



Improving Ebike Safety and Awareness at Palo Alto High School



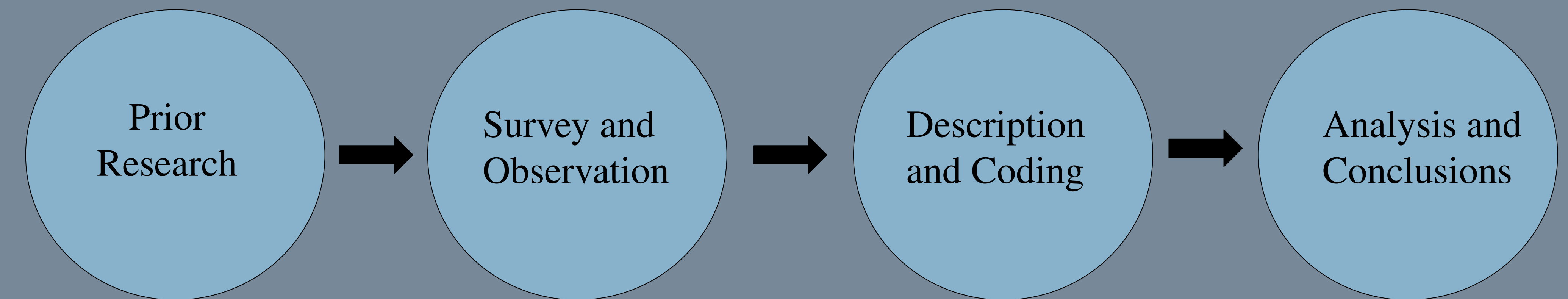
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INTRODUCTION

- “E-bikes are often seen as a fast, cheap, and environmentally friendly mode of transportation”(Hu, 2021). However, they also have greater safety risks than regular bikes when it comes to speed, bike handling, and interactions with other pedestrians.
- The global e-bike market is expected to **grow by over 200% by 2030.**
- Without proper precautions, riders are more prone to injury and crashes. A study estimates that **“29% of e-bikers experienced a safety incident that would not have happened on a conventional bike.”** (Haustien, 2015)



