

Christchurch E-scooter trial: Findings, and thoughts on the future of micro-mobility in cities

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AARIAN MARSHALL TRANSPORTATION 12.30.18 07:00 AM

2018 WAS THE YEAR OF THE SCOOTER. WHAT HAPPENS NOW?



Scooter companies like Lime, Bird, Spin, Scoot, and Skip exploded onto the transportation scene this year. Now they have to figure out how to differentiate themselves from their competitors. DAVID PAUL MORRIS/GETTY IMAGES



CITYLAB

DESIGN / TRANSPORTATION / ENVIRONMENT / EQUITY

Prepare now for the tiny vehicle takeover. // Kathy Willens/AP

Why Little Vehicles Will Conquer the City

BENJAMIN SCHNEIDER JUN 21, 2018

Opportunities



Inc.

Are Investors in Scooter Platforms Betting on a Fad?

Despite venture capitalist's enthusiasm, I expect the demand for scooter rentals to drop steeply, and soon.

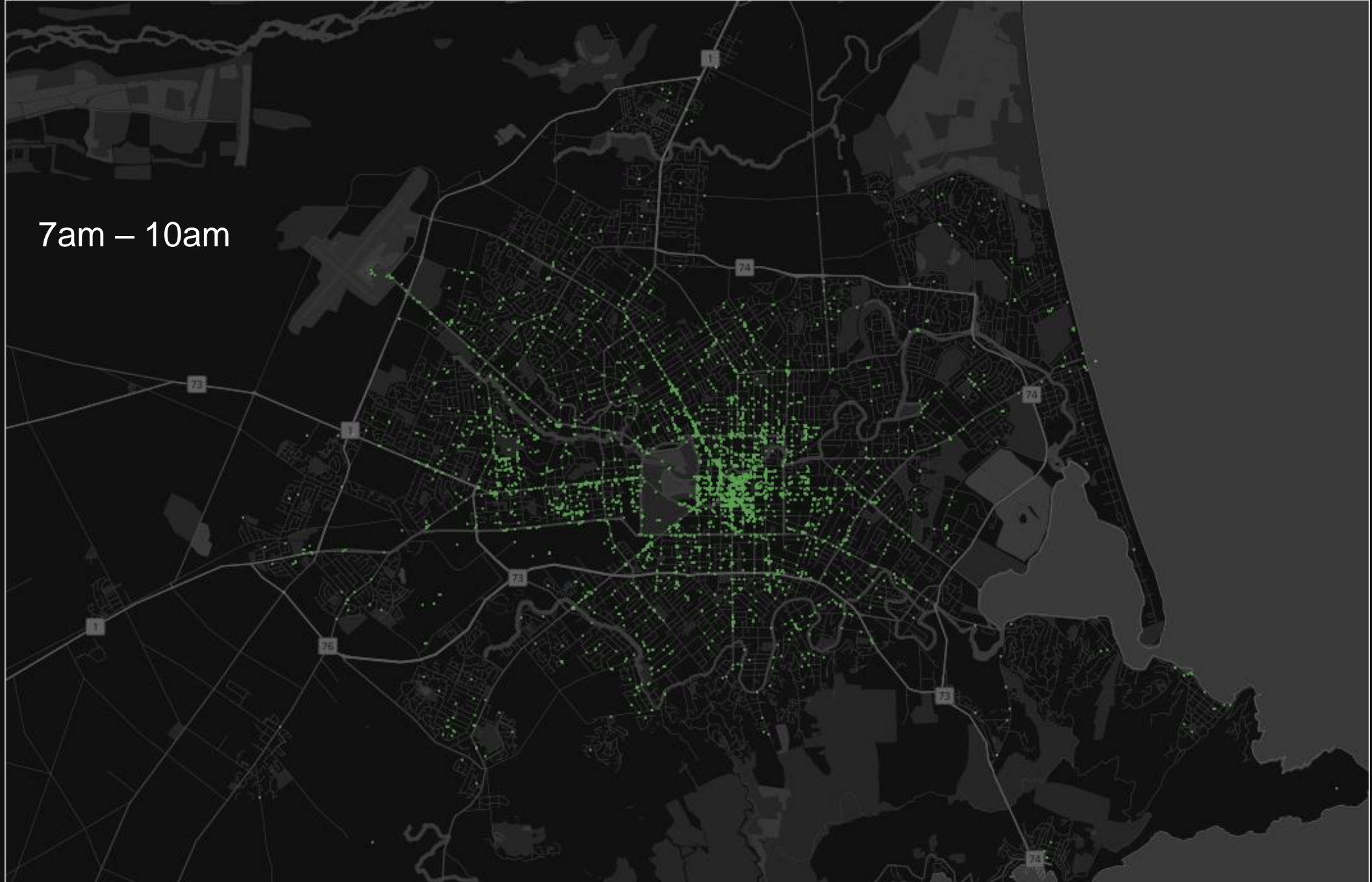
By Alex Moazed *Founder and CEO, Applico* [@AlexMoazed](#)

Risks

What do we want from our transport system?

