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Context and Background

- Burning fossil fuels releases carbon dioxide (CO₂). CO₂ is one of the main contributors to greenhouse gases that cause climate change.
- Washington's transportation sector is the highest CO₂ emitter among all other sectors.
- LINK runs on 100% renewable energy from wind power, with increased ridership levels it has the potential to lower Washington's CO₂ emissions.
- My research aims to understand ways that ridership levels of youth can be increased, it has been shown that people who ride public transit at a young age tend to continue as they get older.

Research Question

What are ways that **ridership levels** of the **youth** in Seattle can be **increased** for the Link light rail?

Internship and Methods

- I interned with Seattle Subway, advocating for increased accessibility to the LINK light rail.
- I tabled farmers markets in Ballard and Lake City.
- I conducted a survey at the markets, aimed at understanding youth ridership patterns of the light rail.
- I compiled a list of all the environmental clubs at Seattle/Shoreline public and private schools.



Fig. 1 Me, Jon Cracolici, & Karl Pauls at the Ballard Seafood Fest.

Education Results

What priority do you place on the environment, compared to other aspects of your life?

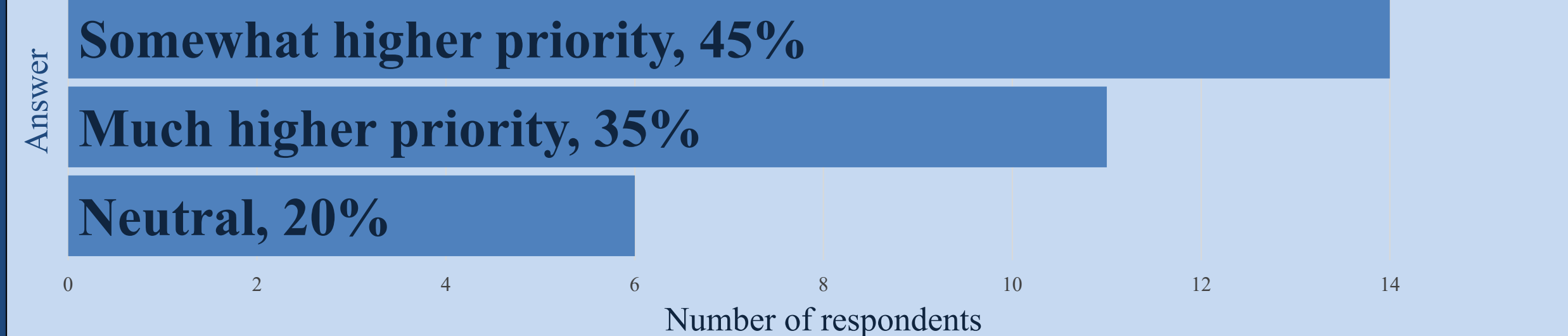
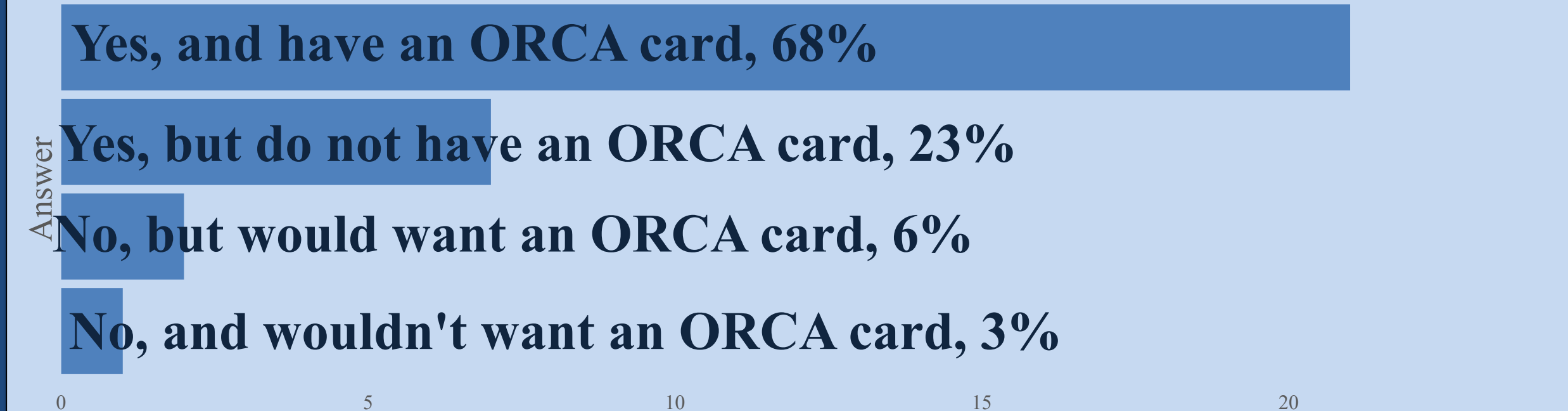


