

Meeting Micromobility's Potential

Impact Report



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A Letter from our CEO



Our values have guided our business from the beginning, when in 2016 we envisioned a safe, sustainable and accessible way for people to move around the city. And we have stayed laser-focused on safety, sustainability and accessibility, with a strategy to work with cities that increasingly weigh these values as the most important criteria.

In 2021, when pressures of a global pandemic coupled with a worsening climate crisis, we recognised the unique landscape that had emerged for the micromobility industry.

Globally, many cities that were previously not considering shared e-scooters fast-tracked trials as a way of offering a sustainable option and as a way to relieve public transport systems that were under pressure due to social distancing. And through lockdowns and tightened restrictions, we recognized that offering an alternative transport option was not only a great way to support the cities we operate in, but it also allowed us to gain valuable insight into how people will travel post-pandemic.

As a business, Neuron embraced the new landscape in urban mobility while following our value-driven strategy and saw increased ridership of 270% across all markets in 2021. We further expanded our operations to more than two dozen cities across five countries.

As we emerge post-pandemic, micromobility, now embedded within communities across the globe, will continue to transform our cities, reducing our reliance on passenger cars, reviving our high streets and creating better synergies with public transportation.

At Neuron, we recognize that this power to transform cities comes with a responsibility to our riders to ensure that their wise decisions to take a sustainable transport

option is backed up by our commitment to making the company and our operations as sustainable and socially responsible as possible.

We have had some great successes: we were the first provider to use swappable batteries, drastically reducing our environmental footprint; our vertically-integrated approach means we control how our products are built and our supply chain; our modular design allows our devices an extended lifespan of more than five years; and we are prioritising renewable energy to power our devices.

But we won't rest our laurels on our past accomplishments. We are committing to dig deeper - to surpass our current Carbon Neutral status and become Carbon Negative by 2025. And further to this, we have a clear mandate to work closely with all the cities where we operate, the communities, local businesses, the underserved populations, to bring them the best service.

As Neuron's e-scooters and e-bikes reach more cities, and as cities find footing post-pandemic, we intend to double down on our efforts to ensure a more equitable and sustainable way of life. Our ambitious sustainability commitments, work within our supply chain, our ever-adapting safety and accessibility technology, and our increased focus on addressing challenges in the communities we serve will guide our work through 2022 and beyond.

Zachary Wang
CEO, Neuron Mobility

“As Neuron’s e-scooters and e-bikes reach more cities, and as cities find footing post-pandemic, we intend to double down on our efforts to ensure a more equitable and sustainable way of life.”

Zachary Wang
CEO, Neuron Mobility



Our 2021 Highlights

We saw huge growth as a business in 2021, bolstered by our work in communities where we operate.



Environment

- Became **Certified Carbon Neutral** across our global operations
- Launched an ambitious sustainability strategy to guide our design, manufacturing, operations and end-of-life processes
- Launched a **Supplier Code of Conduct** to hold our suppliers to stringent standards
- Signed onto The Climate Pledge, demonstrating our ongoing commitment to our environment

Community Impact

- Ran **108 ScootSafe Events** and tens of thousands of safety briefings
- Built our Reconciliation Action Plan in Australia
- Launched our new e-scooter “brain” with **High Accuracy Location Technology** allowing us to precisely monitor and manage how our devices are used and parked, ensuring proper use of community space.
- Launched Neuron Access to give low-income and vulnerable groups access to transport
- Piloted our Acoustic Vehicle Alerting System, a warning noise to help alert pedestrians that an e-scooter is approaching

Economic Support

- Committed **\$350,000 worth of free rides** for Frontliner and Covid Vaccination programs
- Provided over 5,000 frontline workers with complimentary monthly passes to get them to and from their essential jobs
- Created **136 full time roles** and 300 quality part time roles in the communities where we launched
- **6 out of 10 trips** on Neuron devices resulted in a purchase at a local business, according to our user surveys
- Developed our local employment plan focused on giving opportunities to people from disadvantaged backgrounds

Partnerships

- A trusted partner to cities with **100% renewal rate** in cities where we operate
- Partnered with Killara Foundation to develop cultural sensitivity training for our employees
- Developed safety partnerships with Canada’s Traffic Injury Research Foundation, Southern Alberta Brain Injury Society, Brake New Zealand, Citizens’ Coalition for Safety, and the UK’s Royal Society for the Prevention of Accidents
- Integrated with Google Maps, Citymapper, Moovit and Transit app to promote multimodal transit
- Engaged with visual impairment organisations across our markets including Blind Citizens Australia

Our Focus Areas



Environment

In addition to offering a sustainable transport option, we reduce our business footprint, protecting the environment and helping cities meet their low-carbon goals.

Community

Through partnership and localization, we aim to create a positive social impact on the communities where we operate.

Safety

Through investment in technology, knowledge-share, and engagement we ensure that safety is a guiding principle in our decisions.

Guided by the UN Sustainable Development Goals

Our Sustainability, Diversity and Inclusion, Safety and Access policies are guided by the UN's Sustainable Development Goals. Specifically, our business decisions are guided by the following principles:

<p>7 AFFORDABLE AND CLEAN ENERGY</p>	<p>8 DECENT WORK AND ECONOMIC GROWTH</p>
<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p>10 REDUCED INEQUALITIES</p>
<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>
<p>13 CLIMATE ACTION</p>	<p>17 PARTNERSHIPS FOR THE GOALS</p>

Chapter 2

The Elephant in the Atmosphere

Urban Mobility Today

Getting urban mobility right is crucial for sustainable development, for the future of our cities, our environment, communities, and economies.

The toll that transport takes on our planet has been clear for some time, with estimates that urban transport alone makes up nearly a quarter of global emissions.

Despite the clear data and growing public concern for the health of our environment, there is still a global dependency on private passenger vehicles, leading to high emission rates and causing congestion within our cities. Road vehicles, including cars, trucks, buses and motorbikes, account for nearly three quarters of the greenhouse gas emissions that come from transport¹.



¹ International Energy Agency (2020), Tracking Transport 2020. [Link](#)

Beyond emissions, our urban transport choices are contaminating our air, creating isolation and long commutes that affect mental health, hinder our urban economies, amplify noise pollution, and take up space in our streets that could be returned to the community.





According to C40, around the world, **outdoor air pollution kills around 4.2 million people each year**, and many more suffer from serious related conditions such as premature birth, low birth weight and asthma².

The Canadian government estimates the **socio-economic costs of the health impacts of air pollution in Canada is \$120B per year**. They estimate about **52%³ of Canada's NOx emissions are due to transport and mobile equipment**.