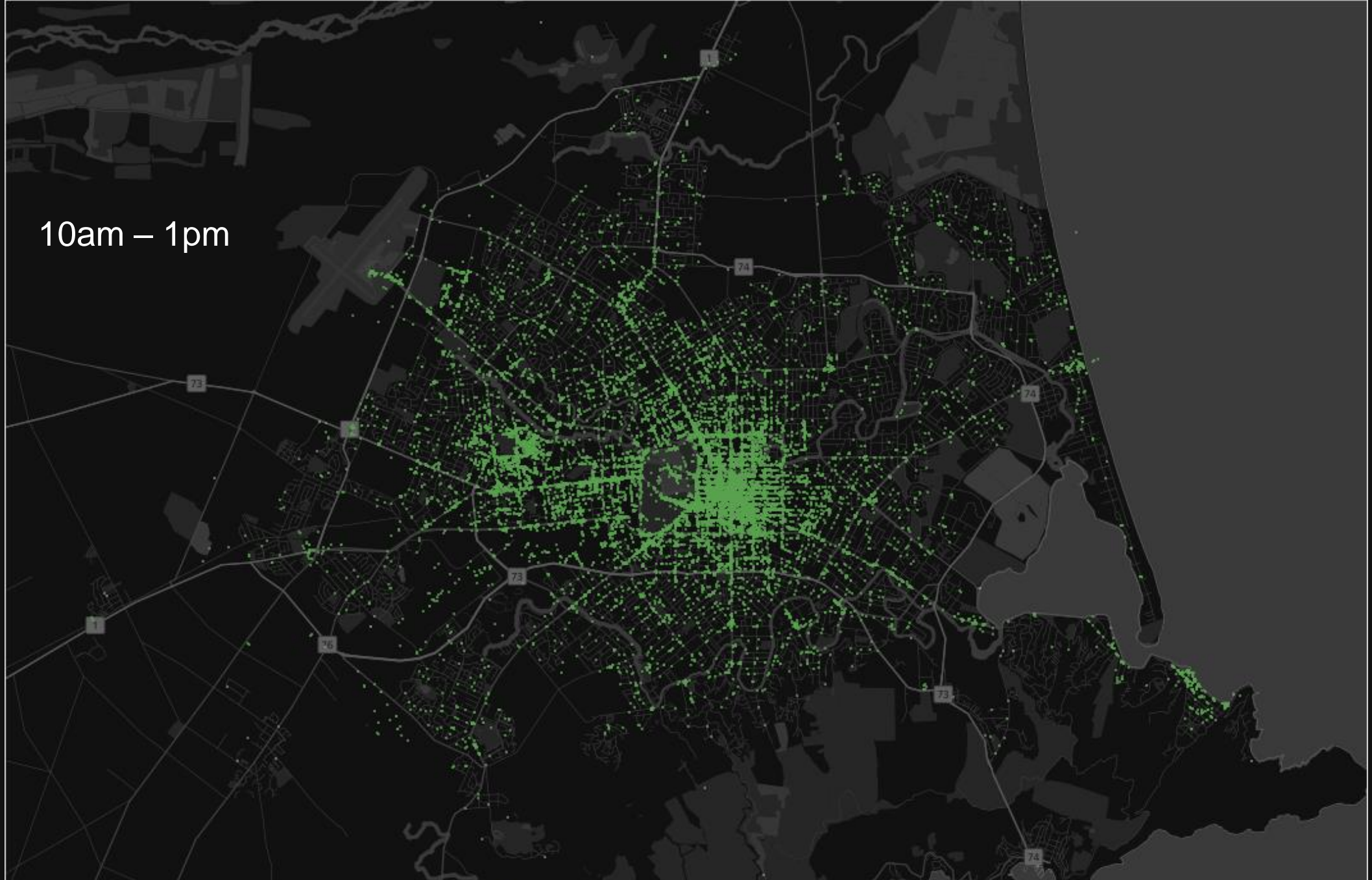


7am – 10am



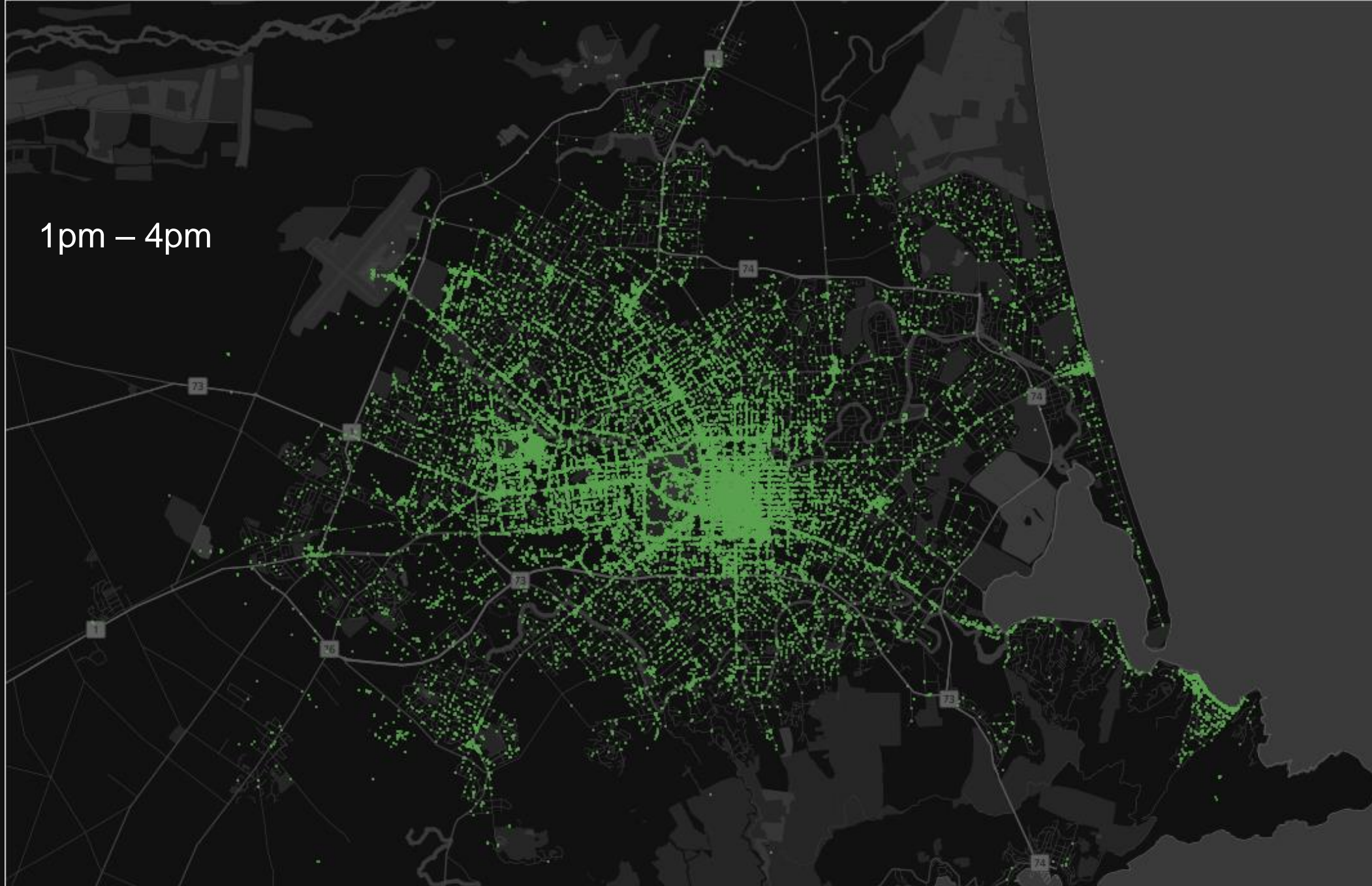
Map based on average of Start Longitude and average of Start Latitude. Color shows details about InFourAves. Details are shown for Trip id. The data is filtered on Start Hour (group) and Start Month. The Start Hour (group) filter keeps 7am to 10am. The Start Month filter keeps January, October, November and December.

10am – 1pm



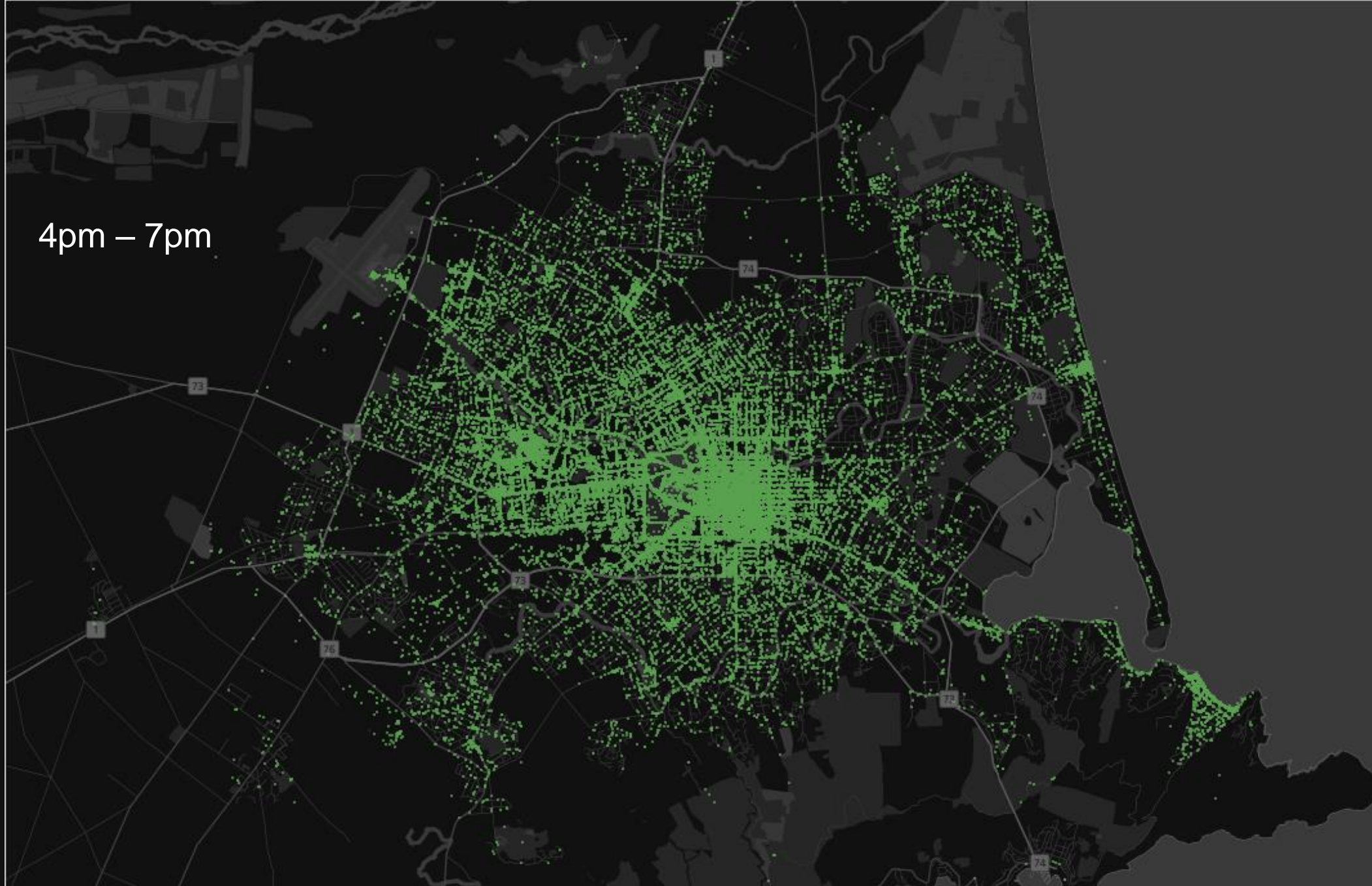
Map based on average of Start Longitude and average of Start Latitude. Color shows details about InFourAves. Details are shown for Trip id. The data is filtered on Start Hour (group) and Start Month. The Start Hour (group) filter keeps 10am to 1pm. The Start Month filter keeps January, October, November and December.

1pm – 4pm



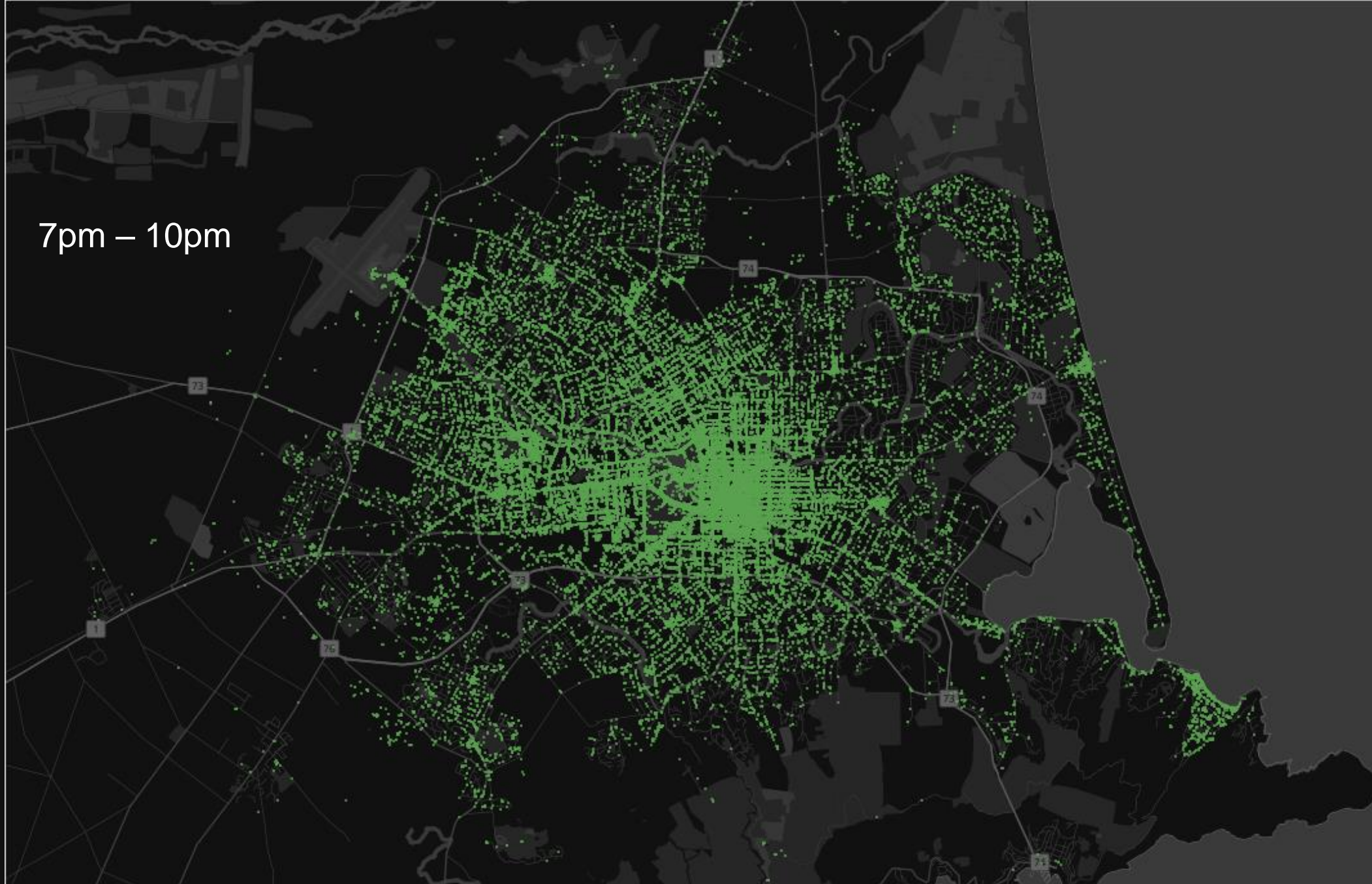
Map based on average of Start Longitude and average of Start Latitude. Color shows details about InFourAves. Details are shown for Trip id. The data is filtered on Start Hour (group) and Start Month. The Start Hour (group) filter keeps 1pm to 4pm. The Start Month filter keeps January, October, November and December.

