# E-scooter trial and the challenges of their introduction

City of Adelaide
IPWEA SA State Conference
31 May 2019



### The beginning of shared mobility in Adelaide

- Adelaide has had shared mobility services for more than 10 years
- Adelaide Free Bikes available from nominated locations around the City and surrounding suburbs
- The scheme is popular with tourists and averages around
   1,400 trips per month



https://www.surveymonkey.com/r/AdelaideFreeBikes



## Dockless shared mobility in Australia

- First dockless bike share schemes appeared in Australian cities in mid-2017 with Melbourne being the first to launch
- Bikes tracked via GPS and are hired using mobile phone apps.
- Provided a new form of flexible transport for people to move around busy cities
- The first dockless bike share company (oBike) launched more than 1,000 bikes on Melbourne streets



https://www.theguardian.com/lifeandstyle/2018/jun/25/bike-sharing-company-obike-to-immediately-cease-all-operations-in-singapore



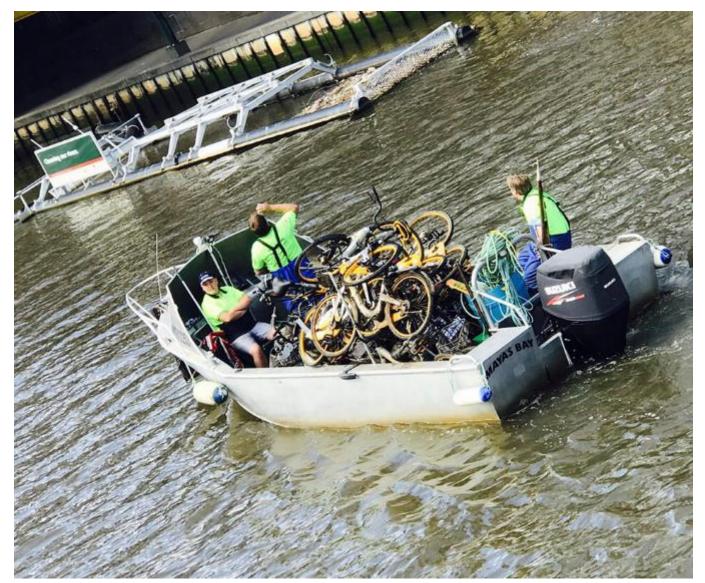
## Dockless shared mobility in Adelaide

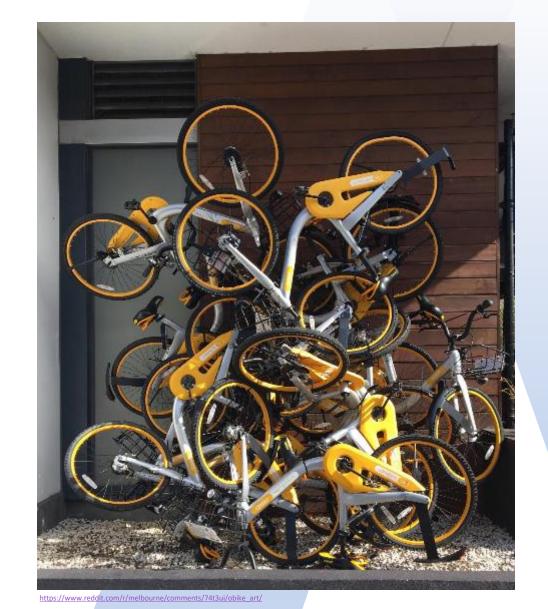
- The management of mobility share schemes in South Australia is different to other states
- Under Section 222 of the Local Government Act SA 1999, undertaking a business activity on a public road requires a permit
- In October 2017, two bike share companies were issued with permits and each launched 100 bikes in the City of Adelaide





## Issues with dockless shared mobility





## Issues with dockless shared mobility





https://www.theaustralian.com.au/nation/politics/melbourne-lord-mayor-robert-doyle-puts-breaks-on-obikes/news-story/6e9a37a64364fb547ff57ee04140285e#&gid=null&generation-gene

## Addressing the issues

- In late October 2017, the City of Adelaide placed an immediate freeze on the issuing of bike share permits
- This effectively capped the number of bike share operators to two
- Both operators continued to provide their schemes in the City of Adelaide, and continued to expand to the surrounding suburbs, increasing their fleets

