

Understanding barriers to using public transit and safety experience and perception for the USask community

PATHWAYS TO EQUITY WORKSHOP: HOUSING SECURITY AND NEIGHBOURHOOD SAFETY

MARCH 26, 2025, STATION 20 WEST

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March 26th, 2025

Land Acknowledgement

I would like to acknowledge that the Saskatoon campus of the University of Saskatchewan is on Treaty 6 Territory and the Homeland of the Métis.

Acknowledgments



Acknowledgments



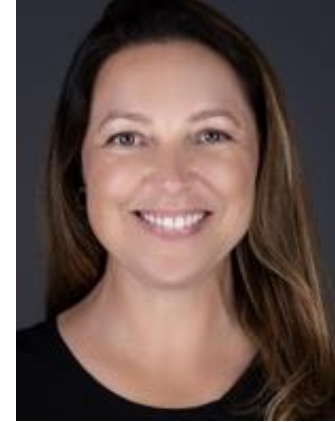
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Setting the Stage

- Shelter (housing) and transportation are the two largest household costs for Canadian households



In 2021, housing and transportation accounted for **31.4%** and **15.0%** of total spending, respectively (Statistics Canada, 2023).

Setting the Stage

- For lower income households (in the bottom 20% of households), transportation costs were even higher than other households!
 - In 2023, cost-of-living increases – especially for housing and transportation – outpaced income gains for lower income households (Statistics Canada, 2024).



Affordability = Housing cost + transport cost

- As living in certain locations adds to living costs by increasing transport costs, both **housing** and **transport** costs should be considered to understand **affordability**.

Commuting Costs Families More than Housing as Affordable Homes Drive Occupants Out of Town

January 9, 2025 Reading time: 7 minutes

Author: Gaye Taylor

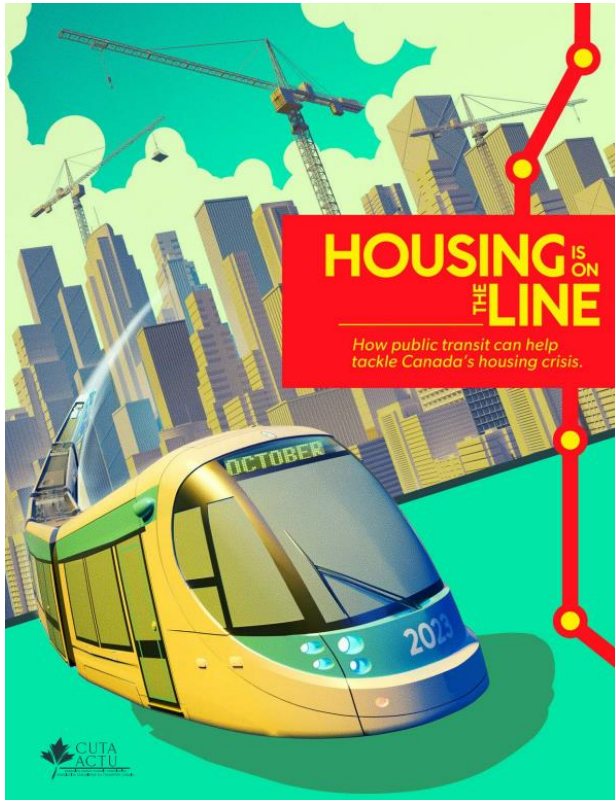
Full Story: [The Energy Mix](#)



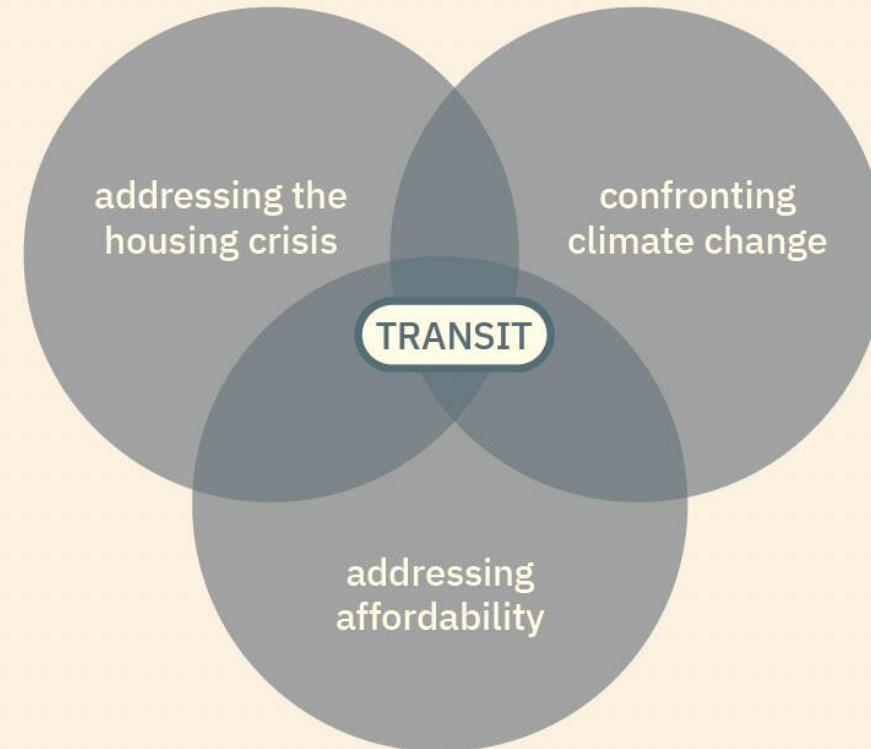
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Transit can help....



Public transit can help address many of Canada's most pressing challenges



... Federal initiatives



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Housing Accelerator Fund

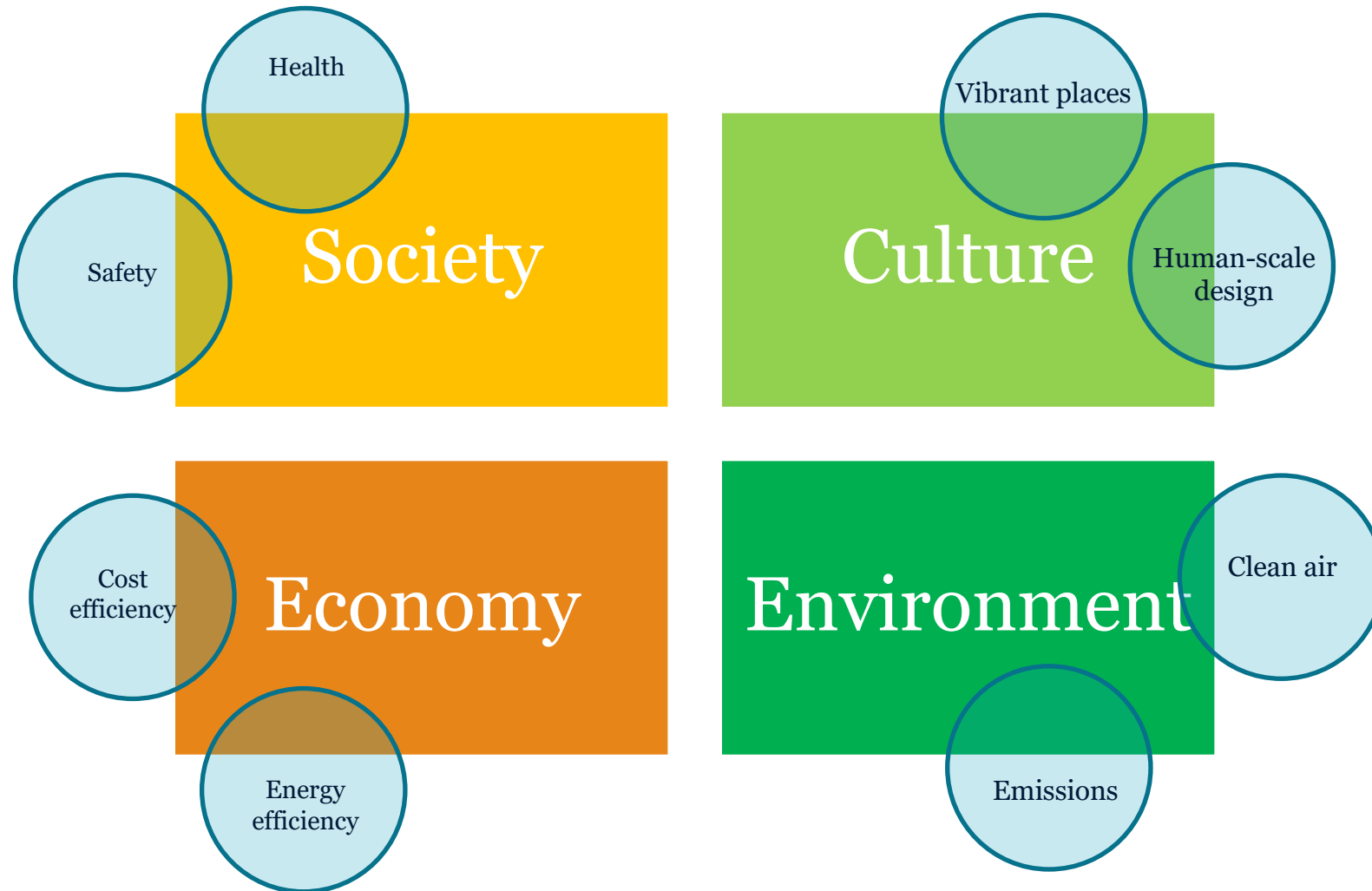
Removing barriers to encourage local initiatives to build more homes, faster. The Fund is helping to boost housing supply, while supporting affordable, diverse and climate-resilient communities.



