

Sustainable access for a thriving future: Auckland's Transport Emissions Reduction Pathway

File No.: CP2022/11289

Te take mō te pūrongo

Purpose of the report

1. To seek adoption of Auckland's Transport Emissions Reduction Pathway.

Whakarāpopototanga matua

Executive summary

2. The Intergovernmental Panel on Climate Change (IPCC) is clear; global warming has to be limited to 1.5 degrees Celsius to avoid the most catastrophic impacts of global warming, and this is only possible with ambitious greenhouse gas emissions cuts.
3. Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan was adopted by council in July 2020 (ECC/2020/29). It is a 1.5 °C compliant plan that requires Auckland's emissions to be reduced by 50% by 2030 and to reach net zero emissions by 2050. Changing the way people and goods move around the region is critical to achieving this goal, as transport is the largest source of Auckland's emissions, accounting for over 40% of the total.
4. As a condition of its endorsement of the Regional Land Transport Plan (RLTP) 2021-31 (PLA/2021/61) in June 2021, the Planning Committee directed that a Transport Emissions Reduction Pathway (TERP) be developed. This was deemed necessary as the RLTP investment programme only resulted in minor reductions in transport emissions by 2030, which is not in line with the requirements of Te Tāruke-ā-Tāwhiri.
5. The TERP sets out a pathway to reduce Auckland's transport emissions by 64% (relative to 2016) to around 1.75 mega tonnes of CO₂e by 2030. The 64% figure originated in Te Tāruke-ā-Tāwhiri as part of its modelled pathway to a halving of overall emissions by 2030. The TERP sets formal strategic direction only for the council group, but requires all parts of the transport sector to play their part.
6. Achieving transport emissions reductions of this magnitude by 2030 requires every available lever to be pulled as hard as is credibly possible. Mode shift, electric vehicle uptake, reduction in car trips and every other lever are all stretched to the limit of what is possible in eight years. For this reason, only one pathway is presented.
7. Because it is such a crucial part of reducing emissions, there has to be a rapid and complete transformation of the transport system – it has to fundamentally change.
8. While the challenge is huge, the solutions to rapidly decarbonise the transport sector already exist and will help to achieve broader wellbeing goals. Many other cities around the world have taken actions similar to those proposed in the TERP as they transform their transport systems to be more affordable, energy-efficient and safer for everyone.
9. Taken individually most of the actions included in the pathway are not radical, they are commonplace in a great many jurisdictions around the world. Once implemented, transport in Auckland would be similar to many other cities where much more travel by sustainable modes - and far less car-dependency - is already the norm. Nevertheless, the scale of the task ahead should not be underestimated, especially given Auckland's relatively low starting point in terms of public and active transport mode share and the historically low density, dispersed urban form.
10. Over 70% of Auckland's transport emissions come from light vehicles such as cars, vans and utes, with over half of car trips being less than 6km. Many of these short to medium-distance car trips are well-suited to shifting to sustainable modes such as walking, cycling, micromobility and public transport. The TERP requires that these modes are made as

convenient, attractive and affordable for as many people as possible in order to facilitate this shift.

11. Cars will still be used, but the fleet will need to be much more emissions efficient. More people using space-efficient and sustainable modes means that freight, deliveries and people who still need to drive should experience more reliable travel times.
12. The TERP sets out eleven areas for transformation. Each transformation area includes several strategic directions and detailed actions for implementation. These represent an integrated set of actions that work as a package – a selective implementation approach will not achieve the emissions goal.
13. The TERP further considers what needs to be done to create a supportive transport planning system and how barriers can be addressed, as well as what Auckland Council and Auckland Transport will do to integrate the TERP into the transport planning system.
14. The pathway has been developed, and will be implemented, in the wider context of increasing government action on climate change. While national-level targets are less ambitious than Auckland's pathway, the direction and actions set out in the TERP and the government's Emissions Reduction Plan (ERP) are well-aligned. Auckland is better placed than other regions to contribute to the government's transport goals through accelerated mode shift. Auckland can also more easily develop housing and jobs around locations with good public transport, cycling and walking. Partnership with government is critical to achieve shared outcomes.
15. The TERP is a strategic document setting out what needs to be true in order to reduce Auckland's transport emissions by 64% (relative to 2016). While it does not, in itself, require any budgetary allocation, the implementation of the TERP will require a reconsideration of budgets and priorities associated with the Auckland Transport Alignment Project (ATAP), Regional Land Transport Plan (RLTP) and Long-term Plan (LTP).
16. Auckland Transport will develop an implementation programme to deliver the TERP actions, review the alignment of existing processes with the pathway's outcomes, and ensure those outcomes are embedded in future prioritisation and decision-making processes. Work to implement some of the actions in the pathway, however, can start immediately and does not need to wait for decisions to be taken through these processes.
17. The implementation of the pathway will require robust engagement with mana whenua, mataawaka, communities and local boards.
18. Auckland's current car-dependent system is inherently inequitable, as it is challenging to navigate for those without access to a car. More than one third of Aucklanders cannot drive, while others are forced into car ownership even when they cannot afford to do so. The TERP will rebalance the transport system to provide more affordable and sustainable transport choices for people. Some specific actions in the TERP, such as congestion pricing, will require additional mitigation to avoid further inequities.
19. Ultimately, the transition to a low-emissions and climate-resilient transport future is a pathway towards improved wellbeing for all Aucklanders. The actions contained in the TERP would mean more affordable transport choices, better access to opportunities particularly for those who are underserved by a car-dependent system, safer streets that promote independent travel for all ages and abilities, increased levels of healthy physical activity, improved air quality and reduced noise pollution, more congestion-free options, and more effective use of limited public funds.
20. The scale of the emissions reduction challenge is enormous, but so too is the significance of the moment. So much will need to change and only eight years – less than 100 months – remain to make it happen. To meet the target, Auckland cannot rely on incremental change; it needs transformation.

