

1 November 2018

Memorandum

To: The Mayor and Governing Body

Subject: Briefing on E-Scooters

From: Stephen Town – Chief Executive

Purpose

1. Provide advice on the issues and options to mitigate safety issues for rental e-scooters.

Key Messages

- The Public and elected members have also raised concerns about e-scooter safety. Media coverage has focused on rental e-scooter safety incidents
- The Auckland Plan supports growth in public transport and active modes of transport. Rental e-scooters can help complement Auckland's cycle and public transport networks
- It is important that Auckland Transport and Auckland Council find ways to support new modes of transport while mitigating potential safety risks
- In the first week of the launch of the e-scooter rental pilots there were around 40,000 trips and 14 mainly minor injury claims reported to ACC related to e-scooters including those privately owned
- Auckland Council has received 7 queries/complaints from the public since the Lime e-scooters pilot commenced about minor safety and obstruction issues.
- Safety is a priority and we have anecdote but little evidence of the extent of safety incidents between e-scooters, pedestrian, and vehicles
- There is potential for safety incidents to increase in the short term at peak commuting times, on main pedestrian routes
- The current regulatory framework including bylaws is relatively comprehensive - government will be considering some changes that may further address safety issues - no change to bylaws is recommended or practicable in the short term
- Staff advise that the best way forward in the short term is to implement a safety communication and education campaign immediately. This is a measured immediate step to address rental e-scooter safety concerns
- Reducing rental e-scooter maximum speed, reducing the number of e-scooter rentals and revoking the licenses for the pilots are not advised at this stage.

Next Steps

- *Monday 05 November 2018:* A communication and education campaign will start, to address safety concerns and mitigate incidents
- *26 November 2018:* A workshop with elected members and agency staff will be convened to discuss e-scooter issues and options
- *December - January 2019:*
 - An e-scooter pilot reference group will formed to report back on the e-scooter pilot
 - A report will be provided to the Auckland Transport Board and the Auckland Council Regulatory Committee for their consideration
 - Monitoring and data collection approach.

Background

2. Cr Fletcher at the Governing Body meeting on 25 October 2018 raised safety concerns about rental e-scooters. This followed a near-miss she experienced with a rental e-scooter on a pedestrian crossing.
3. The Public and elected members have also raised concerns about e-scooter safety. Media coverage has focusing on rental e-scooter safety incidents.
4. His worship the mayor asked the Chief Executive to provide advice on the regulatory framework for e-scooters and options to mitigate safety issues. Staff from the Auckland Council, Auckland Transport, the New Zealand Transport Agency (NZTA), Ministry of Transport and the New Zealand Police have contributed to this memo and endorsed the options put forward.
5. Officials from the Ministry of Transport suggest that the council may wish to share this memo with the Minister of Transport.

The Auckland Plan supports growth in public transport and active modes of transport

6. The Auckland Plan supports growth in public and active modes of transport. Micro mobility devices¹ like rental e-scooters can help complement Auckland's cycle and public transport networks.
7. It is important that Auckland Transport and Auckland Council find ways to support new modes of transport while mitigating potential safety risks

What are rental e-scooters?

8. E-scooters like those used by Lime are classified as a low powered vehicle because the wheels do not exceed 355mm and the motor has a maximum power output not exceeding 300W. Lime e-scooters can travel up to 22kmph, have speedometers and are most suited to short trips.
9. Rental pilots for e-scooters are underway in Auckland and Christchurch where people can pick-up and drop off e-scooters in public places using a mobile app.
10. Lime as part of its pilot has approximately 600 e-scooters operating across Auckland for the four months between 15 October 2018 and 28 February 2019.
11. Two other rental companies, Onzo and Wave, have had licenses approved. Onzo hopes to launch on 10 November contingent on any related decisions from this memo. Wave plans to launch from 30 November.
12. Onzo and Wave are licensed to deploy 1000 and 500 e-scooters respectively as part of their pilots. Any further expansion would be assessed following their completion.