.. Transit is centrally introduced to help...



.. besides affordability



Research questions

- What are the perceived barriers to starting or continuing to use transit?
How do these barriers vary between different groups?
- To what extent do people have negative safety experiences while using transit?
What the factors associated with safety perception?

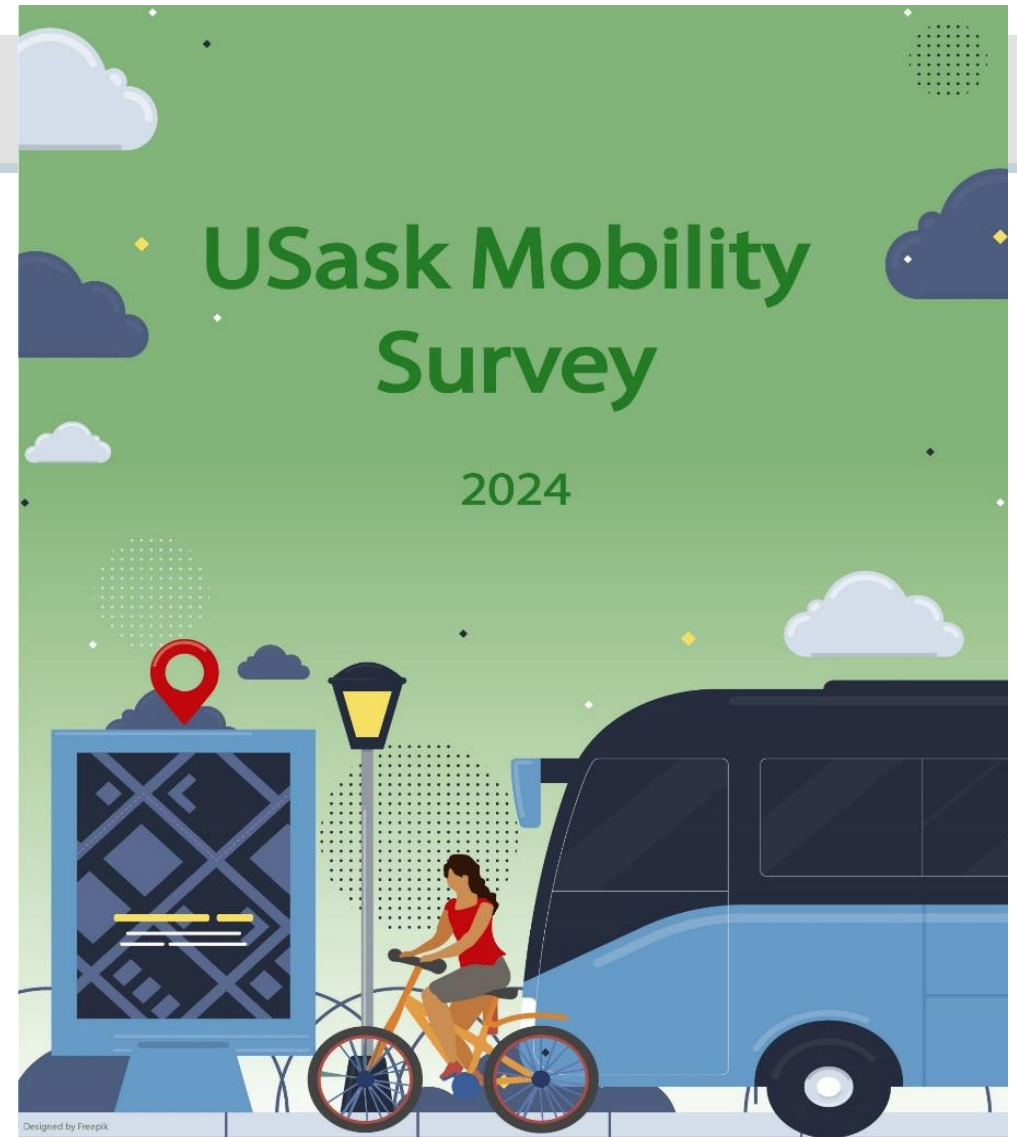


Case study

- USask is a major employment, educational, and cultural Hub in Saskatoon
 - 26,155 students and 5,430 employees (2023)