A study from UWE Bristol⁴ shows that **longer commutes lead to decreased job satisfaction and increased risk of mental health issues**, while shorter commutes have the

It is estimated that **more than 70 per cent of environmental noise** (unwanted sound) in urban Australia is due to road traffic⁵.

An estimated **100 million Europeans are affected by harmful levels of noise pollution**, with road traffic by far the largest source in Europe, according to the European Environment Agency⁶.

According to MIT, the **typical passenger car sits idle 95% of the time**, and requires two parking spaces. They estimate that the transition to shared mobility will see an **estimated 86% of parking spaces freed up for better land use**⁷.

Traffic congestion holds back our economies through lost time and productivity. Before London's Congestion Charge Zone was introduced in 2002, **congestion cost the city's economy up to £4 million⁸ a week in time lost**.

Inaccessible transport and car-centric cities perpetuate inequalities in cities, limiting access to opportunity⁹.

² C40 Knowledge Hub (2019) Why is clean air vital for your city's health and prosperity? [Link](#)

³ Health Canada, (2021) Health Impacts of Air Pollution in Canada. [Link](#)

⁴ Chatterjee, et al. (2020) Commuting and wellbeing: a critical overview of the literature with implications for policy and future research, Transport Reviews, 40:1, 5-34. [Link](#)

⁵ Marquez, et al. (2005). Urban freight in Australia: Societal costs and action plans. Australasian Journal of Regional Studies. 11. [Link](#)

⁶ European Environmental Agency, (2017) Road traffic remains the biggest source of noise pollution in Europe. [Link](#)

⁷ MIT Senseable City Lab, (2018) Unparking. [Link](#)

⁸ C40 Knowledge Hub, (2021) Why green and healthy transport modes deliver vast rewards for cities. [Link](#)

⁹ World Resources Institute (2019) "Towards a More Equal City" [Link](#)

Micromobility offers an antidote. Shared e-scooters and e-bikes offer our cities an opportunity, if managed well, to strengthen transit networks, promote inclusive mobility, and help reduce dependency on cars. By offering sustainable, right-sized vehicles and a shared service, micromobility will ultimately help cities meet their net-zero ambitions, reduce the congestion on their streets, see a reduction in noise pollution, give back valuable urban real estate, and improve the quality of urban life.

The cities where we operate are prioritising the movement of people over cars. We are thrilled to be a partner in this mission, at a time when cities need positive change most.



Chapter 3

Changing the Way We Move















Since 2016 Neuron has been helping people move around cities. Our growth is a testament to the need for a safe, sustainable and accessible transport option, and is propelled by cities recognising the power of micromobility to meet this need.












Neuron Around the World







- Australia**
- Adelaide 
- Ballarat 
- Brisbane 
- Bundaberg 
- Canberra 
- Darwin 
- Frankston 
- Hobart 
- Launceston 
- Melbourne 
- Perth 
- Rockhampton 
- Sydney 
- Townsville 

- Canada**
- Calgary 
- Lethbridge 
- Ottawa 
- Red Deer 
- Vernon 

- United Kingdom**
- Newcastle 
- Slough 
- Sunderland 

- South Korea**
- Ansan 
- Anyang 
- Seoul 

- New Zealand**
- Auckland 
- Hamilton 
- Christchurch 
- Dunedin 

Neuron in Numbers

To date

28
cities with
e-scooters



9 cities with e-bikes



More than **10 M** rides

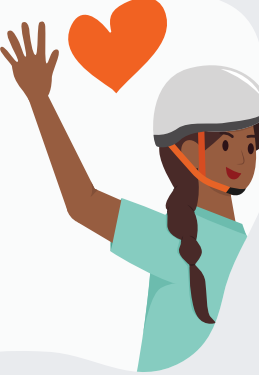
21.5 M
KM travelled

1.4 M
individual riders



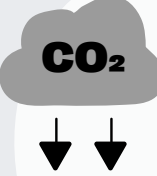
\$350k
worth of rides to
vaccination centers

5,000+
monthly passes
for frontline
health workers



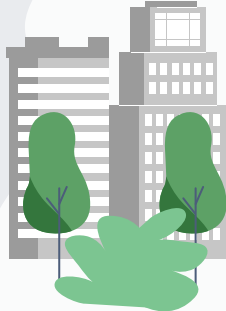
CO₂

1,555
metric tons of CO₂
avoided by avoided
car use



45%
of users globally
report they use
neuron to replace
car trips

6/10
rides support the
local economy



1400+
employment
opportunities
created



3 seconds
for our rapid geofence
detection (RGD) feature to
trigger the e-scooter to
respond to a geofence



Chapter 4

Orange on the Outside, Green on the Inside

We know that transport is responsible for about 25% of GHG emissions¹⁰ and is the main contributor to air pollution in cities. This needs to be addressed. Micromobility, powered by electric devices, can help cities meet their emissions targets.



¹⁰ European Commission, (2022) Transport Emissions. [Link](#)

Our Goal

To provide a sustainable transport alternative, reducing passenger vehicle emissions, congestion and noise pollution by getting cars off the street.

We are incredibly proud of the modal shift that we have facilitated. But getting cars off the road is not enough, we are also committed to ensuring that our services, those that replace cars, are as sustainable as possible.

