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### WeARE Research Area

The data seeks to expose the deaths associated with flood fatalities in Texas. Doing so highlights the importance of preventing flood events due to global warming. The data was collected by using the National Center for Environmental Information. The data highlights events such as Tropical Storm Alex and Hurricane Harvey

### Motivation or Background

The purpose of this data collection is to highlight significant flooding areas and their correlation with how citizens died in such events. Learning how people passed in flooding incidents helps researchers to best advise citizens on what to do in cases of Hurricanes and Major flood events. Analysis of vehicular deaths will help TXDOT to best warn drivers on what to do in areas where flood occurrences have been predicted and to better educate drivers on what to do in case of flooding and driving incidents.

### Objectives

1. To analyze flooding events and their associated causes. Analyzing how deaths occur will help researchers best educate the public in scenarios where flooding events happen frequently and more often

### Methodology

- Data was collected through the National Center for Environmental Information
- An Excel file was used to compile all data and categorize it by type of event, the age, gender, and how an individual died.
- The graphs were data used from 2009 to 2017

### Results

The results showed that during flood events in Texas, motor vehicle incidents with men were much higher than that of Women. As well, overall Men had a higher percentages of deaths. With that, there was a significant increase in flood related events due to Hurricane Harvey, especially in 2017, where the Hurricane accounted for more than half of flood fatalities in 2017. Throughout the years, the data shows more deaths related to vehicular accidents than any other type of death.