4pm – 7pm



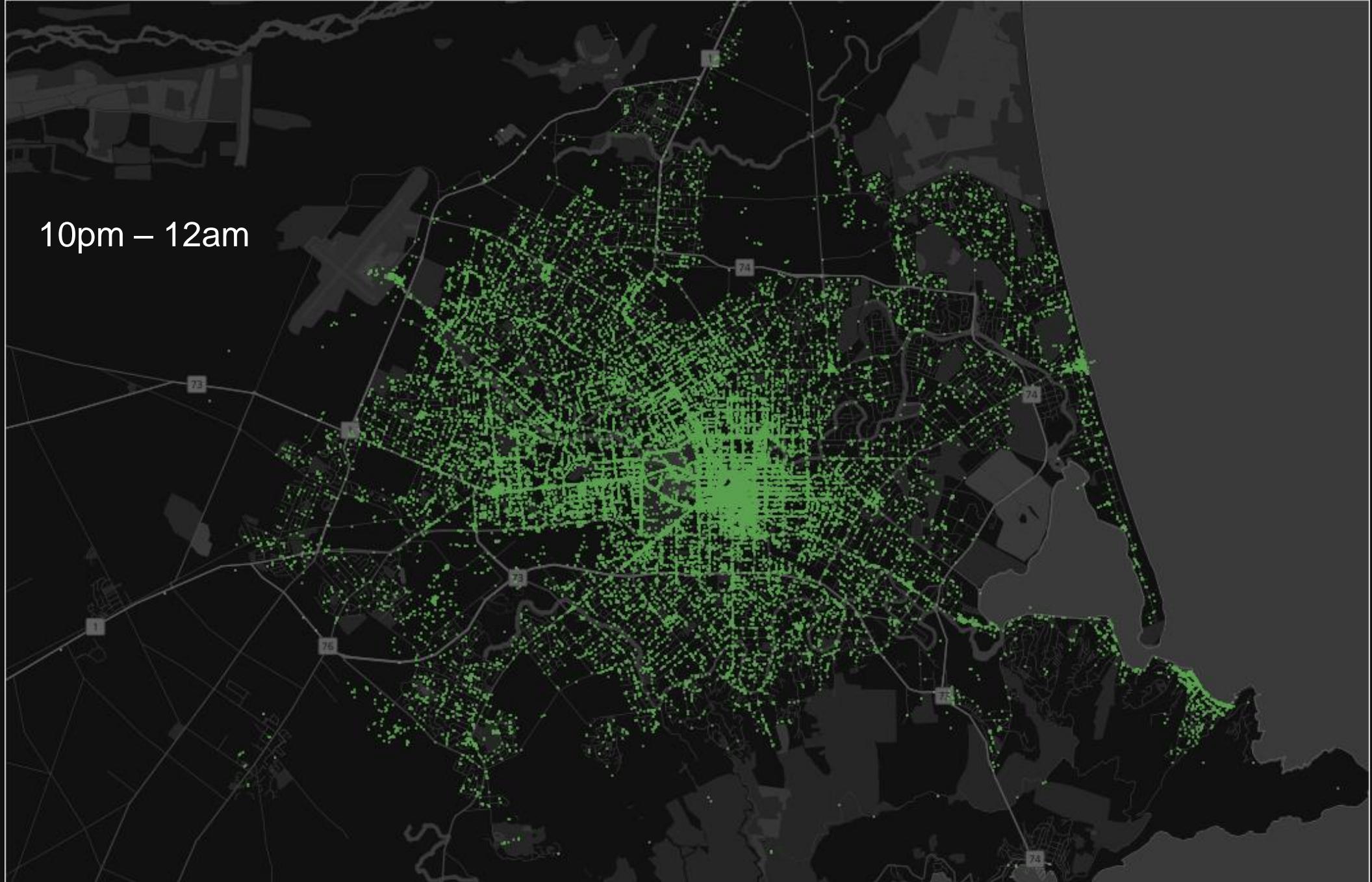
Map based on average of Start Longitude and average of Start Latitude. Color shows details about InFourAves. Details are shown for Trip id. The data is filtered on Start Hour (group) and Start Month. The Start Hour (group) filter keeps 4pm to 7pm. The Start Month filter keeps January, October, November and December.

7pm – 10pm



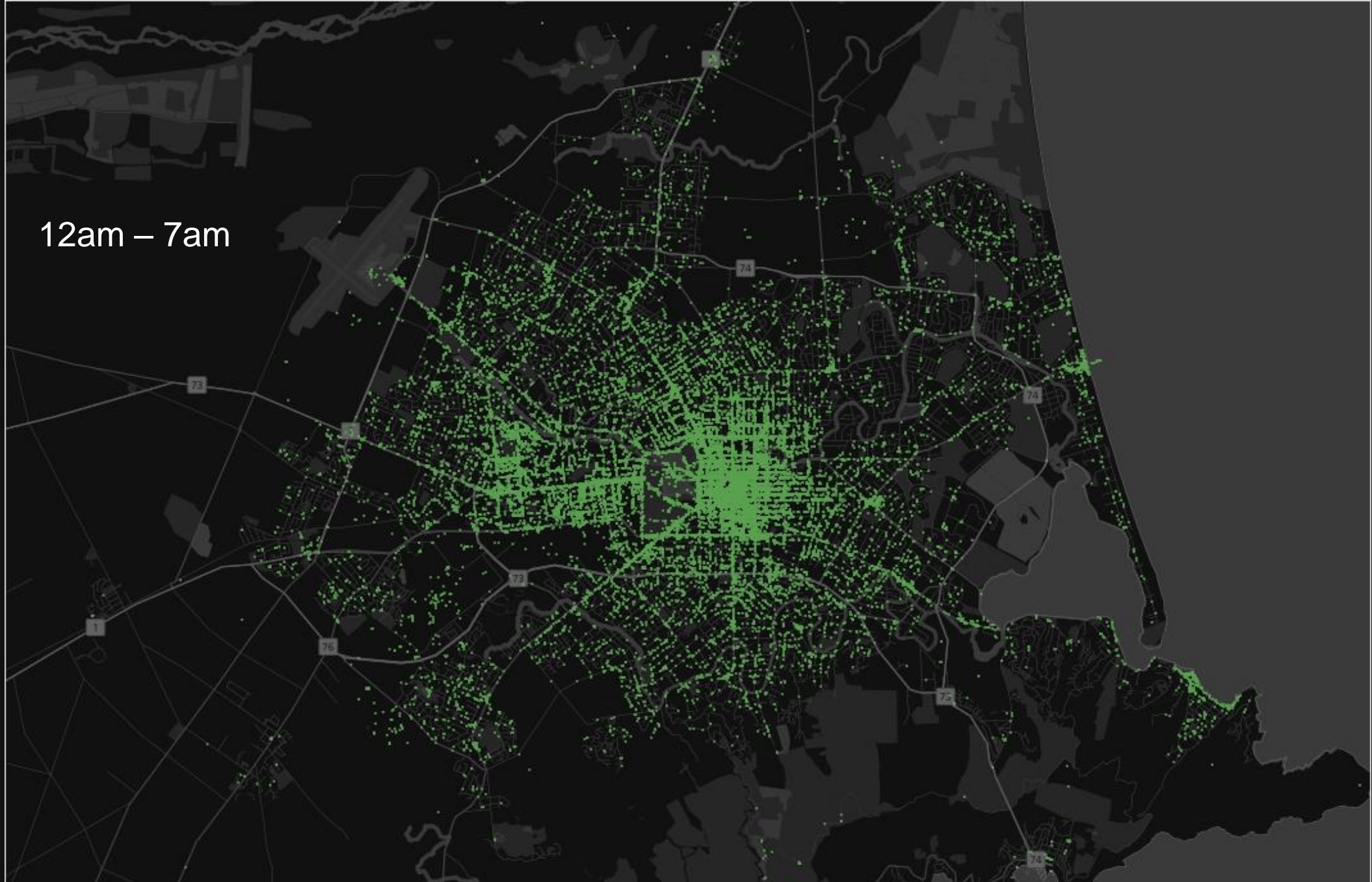
Map based on average of Start Longitude and average of Start Latitude. Color shows details about InFourAves. Details are shown for Trip id. The data is filtered on Start Hour (group) and Start Month. The Start Hour (group) filter keeps 7pm to 10pm. The Start Month filter keeps January, October, November and December.

10pm – 12am



Map based on average of Start Longitude and average of Start Latitude. Color shows details about InFourAves. Details are shown for Trip id. The data is filtered on Start Hour (group) and Start Month. The Start Hour (group) filter keeps 10pm to midnight. The Start Month filter keeps January, October, November and December.

12am – 7am



Map based on average of Start Longitude and average of Start Latitude. Color shows details about InFourAves. Details are shown for Trip id. The data is filtered on Start Hour (group) and Start Month. The Start Hour (group) filter keeps Early Morning (midnight to 7am). The Start Month filter keeps January, October, November and December.

Recap - E-scooter trial (90 days of data)

How are they used?