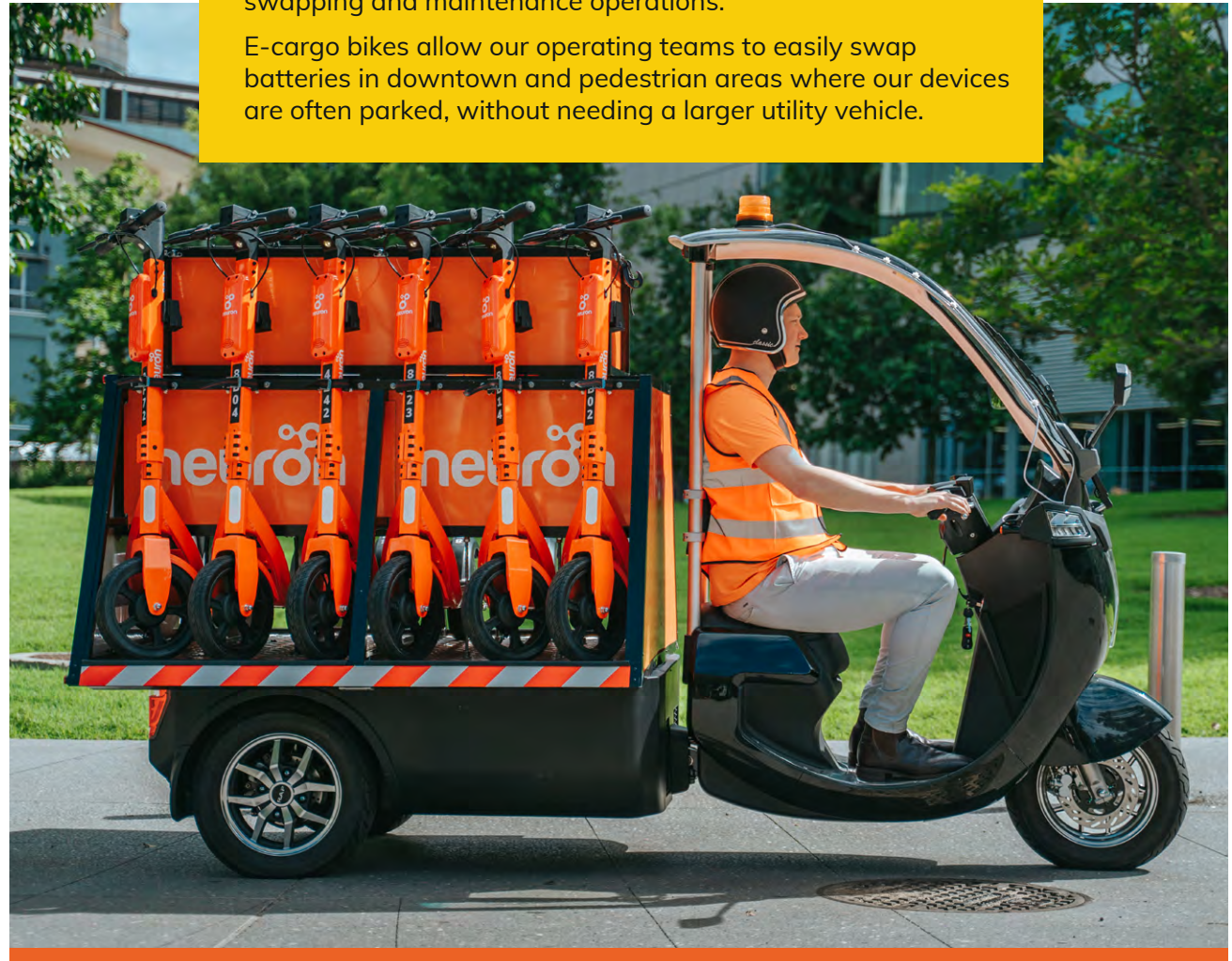
Our current operations are carbon neutral, and while this means that every ride we offer has no net emissions associated with it, we can do better for our cities, our riders and our environment.

In 2021, Neuron set forward an ambitious sustainability strategy, developed in close consultation with our leadership and Neuron teams around the globe. By understanding specific challenges faced in each market, and aligning resources with these gaps as well as leadership objectives, we finished the year with a strong focus on sustainability across all our launched markets and a clear path for soon-to-launch cities.

Cargo E-Bikes to Repower our Fleets

To bring down our footprint and reduce congestion in the cities where we operate, we are piloting a number of electric cargo bikes and smart, small-scale electric vehicles to aid our battery swapping and maintenance operations.

E-cargo bikes allow our operating teams to easily swap batteries in downtown and pedestrian areas where our devices are often parked, without needing a larger utility vehicle.



Carbon Negative by **2025**

This means that **'behind the scenes' we are taking ambitious measures to reduce our emissions footprint as much as possible by addressing emission-intensive processes in our supply chain and manufacturing, our operations and our end-of-life treatment.**



Our Path to 2025

In order to reduce our footprint, our Sustainability Policy commits us to:

Manufacturing

- **Address our manufacturing footprint and use recycled materials within our next generation e-scooters**

We are currently designing our next generation e-scooters, and beyond the advanced technological innovations, we are also committing to using recycled materials for main components.

- **Hold our suppliers to the same high standards we hold ourselves through a Supplier Code of Conduct**

Our **Supplier Code of Conduct** was launched in 2021, ensuring that those we work with recognize and follow the same values as Neuron. Our Code includes labour, business integrity, environmental and health and safety standards that we expect suppliers to abide by.

Operations

- **Power our devices and operations with renewable energy across all of our markets**

We prioritise renewable energy in our operations and power our operations with renewable energy or purchase renewable energy credits for electricity used. Through contracts with Bullfrog Power, PowerShop, Octopus Energy, and others, we have ensured that we are powered responsibly.

- **Deploy fleets with 100% swappable batteries**

We were the first micromobility provider to deploy swappable batteries across our entire fleet, now a sustainability prerequisite in the industry. This allows us a very small operational vehicle footprint, as we rarely have to transport entire devices, further reducing congestion on our city streets. We will continue to iterate on our swappable battery and charging capabilities to further reduce emissions.

- **Implement the use of electric vans and e-cargo bikes across all of our operations**

We are committed to running our operations with electric vehicles, where possible. While we have electric vans in many of our operating cities, as electric vehicles become more ubiquitous we have plans to upgrade our existing fleets. We also make use of electric cargo bikes in downtown areas to ensure we do our part to limit congestion.

End of Life

- **Continue improving our device lifespan through technological advancements**

Our devices are built to last, and our fully modular e-scooter means we can repair and replace parts, rather than replacing the whole e-scooter. This allows us to not only reduce our waste, but keeps our devices on the road for up to five years.

- **Recycle or reuse 100% of our devices, batteries and replacement parts**

Across all of our markets we are partnering with reputable recycling companies that ensure our retired devices, parts and batteries remain in circularity, avoiding use of landfills.