Ngā tūhunga Recommendation/s

That the Environment and Climate Change Committee:

- a) note that Auckland Council declared a climate emergency in 2019 and adopted Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan in 2020, which included a modelled 64% reduction in transport emissions as part of a pathway to halving overall emissions by 2030.
- b) adopt the Transport Emissions Reduction Pathway, as set out in Attachment B of the agenda report, to give effect to Te Tāruke-ā-Tāwhiri's required 64% reduction in transport emissions.
- c) note the Auckland Transport Board endorsed the Transport Emissions Reduction Pathway in August 2022 as shown in Attachment D of the agenda report.
- d) instruct Auckland Council and Auckland Transport to embed implementation of the Transport Emissions Reduction Pathway through all of their activities, including future updates to key transport planning and funding processes such as the Auckland Transport Alignment Project and the Regional Land Transport Plan, and land use policy such as the Future Development Strategy and the Auckland Unitary Plan.
- e) note that the actions identified in the Transport Emissions Reduction Pathway will deliver significant co-benefits across multiple outcomes including safety, equity, access to opportunities and environmental sustainability.
- f) note that the Transport Emissions Reduction Pathway requires not only a transformation in Auckland's transport system, but also a willingness from Aucklanders to take up the travel options that the pathway requires.
- g) note that Auckland Transport will develop an implementation programme to respond to the Transport Emissions Reduction Pathway, which will ensure it is embedded in Auckland Transport's key accountability measures, planning and prioritisation processes, and that the programme will be provided to council for noting and reporting progress.
- h) request that for the implementation programme referenced in clause g), Auckland Transport:
 - i) includes a supporting mana whenua and mataawaka engagement plan
 - ii) seeks the endorsement of the Environment and Climate Change Committee (or its equivalent)
 - iii) reports progress on the delivery of the implementation programme to the Environment and Climate Change Committee (or its equivalent).
- i) note that Auckland Council and Auckland Transport will develop a proposed governance and monitoring framework to oversee the implementation of the TERP, for approval by the Environment and Climate Change Committee (or its equivalent) in early 2023.
- j) instruct Auckland Council and Auckland Transport to engage fully with mana whenua and mataawaka throughout all aspects of the implementation of the Transport Emissions Reduction Pathway.
- k) instruct Auckland Council and Auckland Transport to immediately commence implementation of actions earmarked for delivery in the first two years of the Transport Emissions Reduction Pathway, including advocating to central government for supporting action.

Horopaki] Context

Recap

21. Auckland Council unanimously adopted Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan in July 2020 (ECC/2020/29), including a 64% reduction in transport emissions (against 2016 levels) modelled as part of the target of halving overall emissions by 2030 and transitioning to net zero emissions by 2050. The plan received very high public support, with a record number of supporting submissions received from Māori, Pasifika and rangatahi/young people.

22. In June 2021 the Planning Committee endorsed the RLTP 2021-31 (PLA/2021/61). As a condition of its endorsement the committee directed Auckland Council and Auckland Transport staff to jointly develop a TERP. This work was deemed necessary as the RLTP investment programme only resulted in minor reductions in transport emissions by 2030, which is not in line with the requirements of Te Tāruke-ā-Tāwhiri.
23. The remit of the TERP is to set out what needs to be true in order to achieve a 64% reduction in transport emissions by 2030.
24. The proposed approach to the TERP's development was approved by the Environment and Climate Change Committee in August 2021 (ECC/2021/32). The Committee also established a Transport Emissions Reference Group to provide direction on the development of the TERP. There are nine members in the reference group including three councillors, two representatives from the Tāmaki Makaurau Mana Whenua Forum, one member of the Independent Māori Statutory Board, and three Auckland Transport board members. The reference group met regularly on the TERP and provided direction on the development of the pathway and final documents.
25. In December 2021 the Environment and Climate Change Committee received a progress update on the TERP and approved a range of key interventions for early implementation (ECC/2021/45).
26. Auckland Transport's board endorsed the TERP at its meeting on 9 August 2022. The board's resolutions are attached (**Attachment D**)

Global and national context

27. The climate is changing. The world is getting warmer because of rising greenhouse gas emissions. Rising temperatures will affect crops, speed up sea level rise, and cause more frequent and more extreme weather events, both here and overseas. To lessen these global risks, cities need to reduce emissions as fast as possible.
28. The target to halve regional emissions by 2030 and the decarbonisation pathway set out in Te Tāruke-ā-Tāwhiri (including the modelled 64% reduction in transport emissions) were endorsed by the C40 cities network. Achieving these goals is necessary to keep global warming below 1.5° Celsius to avoid catastrophic climate change.
29. Ongoing membership of C40 is dependent on Auckland's performance in the network's periodic evaluation of its climate ambition and its contribution to global climate action. Not meeting the commitments made under C40 would potentially mean Auckland losing its membership. This carries a significant reputational risk in a world where business increasingly seeks to trade and invest in green economies, and cities that are not seen as taking genuine climate action risk losing their competitive advantage.
30. The TERP also functions in the wider context of increasing government action on climate change. New Zealand is a signatory to the Paris Agreement. The government has committed to the country achieving net zero emissions by 2050 through the passing of the Climate Change Response (Zero Carbon) Act 2019. There is cross-party support for the Act and the three emissions budgets released by the government, which limit how much New Zealand can emit over each of the three periods up to 2035. This means government's commitment to climate action will continue even if the government changes.
31. The government's Emissions Reduction Plan (ERP), which describes how the government will deliver on the first emissions budget, was released in May 2022. It sets out a pathway to an approximate 41 percent reduction (on 2019 levels) in New Zealand's carbon emissions by 2035. Transport is expected to play a crucial role in meeting this target.
32. While the national-level targets are less ambitious than those in Auckland's pathway, the directions and actions are well-aligned. Both the ERP and the TERP identify high levels of mode shift to public and active transport as the most important factor in reducing transport emissions. This is crucial as partnership between government and council is fundamental to transforming the transport system.

