgrade is expected to significantly improve traffic efficiency along this strategic corridor in east Auckland, by the addition of another approach lane on Millhouse Drive. This is the first phase of the corridor upgrade under the Regional Improvement Programme and is one of two projects planned for FY2021/2022. Later this year, the construction is scheduled to begin for the adjacent intersection at Botany Road and Cascades Road. This project is coordinated with the construction of an adjacent aged care development, to minimise the disruption impacts. The Howick Local Board has been supportive of this project.

Sunnynook Road Pedestrian Crossings

New pedestrian crossings have been installed on Sunnynook Road in Sunnynook. Residents in the area contacted AT concerned about the speeds of vehicles travelling down Sunnynook Road, and the lack of pedestrian connectivity at various points along this 1.5km route. An investigation was carried out and three raised zebra crossings were installed to cater to schools, kindergarten and local park. A signalised pedestrian crossing was also installed near Sunnynook Busway Station.

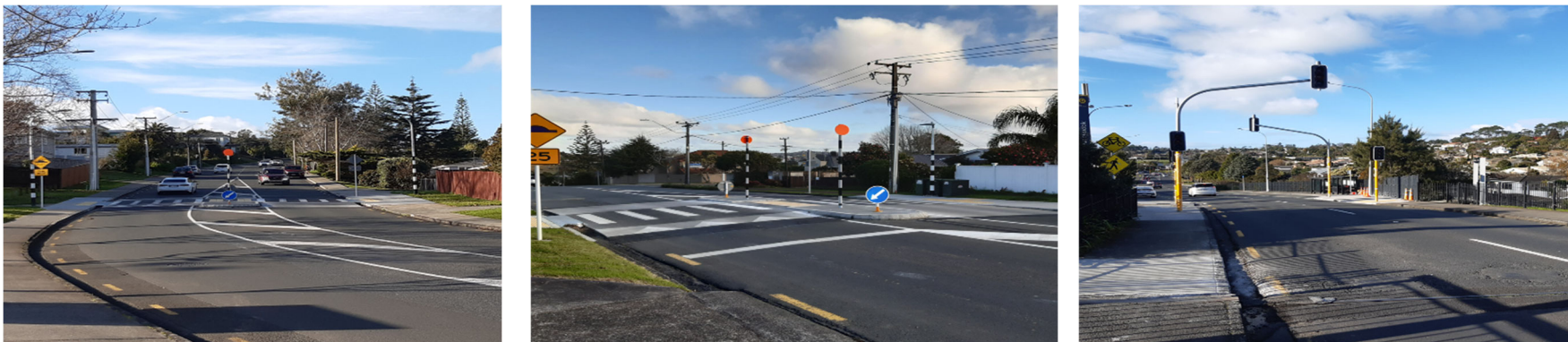


Figure 1 New pedestrian crossings installed on Sunnynook Road, Sunnynook

Waiheke and Gulf Islands Improvement Projects

The installation of fencing around the Claris Airfield runway on Aotea Great Barrier Island has been moved from end of July to mid-September 2021. The delay is as a result of the liquidation of Fly My Sky who were responsible for delivering the materials required for this project.

St. Patrick Square Pedestrian Mall

St. Patrick Square is designated as a pedestrian mall, which makes it legally different to enforcing parking infringements on a road. The square is experiencing poor compliance around parking controls. The Parking Design team is proposing a long-term structural change to reclassify St. Patrick Square as a shared space. This will allow parking issues to be enforced through standard mechanisms. In the short-term, some tactical solutions are being proposed, such as using planter boxes to prevent vehicles from parking in the square. These short-term solutions will recycle some of the kit removed from Queen Street a month ago. This tactical solution is scheduled for implementation mid-September 2021.

Time-restricted Parking Changes

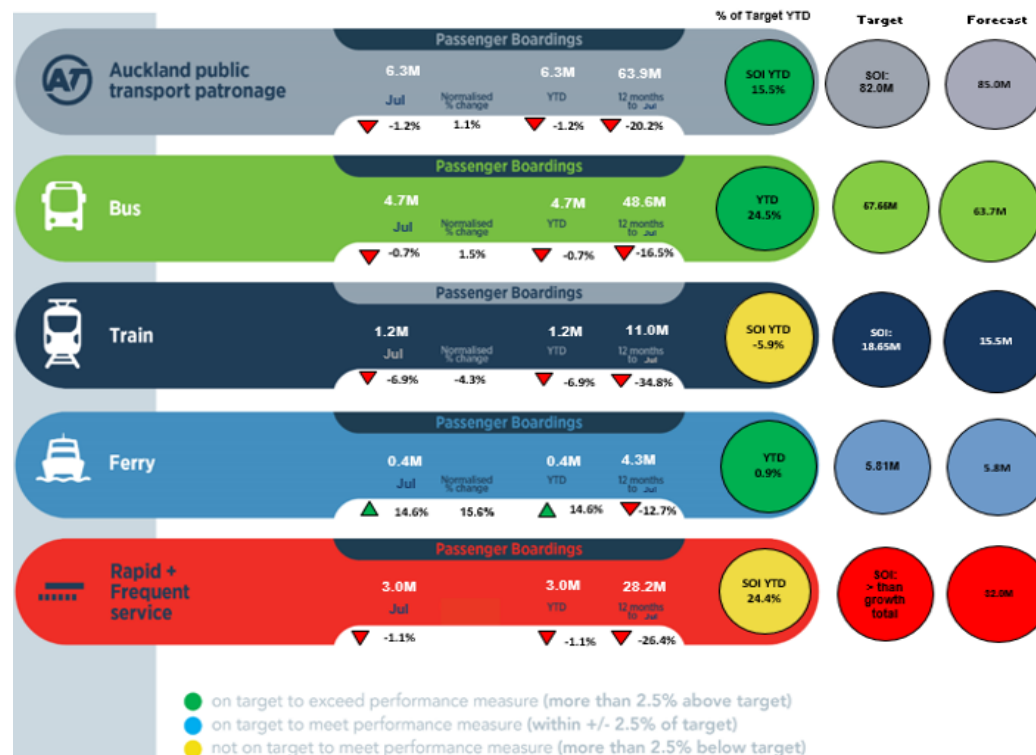
AT is proposing to change time restricted parking in Victoria Avenue, Remuera. This extends the existing paid parking in Remuera on these streets which are now operating above the 85% threshold set under the AT Parking Strategy. Public consultation to change P15, P60 and P120 (Monday to Friday 8am-6pm) to paid parking (\$2 per hour, Monday to Saturday 8am-6pm) closed at the end of August.