Problems and opportunities

Overseas experience presents a mixed picture around safety issues and responses

13. Around a year on from their first launch there are e-scooter rental businesses in over 100 cities in the USA, Europe and Asia. Businesses like Bird and Lime each report usage at more than 10 million rides.
14. The policy and regulatory response to rental e-scooters safety issues vary. This is due to a variety of factors including regulations and legislation, speed, permitted locations and infrastructure.
15. Examples of responses include Singapore which is proposing to make helmets mandatory and to lower the maximum speed to 10km on footpaths. In Los Angeles helmets are no longer mandatory (with flexibility for variation if local agencies determine appropriate). Madrid has banned e-scooters from footpaths.
16. Staff are aware of two e-scooter riders' deaths overseas. One was hit by a car. The other did not involve any other vehicles but sustained fatal head injuries and was determined to be accident.
17. A high-level SWOT analysis shows there are a range of strengths, weaknesses, threats and opportunities to be considered in the context of any decisions about safety concerns and support for e-scooters and rental e-scooters and similar modes.

¹ Micro mobility devices include segway, handcycles, tricycles, wheelchair tandems.

Figure 2: SWOT analysis – Auckland context – E-scooters and similar modes

| Helpful 😊 | Harmful ☹️ |
|--|--|
| <p style="text-align: center;">Potential strengths</p> <ul style="list-style-type: none"> • Current and growing infrastructure for micro and other sustainable modes • High interest and uptake by the public • Aligns with strategic priorities • Current scale and ability to influence rental companies’ operations through regulation • Council has powers to require businesses to meet agreements about performance through a licence • E-scooter rental companies show willingness to promote safety and work with Auckland Transport, Auckland Council and customers. | <p style="text-align: center;">Potential weaknesses</p> <ul style="list-style-type: none"> • Challenges around ensuring responsible rider behaviour and catching those who behave recklessly • Challenges around interaction between users, pedestrians and other modes • Some potential gaps in infrastructure, legislation (e.g. no requirement to wear helmets, rules about use in cycle lanes) • Limits on knowledge and experience of users • Limited data/evidence specific to NZ context • Lack of evidence to inform decisions. |
| <p style="text-align: center;">Potential opportunities</p> <ul style="list-style-type: none"> • Create environments that support micro modes and other sustainable modes as demand increases • More provision e.g. including through rentals • Look to Christchurch and other international jurisdictions for lessons and learnings • Take a measured approach to decision making balanced against risks to safety • Auckland Transport and Auckland Council can keep a close watching brief to help manage and monitor any issues. | <p style="text-align: center;">Potential threats</p> <ul style="list-style-type: none"> • Technology challenging for policy making / regulation and for users to adapt to • E-rental schemes not able to reach balance between safety and use • Decisions made too soon about regulation or policy • Lack of evidence to inform decisions • Need to balance regulatory/policy decisions with creating an environment where rental e-scooter businesses (or other modes) want to start up. |

Safety is a key priority we have anecdote but little evidence of the extent of safety incidents between e-scooters, pedestrian, and vehicles

18. As with the emergence other modes - bicycles in the 1800s, roller skates in the 1960s and the resurgence in the popularity of skateboards in the 1980s - experience shows there are initial peaks in safety incidents.
19. Annual, national level Accident Compensation (ACC) data on push scooter (not e-scooter) accidents show an increase from 5,951 in 2014 to 6,211 in 2017. The ACC data show that nationally, e-scooter accidents rose from 6 in 2014 to 34 in 2017².
20. In the first week of the launch of the Lime e-scooter rental pilots there were around 40,000 trips and 14 mainly minor injury claims reported to ACC related to e-scooters including those privately owned.
21. By way of comparison there were 32 injury claims from push scooters (non-electric scooters) in Auckland and Christchurch and an additional 80 across other regions for the same period.
22. It is currently unclear whether claims are related to injury to the rider, to another person (e.g. pedestrian), or both.
23. Auckland Council has received 7 queries/complaints from the public since the Lime e-scooters pilot commenced about minor safety and obstruction issues.

² These ACC data are almost certainly limited to the use of privately-owned e-scooters as E-scooter rental companies did not begin operating until several weeks ago.