33. The government expects Auckland to play a disproportionately large role in contributing to national climate goals. This will be reflected in the regional targets government agrees with council. Given its scale Auckland is well placed to make a disproportionate contribution (relative to other regions) by accelerating mode shift through both service improvements and the development of housing and jobs in places with good walking, cycling and public transport connections. The regional Vehicle Kilometres Travelled (VKT) reduction target for Auckland will likely lessen, but not fully close, the gap between the national target and the TERP.

Tātaritanga me ngā tohutohu Analysis and advice

Transport Emissions Reduction Pathway

34. The TERP provides a pathway for the whole transport sector to achieve a 64% reduction in transport emissions by 2030. It also provides formal direction that, if adopted, Auckland Council and Auckland Transport must give effect to through all of their activities, including updates of key planning and funding documents such as ATAP and the RLTP, and land use policy such as the Future Development Strategy.
35. A summary document has also been created to assist with general communication and understanding of the transition ahead (**Attachment A**). The summary sets out why a reduction in transport emissions is urgently required, what the TERP is, the essence of the pathway and what that means, what the next steps for council and Auckland Transport are, and some things Aucklanders can do to reduce their own transport emissions.
36. The primary TERP document describes the pathway in full, including the scale of transformation required, the high-level interventions required, and the changes to the transport planning system needed to facilitate those interventions (**Attachment B**). This document is aimed at agencies and partners such as Waka Kotahi, Ministry of Transport and others.
37. Auckland's transport system is crucial to its response to climate change. It is the single largest source of Auckland's emissions, accounting for just over 40% of the total. Over 70% of Auckland's transport emissions comes from light vehicles (e.g., cars, SUVs and utes) (Figure 1). Growth in light vehicles VKT is the primary reason Auckland's transport emissions have increased by 86% since 1990. Today, Aucklanders have one of the highest transport emissions per capita in the world.

Transport emissions profile

Estimated by mode 2019 (MtCO₂e)

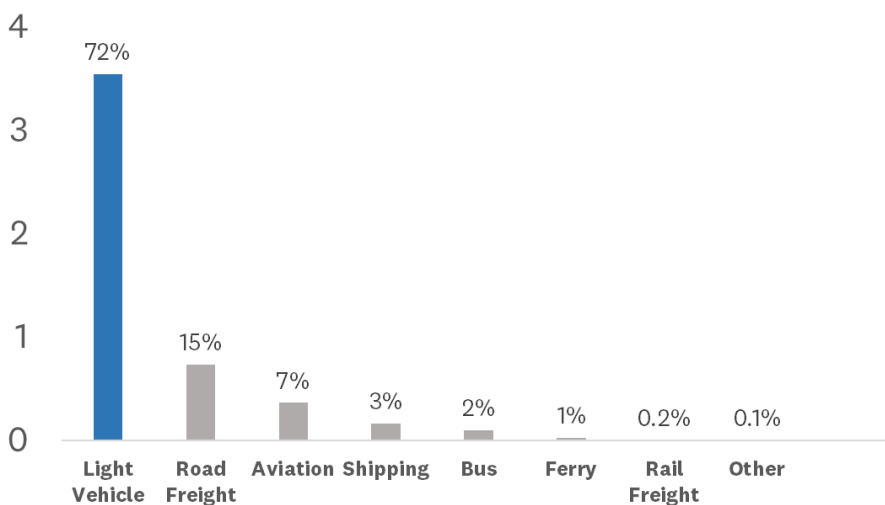


Figure 1 – Auckland's transport emissions profile

38. Because it is such a crucial part of reducing emissions, there has to be a rapid and complete transformation of the transport system – it has to fundamentally change.
39. The TERP is required because current investment plans, combined with confirmed government policies that incentivise the uptake of lower emissions vehicles and more efficient fuel mixes, are forecast to produce only a small reduction in Auckland’s transport emissions by 2030 – around 6%, approximately one-tenth of what is required. This is shown in Figure 2 as Baseline. The Business-as-Usual line shows that with population growth and no planned changes to the transport system, emissions would continue to rise.

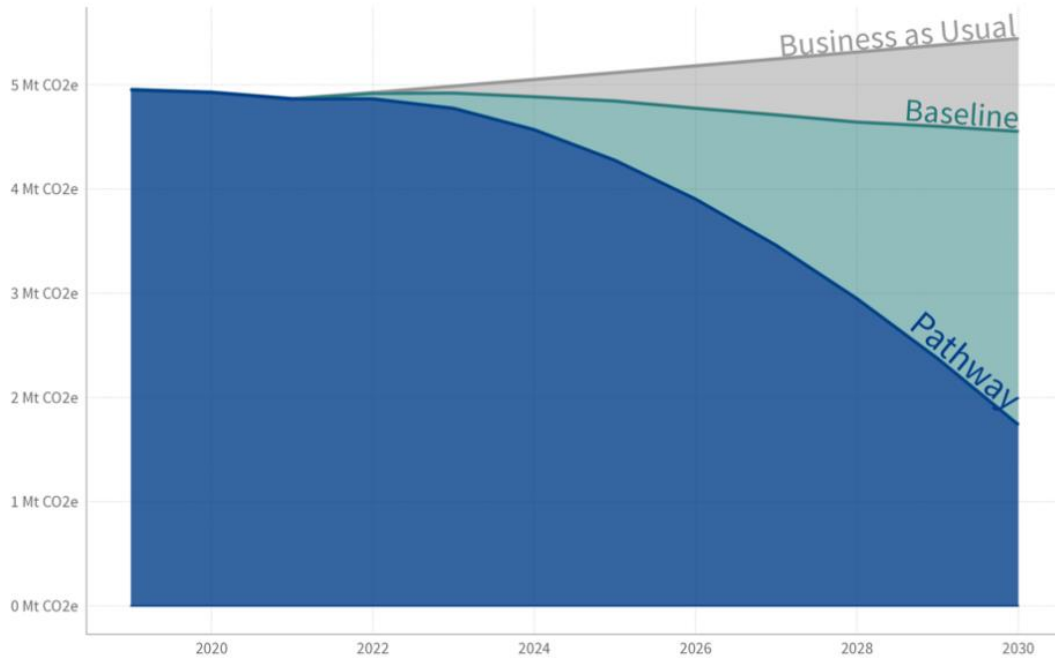


Figure 2 – Pathway scenarios (2019 – 2030)