Trips

400,000+



Users

100,000+



Median Distance

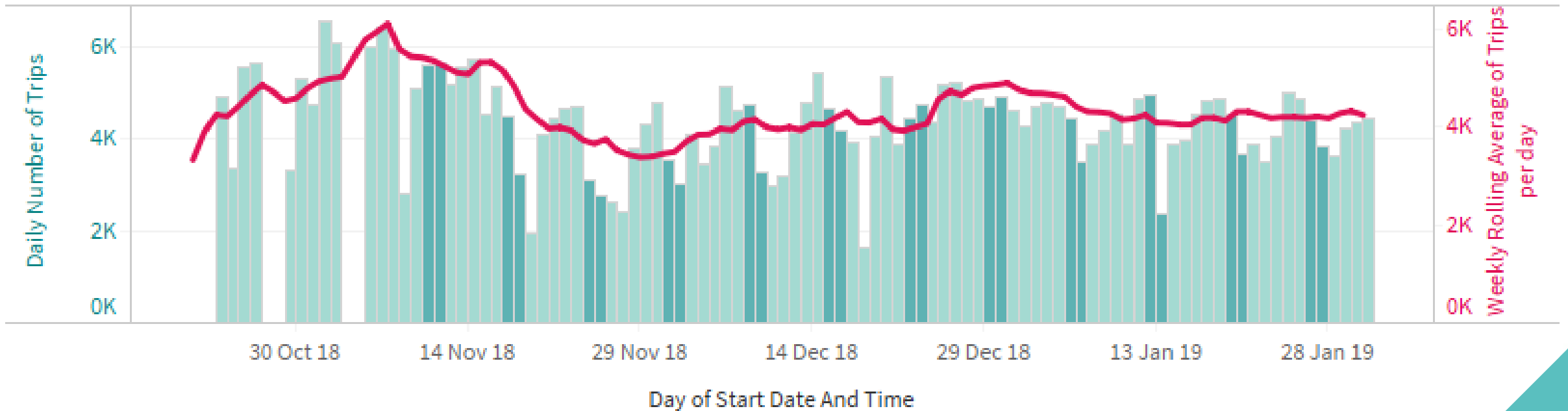
1km



Median trip Time

9min

Trip volumes



Monday



Tuesday



Wednesday



Thursday



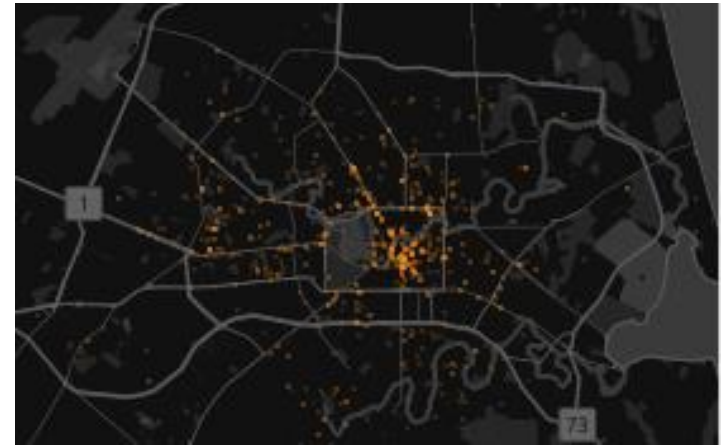
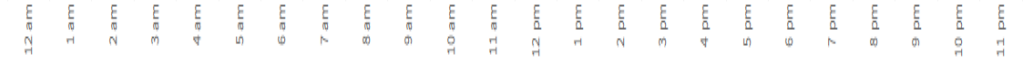
Friday



Saturday



Sunday



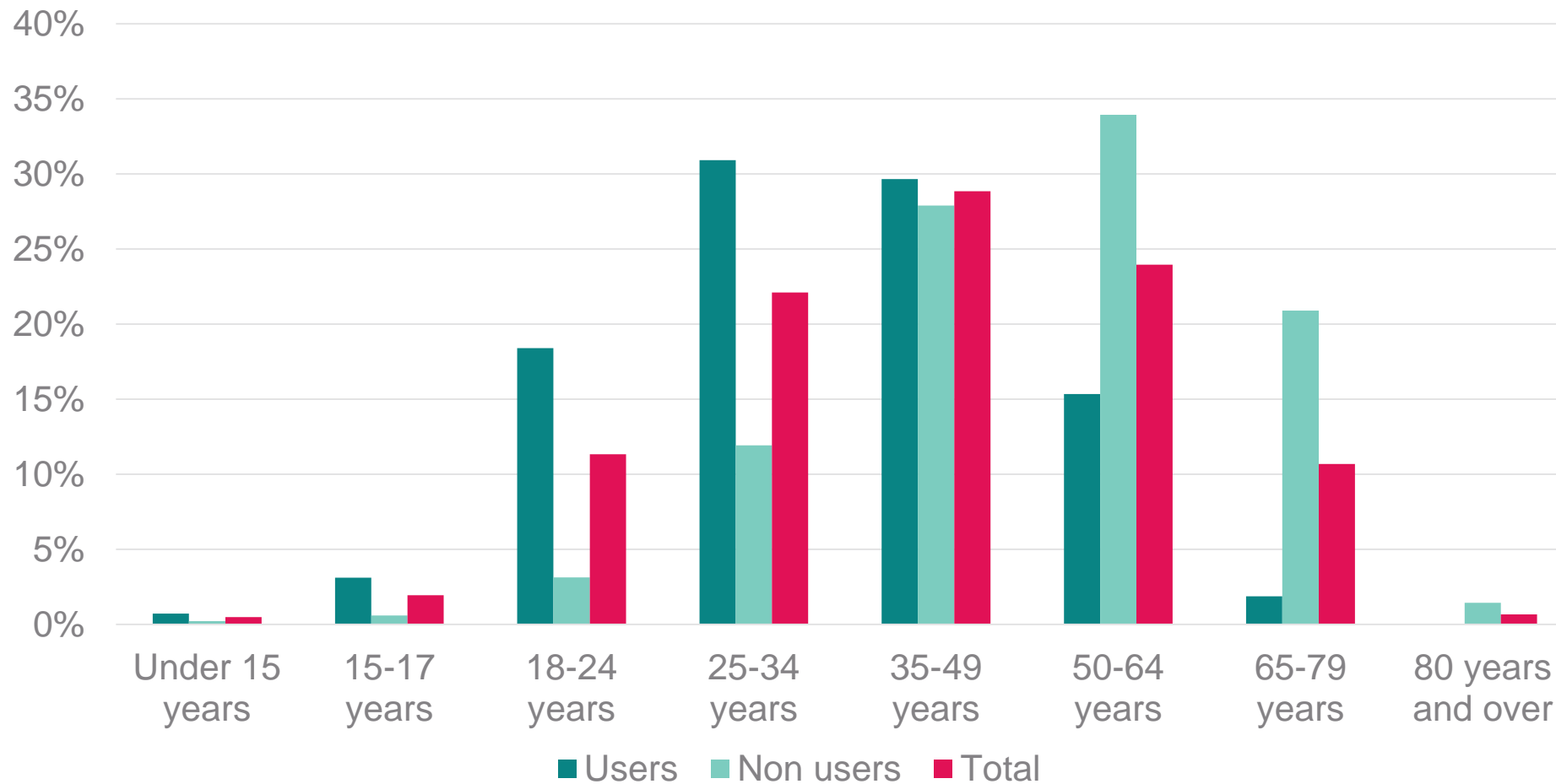
7am to 10am Saturday, longest median trip distance - 1.8km

Moving average of daily trips

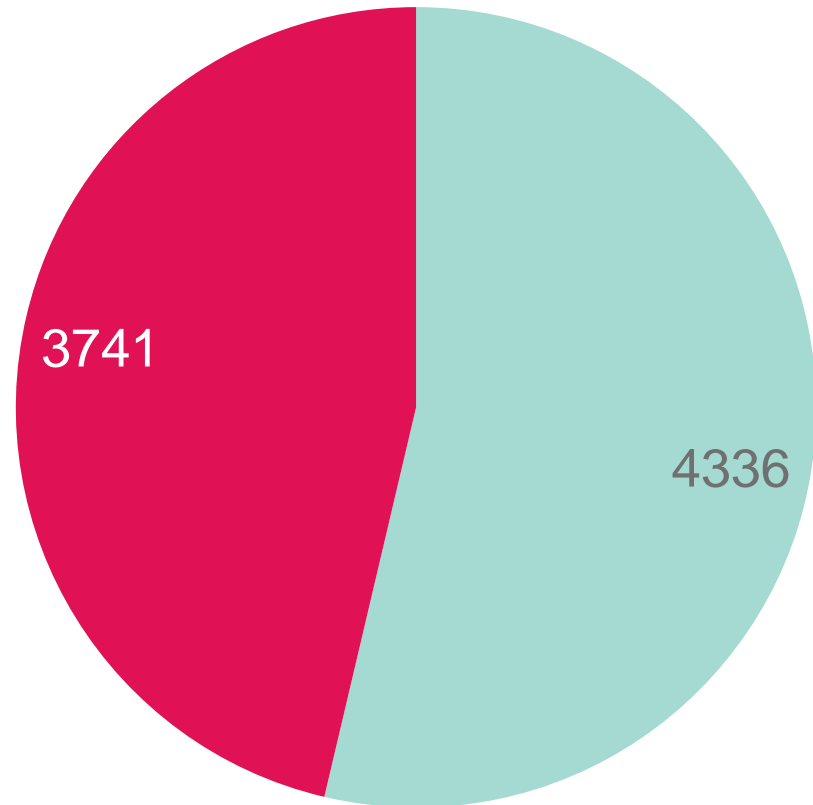


CCC Survey - Demographics

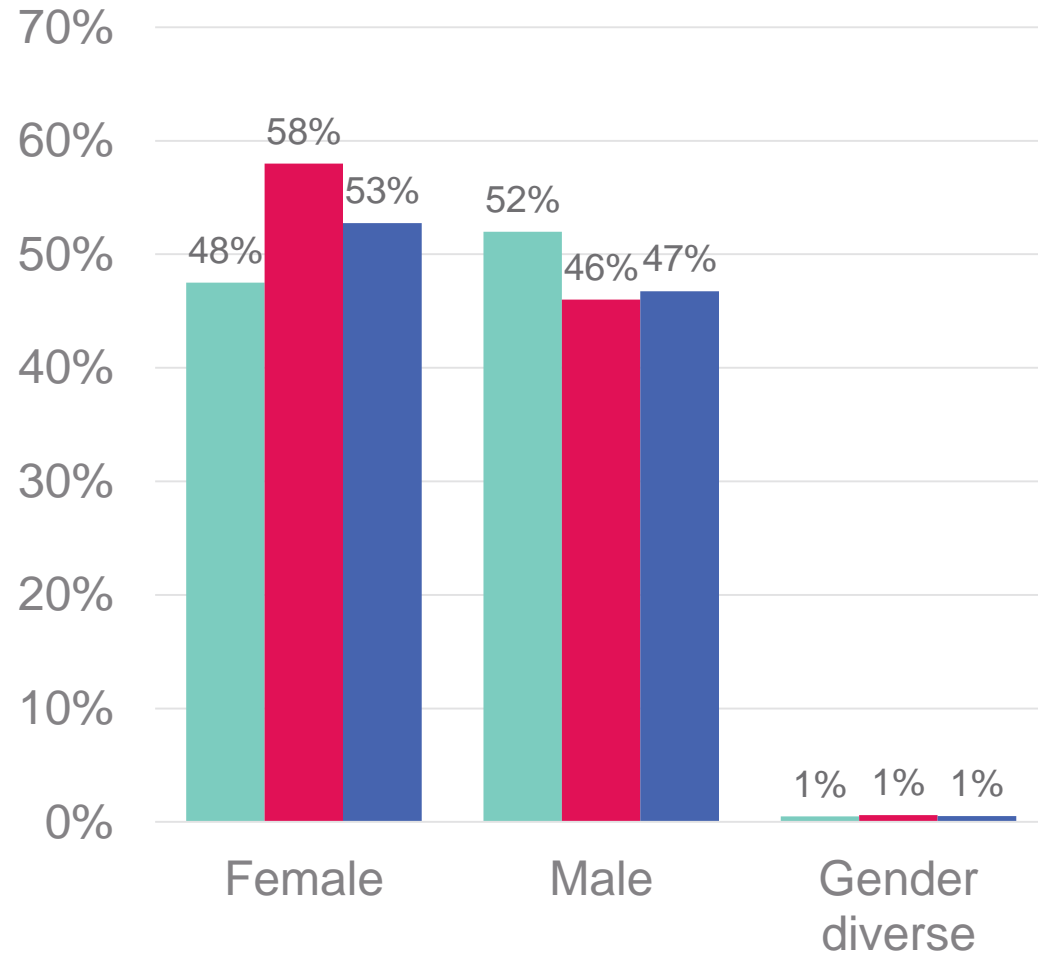
E-scooter survey demographics (n=8,079)



