Micromobility and tourist dispersal in Townsville

Do e-scooters help tourists spread out, visit more sites and spend more?

Research Summary

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Foreword

- This summary outlines the findings of the independent research undertaken by Griffith University.
- The Neuron E-Scooters and Tourist Dispersal (Research Ethics Ref No: GU 2020/905) survey seeks to evaluate the impact of Neuron e-scooters on visitor travel behaviour in Townsville.
- This research was fully funded internally through a grant from the Griffith University Cities Research Institute.
- The research team is extremely grateful to Neuron Mobility for their support and their willingness to share de-identified data.
- The views expressed are solely those of the authors and do not represent the views of any institution. All errors and omissions are the authors' alone.

Background

- Townsville introduced Neuron e-scooters on 25th September 2020.
- Townsville joins Brisbane as the second Queensland city offering public hire e-scooters.
- Currently costs $1 to unlock then 38c per minute.
- Discounted passes are also available as subscription schemes for more frequent users.

What do we want to know

- **Does e-scooter help visitors to get around and spend at attractions?**
- What are the usage patterns of visitors and non-visitors?
- Where do visitors travel in Neuron service area?
- Do they go to more places, or make new trips due to e-scooters?
- How much do visitors spend on shops/attractions?
- Any positive effects on city image and travel?
  - Wider interests for State and local governments (urban policy, tourism)
    - What is the value of e-scooter hire schemes to cities?
    - Balancing the benefits and disbenefits

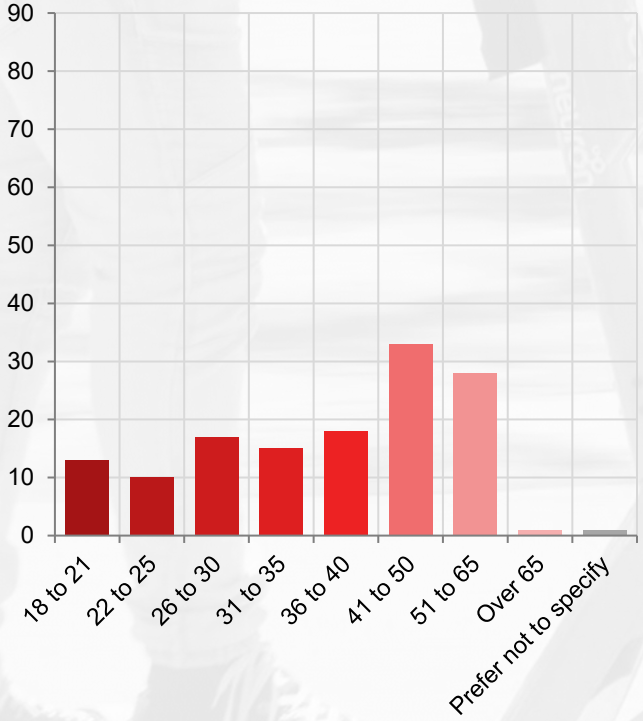
The survey

- Online only survey sent via email to Neuron customers in Townsville.
    - Intercept survey was planned, but not feasible due to COVID uncertainty.
- Target respondents = visitors to Townsville local government area.
- Screening question let us know who are locals.
- Local residents were excluded for the survey, but tracking data can be used to compare travel patterns with visitors.
- Survey period: from 9 December 2020 to 28 February 2021.
- Respondent's time of travel to Townsville: 26 September 2020 to 28 February, 2021.

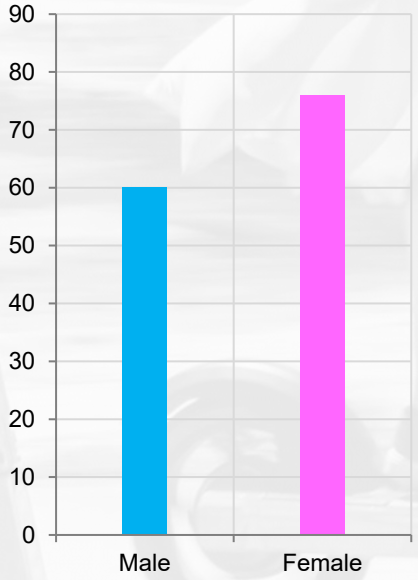
Survey Batch:	1st (Dec 2020)	2nd (Jan 2021)	3rd (Feb 2021)	Total	%
Entered survey	80	107	72	259	**100**
Visitors	30	73	45	148	**57.14**
Locals	37	24	20	81	**31.27**
Effective sample	29	67	44	140	**54.05**

Key demographics of visitors surveyed (n=140)