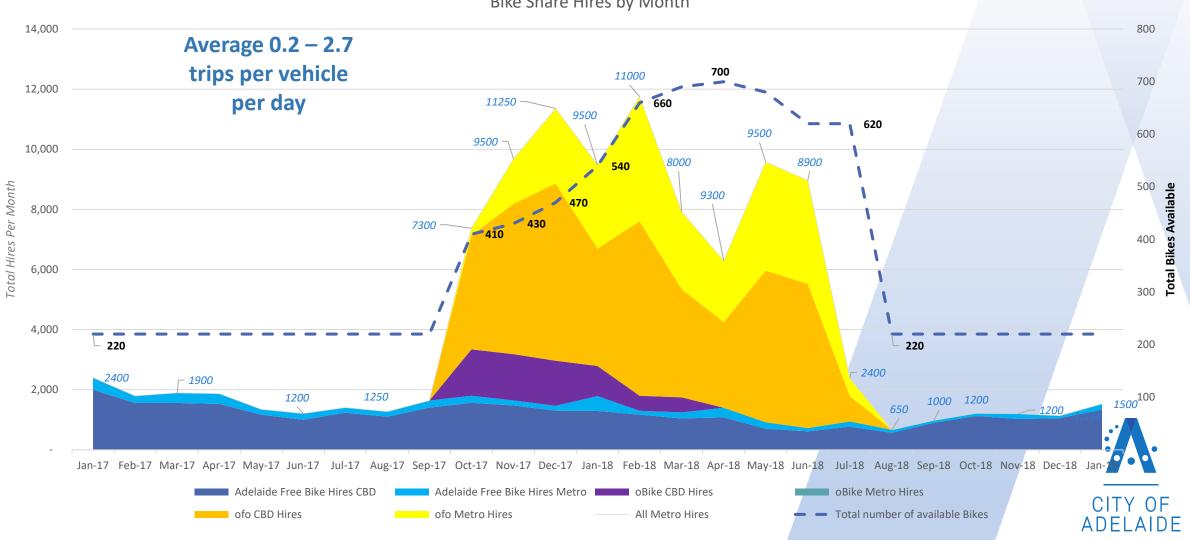


http://anthillonline.com/wp-content/uploads/2017/10/ofo-Adelaide-3.jpg



#### Bike share statistics





#### Introduction of e-scooters

- The exit of dockless bike share saw an opportunity for new electric scooters (escooters) to fill the void
- Other disruptive technology companies (such as ride share) proved people are prepared to pay for short trips
- While e-scooter schemes commenced around 2012, in 2017 and 2018 operators quickly began to appear
- E-scooter launched in Auckland, New Zealand in October 2018



https://gz.com/1558033/a-software-malfunction-is-injuring-lime-riders-around-the-world



#### Introduction of e-scooters in Australia

- E-scooters launched in Brisbane November 2018 with the Queensland Minister for Transport providing an exemption/amendments to legislation to permit e-scooter use
- E-scooters launched on the Gold Coast soon after but without permission from Council
- Several e-scooter operators approached the City of Adelaide and State Government seeking to launch, however, due to State legislation, e-scooters were not legal to operate





## City of Adelaide's approval

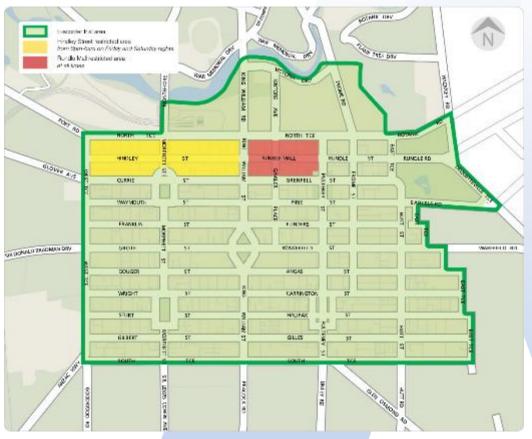
- In January 2019, the City of Adelaide approved e-scooters to be trialled in the City during the busy Adelaide Festival Season, subject to changes to State Regulations
- Approval included a single operator with 500 e-scooters
- Council approached the market for e-scooter operators in parallel with Regulation changes by the State Government





## Regulation change and e-scooter rules

- On Thursday 14 February 2019, the State Government amended the Regulations that govern e-scooters and permitted their use, including where they could be ridden and the rules
- Rules include:
  - Approved geographic area
  - Limited to 15km/h (vehicle controlled)
  - To be ridden on footpaths\*
  - Not to be ridden in bike lanes or on roads\*
  - Must be at least 18 years old
  - Must wear a helmet
  - Must not drink and ride or be under the influence of drugs
  - Not to be taken on public transport