- **Develop innovative second-life programs for our batteries**

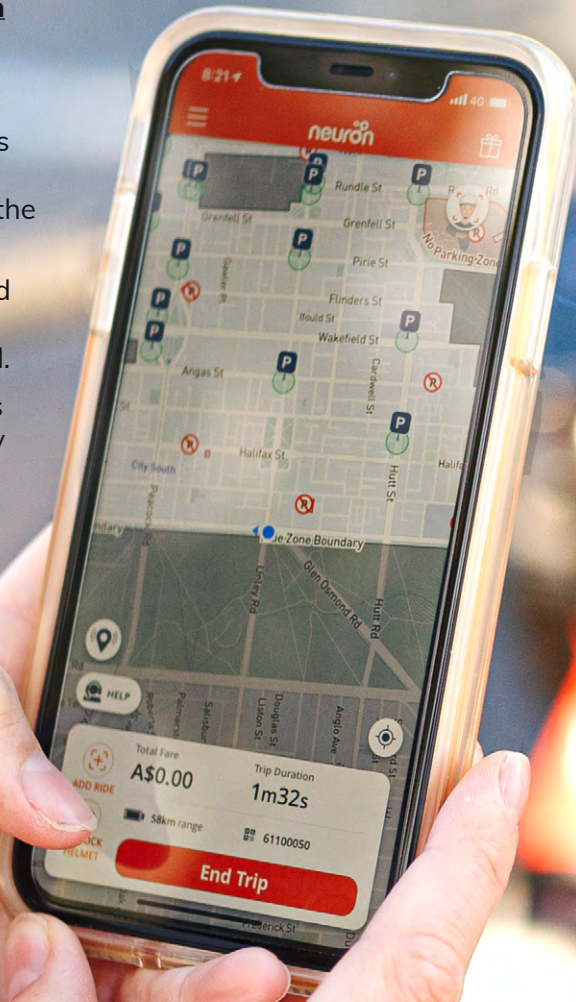
In support of the circular economy, we are piloting programs that ensure any healthy cells that remain after we retire our batteries can be used in second-life applications. We currently have two second-life pilot programmes for our retired batteries, with the hope to scale these globally.

Measuring our Impact

We are committed to understanding and eliminating our carbon footprint, and thus are undertaking stringent carbon reporting exercises through **Carbon Reduction Institute's** NoCO2 Certification program. This includes an annual Lifecycle Analysis for each of our devices in adherence to ISO 14064.1 Greenhouse Gas Reporting Standard, and reporting on Scope 1, 2 and 3 emissions across our markets. We go further than many of our peers by measuring our business footprint, as well as the footprint associated with servicing our devices.

Our global operations are Certified Carbon Neutral and we offset our unavoidable emissions with credits that meet the Gold Standard and Verified Carbon Standard.

We have also joined an ambitious group of businesses promising to meet the Paris Agreement ten years early by signing **the Climate Pledge**.



Amplifying our Best Features

We use high-grade lithium ion batteries in our e-scooters and e-bikes, and while we have found responsible partners to help us recycle these, we know that circularity for lithium batteries has yet to come to full fruition. This is why we are supporting the establishment of Sustainable Lithium Cells Australia, focused on closing the loop in lithium-ion recycling in Australia.

By removing and testing for healthy cells, and reentering them in the market as Graded Second-hand Cells, Sustainable Lithium Cells Australia ensures a second-life for our retired batteries.

This year, we estimate **our recycled cells** will prevent a total of **93 to 470t* of CO2e emissions** from being released in the manufacture of new cells.

Revenue from resell of our healthy cells helps Sustainable Lithium Cells Australia invest in recycling non-functional cells and waste with companies that break them down for raw components to fuel the Circular Lithium Economy.

**Based on figures published by Circular Energy Storage in 2019*
[Link](#).

Global Sustainability in 2021

The Modal Shift: Getting Cars off the Road

In order to meet the environmental promise of shared micromobility, we are focused on replacing car trips. Our user surveys help us to understand our replacement rates, and we are proud that globally about 45% of rides on Neuron devices replace rides that would otherwise be taken by passenger cars.

While e-scooters and e-bikes are convenient ways for urbanites to reach their destinations, Neuron services also help cities to recognise the potential of their public transportation services, by providing a critical first/last mile solution. We know that if communities lack a convenient and affordable way to access public transportation, they tend to opt for a personal vehicle, adding to congestion and air pollution that troubles cities today. Data shows us that public transport hubs are popular destinations for our devices across all our markets.



¹¹ Based on an estimated 160g/km CO₂ emissions from a typical diesel car in Australia as represented in: Stasinopoulos P, Shiwakoti N, McDonald SV (2016) Life-cycle greenhouse gas emissions of electric and conventional vehicles.

¹² Based on Natural Resources Canada (2022), Greenhouse Gas Equivalencies Calculator. [Link](#)

¹³ Based on a recorded .005g/km PM2.5 from a diesel vehicle in 2021 as represented in: US Department of Transport, National Transport Statistics, [Link](#)

¹⁴ Based on recorded 0.6 g/km NOx emissions from diesel vehicles as represented in: OECD (2017) Real-word Vehicle Emissions Discussion Paper No. 2017-06



We are proud to have replaced 3 million car journeys in 2021

Chapter 5

Creating Social Impact

Neuron measures its success by how well we deliver a service that is accessible and brings benefit to the communities in which we operate.



Spreading Awareness Through Simulation

Recognising the challenges that our devices can potentially pose to certain community groups, including those with disabilities, Neuron partnered with Access for All to spread awareness on best practices in e-scooter mindfulness.

Together, Access for All and Neuron ran a ScootSafe event at Otago Polytechnic in Dunedin, New Zealand. The event had obstacle courses set up to show what it was like navigating the city in a wheelchair or with a vision impairment. By demonstrating to our riders the different experiences on roads and footpaths, we aim to spur greater awareness and ensure more compliant e-scooter behaviour.

Equity & Accessibility

Neuron believes that investing in the cities and communities we operate in is critical to our success. We work closely with the city officials and the existing transport network to understand specific pain points where a shared transport solution can have a strong social impact. Our teams on the ground focus on ensuring that we give communities access to transport networks and opportunities that may have been out of their reach.

The Neuron Access Programme is our global initiative, designed to adjust our service to meet the diverse needs and social realities in our operating cities. We work with each city to identify the communities that would benefit from concession passes and work to offer discounted or free rides. We recognize that the intersectionality of identities in every city results in different systemic barriers to mobility options. Thus, we strive to provide equitable access to our service, and enable as many people as possible to reap the benefits of micromobility, especially those that have been hardest hit by COVID-19.



Ensuring Accessibility through Partnerships

To realise our vision of not just operating in a city but being part of the community, Neuron invests in meaningful partnerships with community-based organisations, businesses and events that help us to reach people from all walks of life.



Our Work with Disability Advocacy Groups

We recognise and acknowledge that people with disabilities are experts in their own experience and the value that they can offer in sharing their experiences. We consult with disability advocacy groups in our markets to ensure our services promote accessible streets and that our operations are sensitive to the needs of all road and path users. Based on feedback and simulations, we refine our operations and procedures specific to local conditions and combine technology and education to ensure our rider behaviour is reflective of our values.