Demographics continued



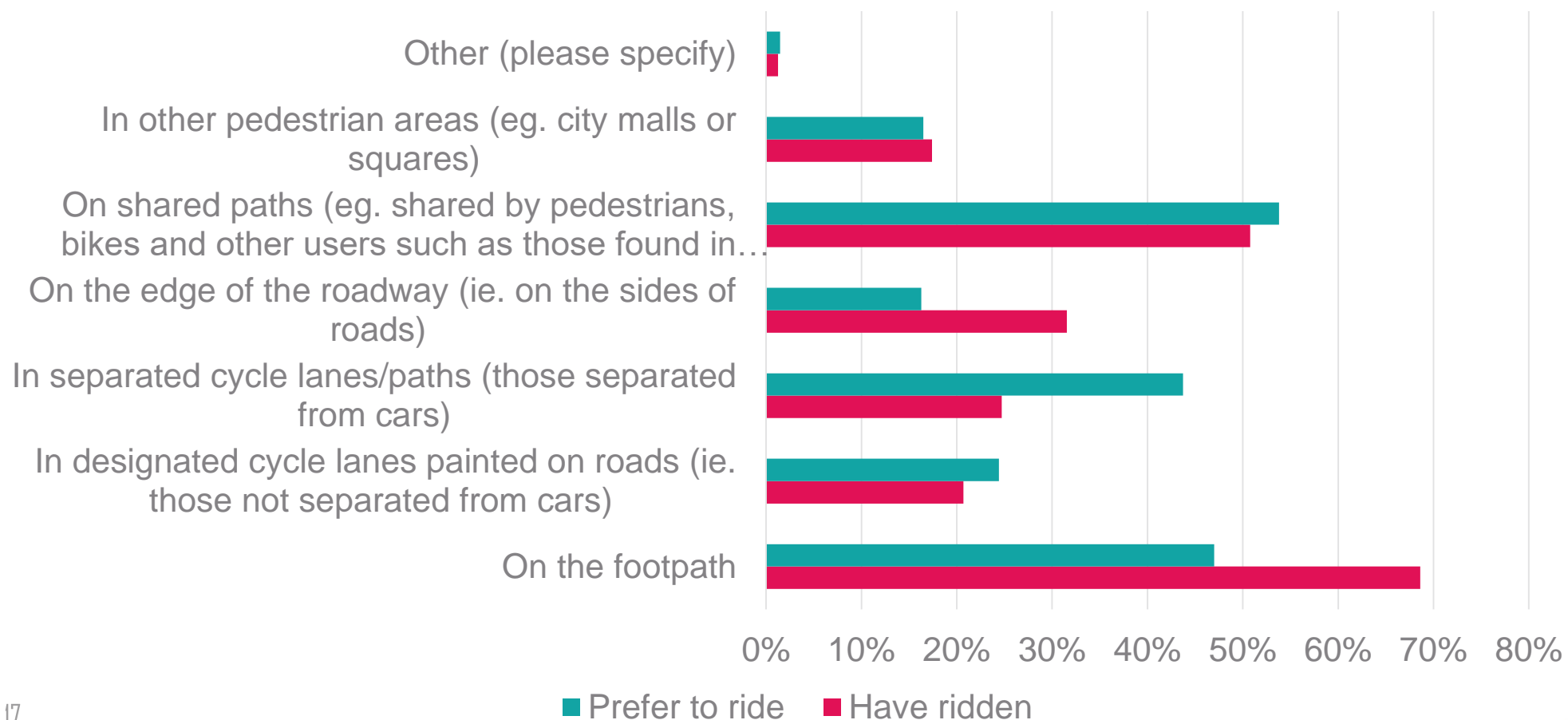
■ Users ■ Non Users



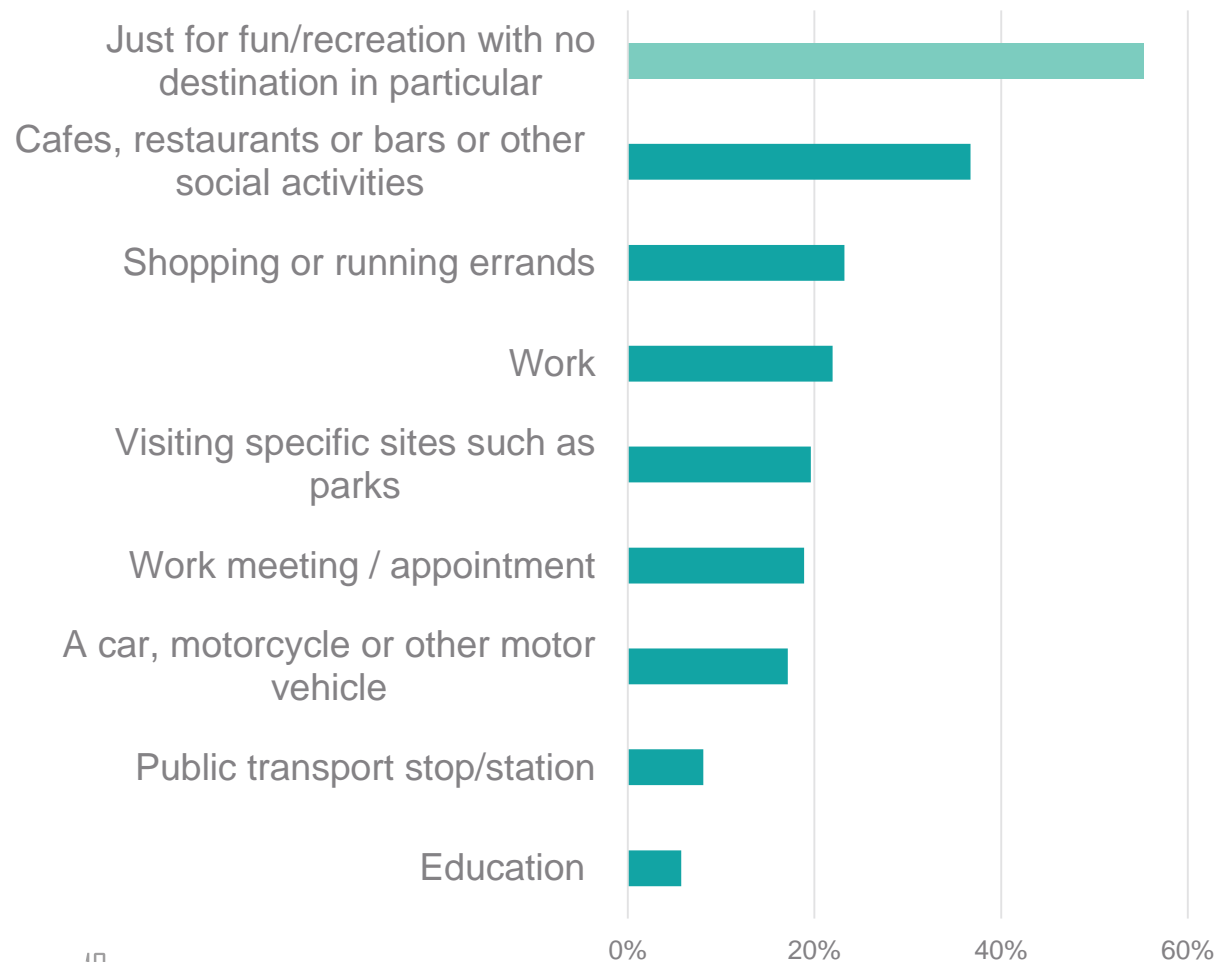
■ Users ■ Non users ■ Total

Usage locations

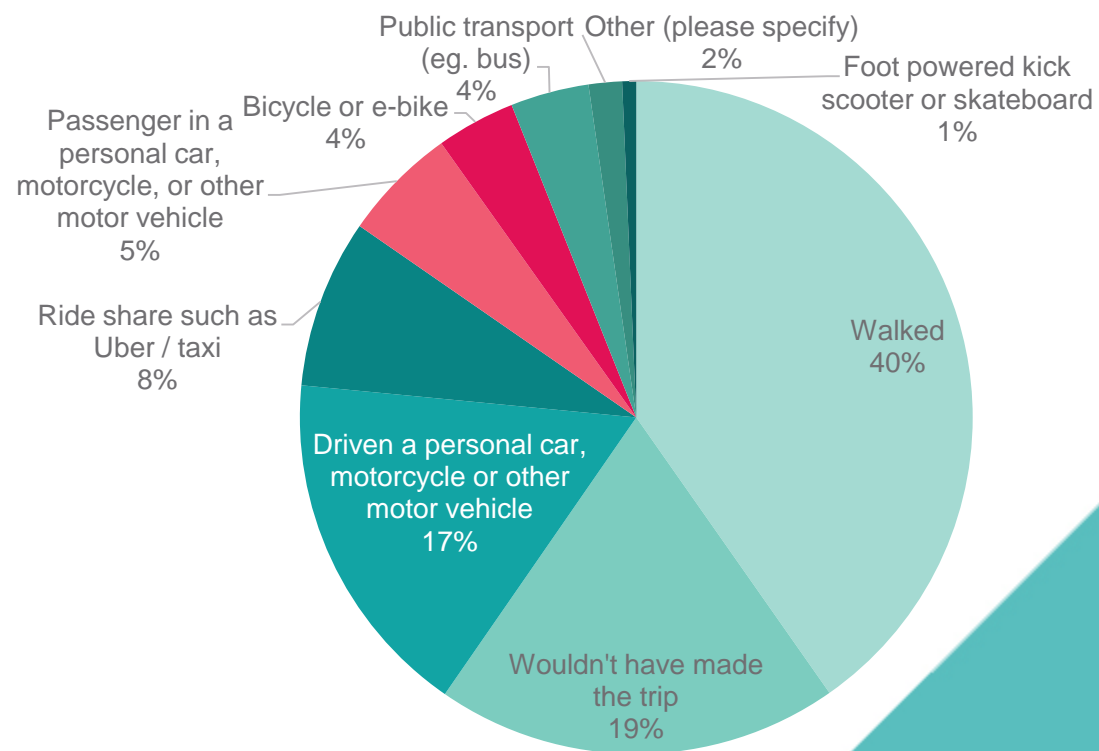
Actual vs preferred locations to ride e-scooters n=4336