There is potential for safety incidents to increase in the short term at peak commuting times, on main pedestrian routes

24. There is potential for safety incidents to increase in the short term at peak commuting times on main pedestrian routes. This is difficult to predict.
25. Anecdotal information suggests that safety incidents may be more likely to occur in areas with high levels of foot traffic. Heart of the City data on pedestrian foot traffic shows variation from 17,973 on lower Queen Street to 5,005 on Karangahape Road (average over 4 days as at 31 October). This data could help determine any options for addressing safety concerns.
26. Interaction with pedestrians is also likely to occur during peak times; for example during the morning commute, lunchtimes and at the close of the day. Auckland Transport and Auckland Council will keep a watching brief and monitor activity with a particular focus on these potential pressure points.
27. Difficulties managing everyday rider behaviour mean we need to be sensitive to but not driven by anecdotal information. Proactively using observational data at peak times could be a quick way to get a better understanding of the nature and the scale of the problem.
28. We believe it preferable where possible for e-scooters to be used predominately on the footpath or on appropriate shared spaces, in preference to the road. A careful balance must be maintained to ensure Aucklanders' safety.
29. Auckland Transport and Auckland Council will share information with and leverage what can be learnt from ongoing engagement with Christchurch City Council in the context of the Lime pilot and potentially beyond.

Regulatory framework for rental e-scooters

The current regulatory framework including bylaws is relatively comprehensive

30. Rental e-scooters are regulated by Auckland Council, Auckland Transport, NZTA, Police and Ministry of Transport. Lime scooters has also set in place requirements for customers around the use of their e-scooters (Figure 1).
31. To operate, businesses like Lime must obtain a license under the separate Auckland Transport (for roads and footpaths) and Auckland Council (for parks and civic spaces) Trading and Events bylaws. They must also adhere to licensing conditions set by the council.
32. To use an e-scooter, riders must comply with road user rules, separate Auckland Transport and Auckland Council Public Safety and Nuisance bylaws and the businesses terms of use.
33. Licenses to pilot rental e-scooters have been approved for Lime, Wave and Onzo (Wave and Onzo are yet to commence operating) with a range of parameters including number and location (further details are provided in Figure 1 below).

Figure 1: Regulation of rental e-scooters in Auckland

| Trading and Events bylaws (for business 🏪) | Lead agencies/Administration |
|---|--|
| <ul style="list-style-type: none"> bylaws made by Auckland Council (for parks and civic spaces) and Auckland Transport (for roads and footpaths) rental e-scooter companies must hold a licence from the council license requirements include track record, liability insurance, data provision, open communication with council, mitigation and reporting of safety issues and maintenance, location and number of e-scooters. council can revoke licenses if requirements are not met. | <p>Auckland Council and Auckland Transport</p> <p>Enforcement: Auckland Council³</p> <p>Powers and penalties:</p> <ul style="list-style-type: none"> Can approve and decline licence request Can impose conditions on licence Can amend and revoke licence Court fine on prosecution of up to \$20,000 for businesses who breach the bylaw including licensing requirements. |
| Road user rule 2004 (for users 🚶🚶🚶) | Lead agencies/Administration |
| <ul style="list-style-type: none"> allows riding on footpath and far left of road not allowed on cycle lanes that are part of the road must be careful and considerate to others speed must not be a hazard to other footpath users must give way to pedestrians and mobility devices <u>does not require helmets to be worn either on or off road</u> <u>does not set an age limit for e-scooter use.</u> | <p>Ministry of Transport, New Zealand Transport Agency, Police</p> <p>Enforcement: Police</p> <p>Powers and penalties:</p> <ul style="list-style-type: none"> Infringement fines of \$40-\$150 Court fines on prosecution of up to \$1,000 |
| Public safety and nuisance bylaw (for users 🚶🚶🚶) | Lead agencies/Administration |
| <ul style="list-style-type: none"> bylaws made by Auckland Council (for parks and civic spaces) and Auckland Transport (for roads and footpaths) prohibits use of device in a way that is reckless, intimidates, dangerous, injurious or a nuisance to other people. | <p>Auckland Council, Auckland Transport</p> <p>Enforcement: Auckland Council⁴</p> <p>Powers and penalties:</p> <ul style="list-style-type: none"> No ability to issue infringement fines Court fine on prosecution of up to \$20,000. |
| Lime - Key terms of use (applies to customers 🚶🚶🚶) | Lead agency / Administration |
| <ul style="list-style-type: none"> <u>must be over 18</u> adhere to relevant traffic laws/regulations be mindful of road obstructions not obstruct pedestrians/pedestrian walkway be competent, assess conditions are safe, no stunt riding responsible for any misuse claims/fines report safety and maintenance issues must not carry backpack, use phone etc if a safety risk must not exceed maximum weight must not be under influence of alcohol or prohibited drugs. | <p>Lime Scooters</p> <p>Powers and penalties:</p> <ul style="list-style-type: none"> Advises on etiquette including parking Advises customers to check e-scooter is working correctly by initial trial pre-use Checks and maintains e-scooters regularly Sets rules around arbitration or disputes Charges for damage caused during use Can discontinue membership for violation of terms of use. |