In New Zealand, Neuron engages with Access for All, a disability advocacy group, to facilitate events that simulate navigating the city in a wheelchair or for someone with a vision impairment, encouraging our riders and operators to be mindful of their surroundings when riding and parking our devices. In Korea, alongside road safety and disability groups, we developed a set of guidelines for riders to promote “barrier-free roads” and protect the right to safe sidewalks for all pedestrians, especially for disabled and vulnerable path users.

Consulting the Visually Impaired

In each market where we operate, we engage with organisations that represent the interests of the visually impaired community. We understand that our devices pose a new challenge to this community, so we see it as critically important to engage with these groups to identify and deliver technology and operational changes to limit the impact on people with disabilities.

In Canada, Neuron has engaged stakeholders representing the needs of the visually impaired in order to ensure needs are being met, specific to the situation in Canadian cities. Through consultation processes Neuron has included raised letter stickers on many of our e-scooters to ensure that any visually impaired individual can contact our support team with ease. We are the first and only operator to have trialled an Acoustic Vehicle Alert System (AVAS) in Canada. The trial ran in 3 phases from August to November 2021 in Ottawa.

In Australia, our partnership with Blind Citizens Australia (BCA), a national organisation representing people with vision impairment allows us the opportunity to present and talk directly with their membership base, providing us invaluable feedback. Together, Neuron and BCA will promote knowledge-share around road and path safety for the visually impaired.

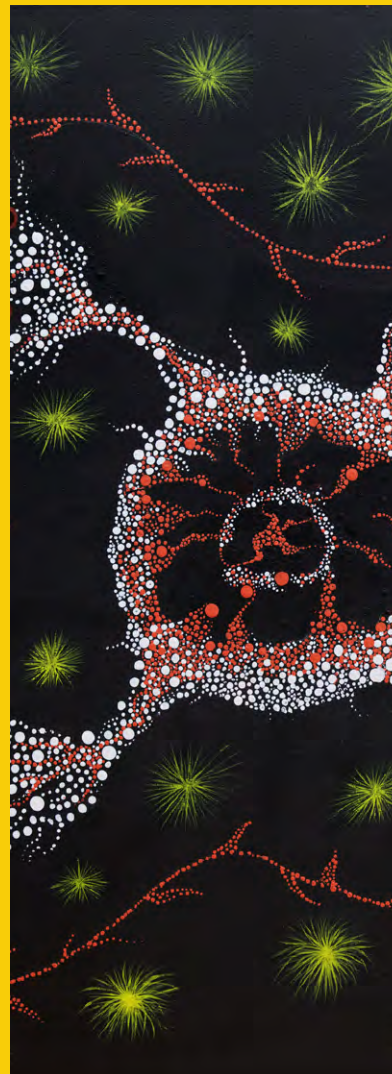
Our Disability Advisory Board

We have recently put together a Disability Advisory Board, bringing together safety partners, disability groups and other important stakeholders to examine how to further promote safety for e-scooter users, in particular for disability groups. The Board is currently representing the views of a diverse range of disabled people in the UK, and we have plans to designate a similar advisory group later this year across our other markets, including Canada.

The Board's objectives are to:

- Provide a forum for disability and safety groups to be consulted and involved in the development of new micromobility technology
- Help represent the views of the diverse range of disabled people in the UK
- Help Neuron and the micromobility sector understand the effect technological advances have on disability groups
- Promote safe and responsible riding

Members of the Disability Advisory Board include Newcastle City Council, the Thomas Pocklington Trust, the Royal Society for the Prevention of Accidents (RoSPA), Motability, Sunderland City Council, and the Centre for Accessible Environments.



Links of Kinship by Denise Quall commissioned for Reconciliation Action Plan

Part of Australia's Journey to Reconciliation

Neuron is at the start of our reconciliation journey and recently, Neuron's Reflect RAP was formally endorsed by **Reconciliation Australia**.

Our reconciliation journey will focus on educating ourselves and our team to build a deeper understanding and respect of Aboriginal and Torres Strait Islander cultures and histories.

We have started investing in meaningful partnerships that provide opportunities for employment, and prioritise using suppliers that support Aboriginal and Torres Strait Islander peoples. To date, more than 25 of our senior leaders across Australia and the company have undertaken awareness training, supported by our partner, the Killara Foundation.

“One of the greatest impacts an organisation can have on Reconciliation is to create an even deeper culturally safe environment for their Aboriginal & Torres Strait Islander Employees to not only conduct their work but to prosper within their workplaces and at home.

Our proud partnership and more importantly our genuine friendship with Neuron Mobility will pave the way for a **safer cultural environment** for not only Neuron but to inspire other organisations around Australia and the world to do more to meaningfully recognise their nations Indigenous peoples, so that one day all of us will have the **equal chance to achieve great things.**”

Mitch Brown, Director, Strategy, Killara Foundation

We are hopeful that through this RAP and our work with Killara Foundation we can take more meaningful and tangible steps towards the reconciliation of the nation.

Creating Local Jobs and Employing Respectfully

We take pride in the quality and the quantity of the local jobs that we offer, and create on average, one job for every ten micromobility devices deployed.

We believe in training each employee, and we do not use gig-economy workers. All our staff and contractors are paid hourly rates and are entitled to benefits such as superannuation, both as permanent or casual staff.



A Living Wage Employer

Neuron is proud to offer salaries that surpass the national and provincial living wage levels, across all of our markets. We are certified Living Wage Employers in the United Kingdom, British Columbia, Ontario and New Zealand, with forthcoming certifications in our other markets.

Our locally hired staff are trained methodically through the Neuron Training Program and provided with opportunities for extra training from vocational training institutions.



One job for every ten micromobility devices deployed

Meaningful Employment Opportunities

Neuron has a national partnership with Workskil Australia, a not-for-profit organisation that places Indigenous, long-term unemployed, people with disabilities and parolees in gainful employment. In partnership with Workskil Australia, Councils and local advocacy groups, we created the 'Hiring to Advantage' program to create opportunities for people which:

- Improve overall employment outcomes for communities through training and upskilling
- Are based on equal opportunity principles.
- Are paid in line with Australian award rates
- Promote the employment of Aboriginal staff

To-date, we have employed 12 people through the Workskil program, and look forward to many more joining our team.

In Our Selection of Service Providers

Across all our markets we endeavour to select service providers that complement the values that we hold dear. Beyond our requirements set out in our Supplier Code of Conduct and our promise to source locally where possible, we look for service providers that have a further positive impact on the community.

As an example, we work with Abilities Group in New Zealand, a non-profit dedicated to enriching the lives of people with disabilities through meaningful work. Abilities Group provide us with a responsible and community-run recycling program for our retired devices, and we are proud to work with them.