#### Launch of e-scooters in Adelaide

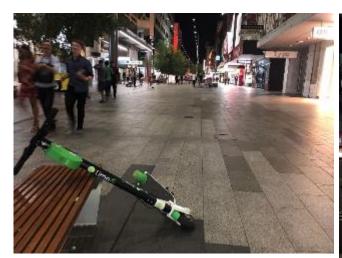
- Change in Regulations enabled the City of Adelaide to issue a permit to a single operator under the provisions in the Local Government Act
- On Friday 15 February 2019, e-scooters first appeared on city streets
- Trial for a period of 4½ weeks to cover the Festival Season
- Operator launched with an initial 220 e-scooters and expanded to the full 500 fleet within the first week



https://www.weekendnotes.com/lime-scooters-adelaide/



## Reported issues









http://www.mix1023.com.au/newsroom/adelaide-lime-electric-scooter-woman-loses-drivers-licence-dui-alcoho

- People not wearing helmets
- Children as young as 12 riding e-scooters (minimum age is 18)
- Multiple people on one e-scooter (including parents with children)
- Riding on the roads, in bike lanes and disobeying road rules
- Riding in Rundle Mall (prohibited)
- Riding outside of the approved area



## E-scooter usage statistics

 Due to the popularity of the trial, in March, Council endorsed for the trial to be extended for 4 weeks to enable the development of the second trial





20,000+ unique users



14,000+ website Visits



9 injuries



1.25km



#### Second e-scooter trial

- An Expression of Interest (EoI) process was undertaken for a second trial
- Two operators with 500 e-scooters each for 6 months
- Competitive process and extensive evaluation which included State Government
- Included demonstrations of the proponents' e-scooter products and their abilities to meet the requirements



Current Average 2.0 –6.0 trips per vehicle per day



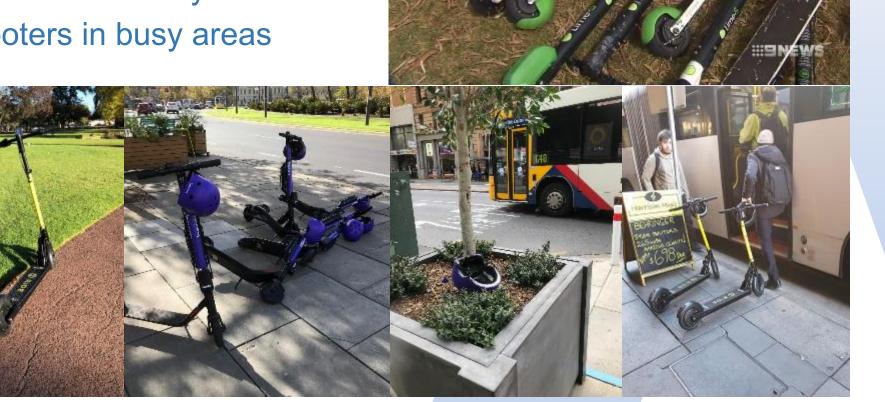
## Learnings from e-scooter introduction

- Effective geofencing areas (Rundle Mall)
- Conflicting information
- Educating users about responsible riding
- Lack of awareness of the rules
- Conflict between pedestrians and e-scooter users
- Parking of e-scooters
- Uncertainty for non-e-scooter users
- Contending with a new mode of transport
- Festival period saw higher than anticipated demand



#### Identified issues

- Geofencing and prohibited areas
- Vandalism
- Littered helmets
- Inappropriately parked e-scooters by users
- Congregation of e-scooters in busy areas



## E-scooter safety

- Globally there is a focus on e-scooter safety
- A number of jurisdictions are recording increases in reported injuries attributed to e-scooters
- The media has reported high injury rates in Auckland (1964 in 6 months) and Brisbane (80 injuries in two months)
- Comparisons often standalone and not against other modes
- A recent Austin, TX study identified 33% of e-scooter related injuries recorded on their first trip and estimated 20 injuries per 100,000 trips



https://www.washingtonpost.com/transportation/2019/03/15/cdc-is-studying-e-scooter niuries/?noredirect=on&utm\_term=.02e716695959



#### Adelaide's record – are we safer?

- 9 injuries reported to date
- Injury rate of 6 per 100,000

1x Broken Nose 1x Broken Arm 1x Head Trauma 3x Injured Shoulder/ Back

3x Minor injury

#### **Possible explanations**

- Limited speed 15km/h
- Mainly using footpaths\* (not bike lanes like other countries)
- Geographically flat
- Mandatory helmet laws
- Wide footpaths



https://www.adelaidenow.com.au/messenger/city/two-people-caught-riding-lime-escooters-while-drunk-one-loses-licence/news-story/0986b19db5c2f0ec7966b726e8d7c3f1