Main origin destinations on e-scooter trips (n=4,336)

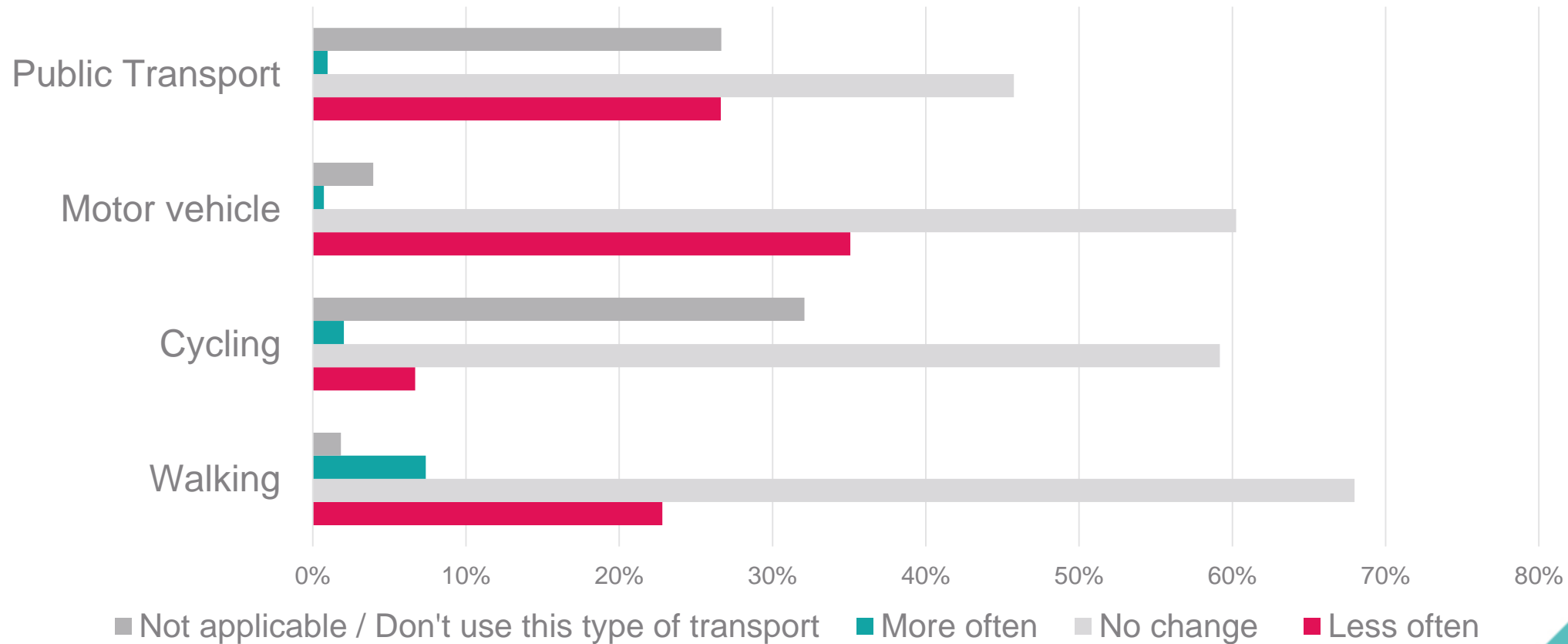


Alternate modes on most recent e-scooter trip (n=3,872)



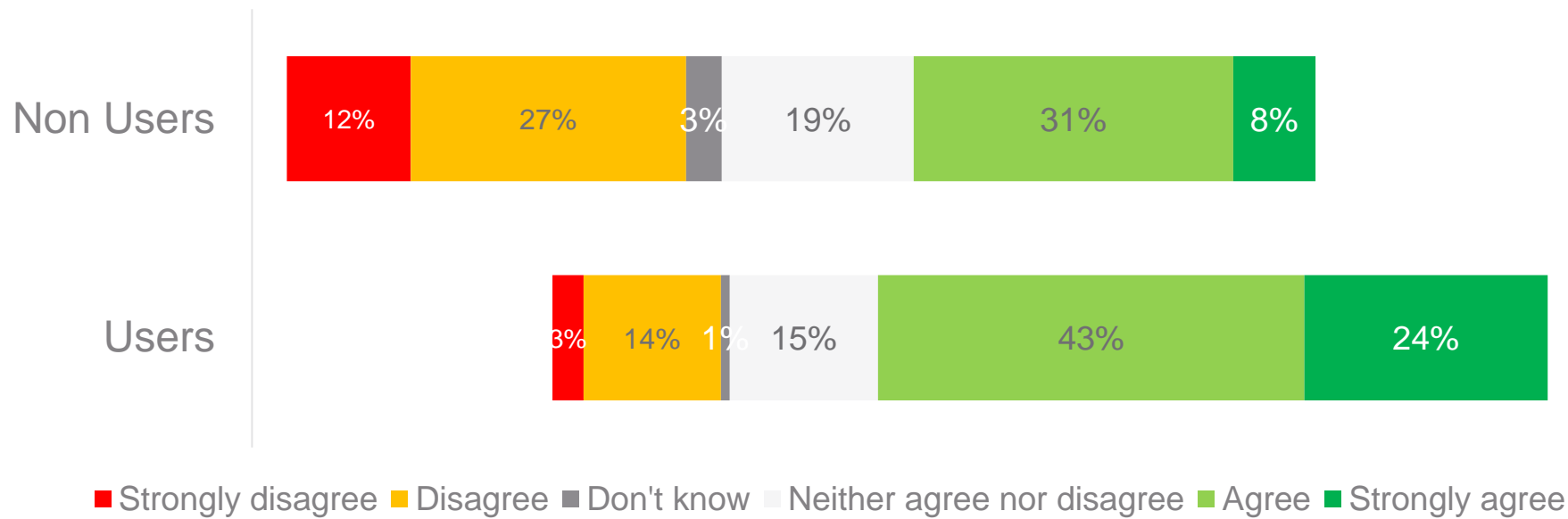
Change in transport habits since using Lime scooters

Change in use of transport modes since using Lime Scooters (n=3,590)

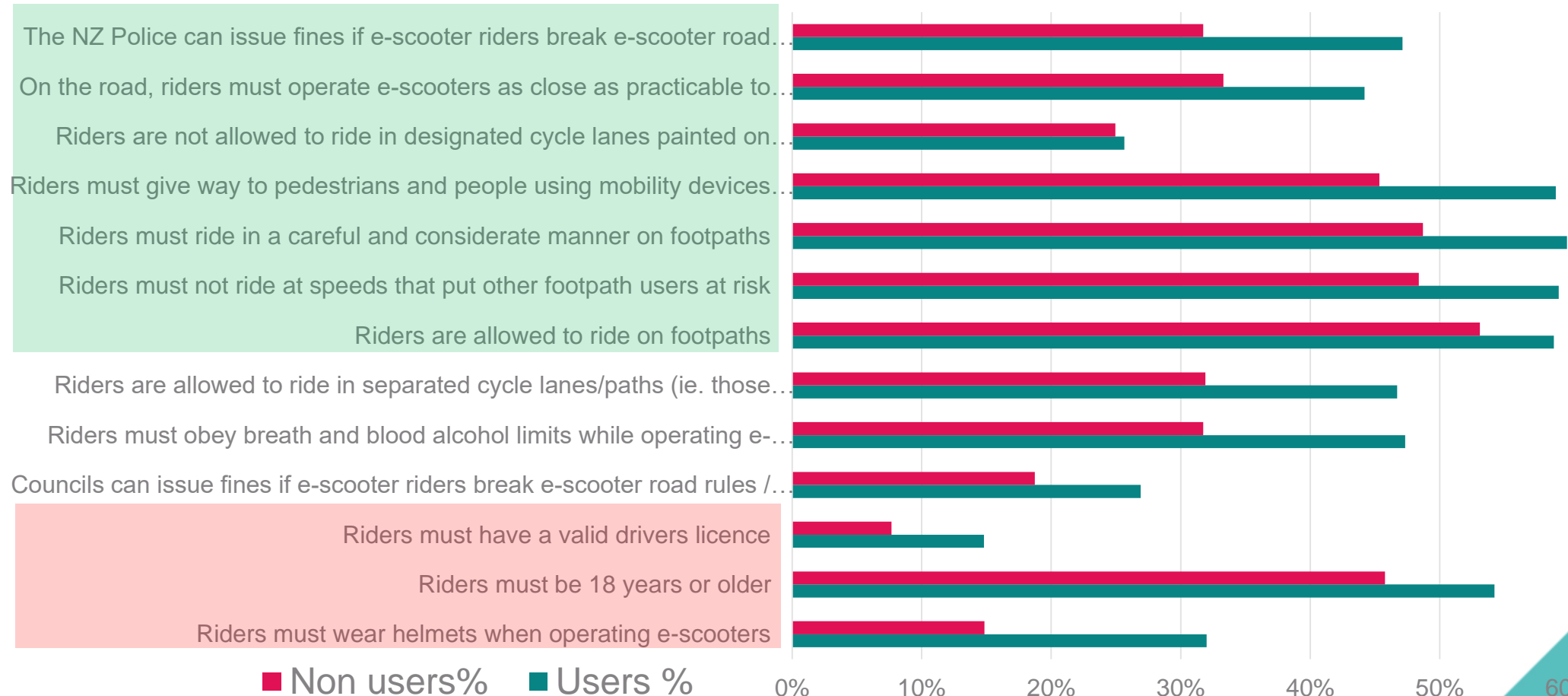


Knowledge of rules

I am confident I know what the road rules / laws are in relation to e-scooter use in New Zealand (n=8,079)