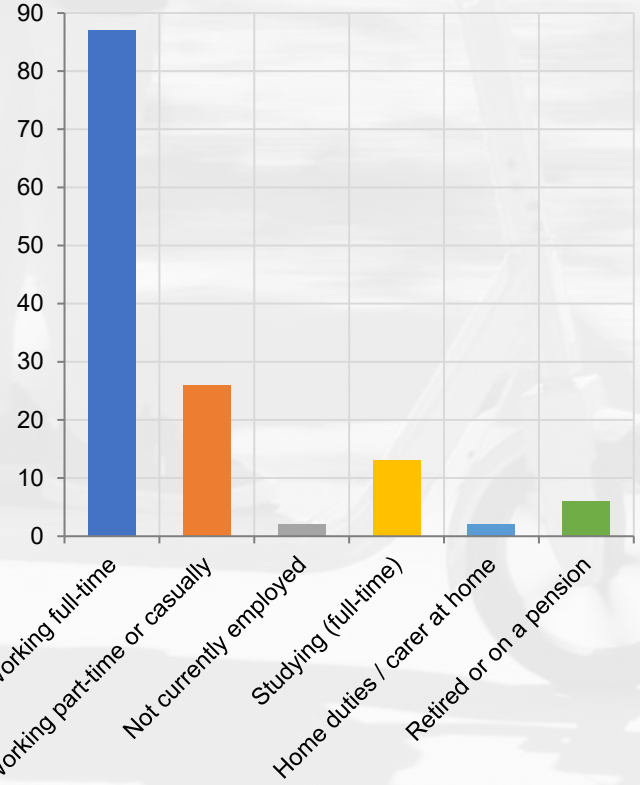
Age



Gender

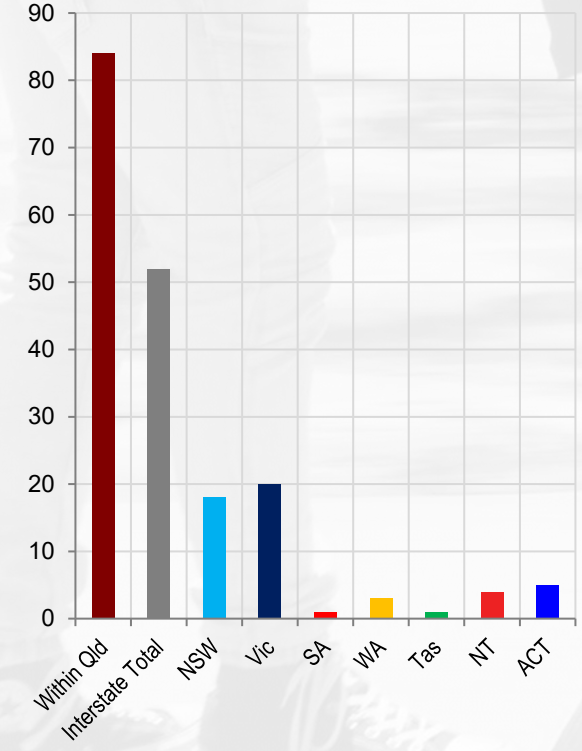


Main activity status

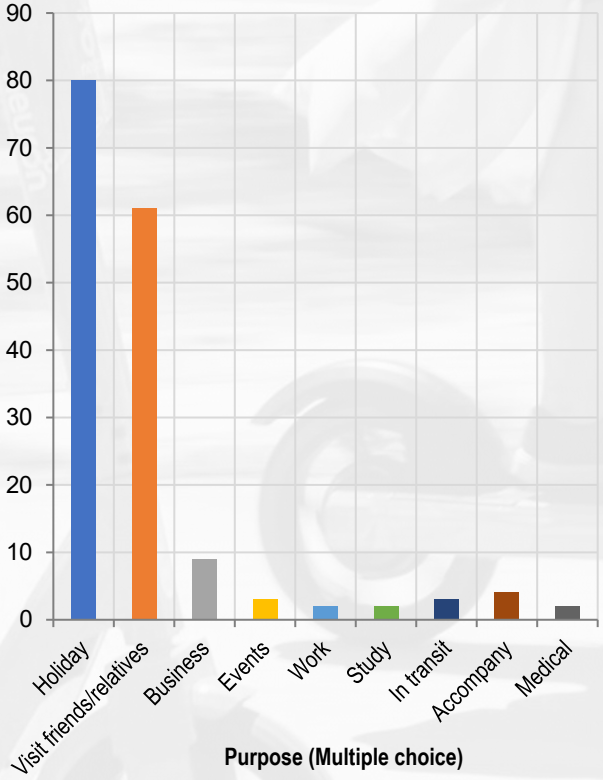


Visitor profile (n=140)

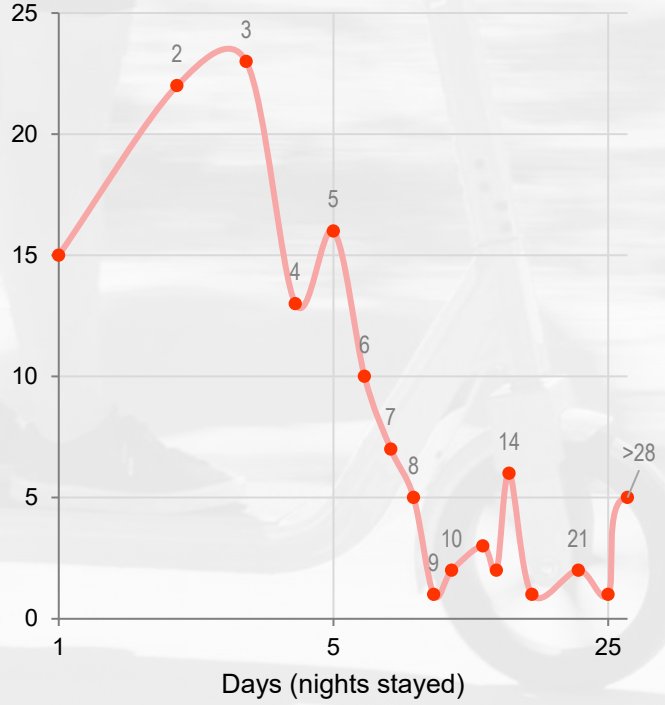
Where from



Purpose of visit



Length of stay

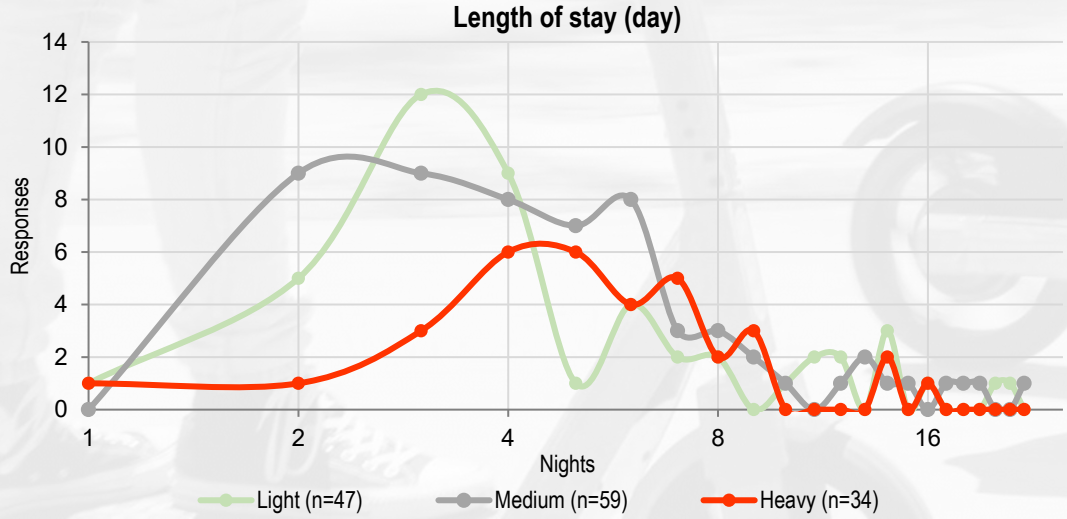


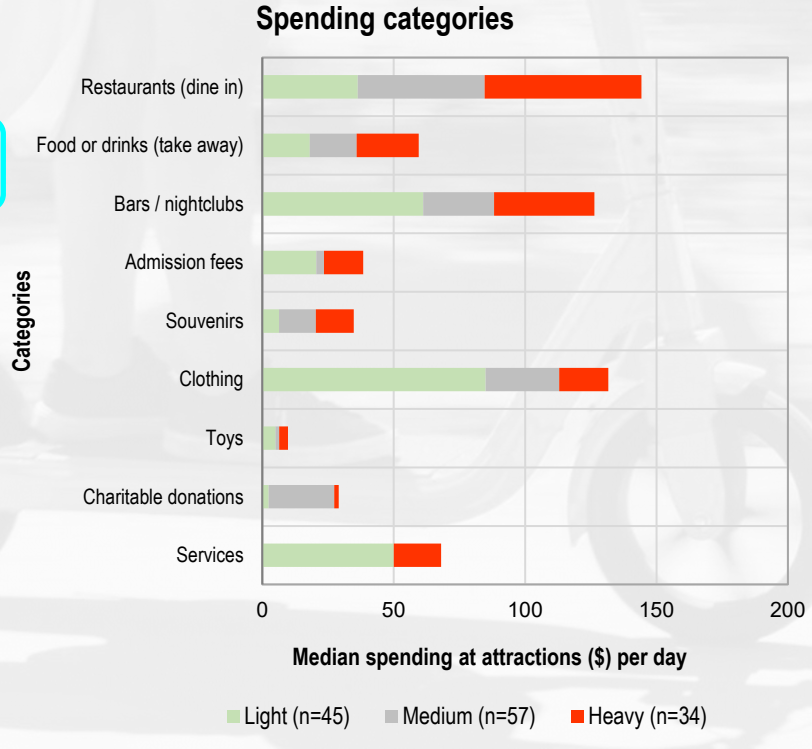
Segment analysis of visitors by usage (n=140)

Group	Light user	Medium user	Heavy user	Total sample
No. of users surveyed	47	59	34	140
Cut off percentile	0 to 33.3%	33.3% to 66.6%	66.6% to 100%	0 to 100%
Mileage range for group	0 to 4.13km	4.3 to 11.49km	11.49 to 95.13km	0 to 95.13km
Median scooter mileage	2.49km	7.54km	26.34km	6.75km
Median cumulative use time	18min	1h 8min	3h 18min	1h 1min
Median number of trips made during survey period	2 trips	3 trips	11 trips	3 trips
Median spending per visitor	$152.37	$156.55	$324.48	$195.43
Median spending per visitor per day	$62.64	$58.74	$88.07	$66.81