The Parking Design team is also working on the implementation of a new P90 parking zone in the Papakura Town Centre at the end of September 2021. The new parking zone will standardise the current range of different parking restrictions in the area and significantly reduce the need of parking sign. This will help improve the streetscape while offering more consistent information to visitors.

Transport and access

For AT, this is a key outcome area and is focussed on providing easy, safe and sustainable transport modes across an integrated network.

Passenger boardings – July 2021 and 12 months to July 2021



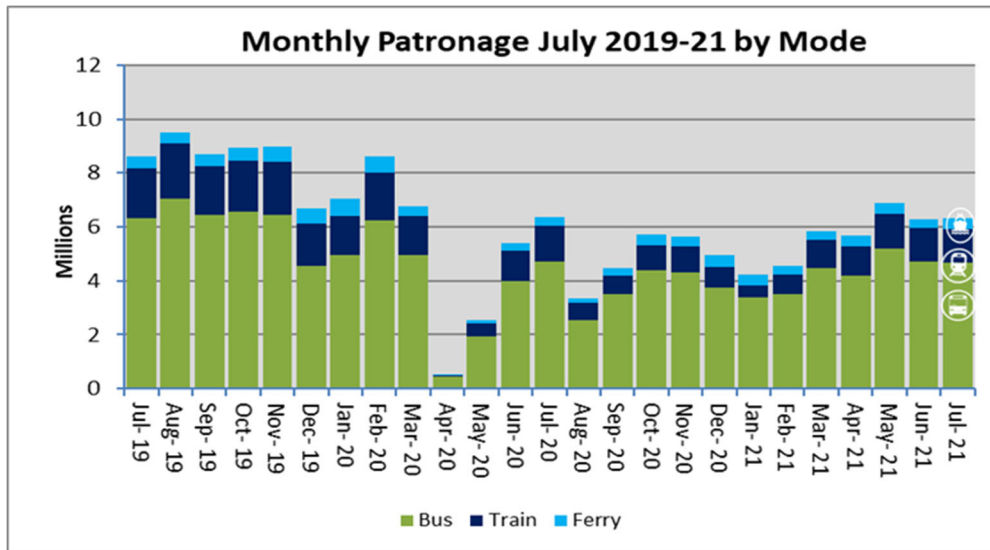
Overall, for the 12-months to July 2021 passenger boardings totalled 63.9 million, -20.2% on the previous year. July 2021 monthly patronage was 6.3 million, -1.2% on July 2020.

Bus services totalled 48.6 million passenger boardings for the 12-months to July 2021, -16.5% on the previous year. Patronage for July 2021 was 4.7 million, -0.7% on July 2020.

Train services totalled 11.0 million passenger boardings for the 12-months to July 2021, -34.8% on the previous year. Patronage for July 2021 was 1.2 million, -6.9% on July 2020.

Ferry services totalled 4.3 million passenger boardings for the 12-months to July 2021, -12.7% on the previous year. Patronage for July 2021 was 0.4 million, +14.6% on July 2020.

Rapid and Frequent services totalled 28.2 million passenger boardings for the 12-months to July 2021, -26.4% on the previous year. Patronage for July 2021 was 3.0 million, -1.1% on July 2020.

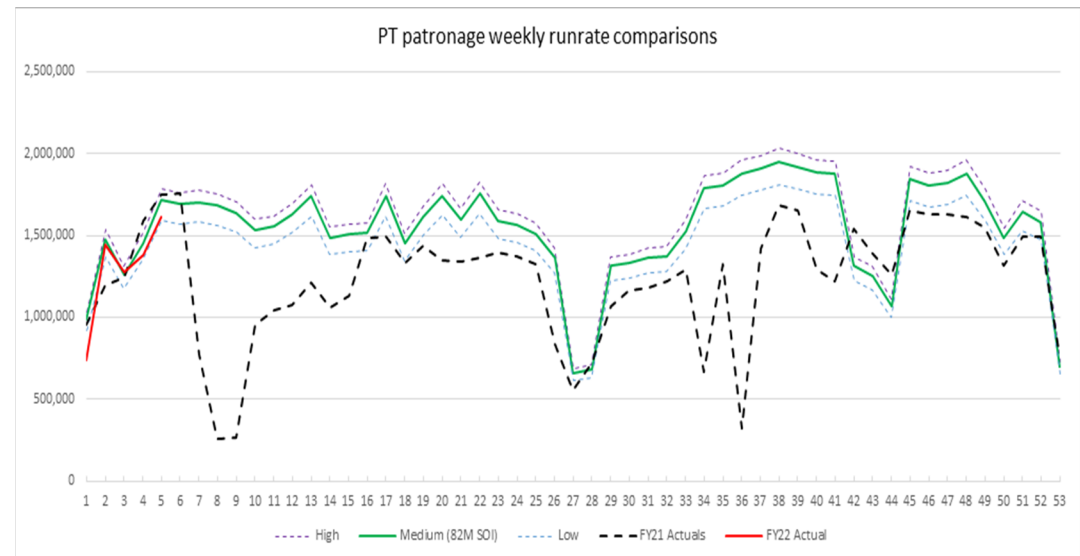


Passenger boardings in July 2021 were lower compared to July 2020. This was due to revised Temporary Speed Restriction's which reduced train frequency as nearly all weekends have had Block of Lines (BoL) and ferry reliability. We remain optimistic that this will recover in the months to come.