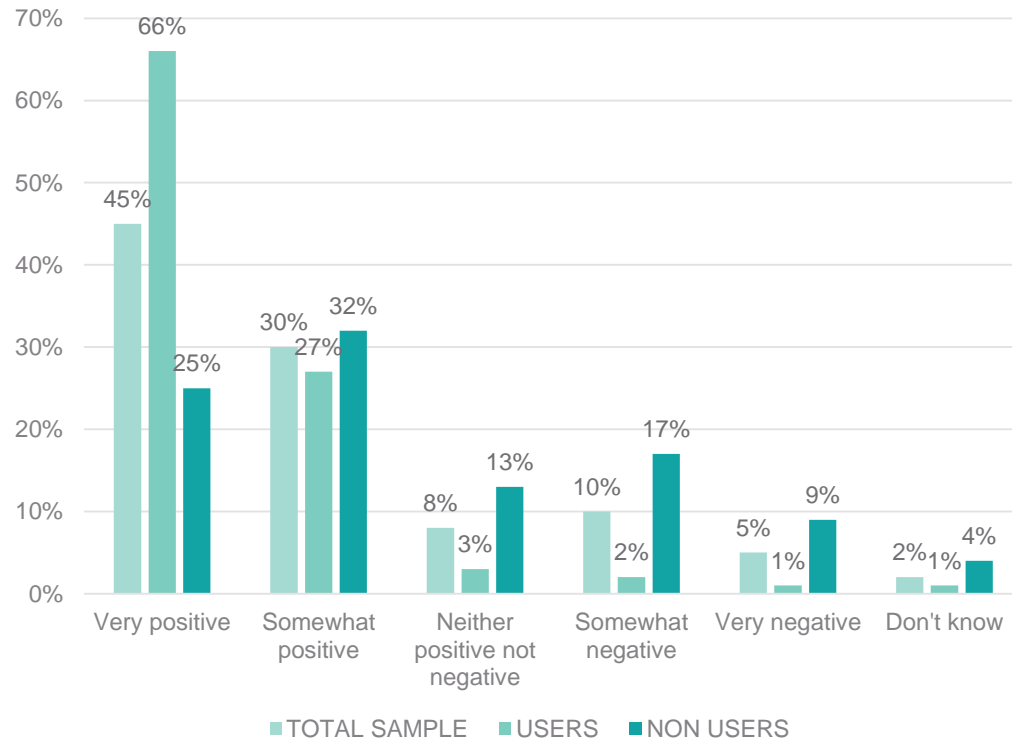


What are the road rules?

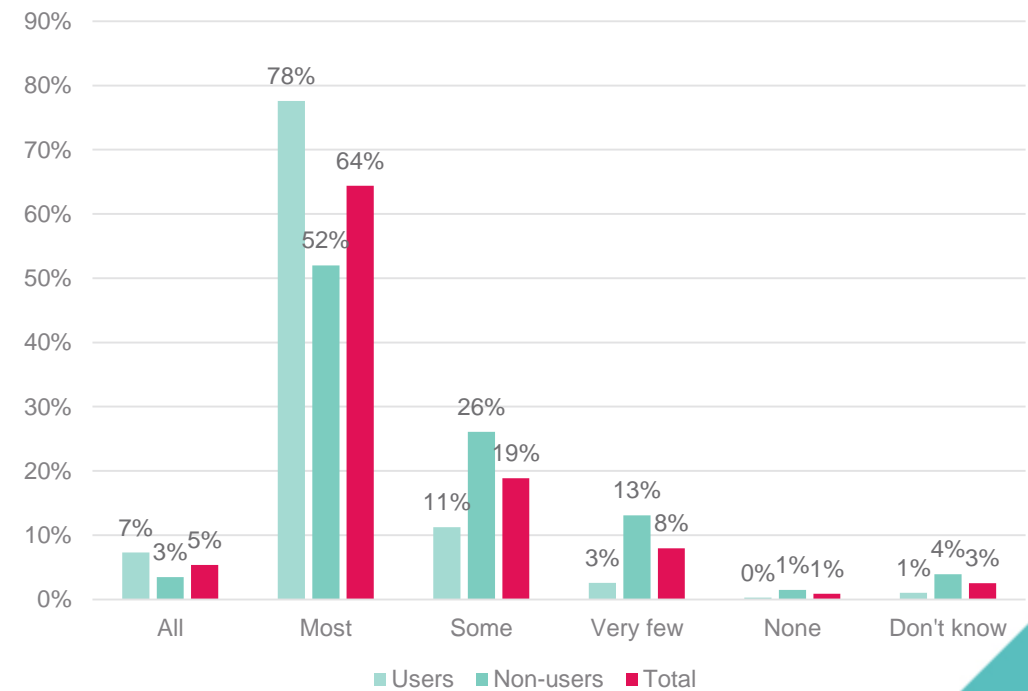


What do people really think?

Effect of Lime e-scooters on Christchurch
(n=6,834)

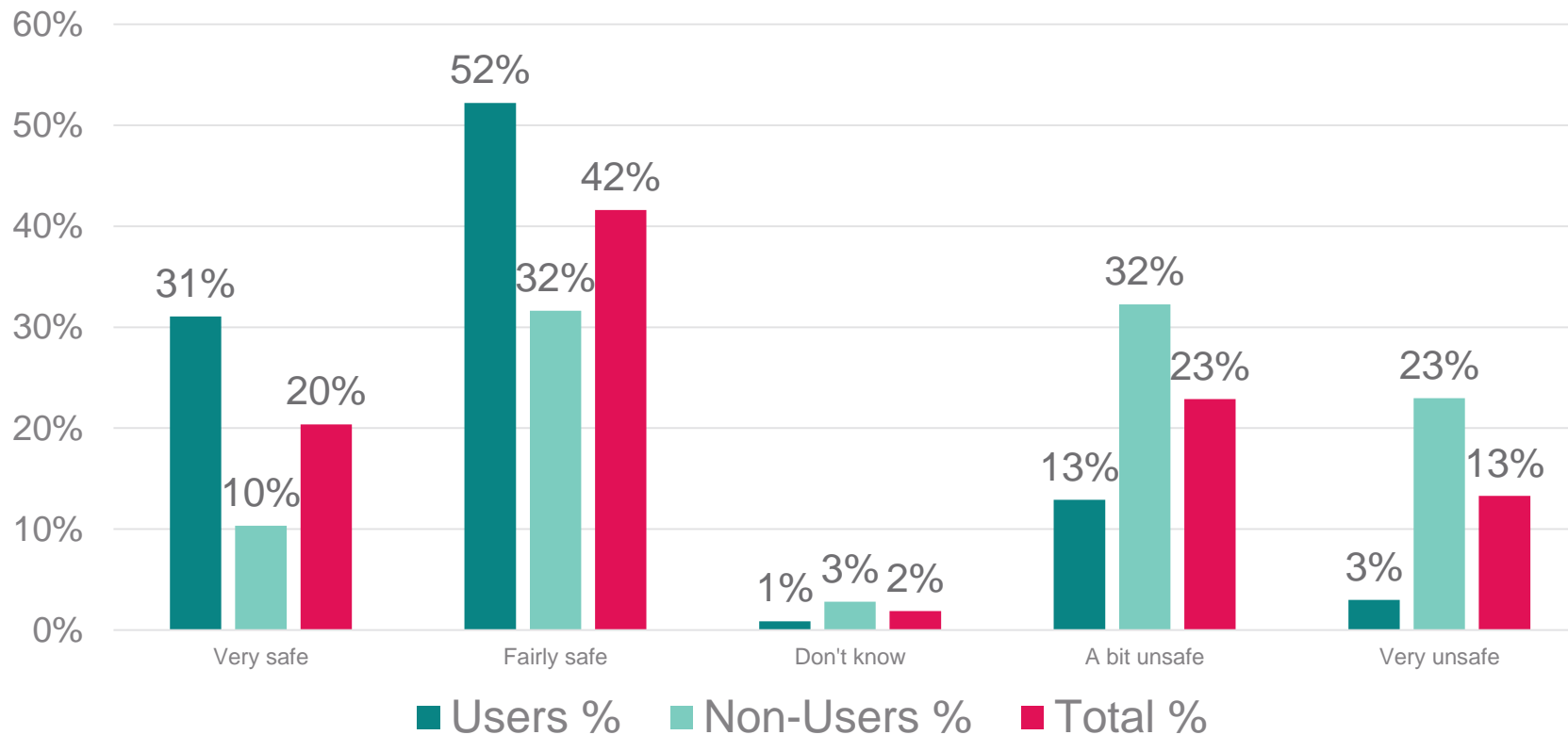


Proportion of Lime e-scooter users, riding the e-scooters in a safe and/or responsible manner
(n=6,851)