40. The Pathway line in Figure 2 shows the enormous scale of change required to bridge the gap between the baseline and a 64% reduction in transport emissions, to around 1.75 mega tonnes of CO₂e in 2030.
41. Achieving a two thirds reduction in transport emissions in the timeframes available will be incredibly challenging. The transformation required means that:
- Light vehicle VKT needs to reduce by half, requiring comprehensive alternatives to private car travel. Around half of all car trips are less than 6km in length and around half of all short trips (less than 2.5km) are taken by car. It is these trips that represent the greatest opportunity for mode shift.
 - A huge increase in the uptake of walking, cycling, micromobility and public transport is required to replace trips no longer taken by car.
 - Cars will still have a place in the system, but they must be more efficient, with a higher proportion of the fleet being zero and low emissions.
 - Trips need to be shorter. This means land use must change so that people can more easily access services and amenities close to where they are.

42. The pathway requires an ambitious uptake of active modes and public transport by distance by 2030. Taken together, this represents around 45 percent of distance travelled by sustainable transport modes. The changes are summarised in the table below.

Mode	Trip share		Mode share by distance	
	2019	2030	2019	2030
Walking	11%	22%	1%	3%
Cycling and micromobility	1%	17%	1%	13%
Public transport	4%	23%	4%	29%

43. The pathway also requires a high uptake of EVs (32% of total VKT share by 2030) and significant reductions in freight (45% by 2030), aviation (50% by 2030) and shipping (50% by 2030) emissions.
44. Figure 3 below compares the distribution of the changes by transport mode in the current state (2019) against the pathway (2030).

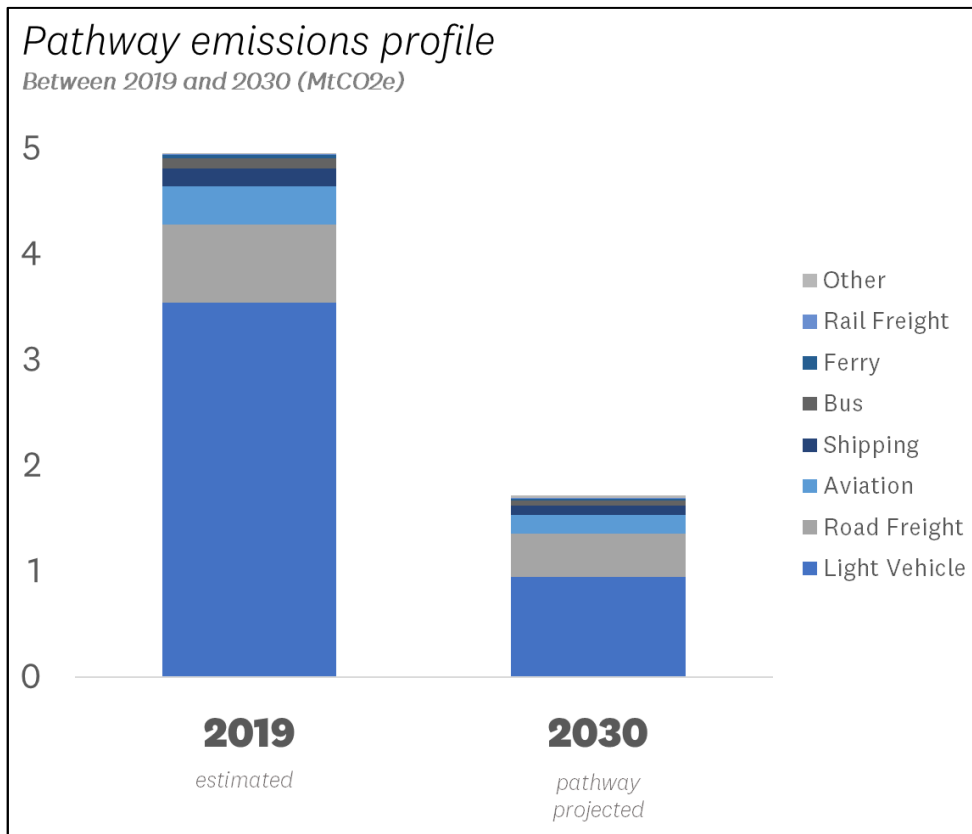


Figure 3: Pathway emissions profile

45. Combinations of system settings were tested to assess their impacts on Auckland’s 2030 emissions profile. It is clear that every single system lever must be pulled as hard as credibly possible. For this reason, only one pathway is presented. Two other pathways were assessed – an even higher take up of electric vehicles (EVs) or a more rapid transformation of Auckland’s urban form, but neither were deemed possible by 2030.
46. EV supply and high upfront costs were seen as a significant constraint. Furthermore, an EV-focused pathway will not achieve other desired outcomes for Auckland, including safer streets, more congestion-free options, and better use of existing resources.

The transformation required

47. Eleven areas for transformation are described in the TERP. Each transformation area includes several strategic directions and detailed actions for implementation. These changes represent an integrated set of actions that work as a package – they are not a ‘pick and mix’ that can be selectively implemented.
48. The first 10 transformation areas are grouped in the same way as the government’s ERP to better align central and local government efforts. They focus on the system changes needed to enable low-emissions methods of moving people and goods across the region. The 11th transformation area underpins all other transformation areas and focuses on empowering Aucklanders to make sustainable transport choices. Below is a summary of the 11 transformation areas.