AT's Statement of Intent (SOI) target for 12-months for 2021/22 is 82 million passenger boardings across public transport. This is 80 – 81% of the highest year (2018/19) prior to the COVID-19 pandemic (COVID-19).

The starting weekly run-rate profiled for July 2021 is 75% of prior to COVID-19, and year-end weekly run-rate for June 2022 assuming a straight annual increase is 90%, required to achieve the annual target.

In July 2021, patronage was 6.3 million compared to 7.9 million in July 2018 or 80%, and 8.6 million in July 2019 or 73%.

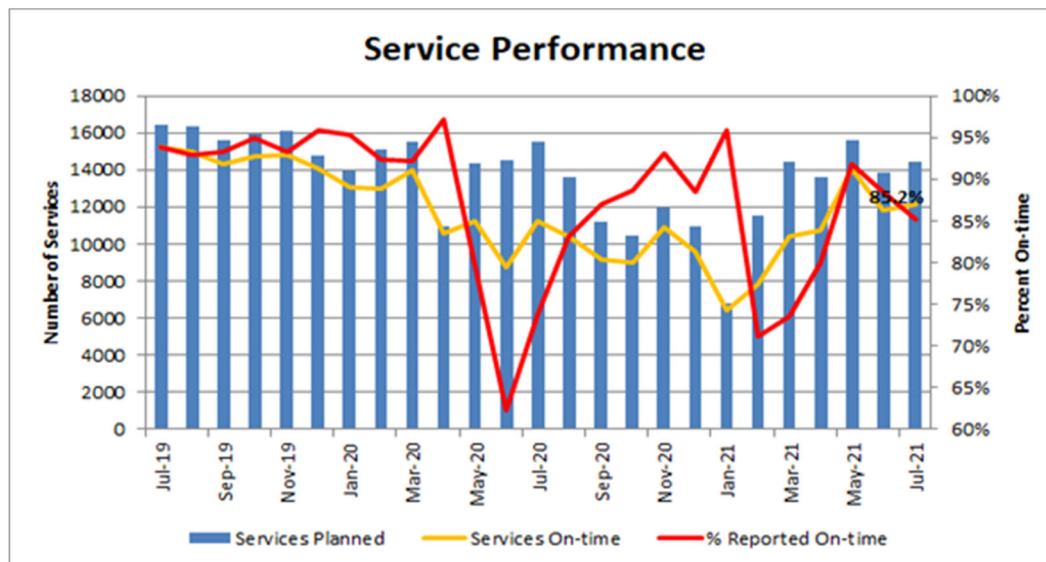


Service Punctuality and Reliability – July 2021



The weighted (to patronage), punctuality improved on prior month. General traffic following the re-emergence of COVID-19 had some impact on reliability however service delivery improved compared to previous months. The rolling average remains well above the SOI target. Performance by mode at destination is outlined below:

	Punctuality at Destination		Reliability at Destination	
	Jul-21	12 Month Average	Jul-21	12 Month Average
Train	85.21%	84.99%	98.90%	97.14%
Bus	97.83%	98.03%	97.97%	98.85%
Ferry	91.16%	93.02%	95.80%	97.50%



Rail Service Performance

The 20 minute peak southern line service continued until 28 July 2021 as a result of speed restrictions that were applied during June / July 2021. On 29 July 2021, the full southern line 10 peak frequency was returned with the Onehunga line converting to a shuttle between Penrose and Onehunga.

Key Construction Project Updates

Project Progress	Current Phase	% Phase Completed
Eastern Busway 1 (Panmure to Pakuranga) – The busway, footpaths, cycleways and highway are substantially complete. Remedial works are being completed to address quality issues before the project opens to the public. All intersections are fully functional with traffic lights. Final traffic lane configurations of Pakuranga Road and Lagoon Drive are in operation, along with 100% pedestrian and cycle access completed along Pakuranga Road and 90% along Lagoon Drive.	Construction	92%
Eastern Busway 2/3/4 (Pakuranga to Botany) – Works progress on design and investigation. Approval was received to proceed with early PAA works from the AT Board (board) at the July 2021 meeting.	Interim Project Alliance Agreement	45%
Puhinui Interchange – Puhinui Station was opened by the Minister for Transport and the Auckland Mayor on 24 July 2021, and also attended by a large contingent of Politicians, Councillors, Local Board members and media. Some smaller sections of work will continue into early August 2021 to align with Block of Lines and for the completion of the Eastern approach but will not disrupt public use of the station.	Construction	95%
Puhinui Bus Priority - Puhinui Road bus lanes were operational to align with the Puhinui Interchange opening. Drainage, road widening and most shared path and crossing improvements were completed in June 2021.	Construction	75%
Northern Busway Extension Stations (Rosedale and Constellation) - The project team and independent assessor are progressing the Total Outturn Cost (TOC) of the civil works and vertical construction for the Rosedale Bus Station.	Construction	49%
Matakana Link Road - Earthworks are progressing on programme. Issues with the ground conditions that were not as expected, and piling issues have meant the bridge work is slightly behind programme. Bridge piling work is now complete, and installation of the piers is underway. The team is still working with adjacent developers / on development tie-ins. Stormwater infrastructure and utility services installation continues.	Construction	51%
Wolverton Street Culverts 1 and 2 Replacement - Culvert 1: Culvert Piling Work was completed in June 2021. Due to an access issue for the stream works, additional temporary works have been developed and installed to ensure the stream works can continue. Culvert 2: Capping beams have been constructed. The drainage work has started however have been delayed due to difficulties of significant water ingress from an old in-situ tunnel.	Construction	62%
Ngapipi Bridge Widening - The final design has been issued by the designer and is being peer reviewed and the road safety audit is being closed off. The physical work is planned to be tendered using a two-stage method. Resource and building consents will be lodged by August 2021 after the seawall design is finalised.	Detail Design	95%