In Adelaide, we partner with Linkage SA, a social enterprise that provides innovative working environments for those with disabilities. Linkage SA supports our recycling efforts in Adelaide, while creating valuable employment opportunities.



Charging a New Career Path: Apprenticeships with Neuron

In Newcastle, as part of our commitment to helping the local economy and providing new opportunities, Neuron has been running an apprenticeship scheme offering opportunities for young people to work and study simultaneously.

Starting in 2021, apprentices joined our team to learn new skills that cut across sustainable engineering, logistics and transport planning, working and learning from experts to set them up for a future career in micromobility.

The apprenticeships offer a blend of traditional and high-tech skills, and allow for a focus on sustainability - a skill that will become increasingly important as the UK and other markets look to a net-zero future.

We look forward to their growth with Neuron, and seeing more apprentice programs across our markets in 2022.

Diversity Drives Us

We recognize the unique challenges that each of the communities we operate face, and work with the local councils and organisations to recognize vulnerable groups (e.g. those returning to work after injury, or from disadvantaged groups), to prioritise employment.

Our vision is to build an organisation that is inclusive of people from diverse backgrounds. We are committed to ensuring that everyone, regardless of their background, gender, race, colour, nationality, ethnic or national origin, ancestry, citizenship, religion, belief, age, physical or mental disability, medical condition, sexual orientation, veteran status, marital status, genetic information or any other category, benefit equally from our practices.

The strength of our technology, service and business is a direct reflection of our team's diversity. Diversity within our team helps us to understand the varied backgrounds and experiences of our riders, and therefore the ability to build the best technology and service to meet these diverse needs.

Neuron's Gender Equity Statement guides our commitment to being a fair employer promoting gender equality and equity across our business. Neuron's commitment means that all genders are able to access opportunities, resources and benefits.

We are committed to increasing the number of women in our workforce.

Our Team in 2021



1400+

employment Opportunities

30%

female full-time employees



30

members of senior leadership undertook cultural competency training in 2021



20+

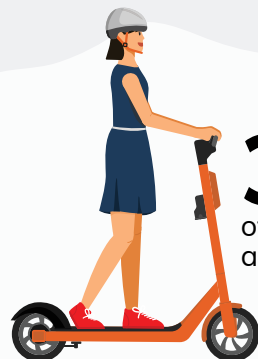
nationalities represented



22

employed through a work placement scheme

Our Riders in 2021*



37%

of our riders are female



24%

of riders globally are over 45 years of age

*Based on user surveys

Chapter 6

A Partner to Cities

Transport networks are the veins of the city, connecting people to the opportunities that urban life allows. As we emerge from a global pandemic, cities are in vital need of support in reviving their economies, revigorating their downtowns, boosting their small businesses, and deepening their culture.

Neuron continues to play an important role as cities recover from the pandemic.



Extending What's Local

Neuron's services extend the 'local' area. Neighbourhoods that were 2-3km away are now accessible without a car. This not only decreases car use but provides a much needed, larger customer base for businesses, allowing riders to do more, see more and spend more.

Our research has found on average 6 out of 10 rides on Neuron devices result in a purchase at a local business. An additional 14% of trips would not have happened at all if our devices were not available, demonstrating the real economic impact micromobility has on rebounding economies.

A Boost for Business

Neighbourhood Connect

Local businesses were hard hit by the pandemic. In an effort to give back, we launched our Neighbourhood Connect Program to support businesses by connecting our riders with local shops, venues and attractions, via our app. By arranging a designated parking spot near businesses, we help bring our riders to their door, offer a chance to promote their company, and learn about their customers through analytics.

Piloted first in Brisbane in 2020 to help local businesses during the height of the pandemic, our first six months saw more than 18,000 users interact with businesses, with more than 2,000 rides ending at a featured businesses.

Part of the Business Community

We take an active role in the business communities where we operate, understanding that we can promote responsible business practices by lending our voice to organisations, chambers and tourism groups. As a member of organisations like Canadian Business for Social Responsibility, we promote accountability and share best practices in sustainability and social equity. In Newcastle, we engage with Newcastle Gateshead to promote accessibility and economic benefit to businesses within the city.

We are members of the Chambers of Commerce in Sydney, Townsville, Melbourne and Canberra in Australia, and members of the Chambers of Commerce in Vernon, Calgary and Red Deer in Canada. Through these chambers, we better understand how we can serve the cities we operate in, and do our part to improve the quality of life.

Providing Needed COVID Relief

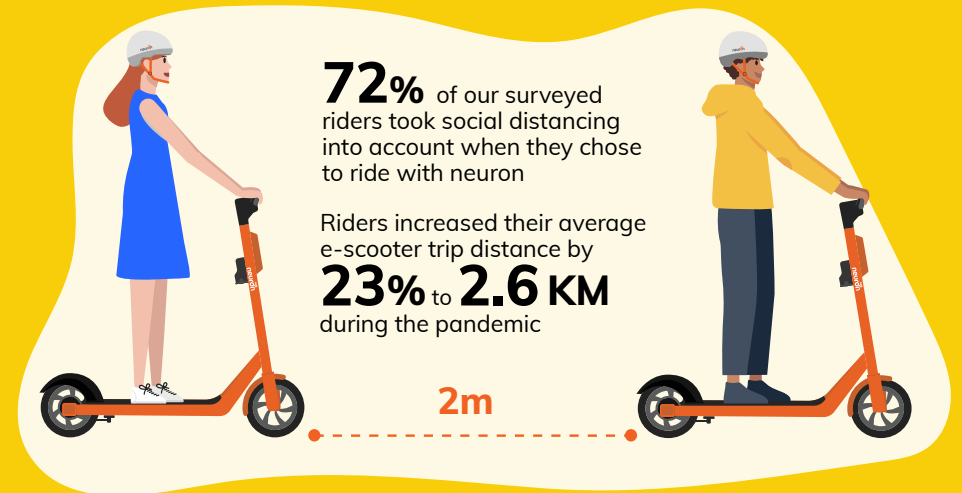
The last few years have devastated our cities, shaken our economies and overwhelmed our healthcare workers. As a new entrant to cities, we wanted to demonstrate our commitment to providing a safe, socially-distanced, and accessible transport option through lock-downs and as cases peaked.

While other operators halted operations, Neuron stepped in to assure access to healthcare workers. Neuron provided free rides to more than **5,000 indispensable healthcare workers** across the UK, Canada, New Zealand and Australia to access their jobs.