Reduce reliance on cars and support people to walk, cycle and use public transport
<p>1. Supercharge walking and cycling</p> <p>The pathway requires a ten-fold increase in distance travelled via walking, cycling and micromobility by 2030. Replacing short car trips with these modes and better connecting them with public transport can help to cut emissions quickly while improving public health, lowering transport costs and making it easier for children in particular to move around independently.</p>
<p>2. Massively increase public transport patronage</p> <p>The pathway requires a five to six-fold increase in bus, ferry and train patronage by 2030. This equates to roughly one trip per person per day, similar to the levels achieved in Auckland in the first half of the twentieth century. This requires significant increases in the frequency, reach and reliability across the public transport network to enable more Aucklanders to travel to far more destinations throughout the region with ease.</p>
<p>3. Prioritise and resource sustainable transport</p> <p>The pathway requires that sustainable modes of transport such as walking, cycling and public transport are prioritised in all aspects of the transport system, including funding, policy and planning, project implementation, maintenance and enforcement. Rebalancing the transport system to make it more attractive for Aucklanders to choose sustainable modes of transport is essential. This also supports more reliable movement of freight and service vehicles, and those who still need to drive.</p>
<p>4. Reduce travel where possible and appropriate</p> <p>The pathway requires that Aucklanders reduce avoidable trips where possible, for example by going online for services and working from home some days instead of commuting to employment. Emissions-intensive air travel should also be avoided where possible and long-term strategies of regional rail developed. New tools such as congestion pricing can help make the transport system more efficient, while generating revenue that can be reinvested into improving sustainable transport options.</p>
<p>5. Safe, low-traffic neighbourhoods for people</p> <p>The pathway requires that Aucklanders can live, work and play locally, reducing the need for long trips. This means neighbourhoods in existing and new areas should be walkable, have a range of services and facilities that people can easily access via sustainable transport modes, and be traffic calmed to improve liveability and reduce rat-running. Public facilities should be located in areas easily accessible by walking, cycling and public transport.</p>
<p>6. Build up not out</p> <p>The pathway requires that the average length of individual trips taken by Aucklanders reduces by 5% by 2030. This means supporting people to live closer to the things they need to get to by addressing Auckland’s urban sprawl and enabling much more good quality development to occur in areas with high accessibility, instead of continued expansion into</p>

greenfield and rural areas to accommodate future growth. Greenfield developments that are underway must prioritise sustainable transport options to shape climate-positive travel behaviour.

Rapidly adopt low-emissions vehicles

7. Electrify private vehicles

The pathway requires that 32% of Auckland’s light vehicle fleet is electric by 2030. This is a faster uptake of EVs compared to the government’s goal for 30% of the national light vehicle fleet to be zero emissions by 2035. This means greater incentives from central government are needed to support the uptake of these modes, focusing on high-use vehicles such as commercial vehicles, taxis and shared fleets. It is also important to ensure that increasing demand for electricity is met through renewable energy.

8. Enable new transport devices

The pathway requires that there is a greater uptake of low-carbon, space-efficient personal mobility devices and vehicles, such as e-bikes, e-scooters and e-mopeds, by 2030. These devices are powerful enough to replace car trips (allowing some households to reduce the number of cars they own) and are more affordable than EVs. These devices also pair well with public transport, if supporting infrastructure is provided. Due to their speed, it is important that there is safe separation from pedestrians to avoid conflict.

Begin work now to decarbonise heavy transport and freight

9. Low emissions public transport

The pathway requires that the majority of the public transport fleet is low-emissions by 2030. This means fully electrifying the rail network, purchasing only low-emissions buses as the fleet expands, and accelerating the decarbonisation of the ferry fleet.

10. Efficient freight and services

The pathway requires that freight emissions are halved by 2030, relative to 2019 levels. 95% of Auckland’s freight emissions are from road freight, with most of them taking place within the region on light commercial vehicles and small-to-medium sized trucks. These vehicles need cleaner fuels and tools to make their journeys are efficient as possible. Auckland also needs low-emissions zones and multi-modal freight hubs to support low-emissions last-mile delivery.

Empower Aucklanders to make sustainable transport choices

11. Empower Aucklanders to make sustainable transport choices

The pathway requires behaviour change and collective action to take advantage of the emissions reduction potential of the transformed transport system. Aucklanders need to feel empowered by the changes that are happening in the city and have a good understanding of the sustainable transport options available to them. This will help to translate the high-level of public support for climate action into support for local changes and localised solutions. To enable this, Auckland Council and Auckland Transport need to ensure its engagement methods are fit-for-purpose to ensure meaningful engagement with Māori and communities on the transport changes that are needed.

49. The transformation areas were chosen based on their effectiveness in reducing emissions while improving multiple wellbeing outcomes. Their development was informed by a body of international evidence that demonstrates their impacts. **Attachment C** provides a summary of the global evidence base for the TERP and is arranged by transformation area. Evidence from more than two dozen cities was examined including plans, strategies and empirical evidence derived from actual on the ground metrics and experience of delivering the kinds of

actions set out in TERP. This work deliberately included a range of diverse cities in terms of urban form, socio-cultural characteristics and existing emissions profile.

50. The transformation areas were further informed by discussions with mana whenua, local boards, stakeholders and subject matter experts.