Project Progress	Current Phase	% Phase Completed
Medallion Drive Extension - The project remains on track for completion by February 2022. Fairview Avenue works are substantially complete, with the exception of concrete barriers on the culvert headwall. Concrete bridge barriers have been completed and cycle handrails installed. Work continues on west side of Oteha Valley Road.	Construction	72%
Tamaki Drive Cycle Route (The Strand to Ngapipi) - Section1: The construction in the section between Solent Street and Ngapipi Bridge is substantially complete and the road carriageway has been resurfaced and traffic lanes are re-opened. The remedial work on the cycle path is ongoing. Section 2: The section of Tamaki Drive between The Strand and Solent Street is starting construction.	Construction	S1 100% S2 45%
Waitemata Safe Routes Scheme - The contract for the remedial physical works has gone out to tender and is expected to be concluded by the end of August 2021. Following this, a project start meeting will be arranged to discuss and agree the construction stage plan and dates with the project partners and stakeholders, as well as the Grey Lynn Business Association. Physical works are anticipated to commence from September 2021.	Construction	74%
Northcote Safe Cycling Route Bridges – The Minister of Transport and local elected members opened the new bridges over State Highway 1 on Sunday 1 August 2021.	Construction	100%

Transport Infrastructure Asset Design and Management

Key activities through to the end of July 2021 include:

- Design and Standards:** The Design Review Process evolved further after a workshop to integrate minor project sprint outcomes. The Technical Design Manual (TDM) for development compliance continues to be processed by Auckland Council (AC).
Engineering Plan Approval applications continue to increase as developers move through the winter season to get approvals for the summer earthworks season.
- Asset Management:** The 2021 Asset Management Plan (AMP) has been approved by the board.

Road Maintenance and Renewals

JULY 2021					
Asset Renewal Activities	July YTD Actual (km)	July YTD Forecast (km)	Full Year Target (km)	Completion v. YTD Target (%)	Completion v. Full Year Target (%)
Pavement Rehabilitation	-	-	10.0	-	-
Resurfacing	7.0	5.0	415.0	140%	2%
Footpath Renewals	5.9	5.0	60.0	118%	10%
Kerb and Channel replacement	4.8	3.5	35.0	137%	14%
TOTAL	17.7	13.5	520.0	131%	3%

Achievement against forecast is 131% of the YTD target with 3% completion to date against the full year targets. The SOI target for the 2021/22 year is that we will resurface/rehabilitate 6.0% of the sealed road network (6,875 km as at 30 June 2021) which is a combined length of 412.5 km.

Resurfacing is limited to asphaltic concrete this time of year with chip sealing expected to commence in late September/October weather permitting. During July a 2.0 km section of Manukau Road was resurfaced between Great South Road and Greenlane West. This section of road carries 25,000 vehicles per day and is part of the bus frequent transit network. With a great degree of planning and collaboration the works were able to be completed in four shifts (two full weekends with night and day work and two other night shifts) instead of 18-night shifts. The methodology deployed delivered better customer outcomes by minimising the impacts for bus services and road users, better quality outcomes through longer paving runs and less transverse joints and increased productivity.

4.8km of kerb and channel replacement, together with 5.9km of footpath renewals work was completed in July 2021.

In July 2021, 96% of customer requests for service were responded to within the specified response times. There were 3,021 requests for service received in the month.

Glen Eden Town Centre Upgrade

The Glen Eden Town Centre safety improvements programme is almost complete. This project delivers safety improvements to six key intersections, along with work to improve safe traffic flow and safe pedestrian access to the town centre, train station, and to residential developments. The work has caused some disruption to travel routes for many residents, and town centre customers and employees.

In order to provide information and hear any issues, AT held five information sessions, set up in a vacant shop in the town centre. Residents and other interested parties were able to drop in and share their concerns and hear more information about the project, and its progress. This was managed by staff from the West Hub with Support from the road safety engineering team and Local Board members.

In addition to address the loss of parking during the work on West Coast Road, AT leased 15 car parks at Wilson Car Park, to provide free parking for customers and some businesses who temporarily had their parking closed for safety reasons. This was appreciated by local businesses.

The Captain Scott Road and West Coast Road intersection curb build out improves safety for pedestrians and cyclists. To improve safety and a sense of place, planter boxes from the Rutherford Safe Streets Pilot have been repurposed to make this area more inviting, and to act as a visual reminder to drivers that this part of the road is now closed to vehicles.