Fig. 2 Question #8 on my high school student survey.

Outreach Do you know about the ORCA Youth Program?



How familiar are you with the fact that beginning in fall 2023 all youth 18 and under (regardless of student status) will be able to ride public transit for FREE?

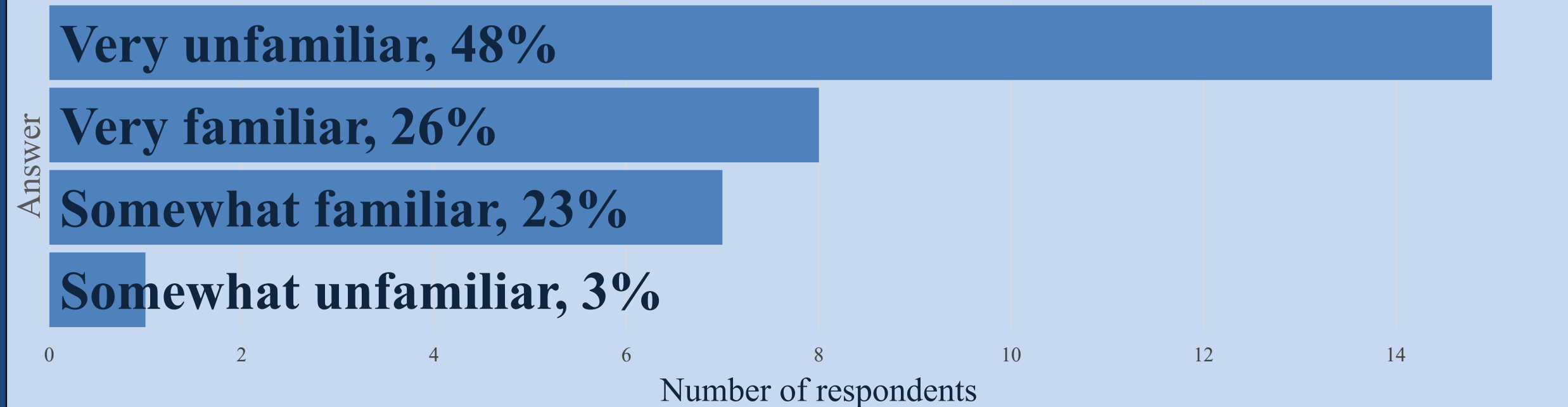
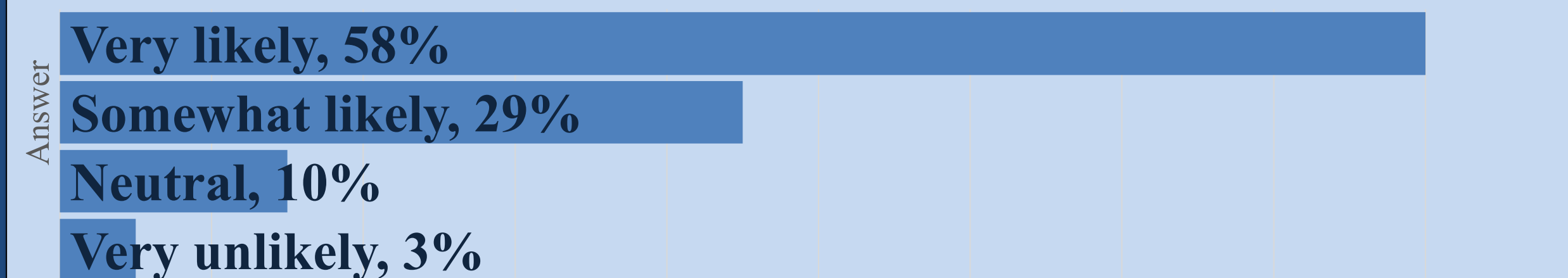


Fig. 3 Question #5 & #6 of 9 on my high school student survey.