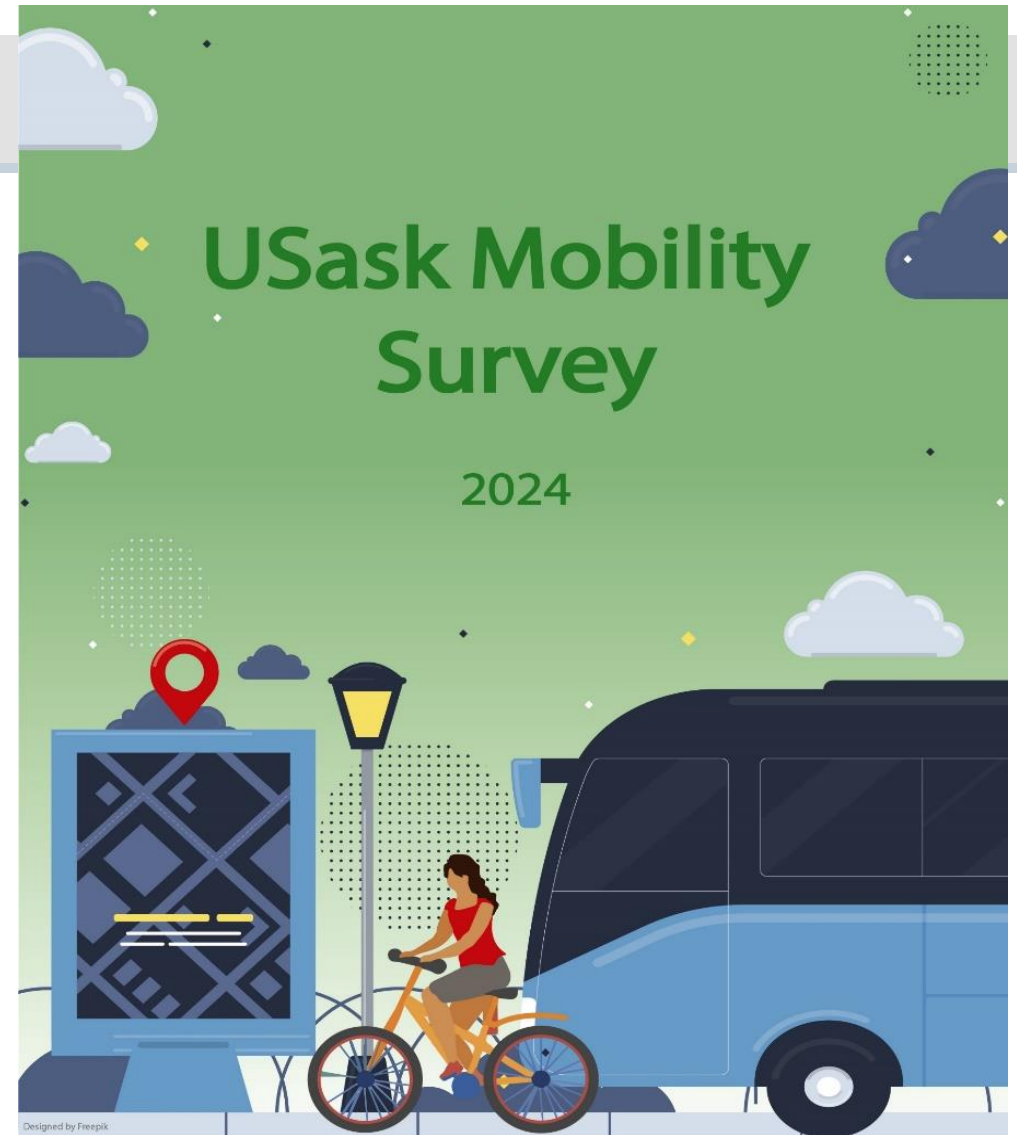
Methodology

- USask Mobility Survey
 - Online survey
 - February to April 2024
 - Targeting 5% of the population
- The survey included different sections
 - Travel behaviour
 - Telecommuting
 - Mode satisfaction
 - Perceived barriers
 - Safety perception and experience
 - Other



Methodology

- Perceived barriers:
 - If people have any barriers to continue/start using transit
 - From their viewpoints, what are the barriers to using transit in the city
- Safety perception: Likert scales questions
- Safety experience:
 - If they ever felt unsafe due to crime, unwanted attention, or other reasons while ...
 - Walking. Waiting. Riding a bus.



Methodology

- Data analysis:
 - Quantitative analysis: Descriptive statistics of the Likert scales questions
 - Qualitative analysis: Reflexive thematic analysis for open-ended questions