- To inform future decision making in relation to any extension to these licenses a reference group of staff from Auckland Transport, Auckland Council (including from Alcohol Licensing and Compliance, Licensing and Compliance, Transport Strategy and Auckland Design Office), NZTA, Ministry of Transport and any other relevant agencies will be convened.
- The reference group will assess the findings of the pilot alongside those from the Christchurch pilot and relevant international evidence. It can also make broader recommendations about e-scooters and micro modes and ways to support their increased use safely.

³ Under delegated authority from Auckland Transport. Administered by Alcohol Licensing Unit.

⁴ Under delegated authority from Auckland Transport. Administered by Licensing and Regulatory Compliance Unit.

Options to respond to safety issues around rental e-scooters

Changing regulation to address issues with e-scooters is not recommended or practicable in the short term

36. It is not recommended that Auckland Transport and Auckland Council amend any bylaws at this time.
37. While it may be possible for Auckland Transport and Auckland Council to regulate speed and require helmets using a bylaw there is limited evidence to satisfy the legal tests for appropriateness at this time. Further, the process to amend a bylaw takes about 12 months.
38. The interaction with legislation would also need to be considered before deciding to amend any bylaws. The Ministry of Transport is proposing a package of measures, now referred to as 'Accessible Streets' 'to support safe use of alternative modes' e.g. e-scooters. However, any changes would not come into force until 2019 at the earliest.
39. The current Lime e-scooter pilot and those to soon be launched by Onzo and Wave will provide a stronger evidence base for decision making around legislation and any need for regulatory change.

Short term options are available to address e-scooters safety concerns using the existing regulatory framework

40. Short-term options to help address safety concerns related to e-scooter rentals are summarized below:

| Option 1: Communications and education campaign run for remaining duration of pilot / beyond (Recommended) | |
|---|--|
| Increase communication about how to use e-scooters more safely and in line with regulatory requirements. This could also emphasise parents' responsibility around use by children - including information about penalties. | |
| Pros: | Cons: |
| <ul style="list-style-type: none"> • empowers people to behave responsibly • could help address safety issues • quick to deploy at relatively low cost • shows Auckland Transport and Auckland Council are taking steps to mitigate safety issues • supports strategic priorities • could benefit all users of e-scooters and similar devices • allows pilot to continue and for evaluation to inform any changes to licenses, infrastructure and regulation. | <ul style="list-style-type: none"> • Auckland Transport and Auckland Council may be criticised for not taking stronger action to address safety concerns • some people will ignore information and guidance and incidents may still occur. |
| Risks/mitigation: | |
| Risk of continued incidents involving rental e-scooters. Risk can be mitigated by: <ul style="list-style-type: none"> • working more closely with e-scooter rental businesses to strengthen user incentives and disincentives • asking City Watch to engage with and educate e-scooter users to support good behaviour and safety • implement Option 2 alongside this Option 1. Risk of focus on e-scooters as being more dangerous than other similar modes: <ul style="list-style-type: none"> • present data on comparative modes to illustrate need for measured and balanced response. | |

| Option 2 - Reducing rental e-scooter maximum speeds overall and / or in certain locations | |
|---|---|
| Requiring license holders to reduce maximum speed of rental e-scooters. | |
| Pros: | Cons: |
| <ul style="list-style-type: none"> • could help address safety issues • relatively quick to deploy, relatively low cost • may mitigate public views that Auckland Transport and Auckland Council are not doing enough to address safety concerns • reducing speed in certain locations could provide a less arbitrary | <ul style="list-style-type: none"> • lack of robust evidence (e.g. about accident causation and nature) to support decision • challenging to justify given accident and fatality rates of other modes significantly outnumber those related to e-scooter usage • privately owned e-scooters and other modes could still travel at higher speeds • criticism that Auckland Transport and Auckland Council have intervened too soon before the pilot is completed |