Innovating Streets- Slow School Speeds

Summerland Primary infrastructure was implemented by the beginning of Term 3. The infrastructure was co-designed with the school and members of the community, with the aim of reducing speed to enable safe and active travel to and from school. The school is on an arterial route, and residents reported concerns of speed after a child was hit crossing the road after school.

The design includes gateway treatments of speed cushions, red road marking, curb build outs using flexiposts and pavement art to highlight the presence of a school. Traffic now approaches the school at a safer speed, providing safer crossing for the students of the school, kindergarten and child care centre. Co-Principal of the School, Barb Dysart already reports, “The improvements on the road are making a difference to the flow of traffic. It is actually quite nice doing road patrol, as it makes it so much easier to get the signs out as the speed of the traffic has slowed.”



Following the board’s receipt of the recent Road Safety Business Improvement Review, AT hosted a live (on-line) Teams briefing for a number of key stakeholders. The briefing was led by the report author, Eric Howard.

He presented a summary of the BIR findings, progress made against the original recommendations in the 2018 BIR, and ways forward for AT to improve road safety. The briefing included the likes of Auckland University, Greater Auckland, Auckland Council, Living Streets Aotearoa, Students Against Dangerous Driving, Auckland Regional Public Health Services, Safe Kids Aotearoa and Eke Panuku Development Auckland

A further briefing was held for elected members. Again, this was led by Mr Howard, along with AT’s chief executive and Bryan Sherritt, Executive General Manager, Safety.



North Western Busway Sod Turning

The Northwestern Bus Improvements project is a joint project between AT and Waka Kotahi New Zealand Transport Agency (Waka Kotahi). The improvements will upgrade and extend the existing bus shoulder lanes on the Northwestern Motorway and add bus stops on the motorway interchanges at Lincoln Road and Te Atatu.

The objectives for the project are to:

- Increase the efficiency of public transport to, from and within the northwest.
- Make public transport a realistic option for journeys to, from and within the northwest.
- Improve connections to, from and within the northwest.

The project is funded by Crown Infrastructure Partners (\$50m) and additional funding is being sought through the National Land Transport Plan (NLTP). Work on the project started on 1 August 2021 on the Te Atatu interchange following a sod turning event on 27 July 2021 attended by the Minister of Transport, MPs, councillors, local boards and invited guests.

Cycle Network Expanded

The Northcote Safe Cycle Route was officially opened. This \$26.6 million project is co-funded by Waka Kotahi and includes \$11.5 million from the National Land Transport Fund (NLTF). The newly completed path now provides a safe connection for people walking and cycling between Smales Farm and Northcote on the North Shore. A great addition to Auckland's growing walking and cycling network, the route spans the northern motorway across two bridges named Tapuwae (footprint) by iwi artist Reuben Kirkwood of Ngāi Tai ki Tāmaki Iwi. The route provides safe access for several schools, Smales Farm Busway Station, Smales Farm Business Park, sports facilities, North Shore Hospital, Northcote Town Centre, Te Onewa Northcote Point Wharf and beyond.

With around six thousand students in the area, this will be an important part of getting more young people on bikes, safely. Construction of the route began in 2015 and construction of the bridges began in 2019



Unsealed Roads

The new framework for assessing unsealed roads has been released. The new framework aims to progressively improve the performance of the unsealed roads network. Working with local boards, a new framework has been developed changing the approach to assess and identify road issues and then apply an appropriate treatment based on these issues. This will mean an increased number of roads can be improved annually as a broader set of solutions are possible, beyond just sealing.

Network Optimisation Programme

The Network Optimisation Programme makes the most of our existing transport network to increase efficiency and performance, particularly in areas with high public transport, walking and cycling, or freight use. Optimisation focuses on low-risk, low-cost projects with a few medium-cost projects. This allows us to make the best use of what we have, to enable the movement of more people, goods, and services to achieve the right outcomes for the right people in the right places and at the right time. The programme has delivered three projects to date against the planned 13 projects for FY2021/2022.

Improvements planned for the Alfriston Road and Magic Way intersection in Randwick Park, were completed in August 2021. These changes improved accessibility and safety for pedestrians and road users by adding advanced stop boxes, reducing vehicle speeds, and improving westbound traffic flows.

Intersection improvements at Hill Road and Charles Prevost Drive, The Gardens, were also completed in August. This intersection experienced congestion and delays in the eastbound direction during afternoon peaks. The changes to intersection improved traffic flow and pedestrian amenities on Hill Road and included relocating the signalised crossing to a preferred location between the shops and the retirement village, and the provision of a dedicated left turn lane on Hill Road. After relocation, the pedestrian crossing is more conveniently located for pedestrians to cross between the retirement village and the local centre. At its original location, the pedestrian crossing was poorly utilised. In terms of efficiency, the average speed in afternoon peak has increased from 19km/h to 21km/h. This is an early indication of the improvement in performance when comparing August 2021 to August 2019.

The planned improvements to the intersection of Lady Ruby Drive and Kerwyn Avenue Intersection Improvements, East Tamaki, was completed in August. The project's objective was to improve the intersection efficiency and safety. The changes at this intersection included localised widening to support movement by removing the slip lanes and signalised crossings.

Route Optimisation Programme

The Route Signal Optimisation Programme is delivered by the Auckland Transport Operations Centre (ATOC) in collaboration with Waka Kotahi and AT. ATOC has successfully delivered the Route Optimisation Programme for FY2020/2021 by optimising a total of 306 signalised sites. ATOC has developed the Route Optimisation Programme for FY2021/2022 with target number of 307 signalised sites including 280 local and arterial sites and 27 ramp signals.