Neuron pledged a further **\$350,000** worth of rides to get the public to and from vaccination centres.

Meanwhile, we introduced a number of safety features within our operations, including:

- Dedicated 24/7 Ground Patrol Teams to sanitise devices
- Spoken and In-app reminders on COVID-19 prevention best practices
- Provision of sanitizers on devices to sanitise hands and helmets
- Distribution of Neuron care packages including sanitisers, masks, and wet wipes from a central booth and through the postal service



Helping Reactivate the Community

Cities attract residents and visitors because of their convenience and vibrancy, and in recovering from the pandemic, we want to do our part to help restore the much loved characteristics of urban life. Through partnerships with events, festivals, organisations and city initiatives we help bring people out to reinvigorate the city.

Neuron has supported major events like the Darwin Festival, Calgary Stampede, Adelaide's Fringe Festival and the North Australian Festival of Arts in Townsville. Through work like this we are able to provide cities with sustainable transport options that solve parking issues, elevate the event experience and increase people's willingness to interact with the city once again.

As university campuses came alive after the summer, Neuron supported students' socially distant transport by providing discounted rates and monthly passes. At the same time, Neuron launched an interactive Student Safe Riding Campaign during Freshers fairs in Newcastle, Northumbria and Sunderland Universities to ensure students ride responsibly.

E-Scooters Drive Spending by Tourists

Neuron worked closely with Griffith University, Transport and Main Roads Queensland, and Townsville City Council on researching links between e-scooters and tourism spending in Townsville. The survey collected shopping and travel patterns of e-scooter users who were visitors and purchased a multi-day Neuron pass as well as the patterns of 80 Townsville residents who purchased the same passes.

Key findings include:

- The more avid e-scooter users (the top third by km travelled) **spent 41% more per day** than those in the bottom third of use.
- The avid tourist users completed a median of **11 e-scooter trips**, covering **nearly 26km each**.
- **69% of users had never ridden an e-scooter before**, but 91% reported the vehicles were easy to use.

A New Lease for Newcastle

Neuron entered Newcastle city centre in February 2021 to much excitement from the community. By November the trial's success was evident with an extension of the service area to serve parts of the east and west ends, greatly increasing the operating area and covering areas less accessible to public transport.

During the initial stages of the pandemic, Neuron offered free commuter rides as well as free passes for NHS and Emergency Service staff across Newcastle.

Safety of riders in Newcastle has been a top priority, and efforts to promote safe riding has been successful, with riders in Newcastle and Sunderland found to be the most safety conscious in the UK. A study with Imperial College London shows that in Newcastle and Sunderland, 94 per cent of those surveyed believe that it is important for e-scooter riders to wear a helmet, compared to the UK as a whole with 83 per cent¹⁵.

The e-scooters have been widely praised by users in Newcastle, with 88% of riders believing that Neuron's services have had a positive impact in the city.

Neuron in Newcastle 2021

- **460,000+ miles** travelled
- **37 tonnes** CO₂ avoided
- **55% of trips** were integrated with another form of transport
- **24/7** availability of e-scooters at transport hubs prioritized
- **37% of car journeys** replaced were over 5 miles
- **12% of riders** wouldn't have travelled at all had the e-scooter not been there
- A fleet of **zero emission** vans support the e-scooters - all powered by renewable energy
- **1,400 free passes** for NHS and Emergency Services workers
- **1,800 free commuter rides** (5am-9am)

¹⁵ Brogan, C. (2022) "E-scooter simulations highlight head injury risk to riders from falls". [Link](#)

Promoting Multimodal Transit

As a multimodal provider ourselves, we believe that the solution to congestion is providing accessible options for both personal and mass transit. This belief shapes our work with cities in providing a complementary service to existing transit networks, helping bridge the first-last mile inconvenience that tends to lead to private car use.

We use on-the-ground teams, alongside analytics to understand where there are gaps in public transport infrastructure, and proactively place our devices in these areas. This allows us to connect thousands of users to public transit networks, thereby connecting them to opportunities.

We engage with platforms that facilitate multimodal trips, including integrating with platforms such as Moovit, Google Maps, Citymapper and Transit app. By offering our services within these platforms, we further ensure we promote a modal shift and connect riders to public transport.



Reinvigorating Calgary

Neuron entered Calgary in June 2021 and our first season was a resounding success, seeing more than 620,000 km travelled in our 2021 season.

As an example of our work within all aspects of the community, we were thrilled to offer employment opportunities, creating a team of over 110 Calgarians of which 8 are full-time (102 seasonal), 16 are highly-skilled STEM professionals, and 66 are part-time.

Beyond fostering employment opportunities, Neuron delivered a measurable contribution to the economic recovery of Calgary in the wake of the pandemic. A recent survey of riders in Calgary found that 80% use Neuron to visit restaurants, cafes, and to explore the city, with 62% of rides ending in a purchase from a local vendor.

Neuron provided free monthly passes for all healthcare and frontline workers during the pandemic, along with a 50% discount for low-income customers.

Neuron in Calgary 2021

- **620,000+ kms** travelled
- **100+ jobs** created
- **10 Scootsafe events** held with **300 helmets** given free to riders
- **62% of rides** started or ended with a purchase
- **50% of rides** replaced a car trip
- **48 tonnes** of CO₂ avoided

Chapter 7

Safety in our DNA

The safety of riders and the wider community is paramount at Neuron. We take a full business approach, from the design and engineering of our devices, to our work with safety partners, to our efforts to spread awareness of safe riding.



Innovation that Protects People

Investment in safety innovation has been a driving force behind Neuron's success and has allowed us to answer the specific safety needs of each community where we operate. Our e-scooters are designed in-house and specifically for shared operations, and have a constant pipeline of new safety features we are developing and testing.



Our safety technology currently being trialed includes:



Helmet Lock

We provide app-controlled helmet locks on our devices, significantly increasing helmet availability and usage while almost completely eliminating the nuisance of 'helmet litter'. We were the first operator to launch a helmet lock.



Voice Guidance

Our world's first Voice Guidance feature provides safety instructions to the rider but also advises pedestrians on how to contact Neuron's customer service. This has extended to include multiple languages.



2-Speed Mode

Our e-scooters feature two speeds, a slower speed for new riders as they get comfortable with the device. Our devices also start up at a slower speed for safety purposes.



Topple Detection

Our vehicles, across many of our cities, have a multitude of sensors onboard (such as a 6-axis gyroscope) to detect if they are upright or toppled. Our operation team is alerted if a scooter is toppled.