Broader wellbeing impacts of pathway

51. The transition to a low-emissions and climate-resilient transport future is a pathway towards improved wellbeing for all Aucklanders. By improving sustainable transport options available to Aucklanders, electrifying the light vehicle fleet, and decarbonising heavy transport and freight, the actions in the TERP would result in noticeably safer streets that promote independent travel for all ages and abilities, more affordable transport choices, increased levels of healthy physical activity, improved air quality and reduced noise pollution, less time stuck in traffic and more stress-free ways of travelling, and more effective use of existing infrastructure and limited funds.
52. Climate action also has strong public support. Over 90% of Aucklanders that made submissions supported the ambition of Te Tāruke-ā-Tāwhiri. More than two thirds of submissions from Aucklanders supported the Climate Action Targeted Rate to combat the climate crisis. Public submissions on the RLTP overwhelmingly support greater priority for actions that reduce transport emissions. Climate action is also important to ensure Auckland retains its liveability and attractiveness as a place where talent wants to live.
53. These co-benefits are a departure from the high cost of a car-dependent transport system, including the social cost of premature deaths and hospitalisation from transport-related air pollution¹, road crashes², and physical inactivity³. Car dependency, coupled with Auckland's projected growth, puts Auckland on a path towards widespread congestion.

Addressing the inequities of the current transport system

54. Auckland's car-dependent system is inherently inequitable, as it is most useful to those with access to a car and challenging to navigate for those without. More than a third of Aucklanders cannot drive, and are dependent on walking, cycling, public transport, taxis and lifts from others. When travel choice is poor, those without access to cars have to contend with longer and more frustrating journeys, or do not make the trip at all, even for critical trips such as visits to the doctor. Research shows that groups such as Māori, Pasifika, LGBTQI+, low-income people, disabled people, older people, women and children tend to experience the most transport disadvantage.⁴
55. A car-dependent system also means some people are forced into car ownership in order to participate in society, even when they cannot afford to do so. On average, low-income households in New Zealand spend 28% of their budget on transport, compared to 8% for high-income households. A more balanced transport system that provides safe, affordable and sustainable transport choices will insulate people from the high cost of running and maintaining a motorised vehicle, while ensuring a good level of access.
56. The TERP includes actions that will make sustainable transport options more affordable and accessible to Aucklanders, such as incentives to increase the uptake of e-bikes, fair fares, and low-cost shared EV trials. Other equity-related actions include addressing people's safety and security concerns while travelling, implementing universal design guidelines, and better understanding the travel needs and barriers of Auckland's diverse populations.

¹ Ministry for the Environment (2022). Health and air pollution in New Zealand 2016 (HAPINZ 3.0). Available at: <https://environment.govt.nz/publications/health-and-air-pollution-in-new-zealand-2016-findings-and-implications/>

² Ministry for Transport (2020). Social cost of road crashes and injuries 2020 update. Available at: https://www.transport.govt.nz/assets/Uploads/Social-Cost-of-Road-Crashes-and-Injuries-2020_final.pdf

³ Healthy Auckland Together (2019). The Healthy Auckland Scorecard. Wellbeing report on the health of Aucklanders. Available at: <https://healthyaucklandtogether.org.nz/assets/Uploads/Resources/HAT-scorecard-2019.pdf>

⁴ Ministry of Transport (2020). Equity in Auckland's transport system. Available at: https://www.transport.govt.nz/assets/Uploads/Report/NZ3060_Equity_in_Auckland_Transport_System.pdf

57. Some specific actions in the TERP, such as congestion pricing, require additional mitigation to avoid further inequities. This means, for example, staging the delivery of a congestion pricing scheme to focus on areas that are most accessible by public transport, cycling and walking, as well as ring-fencing revenue generated back into sustainable transport modes, particularly in areas that are without viable alternatives to driving.
58. As an immediate action, Auckland Council and Auckland Transport staff, with input from partners and stakeholders, will jointly develop an equity assessment framework to assess the equity impacts of TERP initiatives and inform decision-making and prioritisation.

Implementing the Pathway

59. Given the scale and pace of change required, implementation of the TERP must commence immediately upon its adoption. The TERP sets out three sets of actions:
 - actions to deliver the pathway itself (organised around the 11 transformation areas). These are sequenced so that actions in the first two years can generally be taken without significant additional funding, though some re-prioritisation of where existing funding is allocated may be required.
 - actions to create a more supportive transport system, including the way in which funding is determined, allocated and prioritised. Partnership between the Auckland Council group and government at both political and official levels is required to deliver these actions.
 - actions to integrate the TERP into the existing transport planning system while longer-term reform is undertaken. This means TERP outcomes such as emissions reduction, mode shift and equity must drive upcoming updates to documents such as ATAP, the RLTP and the Future Development Strategy, in a way that maximises multiple co-benefits instead of treating these outcomes as competing trade-offs.
60. Partnership with government is key to all aspects of implementation. An important aspect of this will be the jointly developed VKT Reduction Plan for Auckland. The development of this plan was signalled as an action in the ERP and will be an important factor in driving project selection and funding allocation decisions.
61. Auckland Transport will prepare an implementation programme to deliver the pathway that will include a review of the alignment of existing processes with the outcomes of the pathway, and ensure these outcomes are embedded in their prioritisation and decision-making processes. Progress on the implementation programme will be reported back to the committee in 2023.

Governance and monitoring framework

62. A bespoke framework to oversee implementation of TERP is required. Further work is needed on any potential governance arrangements to support this oversight.
63. Staff envisage that an implementation focussed governance group may be required. The Transport Emissions Reference Group, with its wide representation from elected members, mana whenua, Independent Māori Statutory Board and Auckland Transport Board, provides a useful model for this.
64. Governance arrangements should also enable subject matter experts to have input into the implementation of TERP. This may include expertise related to sustainable transport, urban development, mātauranga Māori, health and equity. Community support for the TERP is crucial to its success and the governance arrangements should accommodate the ability for iwi, community leaders and other disciplines to provide input.
65. A robust and credible monitoring framework is also required as soon as possible to track implementation and ensure accountability to elected members, Māori and communities.
66. Further advice, and a proposed governance, monitoring, accountability and reporting framework, will be reported to the Environment and Climate Change Committee (or its equivalent) post the 2022 local government elections.