Findings: Perceived barriers

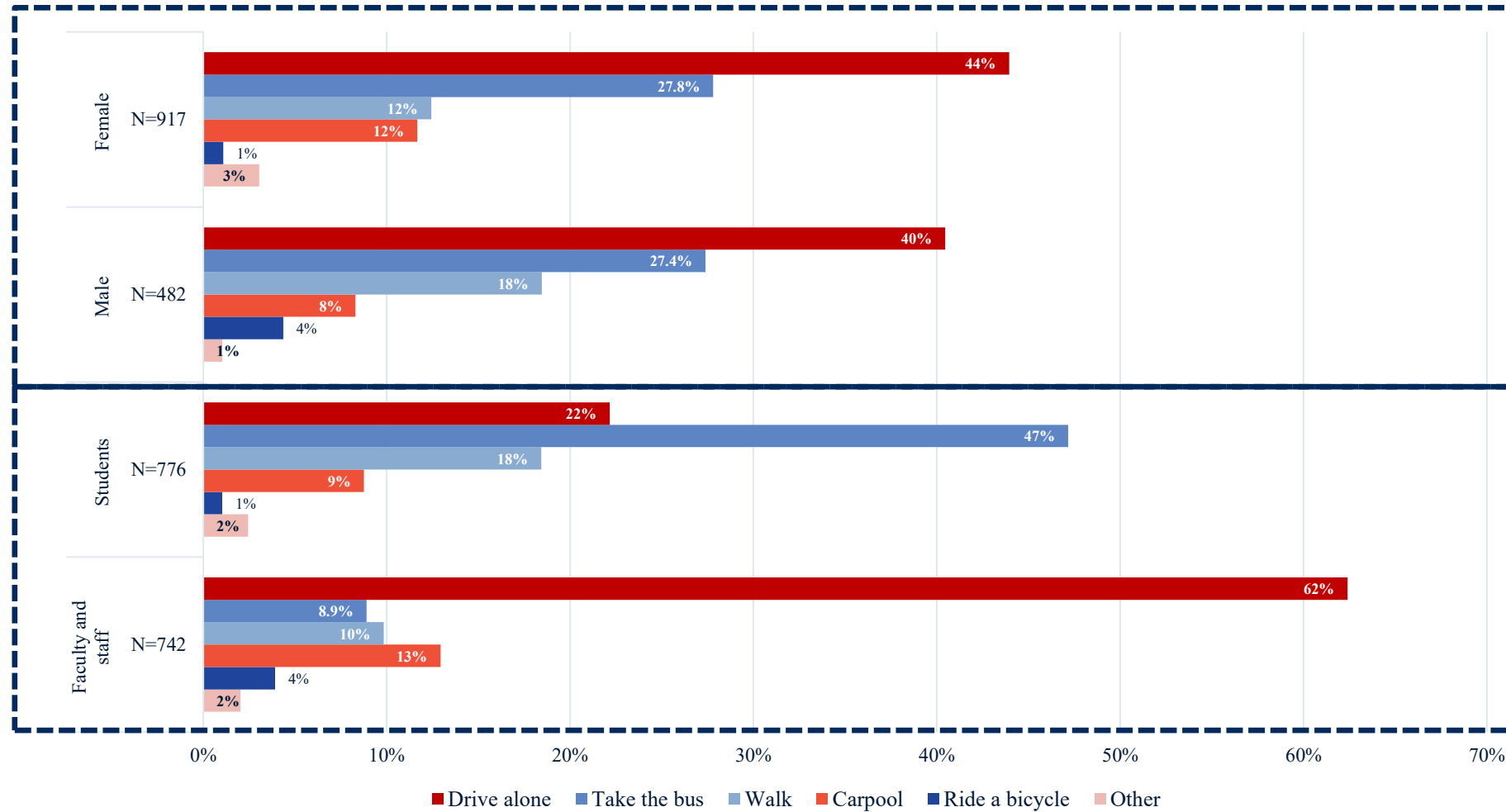


Response rate

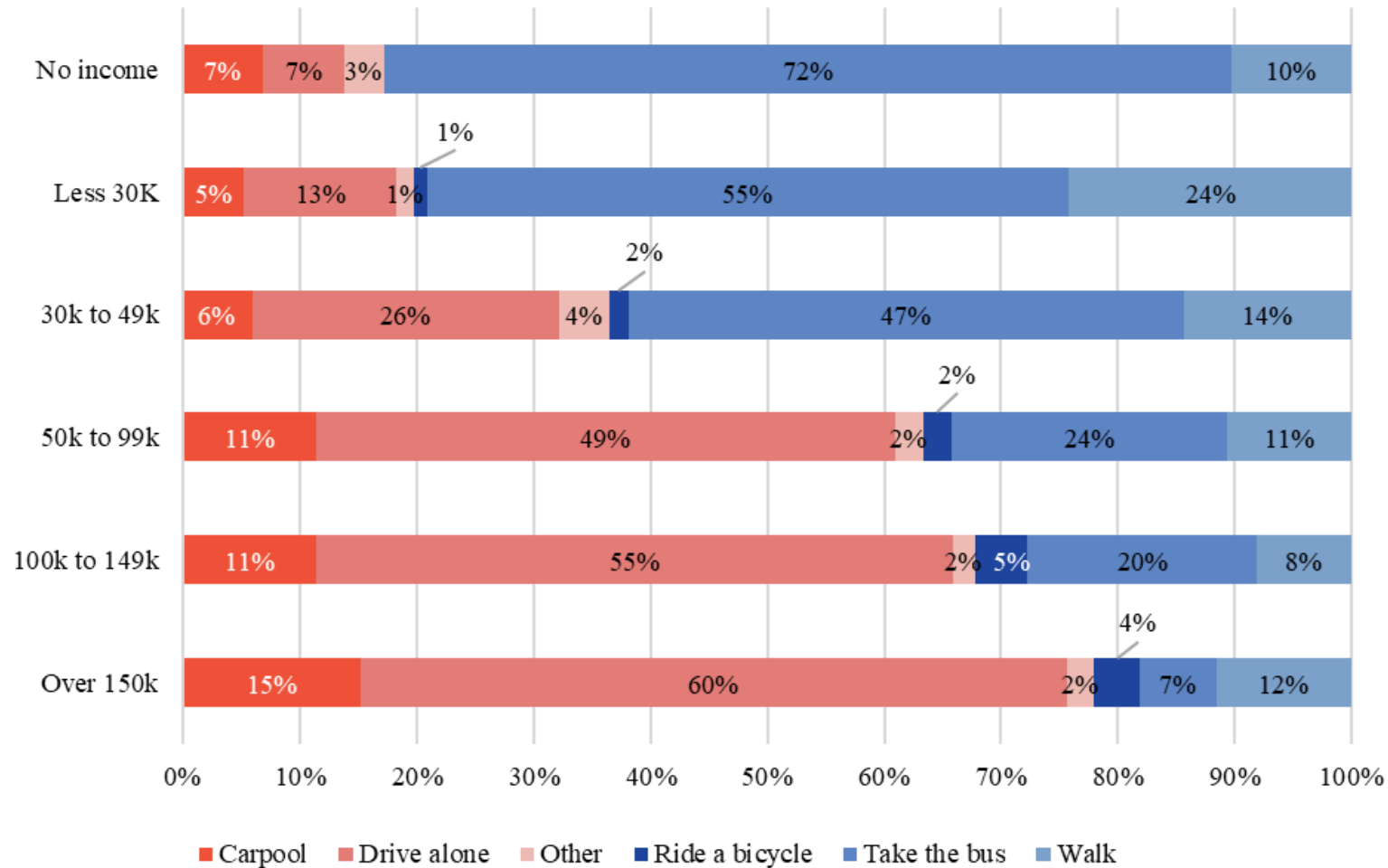
- After data-cleaning process, **1,627 responses** were deemed complete and valid for analysis
 - About 5.0% of USask population
 - The sample from across the city



Committing mode to USask



Committing mode to USask by income

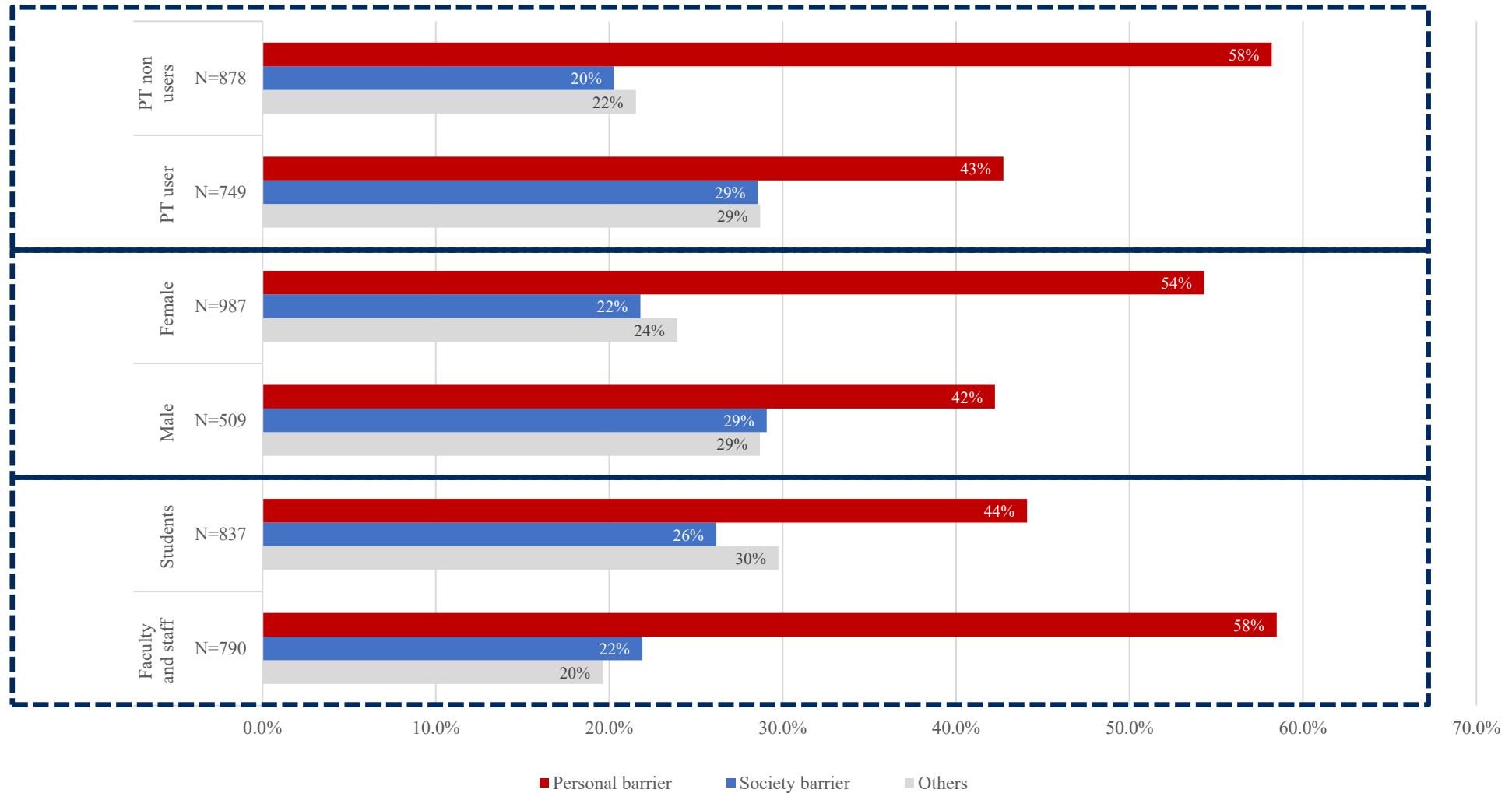


Perception of barriers

- **51.0%** of people have barriers to starting or continuing using PT (i.e., personal barriers)
- **24.0%** of people do not have any barriers but there are barriers in the city (i.e., society barriers)
- **24.8%** of people do not have any barriers or there no society-related barriers