RESEARCH METHODOLOGIES



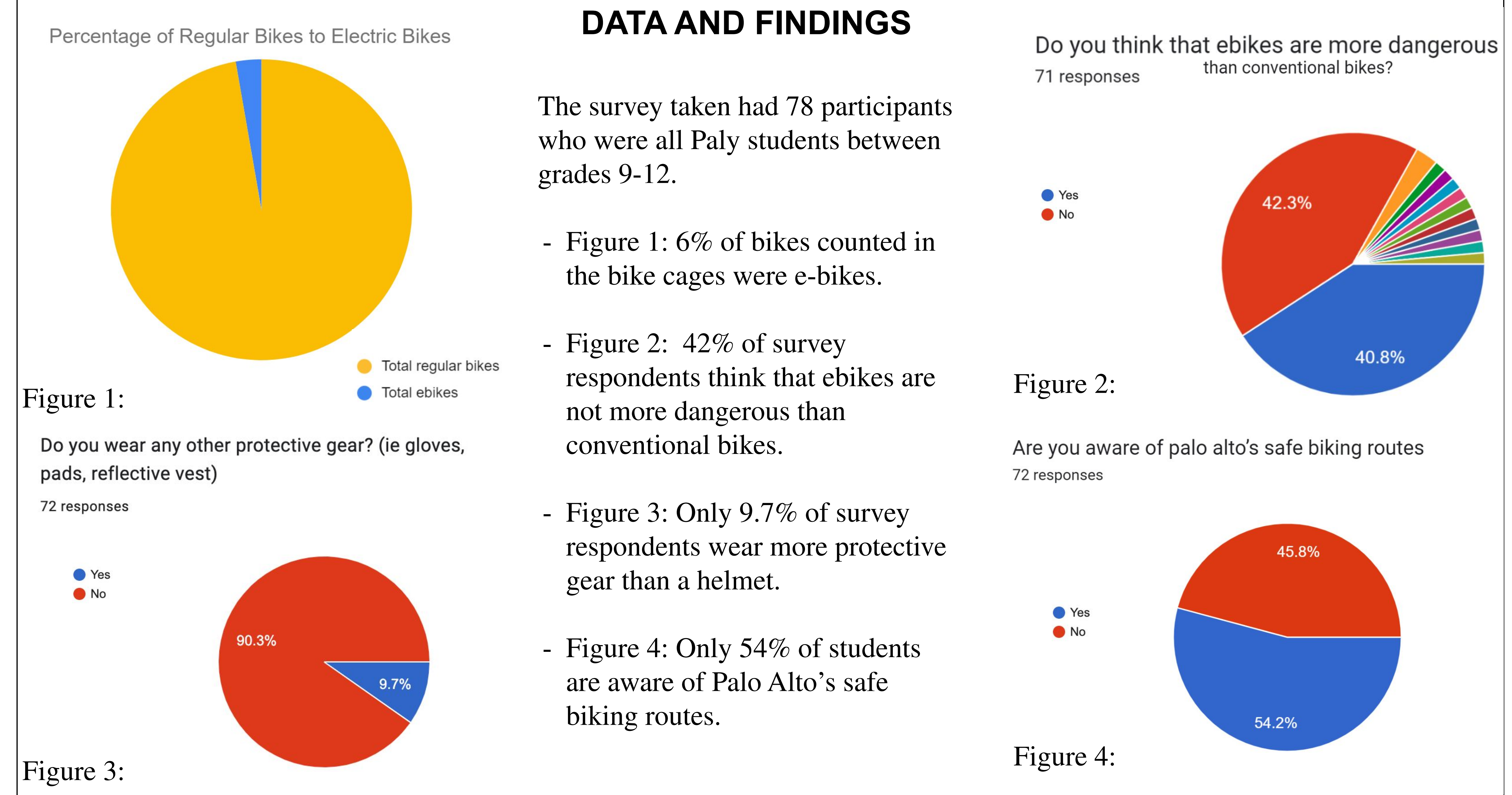
We collected data by **posting a survey** and reading text from prior research. We also **counted the number of e-bikes** parked in the Paly bike cages. In order to understand the data, we used both quantitative and qualitative methods in our data sampling.

CONCLUSIONS

Over the course of this project, we surveyed the school to understand the magnitude of e-bike presence amongst students, and awareness regarding safety protocols.

- From our data collection, we found that **students are largely ignorant to the dangers** that ebikes possess.
- We found that students are also ignorant of many Paly related bike resources for safety.
- We also determined that the **population of ebike riders at Paly is relatively small** in relation the bike population.
- Almost **nobody considers wearing additional protective gear** and accessories such as bike lights and protective jackets.

DATA AND FINDINGS



IMPLICATIONS

Now that we have **gauged the population of e-bike riders** along with data regarding to student bike safety, we are able to **target the desired population** with an approach directed towards improving safety.

While the number of current paly students riding e-bikes is small, it is likely to grow dramatically in the future as the accessibility and utility of e-bikes only increases.

ACKNOWLEDGEMENTS / REFERENCES

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Works Cited:

Haustein, S., & Møller, M. (2016). E-bike safety: Individual-level factors and incident characteristics. *Journal of Transport & Health*

Hu, Y., Ettema, D., & Sobhani, A. (2021). To e-bike or not to e-bike? A study of the impact of the built environment on commute mode choice in a small Chinese city. *Journal of Transport and Land Use*, 14(1), 479–497. <https://www.jstor.org/stable/48646195>

NEXT STEPS

- Increasing awareness about the dangers ebikes possess.
- Changing the imaging in our community around wearing additionally safety gear.
- Increasing accessibility of safety equipment.
- Increasing awareness and publicity of bike safety resources.
- Public works development for bike related infrastructure development.