Tauākī whakaaweawe āhuarangi

Climate impact statement

67. There have been concerted local and central government efforts towards reducing emissions in recent years. Auckland Council unanimously declared a climate emergency in 2019 and endorsed Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan in 2020. Central government added decarbonisation to its Government Policy Statement on Land Transport (GPS) in 2021 and released the first ERP in 2022, which sets the national direction for government's climate action for the next 15 years.
68. Yet, Auckland's transport emissions have continued to rise – the region is not remotely on-track to meeting its climate goals. Adding to the challenge is Auckland's uneven recovery from the Covid-19 pandemic. Car traffic volumes are back to 2019 levels, but public transport patronage is still much lower than 2019. Continuing down the path of incremental improvements will not achieve the transformational change that Auckland requires.
69. Achieving the scale of emissions reduction required in the timeframes available (less than 100 months) will be extremely challenging. However, unlike other sectors where reductions in emissions are needed, reducing transport emissions does not depend on technological breakthroughs; the key solutions are already known and they simply need to be implemented.
70. Moreover, Auckland is not alone. Around the world, it is cities that are leading the way in addressing the climate crisis. More than 2,000 other jurisdictions have also declared a climate emergency. Along with Auckland, these cities are now tasked with developing emissions reduction pathways to give effect to their climate declarations and commitments. A great many of these cities have already implemented, or are implementing, actions very similar to those included in Auckland's pathway. Some of these are highlighted in the TERP evidence report (**Attachment C**).
71. Many of the actions in the pathway will not only achieve and sustain transport emissions reductions, but they will also improve quality of life for all Aucklanders, including future generations.

Ngā whakaaweawe me ngā tirohanga a te rōpū Kaunihera Council group impacts and views

72. Auckland Council funds Auckland Transport and directs it to act consistently with its strategies, plans and policies, including the TERP. The council also appoints the board of Auckland Transport and sets expectations via the Letter of Expectations process.
73. The Auckland Transport Board was represented in the Transport Emissions Reference Group, which provided staff with oversight and direction on the TERP.
74. The Auckland Transport Board endorsed the TERP in August 2022 (**Attachment D**). Auckland Transport's endorsement of the TERP is further supported by several matters that, in reality, relate not only to Auckland Transport but equally to Auckland Council. For example:
 - that the reduction in emissions rely on the willingness of people in Auckland to change travel habits and take up the travel choices set out in the TERP;
 - the resources needed to develop the transport system required by the pathway;
 - the transformation in policies, priorities, funding frameworks and regulations that will be necessary to support the transport system required by the pathway.
75. Implementation of the TERP will require concerted action from multiple agencies. Auckland Transport will be particularly critical to the success of implementation given its key role in relation to many aspects of Auckland's transport network.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe Local impacts and local board views

76. The TERP is a strategic and region wide plan. Its actions are high-level and are not area-specific. However, implementation of the pathway will have significant impacts at the local

level. Local boards have an important role to play in advocating for specific improvements that support their communities to transition to low carbon travel, and to communicate the changes required in a way that resonates with local communities.

77. Local boards have consistently been supportive of the need to reduce Auckland's transport emissions through the provision of sustainable transport choices and land use planning that supports low-carbon transport.
78. Local boards were briefed in October and November 2021 on the TERP, and local board chairs were invited to a series of committee workshops in 2021 and 2022. A report on the TERP was also submitted to local boards for formal feedback in April 2022.
79. Key feedback themes from local boards on the TERP are:
 - Strong support for more frequent, reliable and affordable public transport, including more frequent feeder buses and safer access to public transport stations and stops. Public transport fares should be reduced or made free.
 - Strong support for safer and connected walkways, cycleways and greenways, and programmes that support the uptake of active modes.
 - To achieve the TERP's targets, more effort is needed to address parts of Auckland that experience enormous growth pressures but remain highly car-dependent due to the poor quality and availability of sustainable transport options.
 - The transition to a low-carbon transport future needs to be equitable. A specific concern is that congestion pricing could further disadvantage communities, particularly people on low incomes, and needs to be supported by improved alternatives to travelling by car.
 - Subsidies and incentives are needed to address the high upfront costs of e-bikes and EVs. The lack of e-bike and EV charging provision needs to be addressed.
80. Successful implementation of the TERP at a local level will require Auckland Transport to urgently review how it currently designs, consults on, funds and implements minor capital works, as recommended in the Independent Panel's review of Auckland Council's Council Controlled Organisations.

Tauākī whakaaweawe Māori

Māori impact statement

81. The development of the TERP builds on the partnership between Auckland Council and the Tāmaki Makaurau Mana Whenua Forum (the Forum) in developing Te Tāruke-ā-Tāwhiri. A Tiriti-based partnership approach strengthens Auckland's climate response and enables Auckland to benefit from the unique perspectives of te ao Māori.
82. The TERP's Māori engagement process included analysis of previous feedback from mana whenua and mataawaka on relevant strategic plans, engagement with the Tāmaki Makaurau Mana Whenua Forum, and reaching out to the chairs of the 19 mana whenua entities in Tāmaki Makaurau and representatives of mataawaka organisations. Staff also received direction from the Independent Māori Statutory Board and Forum representatives in the Transport Emissions Reference Group.
83. In general, there is strong support from mana whenua and mataawaka for Auckland Council and Auckland Transport to deliver climate action, in partnership with Māori. Key feedback themes are:
 - There is strong support for partnership between council and mana whenua to tackle the climate crisis and achieve shared priorities.
 - Responding to Māori whānau and eliciting behaviour change will require a different outlook that is centred around te ao Māori.
 - Support for mana whenua-led response to climate change as outlined in Te Tāruke-ā-Tāwhiri.
 - Support targeted funds for iwi to enable mana motuhake when it comes to climate action.