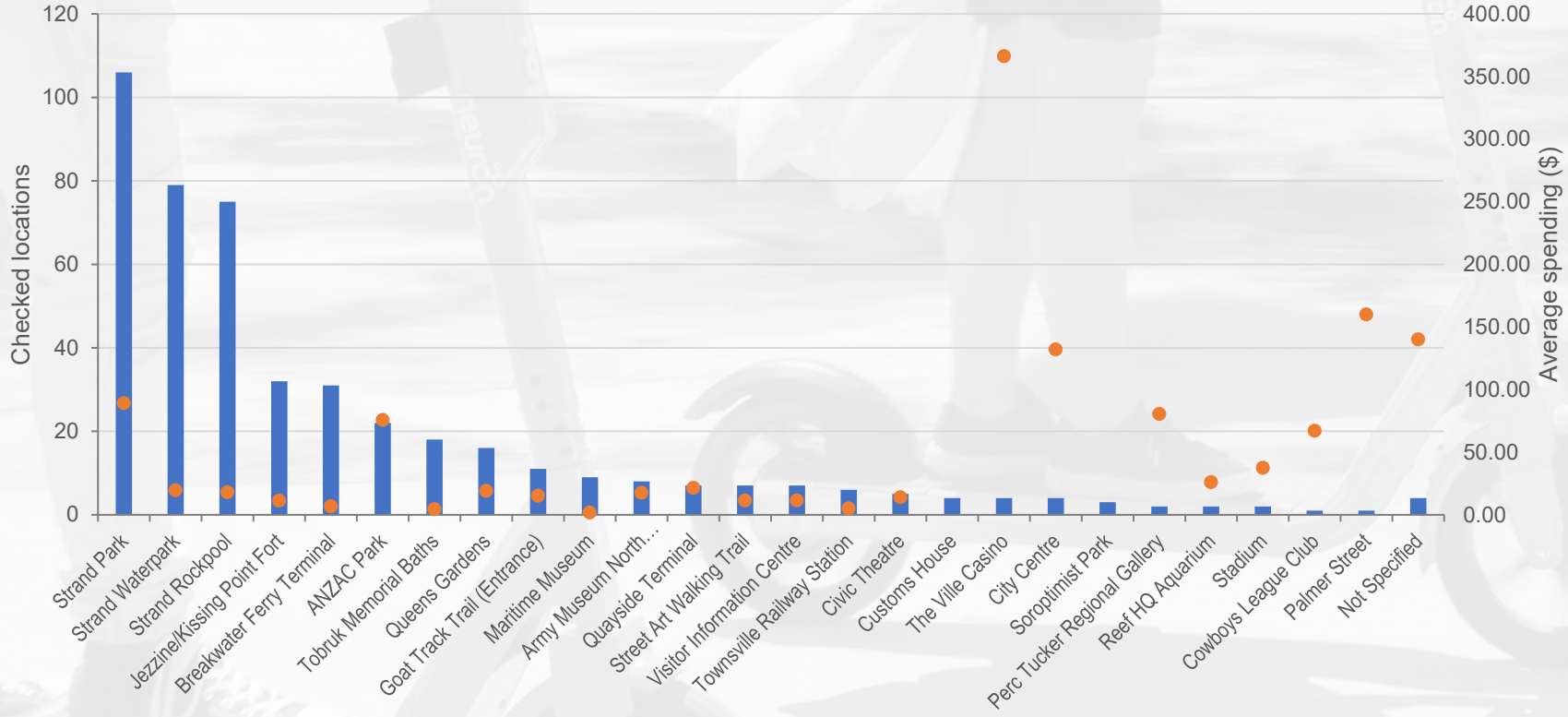
High mileage Neuron users tend to:

- Make more e-scooter trips
- Travel further
- Spend more (per day)





Visited locations vs Spending at site (n=140)

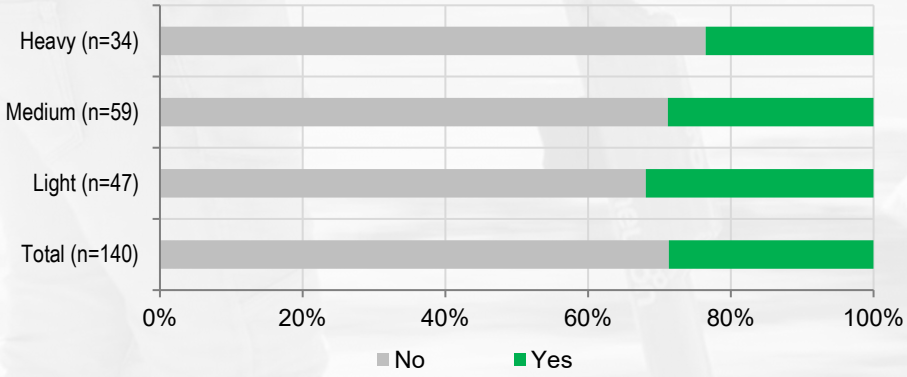


Spending categories vs Location (n=140)

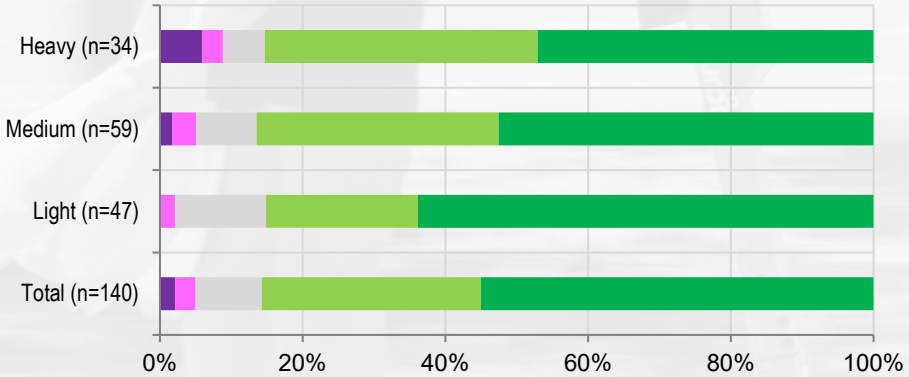
No. of visits	Attraction Location	Restaurants (dine in)	Food or drinks (take away)	Bars/ nightclubs	Admission fees	Souvenirs	Clothing	Electronics	Toys	Charitable donations	Services	Other (e.g. casino)	All types
		Average spending per visits ($)											
Responses with spending:		*62*	*67*	*20*	*11*	*7*	*11*	*1*	*3*	*4*	*2*	*4*	*96*
106	Strand Park	42.10	19.55	11.42	2.17	1.23	10.57	0.14	0.94	0.19	0.81		89.12
79	Strand Waterpark	13.04	6.47										19.51
75	Strand Rockpool	12.17	3.87				2.00						18.04
32	Jezzine/Kissing Point Fort	8.44	1.56	1.25									11.25
31	Breakwater Ferry Terminal	1.61	0.81		4.35								6.77
22	ANZAC Park	29.64	15.59	22.73			2.27					5.45	75.68
18	Tobruk Memorial Baths	3.89			0.56								4.44
16	Queens Gardens	2.50	4.06	3.75		0.63	6.88			1.25			19.06
11	Goat Track Trail (Entrance)	5.45	1.09	7.27			1.36						15.18
9	Maritime Museum				1.78								1.78
8	Army Museum North Qld.		5.00							12.50			17.50
7	Quayside Terminal	14.29	7.14										21.43
7	Street Art Walking Trail		2.86	8.57									11.43
7	Visitor Information Centre				11.43								11.43
6	Townsville Railway Station				4.17	0.83							5.00
5	Civic Theatre					14.00							14.00
4	Customs House												
4	The Ville Casino	130.00	50.00	61.25								125.00	366.25
4	City Centre	39.50		12.50								80.00	132.00
3	Soroptimist Park												
2	Perc Tucker Regional Gallery	41.50		35.00			4.00						80.50
2	Reef HQ Aquarium				26.00								26.00
2	Stadium		25.00			12.50							37.50
1	Cowboys League Club	40.00	25.00		2.00								67.00
1	Palmer Street		100.00	60.00									160.00
4	Not Specified	70.00	20.00	50.00									140.00