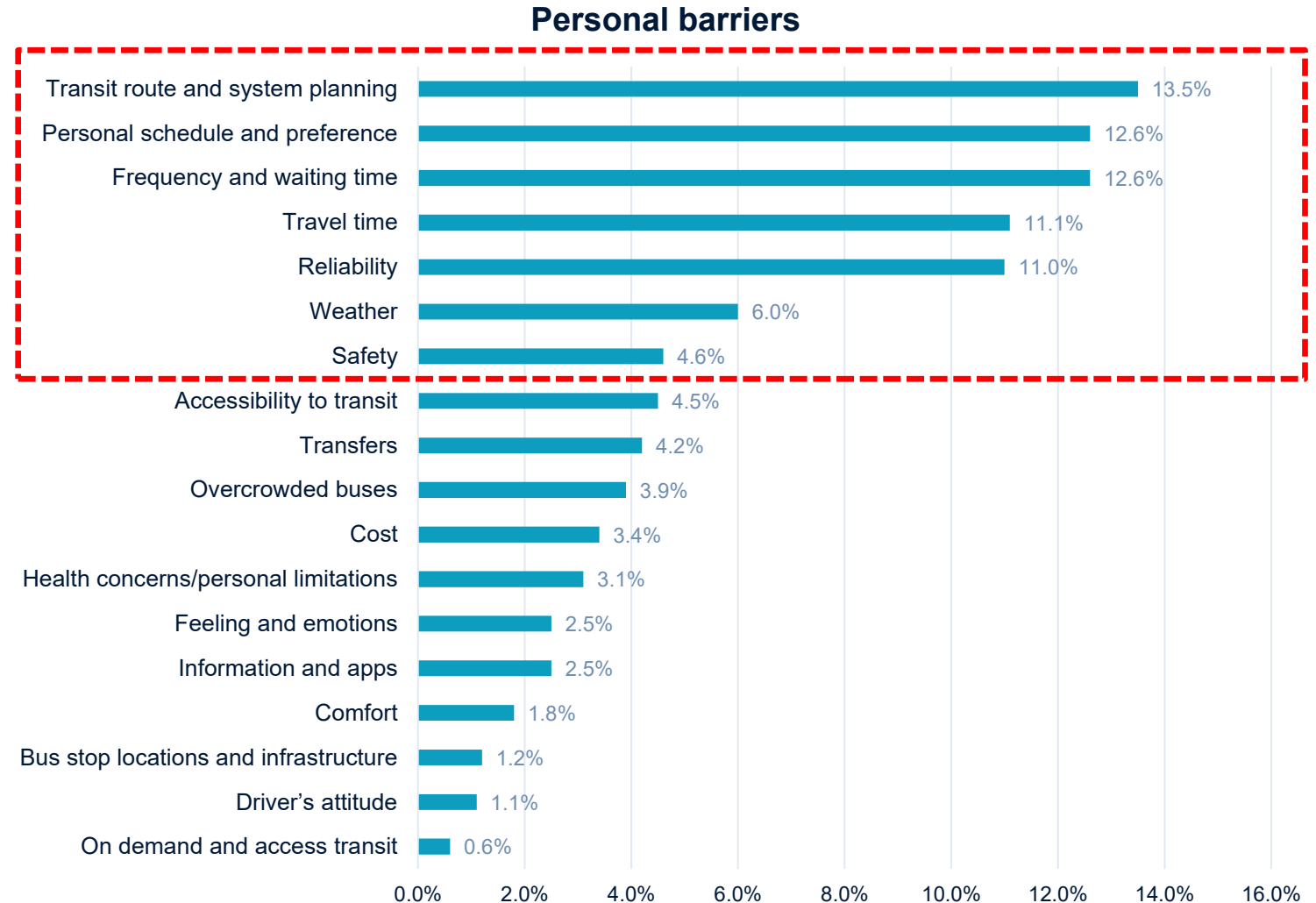


Perception of barriers by population



Perceived barriers themes

- Using people comments, the qualitative analysis yield to 18 sub-themes



Sample quotes

- ***Transit route and system planning*** *...The routes are not convenient - often to get where I need to go ...*
- ***Travel time*** *Last I checked a ride to campus is around ~30-50 minutes + 10 minutes walking from my house, depending on the time of day. I can consistently bike to the office in 25 minutes. Driving takes about 20 minutes + 10 minutes walking. So, the bus takes 20-60 minutes extra per day.*
- ***Safety*** *I do not feel safe on public transport. I have been threatened on public transport. I have almost been assaulted on public transport. I have seen uncomfortable events on public transport.*
- ***Driver's attitude*** *Sometimes I do run after the buses, the drivers see me and do not wait for me. This is something that is even more awful during winter and extreme cold weather.*

Perceived barriers themes by population

Barriers to start or continue using PT	Personal barriers					
	PT non-user	PT user	Female	Male	Students	Faculty and staff
	N=495	N=296	N=506	N=206	N=341	N=450
	%	%	%	%	%	%
Transit route and system planning	35.56	25.68	33.66	30.58	26.39	36.00
Travel time	32.93	23.99	29.33	32.52	24.93	33.11
Frequency and waiting time	18.18	39.19	25.00	29.13	32.26	21.33
Reliability	20.81	34.12	26.77	21.84	33.72	19.78
Personal schedule and preference	41.82	9.12	32.68	24.76	14.66	40.89
Weather	10.10	20.61	14.17	10.19	17.60	11.33
Safety	9.90	12.16	10.24	9.71	14.66	7.78
Accessibility to transit	9.90	11.49	9.84	10.19	12.90	8.67
Overcrowded buses	7.88	11.15	9.84	7.77	9.09	9.11
Transfers	8.69	11.82	9.65	10.19	9.38	10.22
Cost	8.08	8.11	8.07	9.22	4.69	10.67
Health concerns and personal issues	7.68	6.76	6.69	3.88	6.45	8.00
Information and apps	3.84	9.46	5.91	6.31	9.68	3.11
Feeling and emotions	4.65	7.77	6.30	3.88	8.80	3.56
Comfort	3.03	6.08	3.15	5.34	5.57	3.11
Bus stop locations and infrastructure	1.62	4.73	2.36	2.43	3.52	2.22
Driver's attitude	1.82	4.05	2.95	1.94	4.11	1.56
On demand and access transit	1.41	1.35	1.77	0.49	1.17	1.56

Key takeaways

- Differences between groups regarding of the type of perceived barriers.
 - Regardless of the group, participants consistently identify transit route and system planning issues as the most common barriers they are facing.
- Reliability is a significant concern for transit users, and travel times by transit for non-users.