Accessibility Would you be more likely to ride the Link light rail if it were free?



How often do you ride the Link light rail?

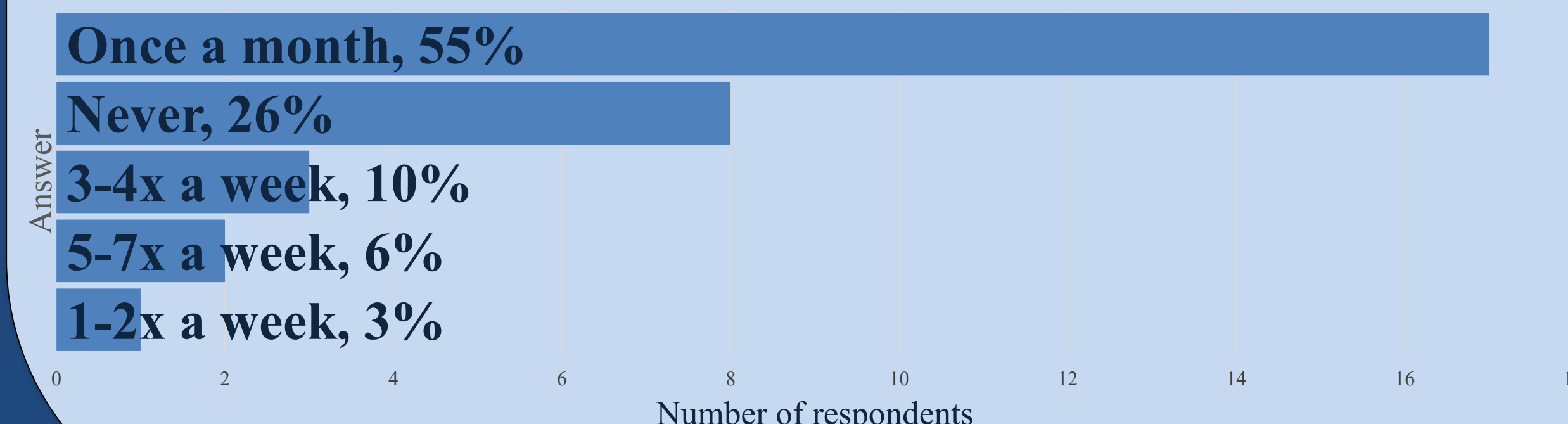


Fig. 4 Question #4 & #7 on my high school student survey.

Education Key Takeaways

- Students care about the environment, combined 80% of students noted the environment as a somewhat higher or much priority in their life (fig 2)

Outreach

- Youth in Seattle have access to free ORCA cards through their high school, 68% of respondents noted they know about the ORCA program and have an ORCA card (fig 3)

- 48% of respondents are very unfamiliar about the new Move Ahead Washington Program (fig 3)

- But combined, 49% of students are very or somewhat familiar with the new program (fig 3)

Accessibility

- Combined, 87% of respondents would be very or somewhat likely to ride the Link light rail if it were free (fig 4)

- While most students have an ORCA card, only 55% of respondents ride the light rail once a month (fig 4)

- 26% never ride the light rail (fig 4)

Significance

- Youth light rail ridership levels increasing would help to lower Washington transportation sector CO₂ emissions.

- Increased environmental education in high schools would provide a more significant knowledge base for youth to make their own informed decisions on riding public transportation.

- Increased outreach would help students to start engaging more with the light rail.

- Continuing to increase accessibility looks like providing easy access with the light rail to schools, amenities, and neighborhoods throughout Seattle.

Acknowledgements:

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