Neuron use and visitor travel (n=140)

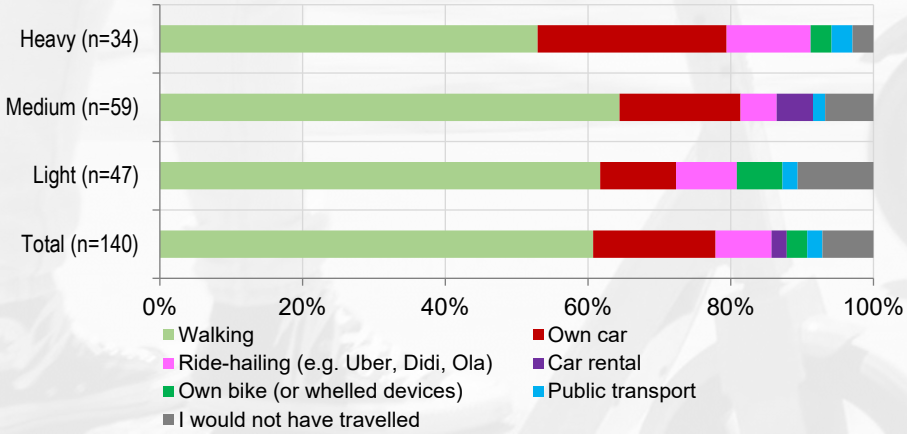
Prior scooter experience



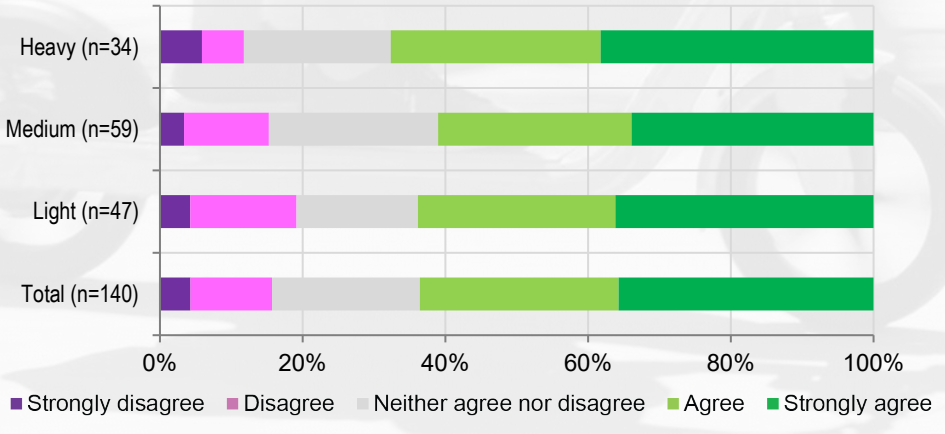
Reason to use - Just to try



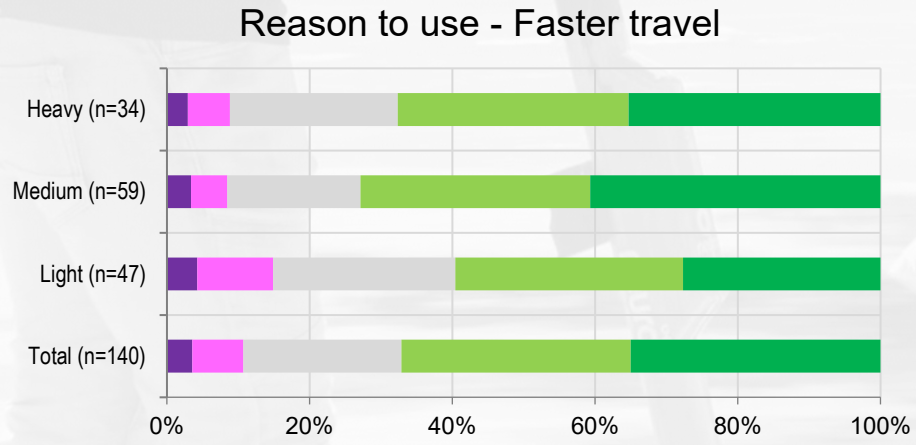
How to travel if not using Neuron

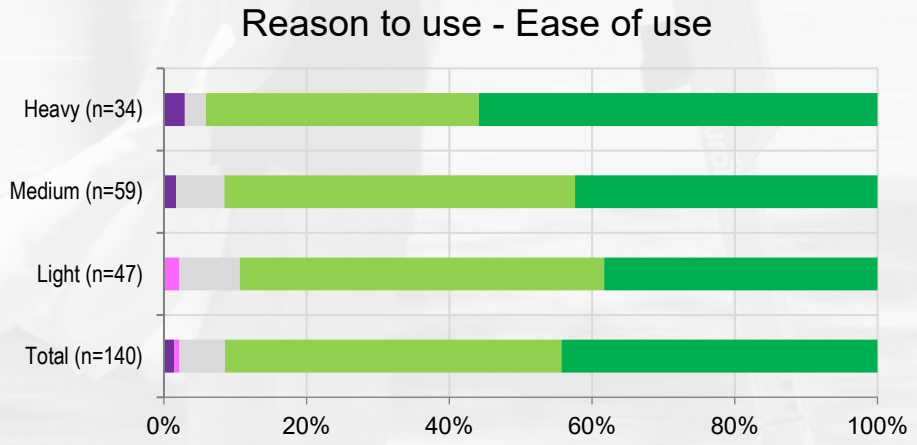


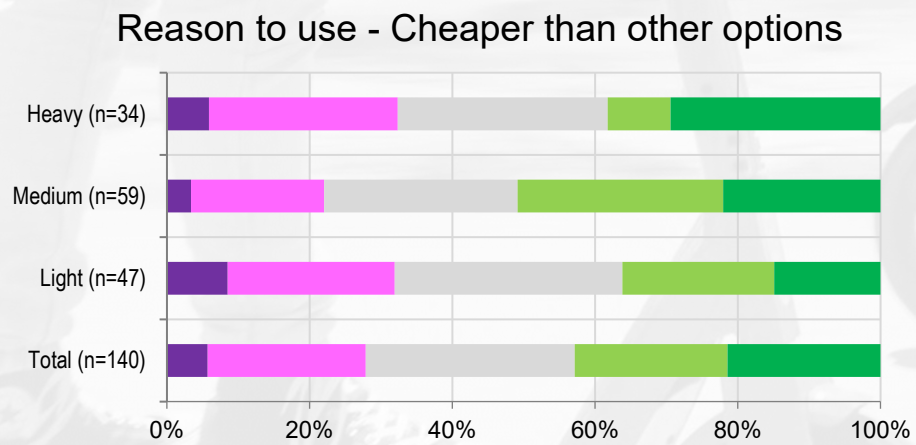
Effects on travel - don't need to use the car