Active Modes Update

Construction is nearing completion on the Great South Road footpath project in Mount Wellington. Detailed design has also been completed for a further five footpath sites: Third View Avenue, Beachlands; Hibiscus Coast Highway, Orewa; Maire Road, Orewa; Davis Crescent, Newmarket and Muriwai Road, Waimauku.

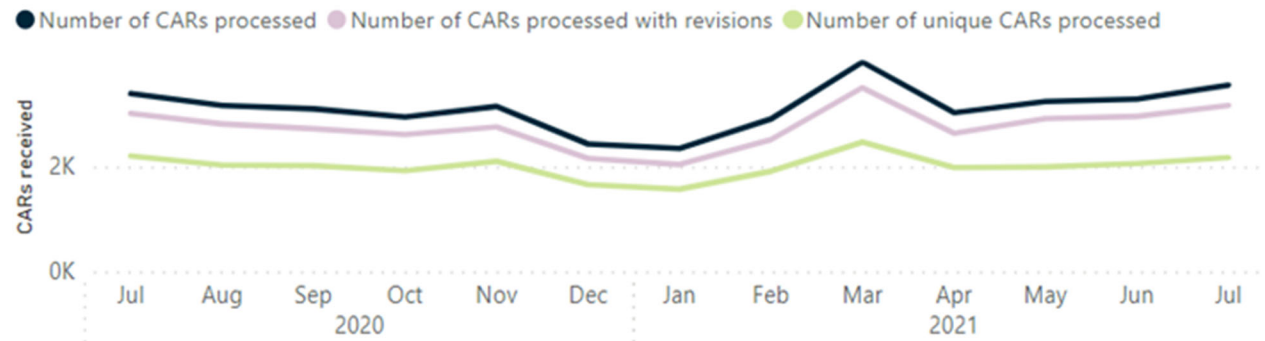
Work has restarted on the Northwestern Dual Path which was delayed last year due to the COVID-19 emergency budget review. Resource consent was approved by Auckland Council on 30 July 2021 and construction is planned to commence in August or September. Detailed designs are due to commence shortly for 16 sites across the region offering “pop-up protection” to enhance existing painted cycleways on the network to form separated cycle facilities, as part of the Minor Cycling and Micromobility Programme.

The licenses for existing rental or ride share micromobility services are due to expire in September 2021. Working in collaboration with Auckland Council, AT is intending to undertake a renewal assessment process on micro-mobility licenses. The assessment will be based on interest and the compliance history of current operators. Any successful renewals would extend beyond the introduction of Auckland Council’s new Trading, Events and Filming Bylaw which will form the legal framework for licensing of micro mobility devices moving forward.

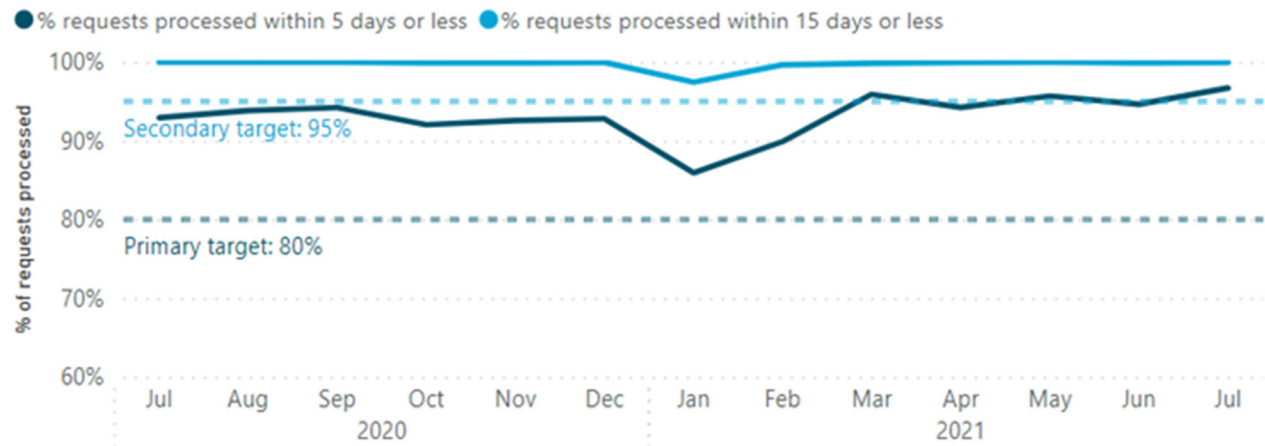
Road Corridor and Worksites

In July 2021, the number of Corridor Access Requests remained high. Approval times have consistently met or exceeded targeted timeframes, despite an upturn in the number of times an application has required revision and a period of reduced team resources during the first half of the year. This is an achievement the team was proud of and a true reflection of the values of Auahatanga and Manaakitanga.