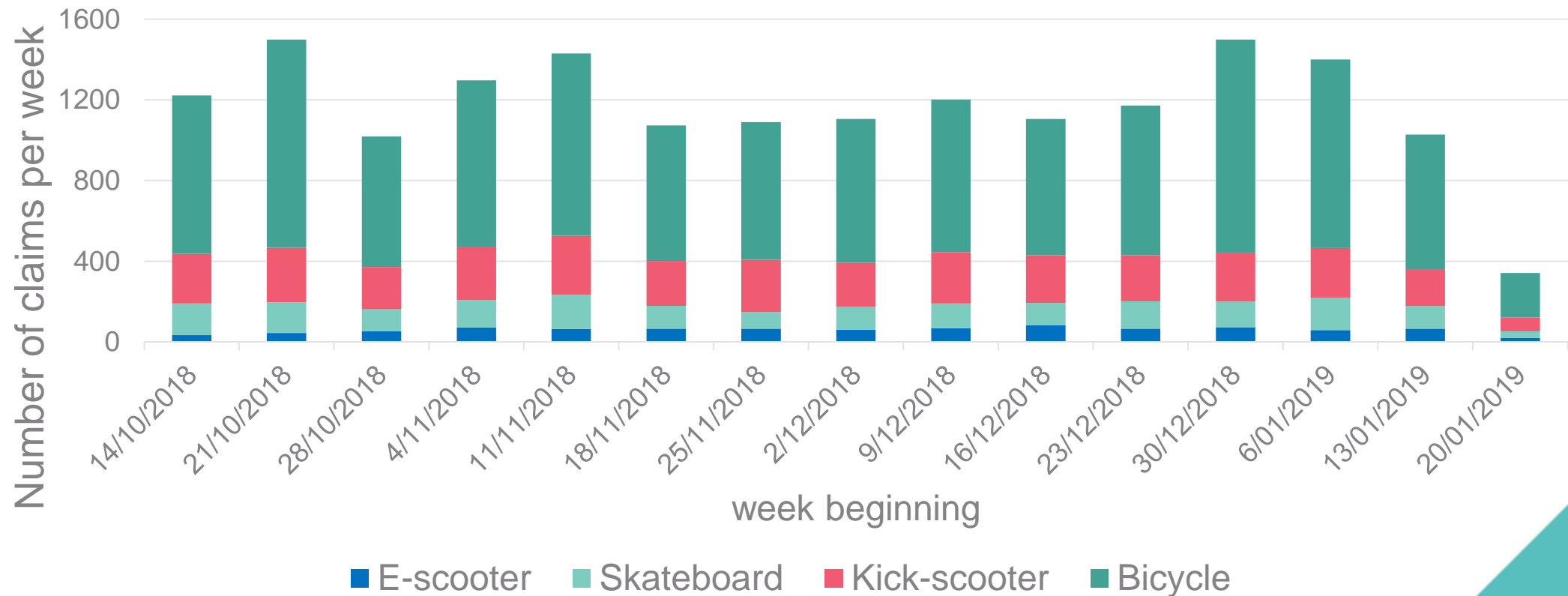
Perceptions of safety

How Safe do you feel sharing pedestrian areas with scooters? (n=6,923)



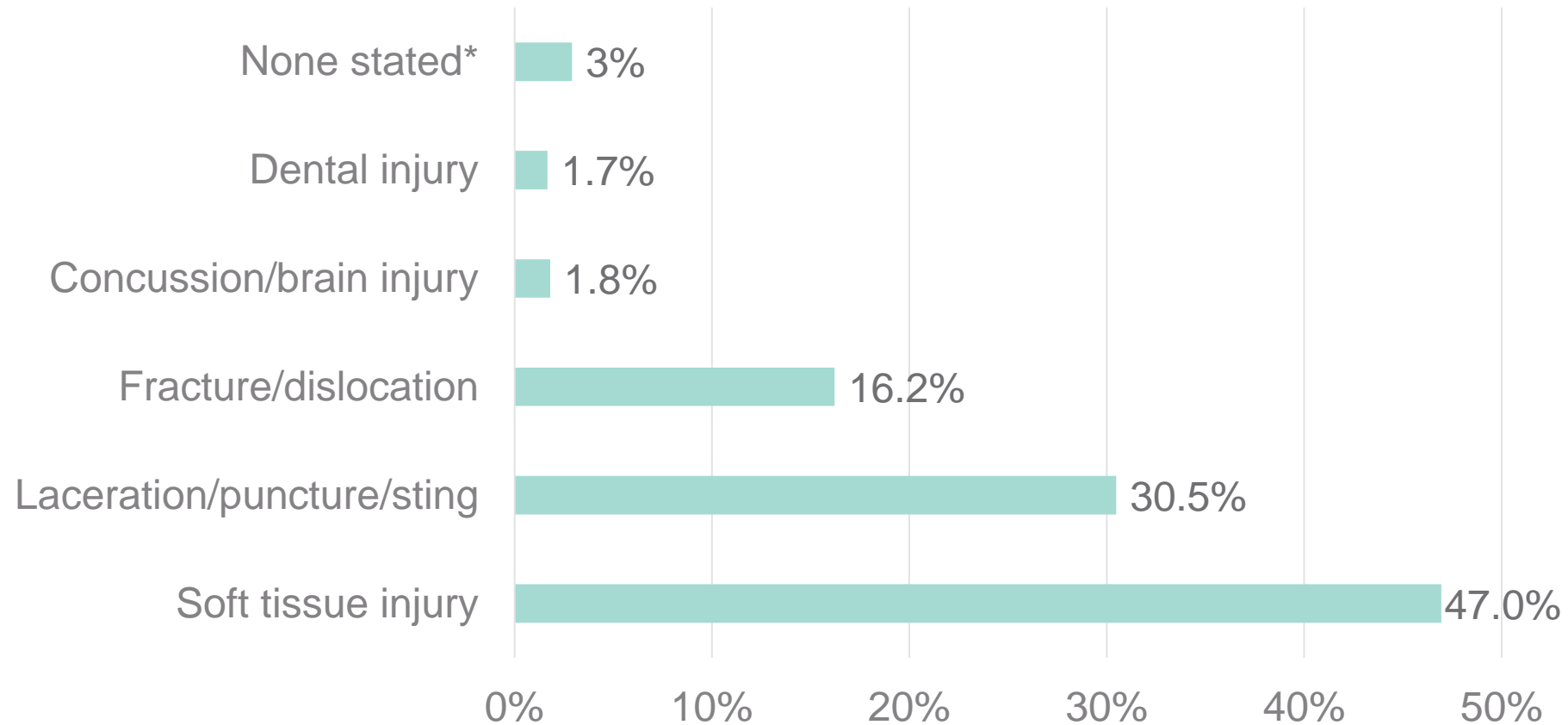
Issues and tensions

ACC injury claims WRDs and Bicycles - all of NZ



Injury data

ACC Primary Diagnosis (n=722)



*Data withheld when types of injury are <4

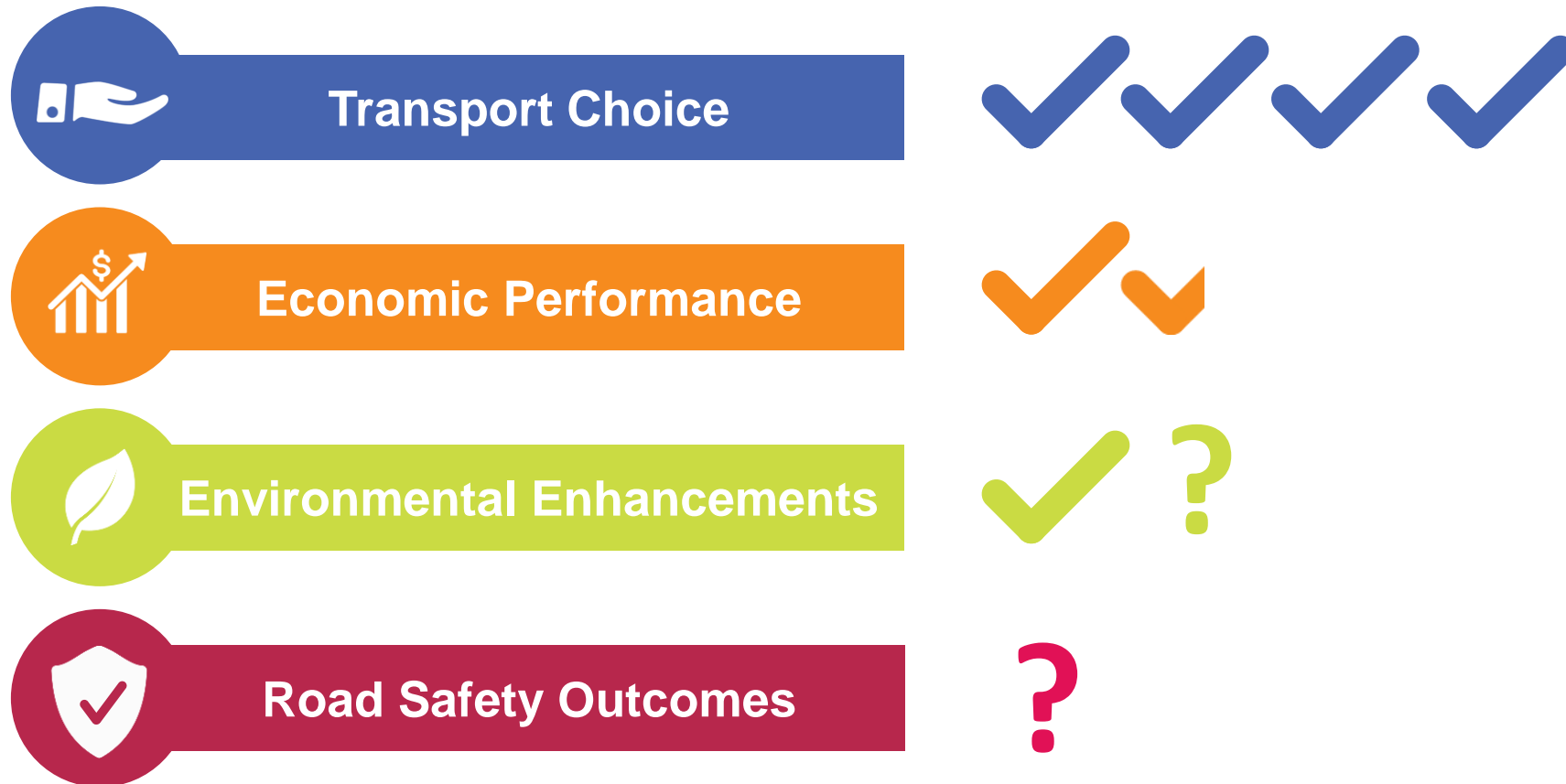
What does the future hold?



"The deeper I get into transportation, the more I realize we don't need autonomous vehicles, we don't need tunnels, all we need are more bike lanes,"

- Travis VanderZanden, Bird CEO and Founder

What do we want from our transport system?



What next?



Encourage micro-mobility to complement and supports public transport and multi modal trips



Recognise that pedestrians as most vulnerable and be put first in the hierarchy



Designing infrastructure and public spaces to recognise micro-mobility options.



Managing and require universal open data and standards



Manage fleet sizes in the short and medium term to understand customer demand and oversupply



Levy fees to pay for campaigns and improve public spaces



Work with central government and other Councils to develop regulation, policy frameworks

Thank You

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