#### E-scooter benefits

- E-scooters have proven to be popular and not just amongst younger generations
- Feedback received from the community has been generally supportive (22% positive, 49% neutral and 29% negative)
- Main concerns related to e-scooters being ridden on footpaths and rider behaviour
- New commuter patterns have formed and people are reliant on e-scooters for their daily commute
- Improved access to less accessible areas of the city by providing convenient travel for short trips

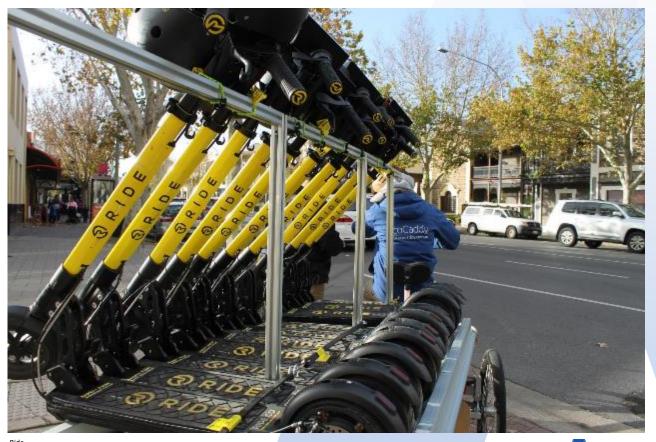


https://www.adelaidenow.com.au/messenger/city/beam-or-ride-we-roadtest-adelaides-newscooters/news-story/2aa1995bb499ac55f1858d3e78dc9ace



#### E-scooter benefits

- Local businesses are supporting e-scooter riders and encouraging e-scooters to be parked at their business (incentives)
- New business partnerships have been formed
- E-scooters are providing an eco-friendly, low emissions transport option

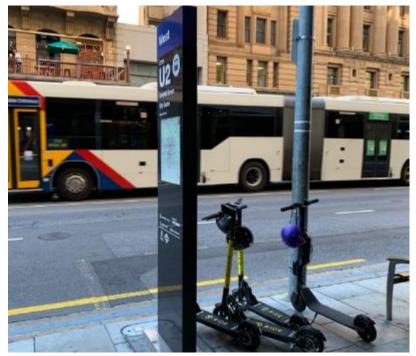






#### Considerations for Local Governments

- Managing e-scooters deployment
- Operator relationships
- Inappropriately parked / preferred parking areas
- Congestion on footpaths
- Quality of footpath and ramp infrastructure









#### What next?

- Current permit for 4 months to October 2019
- Preferred/dedicated parking zones
- User survey and community engagement
- Joint user education campaign with State Government and South Australian Police
- Full review of e-scooter, permit and Regulations such as speed limits, where to ride and user conditions
- Considerations for impacts of expansion across the City of Adelaide and to surrounding Councils



# Thank you

Peter Wong

Principal Transport Design

City of Adelaide

P.Wong@CityofAdelaide.com.au

www.CityofAdelaide.com.au/e-scooter escootertrial@CityofAdelaide.com.au



#### References

**REOI Documents:** 

https://www.cityofadelaide.com.au/online-services/permits-and-licenses/approvals-permits-licenses/e-scooter-mobility-services

Council Report:

https://dmzweb.cityofadelaide.com.au/agendasminutes/files08/Agendas/Council/2019/2019 03 12Council Item 8.1 - Distributed Separately.pdf

New Zealand (March 2019) Statistics <a href="https://www.rnz.co.nz/news/national/385406/scooters-2-point-9m-acc-bill-for-users-injuries">https://www.rnz.co.nz/news/national/385406/scooters-2-point-9m-acc-bill-for-users-injuries</a>

Auckland (May 2019) Statistics <a href="https://www.nzherald.co.nz/business/news/article.cfm?c\_id=3&objectid=12227078">https://www.nzherald.co.nz/business/news/article.cfm?c\_id=3&objectid=12227078</a>

Brisbane (May 2019) Statistics <a href="https://www.abc.net.au/news/2019-05-09/man-dies-in-hospital-critical-lime-scooter-crash-brisbane/11098060">https://www.abc.net.au/news/2019-05-09/man-dies-in-hospital-critical-lime-scooter-crash-brisbane/11098060</a>

Centers for Disease Control and Prevention and Austin Public Health Department Study (April 2019) Report <a href="http://www.austintexas.gov/edims/pio/document.cfm?id=318777">http://www.austintexas.gov/edims/pio/document.cfm?id=318777</a>