Emergency Button

This function allows a rider to quickly call for emergency services in case of an accident.



'Follow my Ride'

This function, developed on user feedback, allows users to share their live location on a trip with selected family and friends.

Helmet Safety Awareness Week

In 2021 we held our first annual global safety campaign dedicated to promoting the importance of wearing a helmet. Across all our markets, we teamed up with our national safety partners, Councils and the local law enforcement to promote helmet use and safe riding.

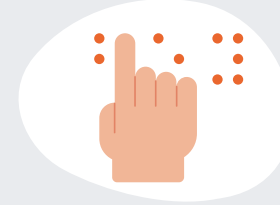
Our Helmet Safety Awareness Week resulted in:

- **17** ScootSafe events across our cities
- A **3% increase** in voluntary helmet wearing, amounting to **tens of thousands of safer rides** in November and December 2021
- More than **50 Safety Ambassadors** took to the street
- Over **7,000 respondents** in Australia, New Zealand, the UK and Canada responded to our safety poll
- **9 out of 10 respondents** say it is “important” for e-scooter riders to wear helmets
- **100% increase** in use of our ‘helmet selfie’ feature during the campaign period compared to previous month



Hyper-Accurate Geofencing

Our hyper-accurate, hyper-responsive geofences can respond in under one second.



Braille Instructions

Our devices are fitted with braille stickers, providing instructions to contact our customer service.



Upright Parking Enforcement

The onboard gyroscope also ensures the N3 is upright when the user attempts to end their ride.



Cognitive Reaction Game

To combat drink riding, Neuron introduced a cognitive reaction game which tests the speed of user reaction to changes on the screen, proxying the ability to navigate on the road.



High Accuracy Location Technology (HALT)

This allows us to detect an e-scooter’s location up to 10 centimetres.



Extra-wide Footboard

Our N3 e-scooter features an extra-wide footboard for stability.



Spreading Awareness and Creating Safer Streets

Reaching our riders and our communities is integral to ensuring the safety of our services. We work closely with the city councils, local organisations and media to spread awareness of how to ride our devices safely and how to protect pedestrians.

Our ScootSafe Campaigns and Training

Our 'ScootSafe' campaigns are organised regularly in every city where we operate. This involves deploying 'Safety Ambassadors' to engage with riders and the general public to educate and reassure them.

Neuron champions safe riding through our ScootSafe Campaign and Training. With Neuron's own Safety Ambassadors deployed in each city, we host ScootSafe events on launch days and throughout the year to engage with our riders and train them on safe and responsible riding. Our Safety Ambassadors incentivize responsible riding by providing those that attend our safety briefing with free credits for future rides.

Our 2021 ScootSafe Campaign

108
ScootSafe
events

1,000s
of face-to-face
safety briefings
conducted at
our ScootSafe
events

325+
Safety
Ambassadors
on the street
to support
riders

Protecting our Riders - Third Party Insurance

Neuron was the first operator in Australia and New Zealand to provide riders with third party insurance. This protects them as well as the wider community. This extended cover complements our existing significant public liability insurance, along with the company's personal accident insurance, giving riders added peace of mind in case of an incident during their ride. The provision of third party rider liability insurance goes well beyond what is required by law and further demonstrates our commitment to operating in the safest, most responsible, way.

Road Safety Week

In conjunction with UN Global Road Safety Week (17-23 May), we organised a series of #ScootSafe demonstrations across all markets that we operate in. By partnering with councils, the local police or community safety ambassadors, attendees had the opportunity to complete safety briefings or courses in a safe and socially-distanced manner.

We also launched Safe Rider Quizzes tailored for each and every one of our cities. These quizzes promoted safe riding and educated our riders of the local riding rules. They were available on the Neuron app, and free e-scooter credits were awarded to riders for completing them.

Working with Safety Partners

In Canada, Neuron **launched a national safety partnership** with the Traffic Injury Research Foundation (TIRF), which will lead the way in best practices for shared e-scooter programmes and safety across the country. Together we are co-developing campaigns and activities that will promote rider safety in Canada.

In the UK, Neuron has partnered with safety charity the Royal Society for the Prevention of Accidents (RoSPA) and city councils across Newcastle, Slough and Sunderland to promote the local riding rules and top safety tips. Together Neuron and RoSPA developed a safety course to equip riders with the knowledge and confidence to ride our e-scooters.

Across Australia, we work with Australian Road Safety Foundation (ARSF), the country's leading non-profit organisation at the heart of road accident prevention. ARSF supports Neuron as a nation-wide safety partner, leading the way in best practice for e-scooter safety in Australia. Together we co-develop safety guidelines, materials and training to better educate riders and road users.

In New Zealand, our nation-wide partnership with Brake New Zealand helps us to lead the way in best practice for shared e-scooter safety, providing riders with safety guidelines, materials and training.

A New Safety Brain for our Devices

Neuron's commitment to technology leadership saw the launch of a global tech trial to test our new 'e-scooter brain' innovation. This new technology provides Neuron and the cities managing shared e-scooter programs unprecedented control of how the vehicles are ridden and parked. The new technology includes:

- **High Accuracy Location Technology (HALT)** – This allows us to detect an e-scooter's location up to 10 centimetres, making it at least 50 times more accurate than the average GPS-based location system
- **Rapid Geofence Detection** – This triggers an e-scooter's response to a geofence in 0.3 seconds (as opposed to the usual 6-12 seconds)
- **Dangerous Riding Detection** – We are introducing a range of smart sensors to counteract unsafe riding habits in real-time

The trial is still ongoing, and selected features will be rolled out across Neuron's fleet internationally over the next 12 months.

Trialling New Technology: A 'Warning Noise'

In an effort to improve our safety and accessibility features, a Canadian-first trial is underway, designed to test the impact of an always-on Warning Noise in e-scooters to help alert pedestrians that an e-scooter is approaching. The Acoustic Vehicle Alerting System (AVAS) is particularly targeted toward those with vision loss, and aims to further support a safe pedestrian environment and riding experience for all.

We worked closely with accessibility groups and the vision loss community to develop this trial, which took place in the City of Ottawa. As part of the 2021 testing phase, we held numerous demonstrations with the City and members of the vision loss community and surveyed riders, pedestrians, and the wider community to determine effectiveness.

For a Better Urban Future

Our cities, environment, wellbeing, economy and safety depend on us getting urban mobility right. By encouraging a modal shift away from cars, taking accountability and action within our own footprint and ensuring that we support the communities that we operate in, Neuron is proud to help cities meet their ambitious goals.



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