Number of CAR requests received



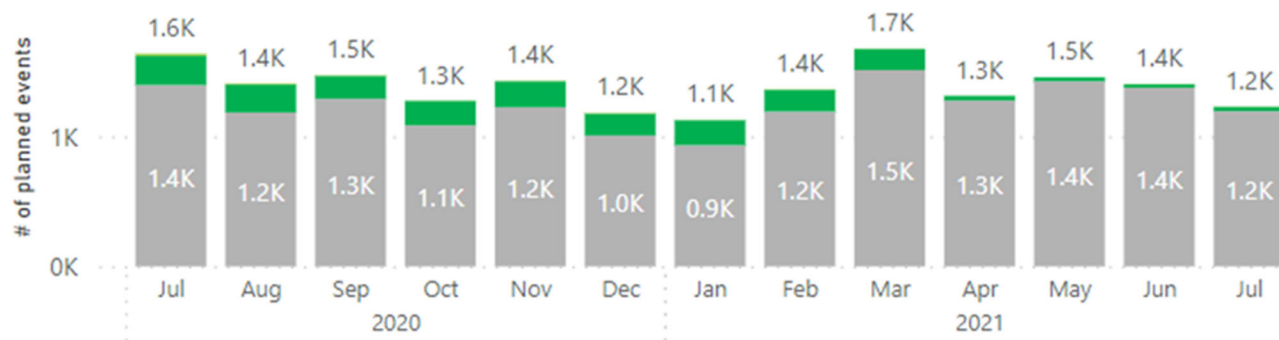
CAR process times



Managing planned events

Number of planned events

● Normal ● Minor ● Significant ● Serious ● Hea



Incident level	People	Delay (Urban)
Catastrophic	Widespread deaths	> 24 hours
Headline	Multiple serious injuries or deaths	3 - 24 hours
Serious	Serious harm or death	1 - 3 hours
Significant	Minor injuries	30 - 60 minutes
Minor	No injuries	< 30 minutes
Normal	No impact	No impact

In July 2021, similar levels of planned events took place compared to pre COVID-19 levels. Traditionally, the wetter weather in July presents as a barrier to both special events and filming, however there was a significant amount of protest activity this month which included the nationwide Groundswell protest. Integrated ticketing was in place for one All Blacks fixture at Mount Smart Stadium this month.

Upcoming Planned Events

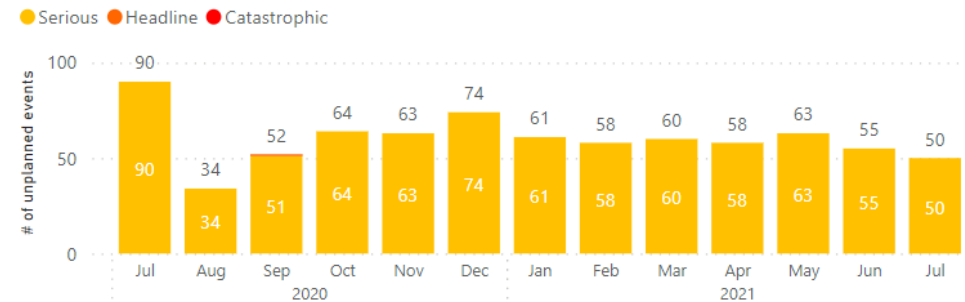
Major events delivered in August 2021 included the Auckland Food Show, the Mass Vaccination Event on 1 August, a Bledisloe Rugby match and the All Blacks versus Wallabies match on 7 August.

ATOC is also collaborating with Auckland System Management, Waka Kotahi Auckland Urban Journey Manager and New Zealand Police on the feasibility of an extension of the approved time for the Auckland Marathon to implement the associated road closures required to run the next event.

Managing unplanned incidents

In July 2021, there was a drop in serious incidents managed compared to recent months. Of 50 serious incidents reported, 46 were crashes which was also lower than usually noted. The lower number of crashes and incidents were spread across ATOC's full area of operation. There were two serious incidents of note: The first was a 12-car crash on the North Western motorway (SH16), at the end of the peak period, which prompted a full eastbound motorway closure. The second was a police operation on Great South Road, Greenlane, which involved multiple road closures impacting six bus routes.

Number of Serious, Headline or Catastrophic unplanned incidents



COVID-19 vaccine planning

ATOC Planned Events have been supporting the Auckland District Health Board, Waka Kotahi COVID-19 Response and Auckland Unlimited in the ongoing roll-out of COVID-19 vaccinations. There are two active COVID-19 vaccine planning workstreams:

1. Mass Vaccination Event: planning was completed for multiple community 'Vaccination Events' which are a New Zealand first. The ministerial announcement on 14 July 2021 confirmed the first event, being held at Vodafone Event Centre (30 July to 1 August and 10 – 12 September 2021). Additional events are still being worked through by Auckland Unlimited.
2. Vaccination Centre Assessment: these include the following assessments:
 - Local Vaccination Centres: ATOC Planned Events now lead a weekly operational meeting with other AT departments and the Auckland District Health Board (ADHB) to discuss other upcoming locations for vaccination centres and ensure that information on activities is shared. The group is currently working through the operationalisation of a potential new local vaccination centres.
 - Pop-up Vaccination Centre: there is feasibility work underway by the ADHB to look at alternate options for pop-up vaccination centres.
 - Drive-Through Vaccination Centres: the Waka Kotahi COVID-19 Response Team has been approached by Ministry of Health (MoH) to provide advice around the utilisation of drive-through vaccination centres. Following a planning meeting held in May 2021, the MoH has developed draft guidance for District Health Boards. Additional discussion is required to confirm recommendations have been incorporated. ATOC continues to monitor and understand how this may impact operation of the network.

Maritime safety

The Harbourmaster team has been involved in an Auckland Council Resource Management Act prosecution against individuals who purposely sunk a derelict boat off the coast of Waiheke Island without consent. The Harbourmaster team provided the Council prosecution team with a significant amount of evidence related to the case and the defendants were found guilty after a jury trial. The Harbourmaster's Operations Manager testified in Court and declarations related to sentencing have been supplied to the courts by the Harbourmaster. The Harbourmaster has requested that the defendants be required to raise the wreck and dispose of it properly ashore in addition to any costs and fines imposed.