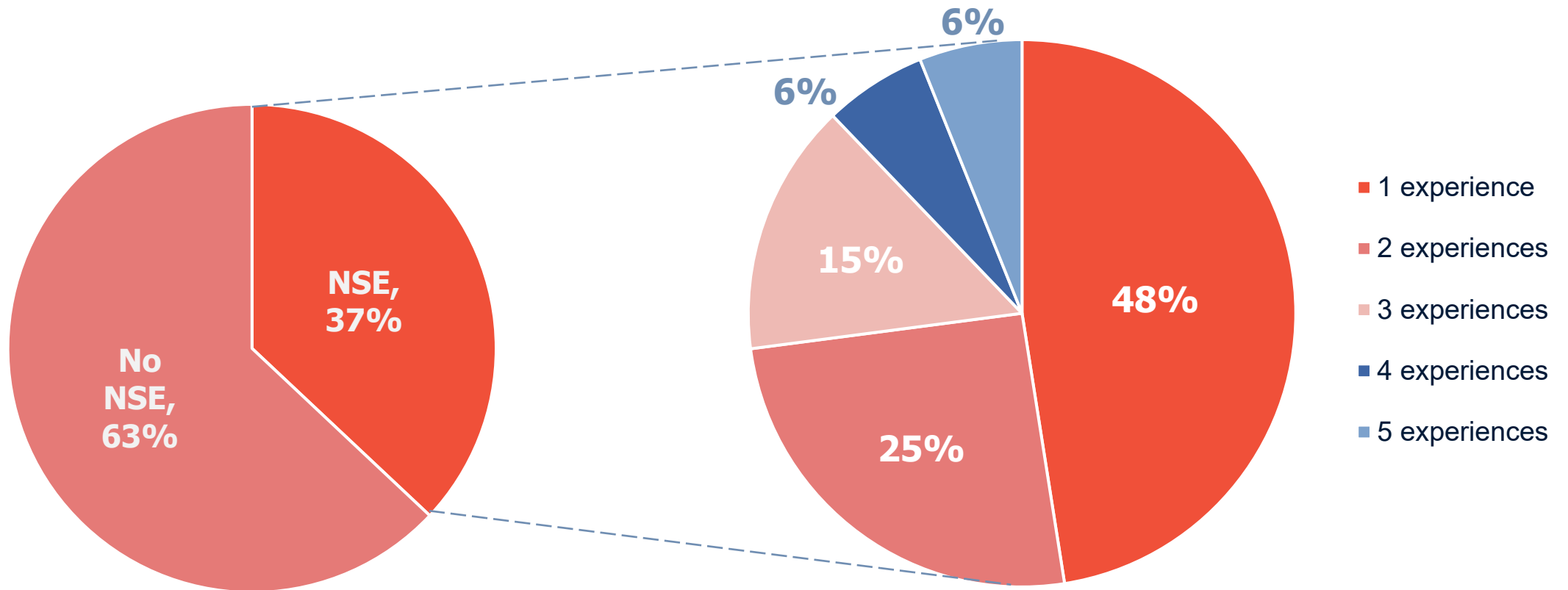




Findings: Safety experience and perception

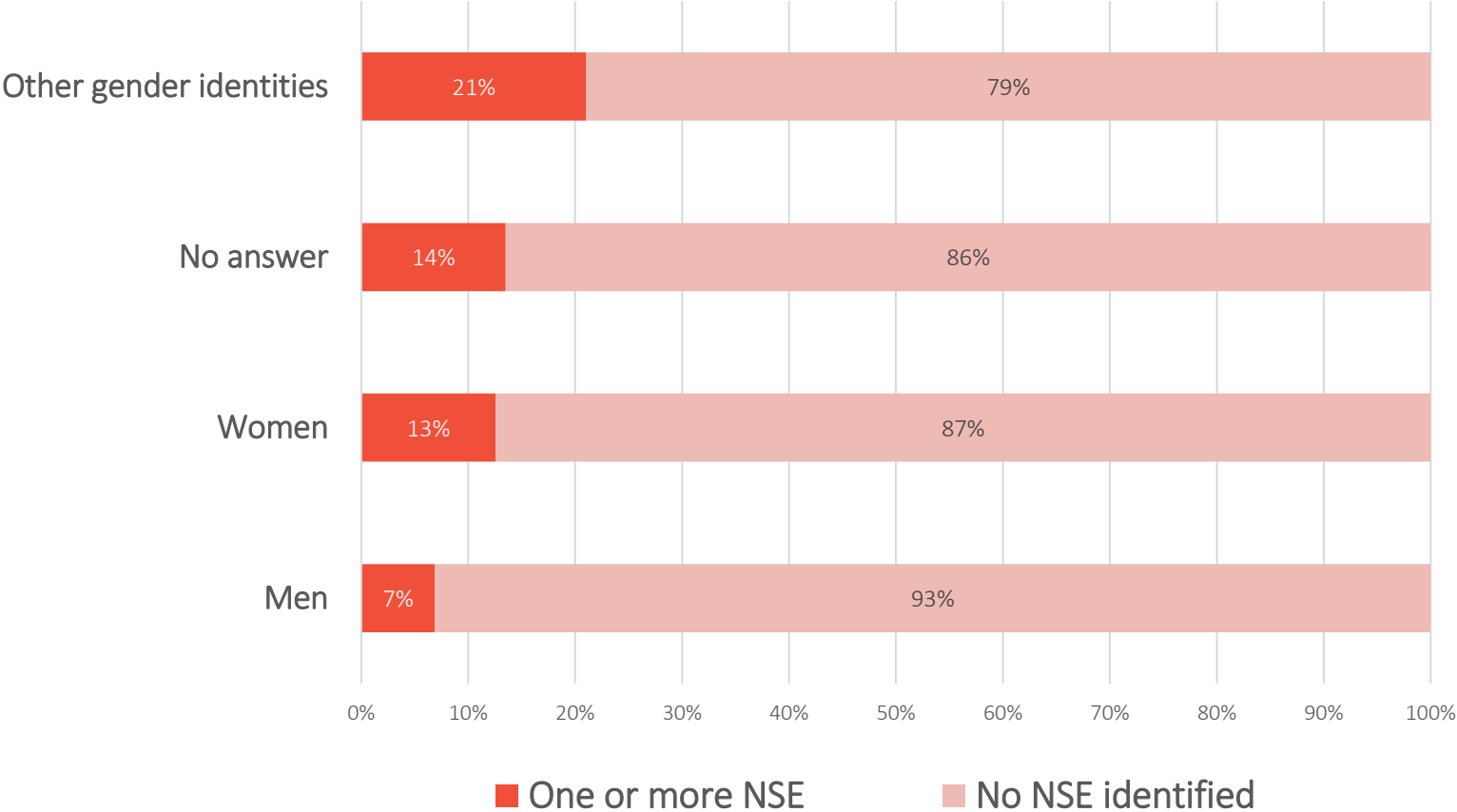


% of transit users with previous safety experience

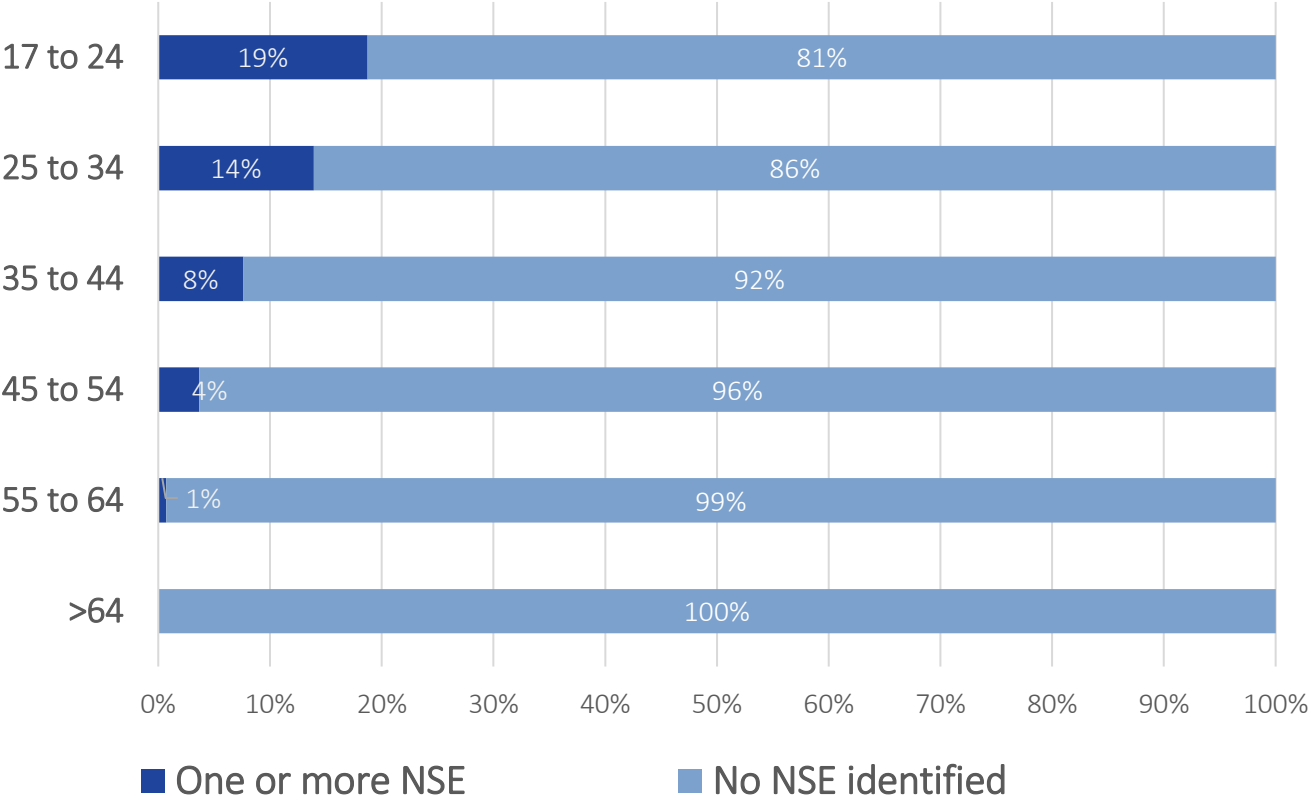


Negative safety experiences (NSE): Having a negative experience associated with safety or crime while using the PT system.