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- Māori have complex travel patterns and tend to live in a range of localities, from urban to rural. This means there cannot be a one-size-fits-all approach.
 - Support for a more equitable transport system that aims to increase access, choice and affordability, particularly for lower income groups and those living outside of the urban core.
84. The feedback received has been incorporated into the TERP. The TERP includes the following principles to guide implementation:
- i. Mana whenua exercise mana motuhake
 - ii. Mātauranga Māori is embedded in our climate response
 - iii. Māori rights and interests are protected
 - iv. Mana whenua and mataawaka shape their own climate response.
85. The TERP also sets the direction for future transport plans to be developed in partnership with mana whenua, as well as for greater support and funding for Māori-led low carbon transport solutions, recognising that mana whenua and mataawaka are already taking action in this area.
86. Implementation of the TERP needs robust engagement with Māori. This requires that council and Auckland Transport improve current Māori engagement processes. The TERP implementation programme will be supported by a mana whenua and mataawaka engagement plan and appropriate resourcing.
87. Strong Māori representation in the governance of TERP implementation is critical to enable a Tiriti-based partnership and ensure that the implementation of the TERP incorporates te ao Māori. The Transport Emissions Reference Group, which included representatives from the Independent Māori Statutory Board and the Forum, provides a useful model for the proposed implementation-focused governance arrangements.
88. TERP governance arrangements should also enable input from iwi and community leaders, as well as subject matter experts on topics such as mātauranga Māori, health and equity.
89. Staff will seek the approval of the Environment and Climate Change Committee (which includes representatives from the Independent Māori Statutory Board) for a TERP implementation governance framework after the 2022 local elections.

Ngā ritenga ā-pūtea

Financial implications

90. The TERP is a strategic document and does not, in itself, seek any budgetary allocation. Crucially, the implementation of the TERP will require a reconsideration of budgets and priorities associated with the Auckland Transport Alignment Project (ATAP), Regional Land Transport Plan (RLTP) and Long-term Plan (LTP).
91. Systemic change, such as the TERP, requires a corresponding systemic change in the funding landscape, where programmes and projects are no longer viewed on traditional merits alone, but on how they contribute to a new paradigm. The TERP requires that emissions reductions goals, and associated wider benefits such as safety for all modes, must now be at the forefront of funding decisions.

92. The transformation required to achieve a 64% reduction in transport emissions means funding for sustainable transport modes needs to increase significantly. This means reallocating existing funding from projects that deliver poor emissions reduction outcomes, and identifying new funding sources, such as the government's Climate Emergency Responds Fund (CERF)⁵. The opportunity cost of such reallocation will be a consideration.
93. The costs of TERP are mostly upfront expenses, ramping up from year two to 2030. These costs would most likely be borne by Auckland Council and central government, and take the form of capital and operating expenditure (resequencing and new). Benefits of the TERP likely arise further down the track and over time, building up in scale towards 2030 and beyond, and are mostly ongoing in nature. Accordingly, some benefits will accrue to future generations only while others will have more immediate impact.
94. Some costs that will likely result from the TERP are increased public transport operating expenditure to account for higher levels of service, and bringing forward infrastructure investments (e.g., active modes facilities and bus priority).
95. The TERP has a strong focus on making better use of existing infrastructure to support a faster rollout of the sustainable transport networks required to support substantial behaviour change. This includes the use of road space reallocation and tactical urbanism as appropriate. In general, these methods have a much lower delivery cost than creating new stations, tunnels or links from scratch.

Ngā raru tūpono me ngā whakamaurutanga Risks and mitigations

96. The key risks and mitigations are set out below.

Risks	Mitigation update
Current structures and processes do not enable the transformational change required to achieve the pathway's ambition.	The TERP instructs council and Auckland Transport to take immediate action, as part of implementation, to address the misalignment between current processes and the scale of transformation required. Council and Auckland Transport will also develop a prioritisation framework (building on the framework outlined in the TERP) to ensure council and government resources are directed towards sustainable transport modes, and work with government to align efforts in delivering shared ambition.
The changes proposed in the TERP do not receive the public support they need to build momentum for action.	As part of the implementation of the TERP, it is critical that council and Auckland Transport foster deep and ongoing engagement and partnership with mana whenua, mataawaka, communities and businesses on the changes required. Greater support for Māori, citizen and youth-led climate responses will also be crucial to create buy-in and local ownership of climate action.
Implementation of the TERP further perpetuates inequity, particularly for communities that are already disadvantaged.	The TERP instructs council and Auckland Transport to prioritise equity alongside emissions reduction in strategic planning and decision-making. Providing realistic alternatives to driving could benefit groups that are underserved by the current transport system, but this requires an equity-first approach in the implementation of actions and greater partnership with Māori, community groups and other sectors. Data collection should be improved to better understand the barriers faced by disadvantaged groups and enable monitoring of progress. Council and Auckland Transport will develop an equity framework as an early

⁵ At the request of the Environment and Climate Change Committee (ECC/2021/45), Auckland Transport is developing a pipeline of projects ready to be delivered should additional funding become available. A strong bid can therefore be submitted for significant CERF funding to deliver projects that meet the government's expectations around rapid and cost effective roll out of safe cycling infrastructure, pedestrian improvements, enhanced active mode access to schools and bus priority, all of which are pivotal to the pathway.

	implementation action.
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Ngā koringa ā-muri

Next steps

97. In early 2023, Auckland Council and Auckland Transport will report back to the Environment and Climate Change Committee (or its equivalent) on the following matters relating to TERP implementation:
- Implementation programme, including mana whenua and mataawaka engagement plan, and prioritisation framework
 - Proposed governance arrangements
 - Monitoring framework, including accountability and reporting mechanisms.

Ngā tāpirihanga

Attachments

No.	Title	Page
A	Sustainable access for a thriving future Auckland's Transport Emissions Reduction Pathway (Summary Document)	
B	Sustainable access for a thriving future Auckland's Transport Emissions Reduction Pathway (Main Document)	
C	The global evidence base for TERP	
D	Auckland Transport Board resolutions endorsing the TERP (9 August 2022)	

Ngā kaihaina

Signatories

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