Global supply chain issues have resulted in several deep draft container vessels calling at Auckland over the past couple of months. The drafts of these vessels have been as deep as 13.2 metre whereas the normal maximum draft permitted by the Harbourmaster is 12.5 metre. A risk assessment for each of these calls was undertaken by the Pilots and Harbourmaster prior to the vessels' arrival and mitigations are put in place as necessary.

Navigation Safety Bylaw

The Auckland Council Navigation Safety Bylaw 2021 was due to come into force on 31 July 2021, however, this has been postponed until the associated "Maritime Transport (Infringement Fees for Offences – Auckland Council Navigation Safety Bylaw 2021) Regulations 2021" are ready. They must come into force on the same day. The MoT and AC bylaw team are collaborating with progressing the regulations.

NLTP

The Funding Team has submitted the final NLTP submission for Waka Kotahi consideration. This included improvement activities (including low cost / low risk activities) and the continuous programme. Waka Kotahi has advised that there are funding constraints within the 2022-24 NLTP period, however final outcomes of the NLTP process will be known late August 2021 when the NLTP is released.

RLTP funding

There were no new approvals by Waka Kotahi during the period 7 July 2021 to 8 August 2021.

Procurement

There were two tenders published in the current reporting period (6 July 2021 – 4 August 2021) with an estimated value of \$1.8 million. No tenders had an estimated value of over \$2 million.

There were 132 contracts created in the current reporting period with a total award value of \$36 million. Six contracts had a value of over \$2 million.

Contract	Supplier
<p>Technology Field Device Maintenance, Renewals and Capital Works (On-Bus Devices) – Five-year (2022-26) maintenance and renewals contract ensuring most of AT's field technology assets (e.g. school zone signs, CCTV cameras, pedestrian warning studs) function reliably and safely to deliver AT's operational and customer experience outcomes. This contract covers the installation and maintenance of On-Bus devices.</p>	<p>HTS Group Limited</p>
<p>Technology Field Device Maintenance, Renewals and Capital Works (Central) – Five-year (2022-26) maintenance and renewals contract ensuring most of AT's field technology assets (e.g. school zone signs, CCTV cameras, pedestrian warning studs) function reliably and safely to deliver AT's operational and customer experience outcomes. This contract covers the Central region.</p>	<p>CSL Infrastructure Limited</p>
<p>Technology Field Device Maintenance, Renewals and Capital Works (North and West) – Five-year (2022-26) maintenance and renewals contract ensuring most of AT's field technology assets (e.g. school zone signs, CCTV cameras, pedestrian warning studs) function reliably and safely to deliver AT's operational and customer experience outcomes. This contract covers the North and West regions.</p>	<p>CSL Infrastructure Limited</p>
<p>Technology Field Device Maintenance, Renewals and Capital Works (Rail Corridors) – Five-year (2022-26) maintenance and renewals contract ensuring most of AT's field technology assets (e.g. school zone signs, CCTV cameras, pedestrian warning studs) function reliably and safely to deliver AT's operational and customer experience outcomes. This contract covers the Rail Corridors.</p>	<p>CSL Infrastructure Limited</p>
<p>Britomart Station Maintenance Transfer – Addition of Britomart station to Downer's portfolio of stations being maintained as part of the CRL project.</p>	<p>Downer New Zealand Limited</p>
<p>Park and Ride – 80 Great North Road, Warkworth – Construction of a Park and Ride carpark and associated works at 80 Great North Road, Warkworth.</p>	<p>The Fletcher Construction Company Limited</p>

Environment and cultural heritage

For AT, this outcome area is focussed on protection of the natural environment and Auckland's cultural heritage.

Street Lighting

There are approximately 123,000 streetlights on the network of which 95,201 (77%) have Light Emitting Diode (LED) luminaires connected to the Central Management System (CMS). There are a further 10,000 LED lights on the network which are either not yet installed with light point controllers or fitted with luminaires which are not compatible with the CMS which means that approximately 105,000 of the 123,000 street lights (85%) have LED luminaires.

In July 2021 we replaced a further 1,084 lights with LED luminaires and installed 473 light point controllers on existing LED lights so as to connect them to the CMS. Existing light point controllers have been purchased to enable existing LED lights to be connected the CMS as soon as possible.

Research

The Environment Specialist has a research project with two fourth year engineering students who are looking at the use of plastic sleeves on wharf piles and the potential to generate microplastics through wear and tear (wave action and vessel impact). The students are analysing samples from a plastic sleeve removed from an AT pile. They will report back later this year.

Opportunity and prosperity

For AT, this outcome area is focussed on collaborative technological development enabling resilience and adaptability.

Forecasting Parking Demand

The parking services and data science teams are working in collaboration to seek a strategic approach to optimise the current use of parking areas.

On-street and off-street parking are designed to accommodate the demand of parking over different time periods. When planning to meet customers' needs, forecasting is one of the most important techniques to know what to expect in the future. . Parking patterns are influenced by various factors which need to be considered holistically, and machine learning models are the best method for the forecasting job, ultimately this will mean providing better options based on modelling to customers.

Thus, the data science team has collected and quantified various influential factors, selected the most suitable machine learning models, and worked out the best combination of these factors by the model.



As the Central Business District (CBD) is the busiest area, 10 on-street parking areas with the most parking bays have been selected at the start of this innovative work. Their time series patterns has been well identified and interesting facts have been revealed and acknowledged by the business. By combining time series patterns, public holidays, school holidays and lockdown levels, a forecast model has been developed and it has achieved more than 70% accuracy. To further improve the model, events, traffic disruption and weather data will be later integrated, and better accuracy is expected.

Figure 2 Grey Avenue has high parking demand overnight due to apartment buildings without car parks