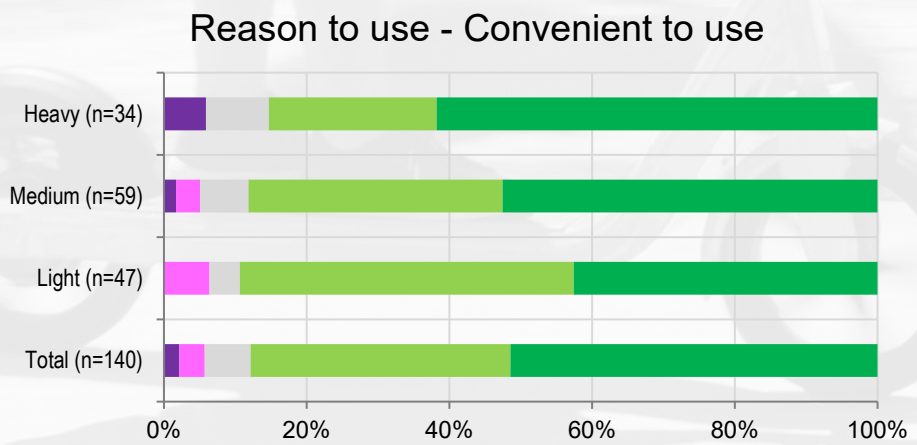


Neuron use and visitor travel (n=140)



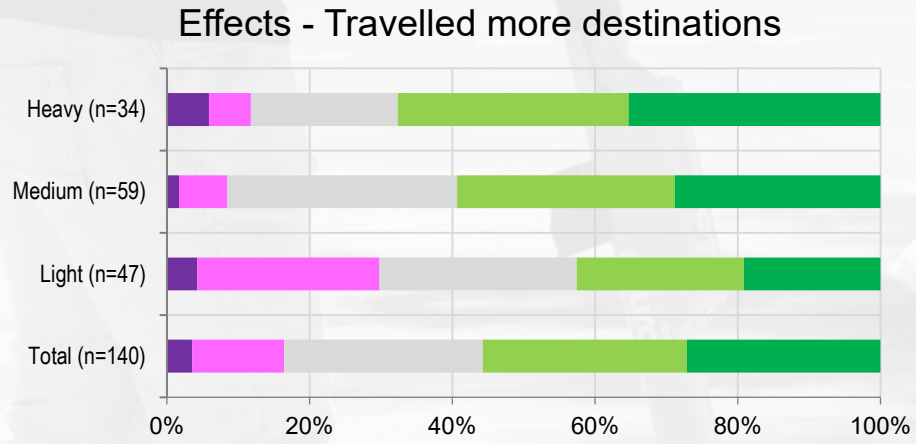


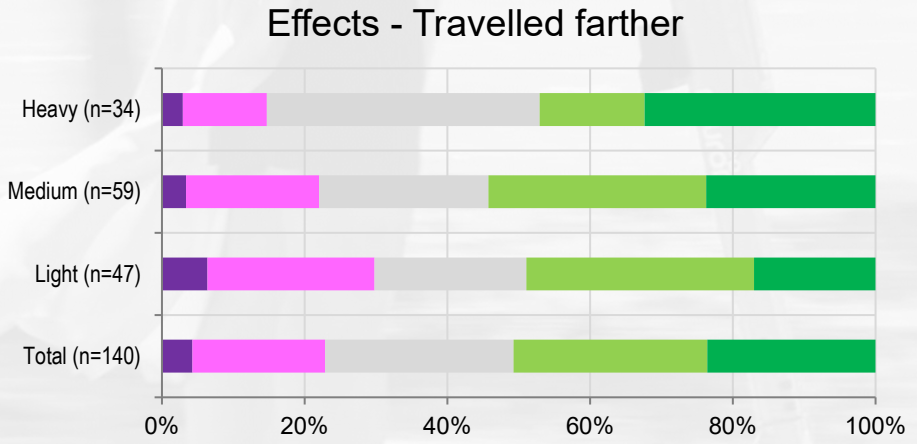


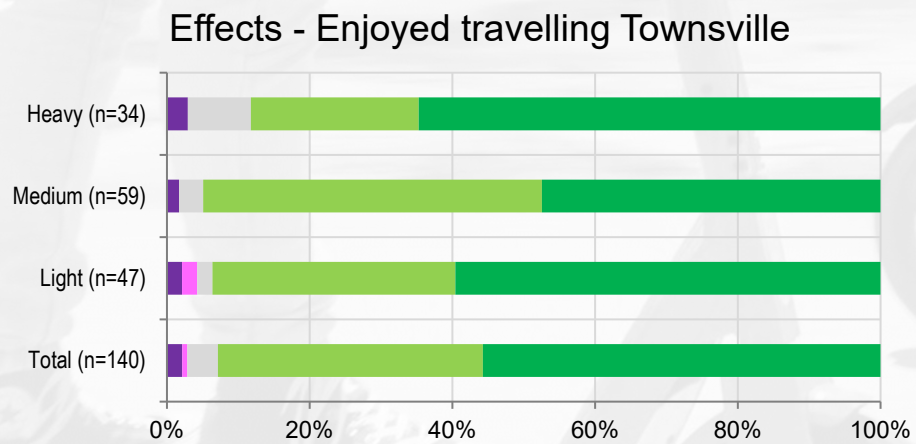


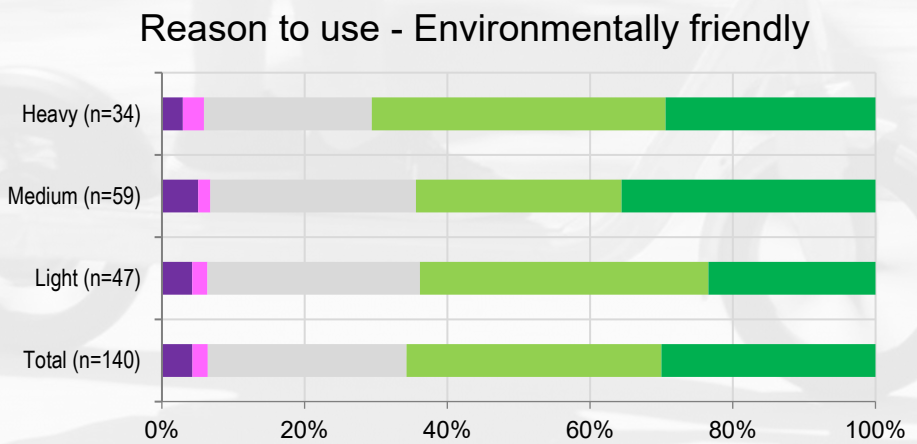
Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree

Neuron use and effects on visitor travel (n=140)





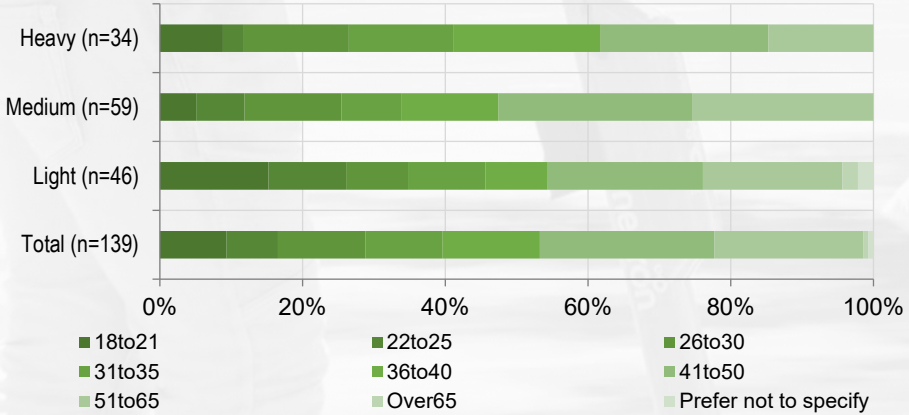




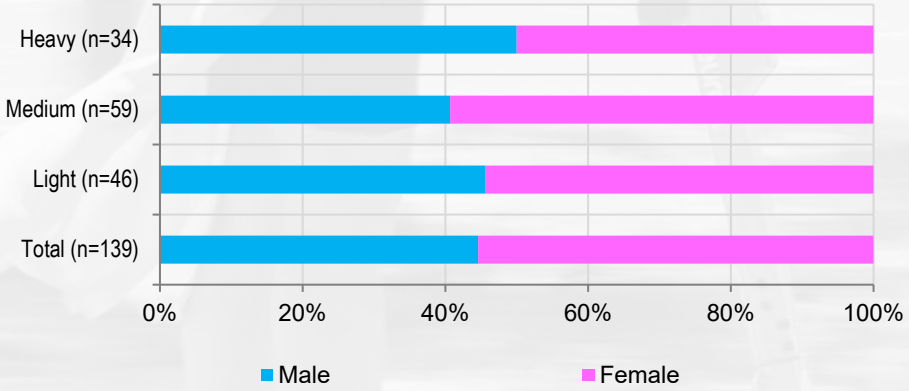
Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree

Respondent (visitors) profile (n=140)

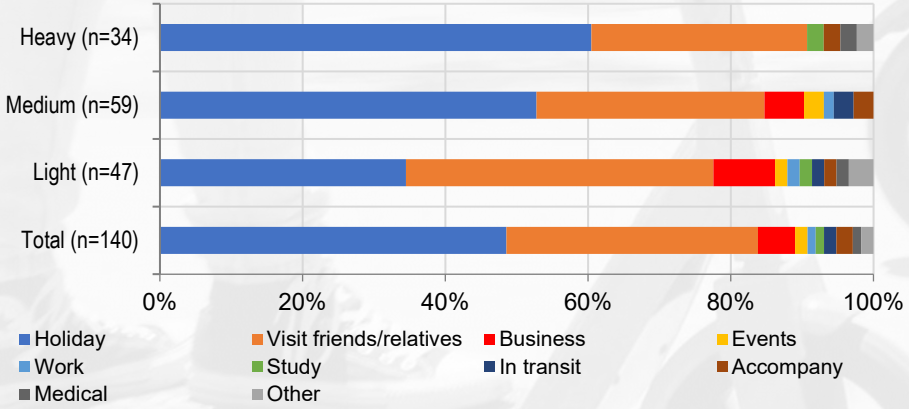
Age



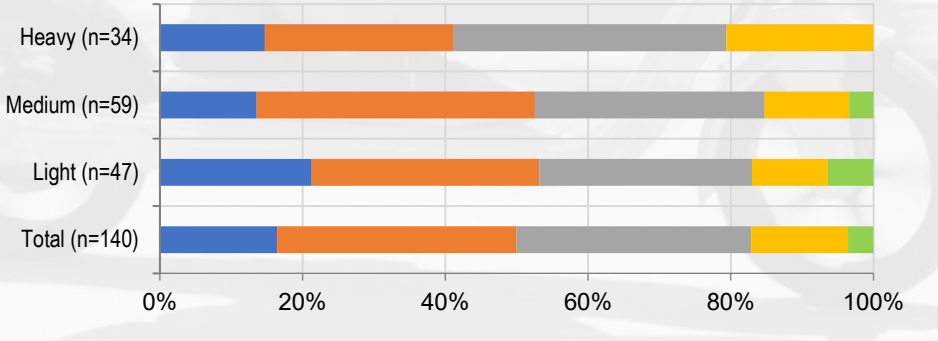
Gender



Purpose of visit

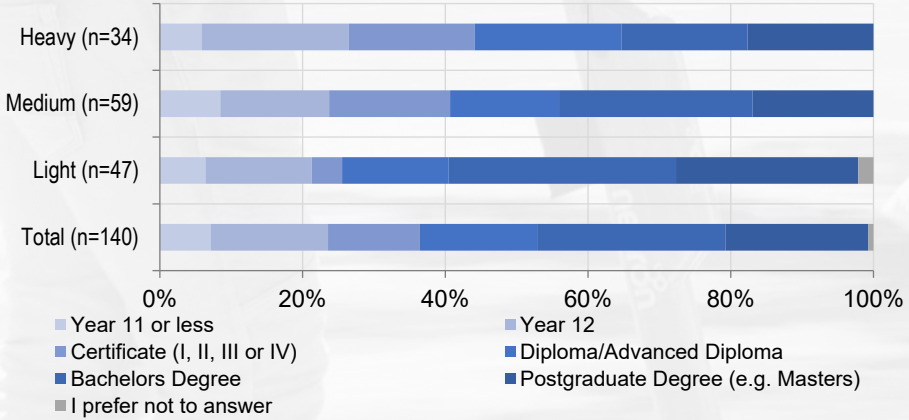


Travelling with

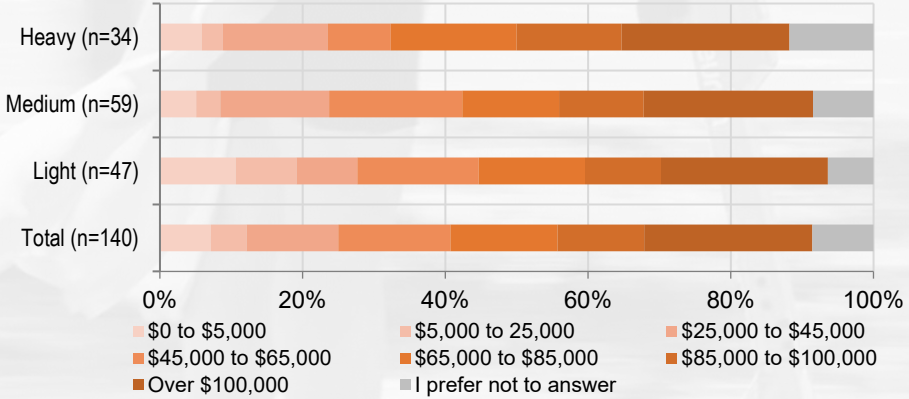


Respondent (visitors) profile (n=140)