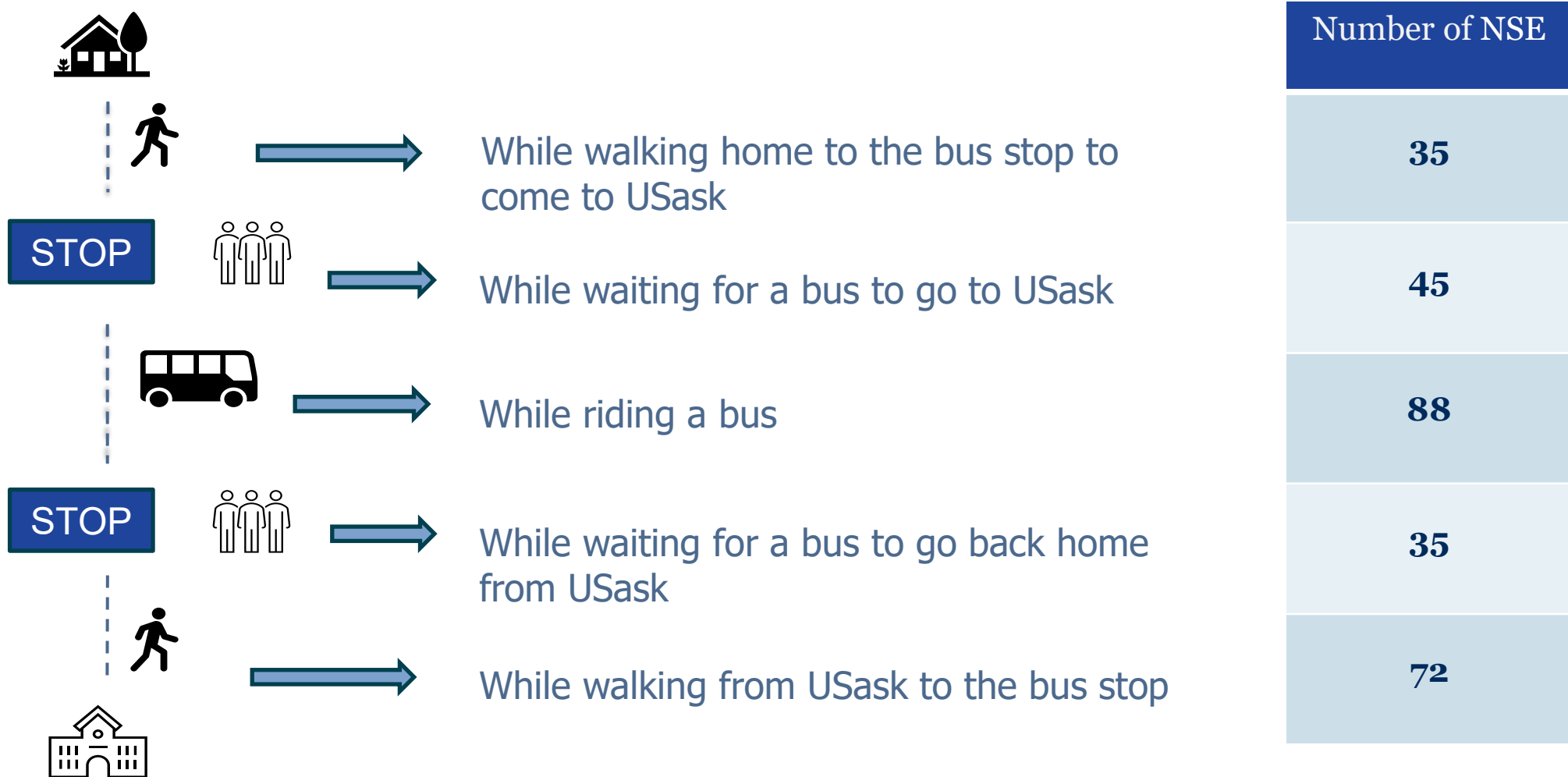
% of users with NSE by gender identity



% of users with NSE by age



Qualitative analysis – number of reported NSEs



Qualitative analysis – sample quotes

when crossing college drive i often feel unsafe from impatient drivers wanting to turn left or right off of wiggins ...

Same reason as before. Black girl in a white neighbourhood....

...creepy guy kept trying to talk to me asking where i lived

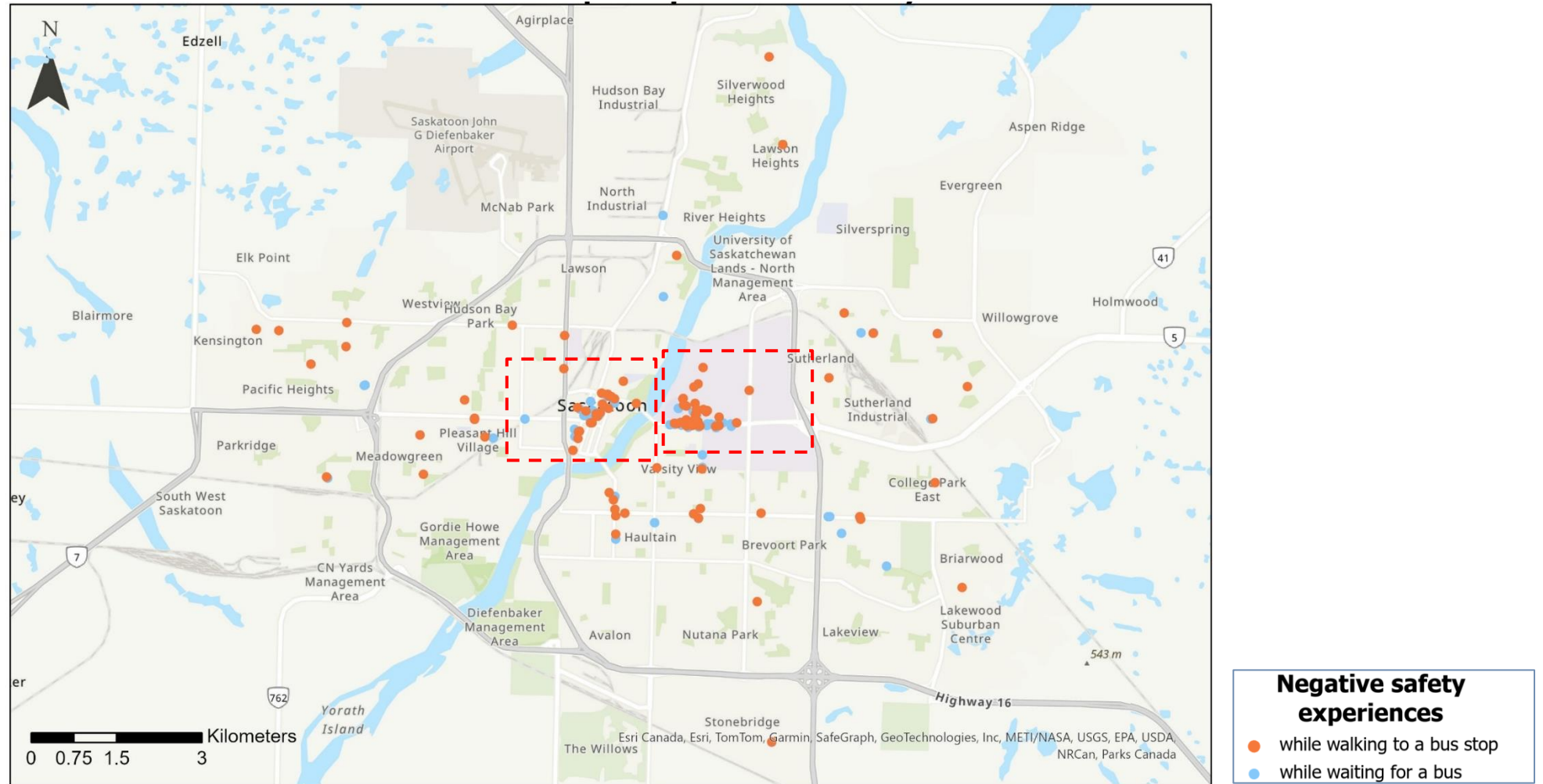
Place Riel becomes lawless after regular business hours. Waiting for a bus inside or outside can be scary.