| | |
|--|---|
| <p>approach to managing any speed related safety issues</p> <ul style="list-style-type: none"> allows pilot to continue and for evaluation to inform future decisions. | <ul style="list-style-type: none"> would not enable evaluation of rental e-scooters at full functionality, may limit application of findings would take time to assess which speeds are appropriate for particular locations. |
| Risks/mitigation: | |
| <p>Risk of continued accidents related to rental e-scooters. Risk can be mitigated by:</p> <ul style="list-style-type: none"> implement Option 1 alongside this Option. | |

| Option 3 - Reduce number of rental e-scooters deployed as part of each pilot | |
|--|---|
| Requiring license holders to reduce the number of rental e-scooters deployed as part of pilots. | |
| Pros: | Cons: |
| <p>Overlaps with pros listed in option 2 and:</p> <ul style="list-style-type: none"> allows pilot to continue and for evaluation to inform future learnings and their application. | <p>Overlap with pros listed in option 2 and:</p> <ul style="list-style-type: none"> may be considered unfair by the public and rental e-scooter businesses. |
| Risks/mitigation: | |
| <p>Risk of continued accidents related to rental e-scooters. Risk can be mitigated by:</p> <ul style="list-style-type: none"> increasing level of communications, work more closely with e-scooter rental businesses to strengthen incentives and disincentives for users and promote training opportunities Ask City Watch to act as ambassadors and engage with and educate e-scooter users to support good behaviour and safety implement option 2 alongside this Option 1. <p>Risk of focus on e-scooters as being more dangerous than other similar modes:</p> <ul style="list-style-type: none"> Present data on comparative modes and place e-scooters in broader context and illustrate need for measured and balanced response. <p>Risk of criticism by rental e-scooter companies and the public: Communication around this would explain that this step has been taken to help address safety concerns during the pilot. Restrictions would not necessarily remain in place over the longer term.</p> | |

| Option 4: Seek to revoke E-scooter company licenses and end /cancel pilots (Not recommended) | |
|---|---|
| Pros: | Cons: |
| <ul style="list-style-type: none"> safety incidents related to use of e-scooter rentals would be prevented some Aucklanders may be supportive of ending the pilot due to concerns about safety. | <ul style="list-style-type: none"> criticism may be directed toward Auckland Transport and Auckland Council for not letting the pilot run its course would not allow data gathered through pilot inform future policy around e-scooters which could also provide learnings for other micro mobility devices decision would not support strategic objectives around alternative transport modes could discourage other e-scooter rental businesses from entering the market – may limit transport options for Aucklanders. |
| Risks/mitigation: | |
| <p>Risk that Auckland Transport and Auckland Council may be criticised for ending the pilot early can be mitigated by:</p> <ul style="list-style-type: none"> public communication that safety concerns have been too significant to continue. <p>Risk around decision making process, could be mitigated by:</p> <ul style="list-style-type: none"> Council would need to ensure that the decision to revoke the licence was legally robust Auckland Transport and Auckland Council would need evidence that the safety risks associated with the pilot were of sufficient magnitude to justify revoking the license for the pilot. Auckland Transport and Auckland Council would need to offer the operator an opportunity to remedy the safety risks associated with the pilot, prior to revoking the licence. | |

Option Summary

Implement Option 1: a communication and education campaign immediately as a measured immediate step to address rental e-scooter safety concerns

41. Staff advise that the best way forward in the short term is to implement Option 1: a communication and education campaign immediately. This is a measured immediate step to address rental e-scooter safety concerns from the public and safety issues around the use of rental e-scooters.
42. Option 1 balances the need to respond to safety concerns in a measured way and shows the Auckland Council and Auckland Transport are placing a focus on safety as well as supporting new modes of transport. This response is proportionate in light of data that show that other modes of transport including push scooters (non-electric) are linked to more safety incidents.
43. Reducing rental e-scooter maximum speed (Option 2), reducing the number of e-scooter rental (Option 3) and revoking the licenses for the pilots (Option 4) are not advised at this stage. Their implementation is difficult to justify given our current understanding of the scale of the problem.
44. Should safety incidents escalate in nature and scale staff advise that reducing rentals e-scooter maximum speed (Option 2) and reducing the number of e-scooter rentals (Option 3) are the next most viable options to implement.
45. Revoking the licenses for the pilots (Option 4) is not advised at this stage. Micro-mobility will continue to grow. It is important that Auckland Transport and Auckland Council take a proactive response to support safety measures while harnessing the benefits.

Next Steps

46. Indicative timeline for next steps