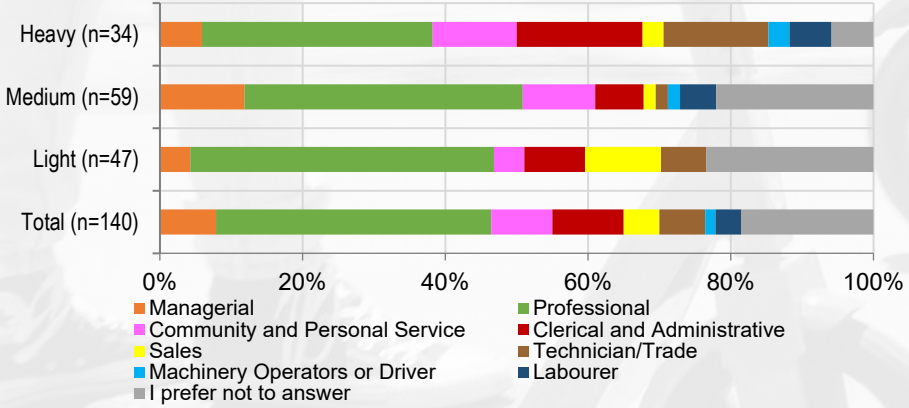
Education attainment



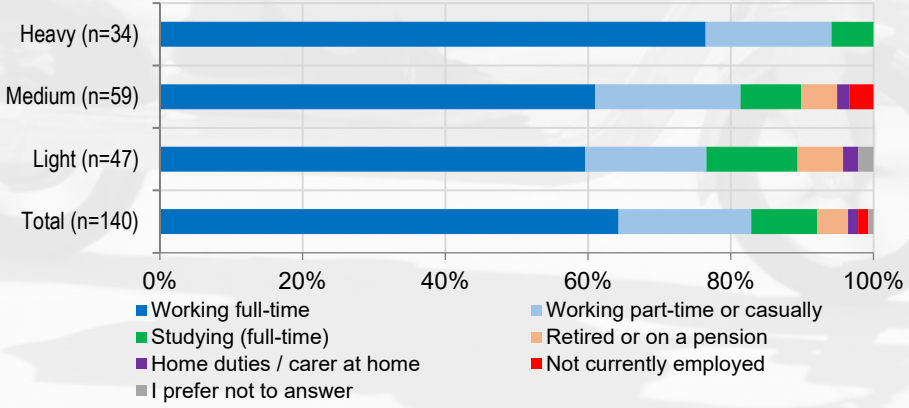
Income



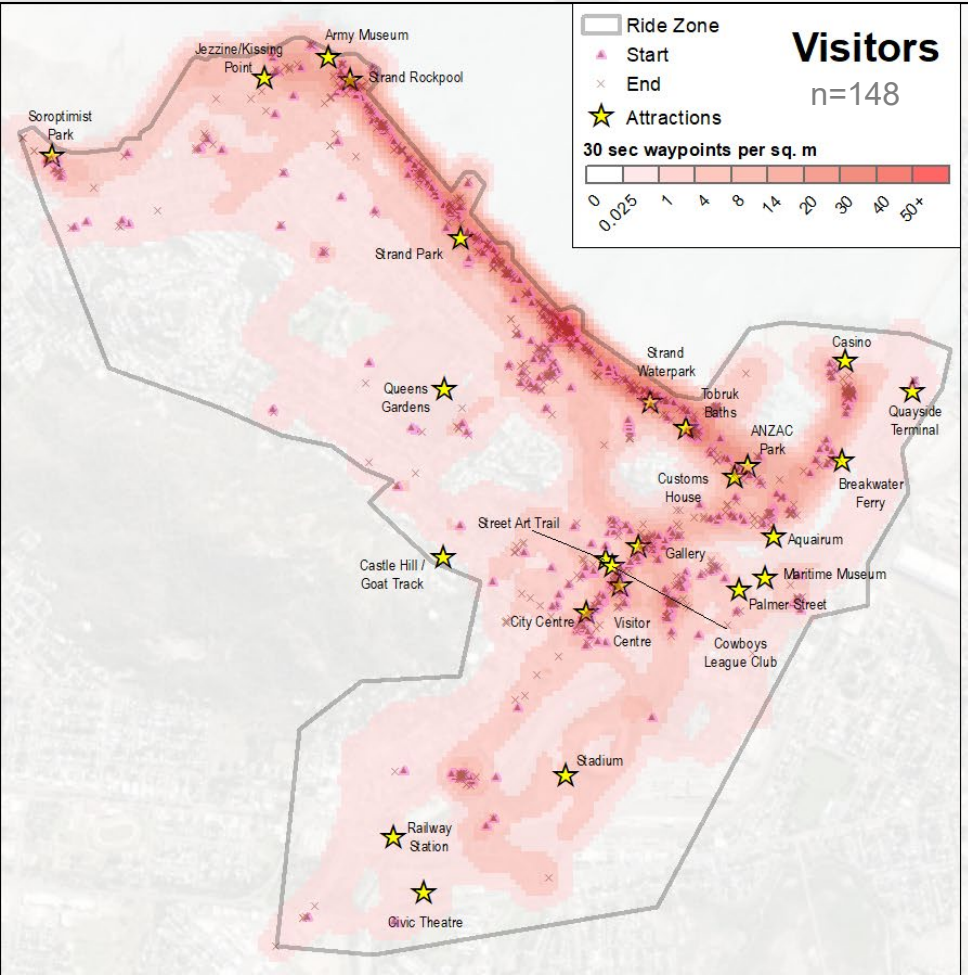
Occupation

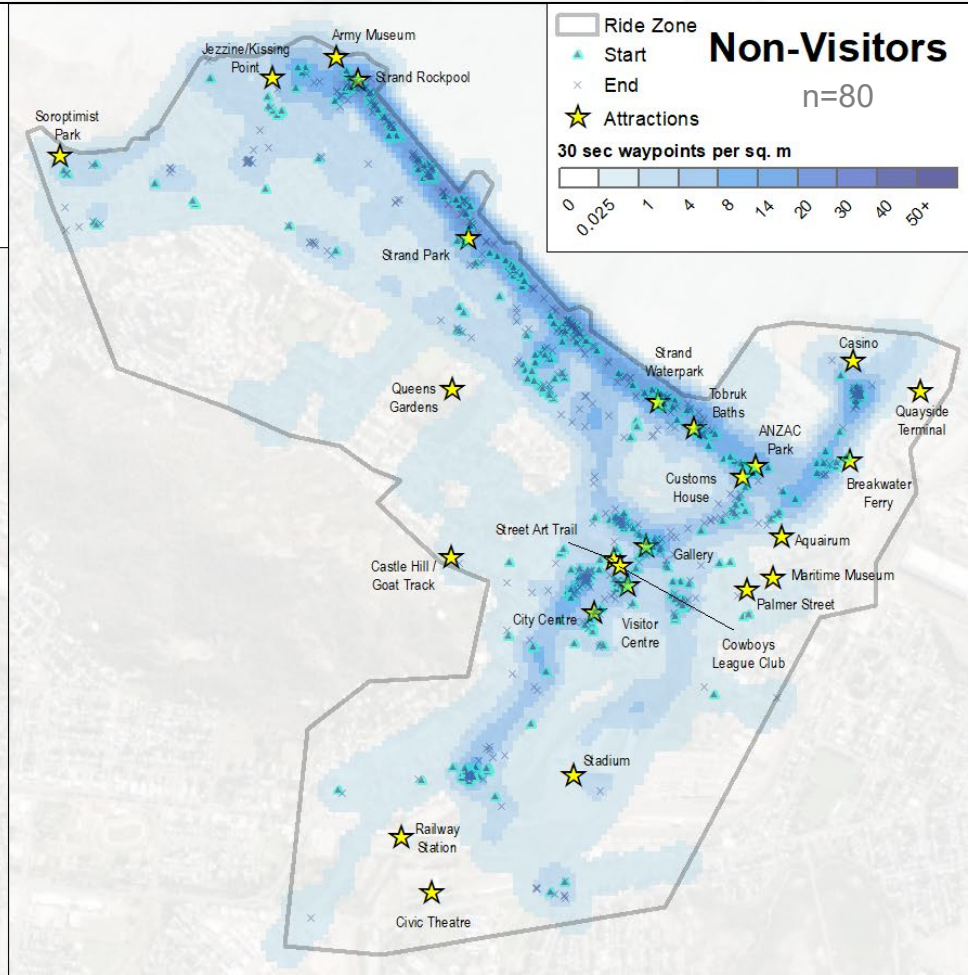


Main activity



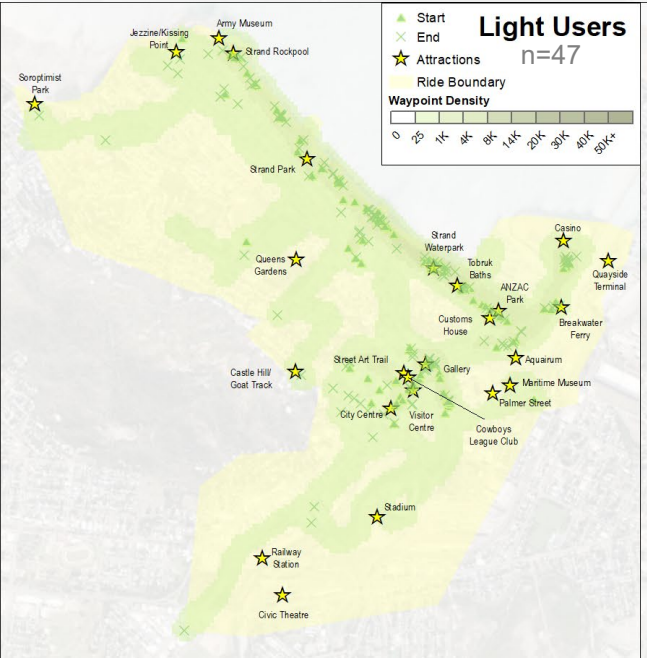
Tracking – Visitors vs Non-Visitors (n=228)