... harassment situation, one guy was to close to me and talking about my hair and wanna to touch it. It was too uncomfortable that i just freeze, until someone told him to stop.

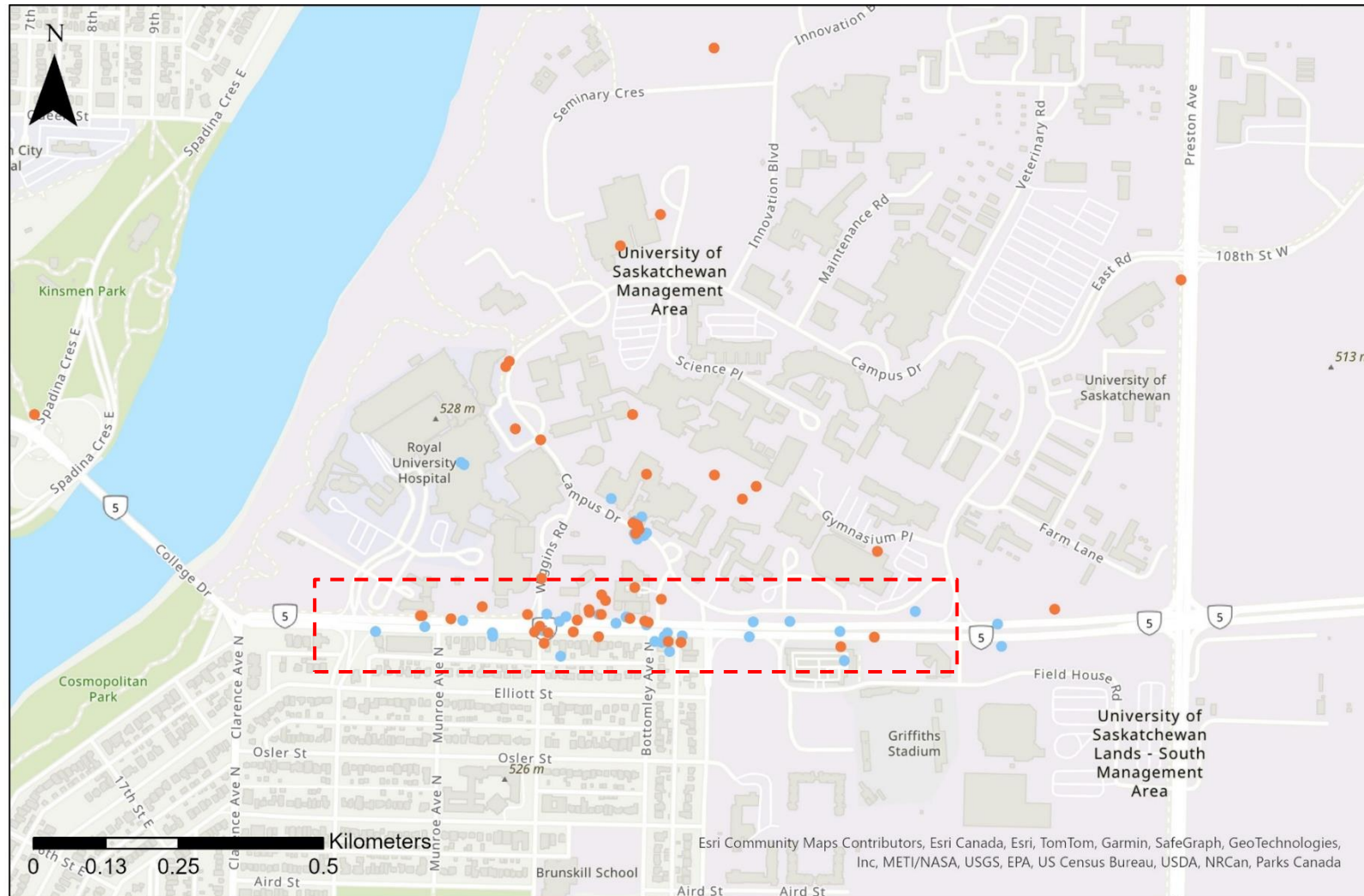
Qualitative analysis – identified topics

- **Interaction with strangers**
 - e.g., unwanted conversation from people under substance
- **Presence of sketchy people**
 - e.g., stranger talking to his reflection
- **Nighttime**
 - e.g., walking in unsafe neighborhood during night
- **Crime and harassment**
 - e.g. discrimination
- Traffic
 - e.g. cars not being aware of pedestrians
- Weather and environment
 - e.g. icy sidewalks
- Bus stop conditions and surrounding
 - e.g. shattered glass at the stop
- Protecting issues
 - e.g. lack of responsibility from protective services
- Driver's attitude
 - e.g. driver speeding

Spatial analysis of locations people experienced NSE



USask main campus



Negative safety experiences

- while walking to a bus stop
- while waiting for a bus

Downtown area



Negative safety experiences

- while walking to a bus stop
- while waiting for a bus

Safety perception

	NSE	Without NSE	PT users	PT non-users	Men	Women	OGI	Student	Faculty and staff
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Presence of homeless people	3.43	3.05	3.19	3.43	3.31	3.35	2.27	3.34	3.27
Presence of people under the influence of substances	4.48	4.04	4.17	4.10	4.10	4.18	3.44	4.24	4.02
Receiving unwanted attention or having unwanted interactions	4.31	3.98	4.08	3.97	3.72	4.19	3.97	4.13	3.93
Presence of people acting aggressively or speaking loudly	4.38	4.13	4.20	4.13	4.04	4.23	4.03	4.22	4.10
Reckless driving	3.97	4.10	4.00	3.68	3.67	3.93	4.02	4.02	3.66
Bus going through dangerous and sketchy neighborhoods	3.09	3.09	3.04	2.95	2.89	3.08	2.26	3.13	2.86
Bus stop located in areas perceived as insecure, such near liquor stores or parking lots	3.83	3.69	3.70	3.21	3.27	3.58	3.00	3.61	3.31
Insufficient lighting at the bus stop	4.35	4.15	4.21	3.97	3.85	4.22	4.18	4.18	4.00

Notes: OGI stands for other gender identities. Grey color highlights the top three scores for each group.

Key takeaways

- Females and other gender identities reported more NSEs.
 - Policies should prioritize targeted safety measures and support for these groups
- Poor lighting, aggressive behavior, and substance use are top issues.
 - Collaboration with the community, along with better lighting, can improve safety perceptions.





Thank you!

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University of Saskatchewan
Monday, March 26th, 2025



UNIVERSITY OF
SASKATCHEWAN

THE FIRST STREET CAR TO RUN IN SASKATOON DEC 30th 1912