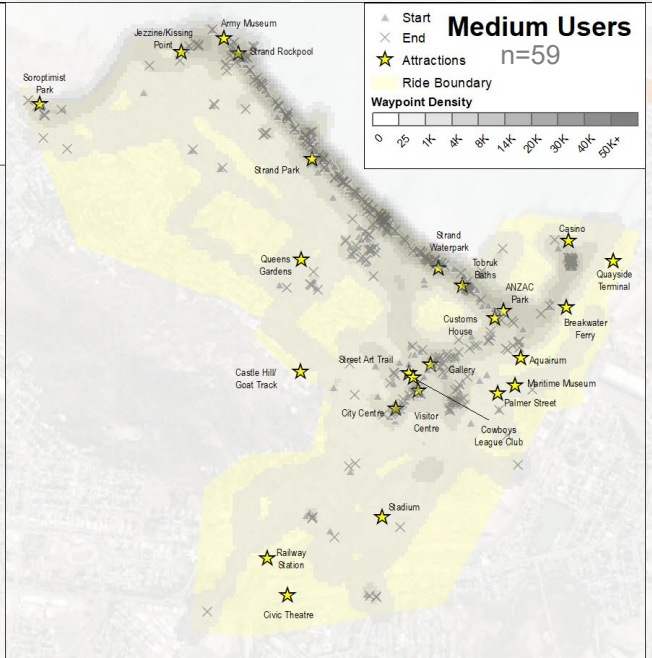


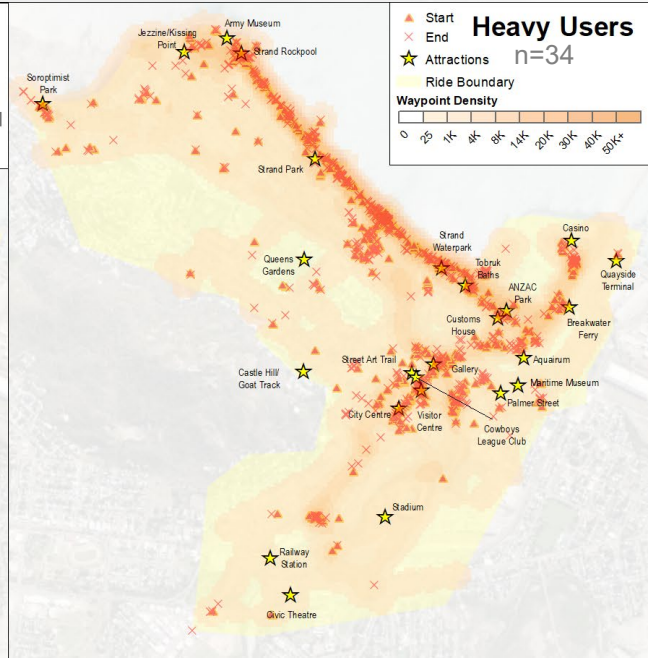


Tracking data – by user type

- More mileage → more spread out → more attractions could have been visited.
- Future detailed spatial analysis to examine how expenditure relates to trajectories or attractions.
- Examine the effects of multi-day pass.





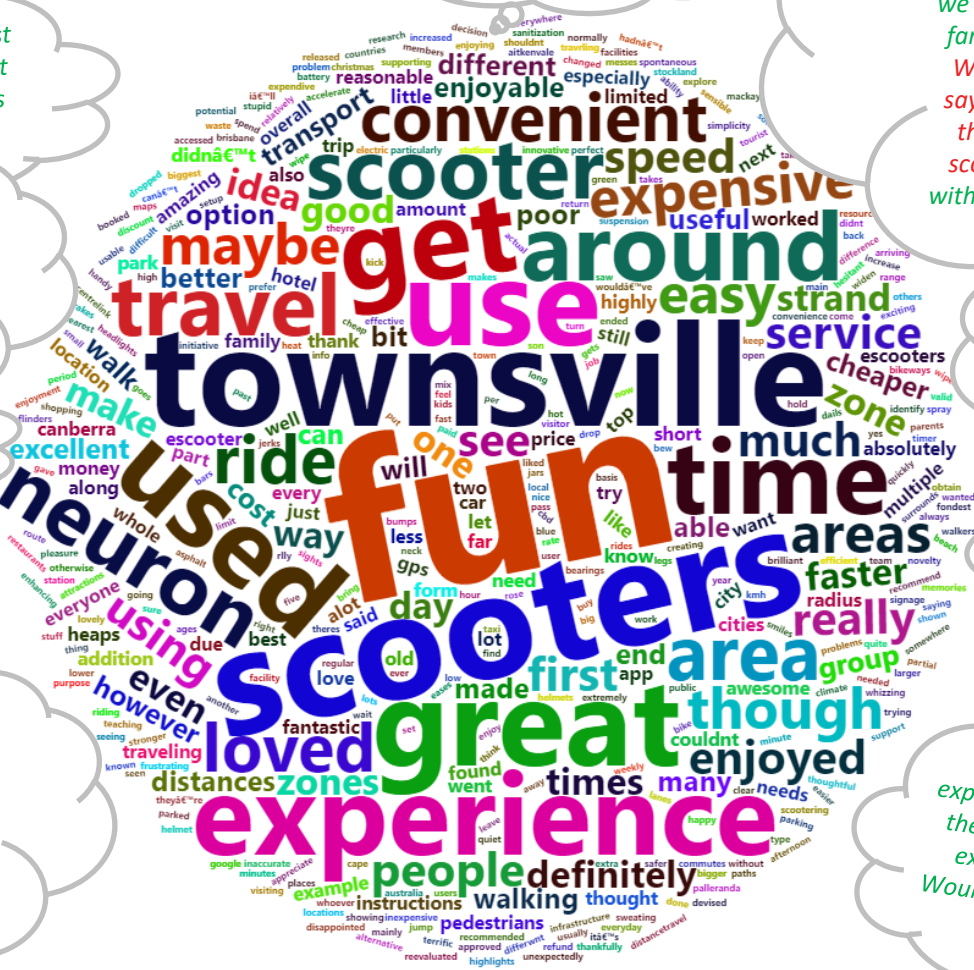


Open-end questions

Great idea, need to widen the area

We enjoyed being able top travel to areas that we would not normally have seen or were too far to walk in a reasonable amount of time. We did have a problem with the e-scooters saying we were not in a valid ride area, even though the Neuron team had dropped the scooters at that location. Neuron was great with their support and gave us a partial refund.

Using Neuron is part of my fondest memories of visiting Townsville. It was great seeing so many others using them too - it was fun!



My 13 year old son loved the e-scooters. It made the trip to Townsville for him so fun. He said it was the best thing. We went on the e scooters everyday we were in Townsville.

A great option for a first time visitor to Townsville to quickly see the sights and get my bearings of local attractions

Cheaper minute rate would be good, stronger headlights

It was amazing to see so many people enjoying scootering along the Strand and the mix of pedestrians and scooters worked well.

So much fun and easier on my poor old legs. Thank you

Difficult to identify where the drop off stations were. They need signage

The radius was small only being used around the strand and beach area a mainly, have used e scooter in different countries and have found the usable radius quite a lot larger

Absolutely fantastic experience. Particularly liked the weekly pass which was extremely cost effective. Would highly recommend and will use again

Media enquires or further information

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