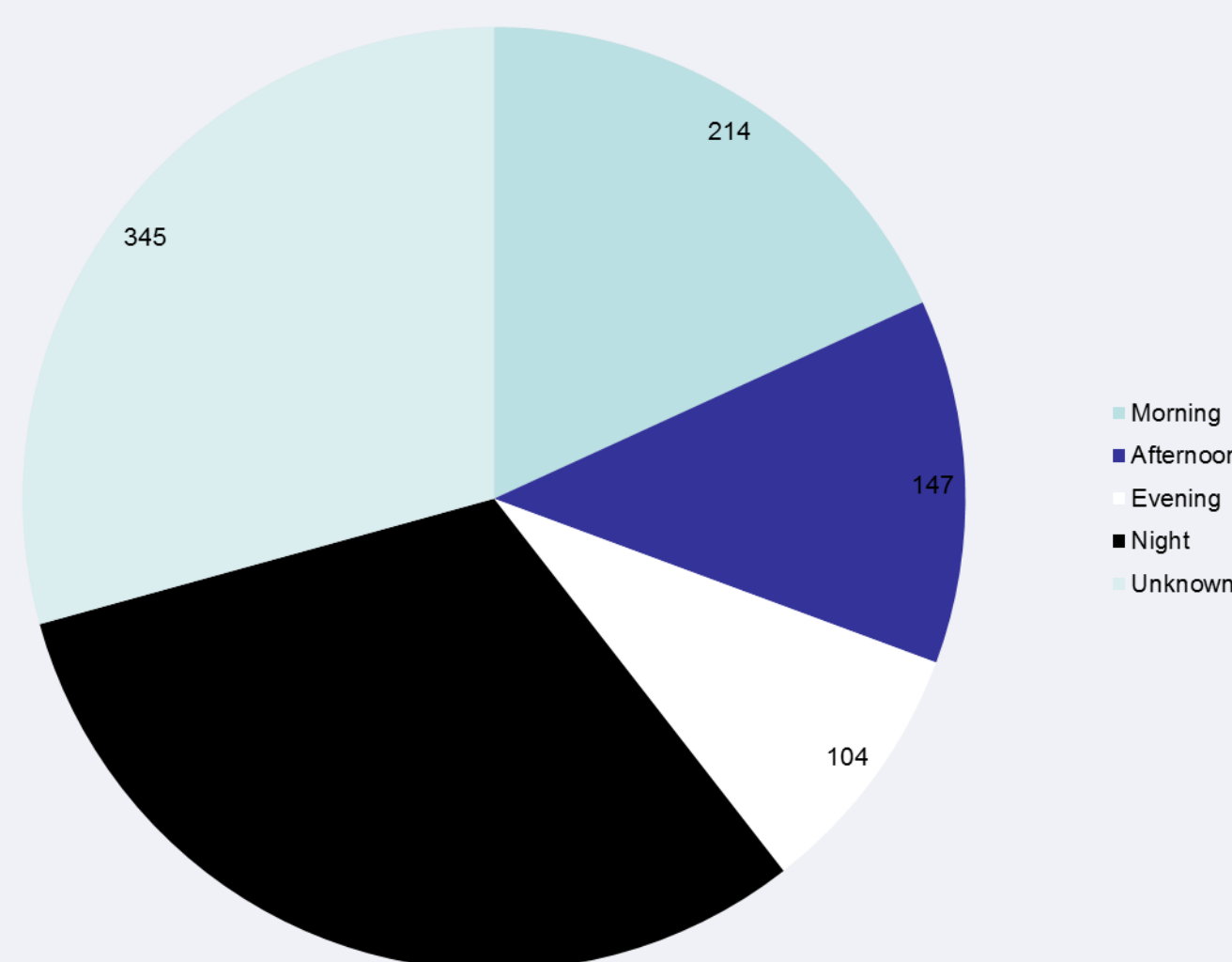


Fig. 1. Deaths at certain times of days

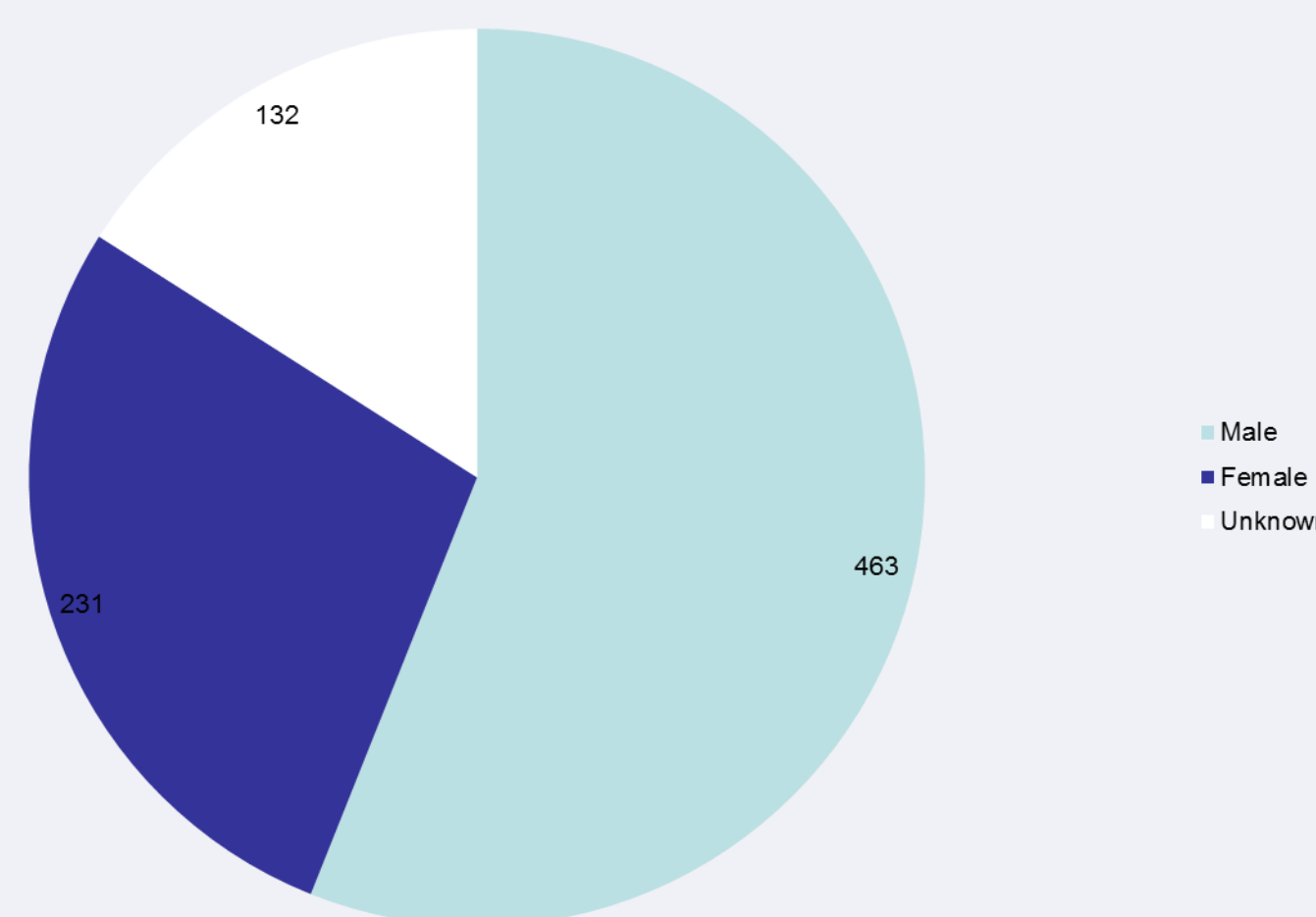


Fig. 2. Deaths by gender

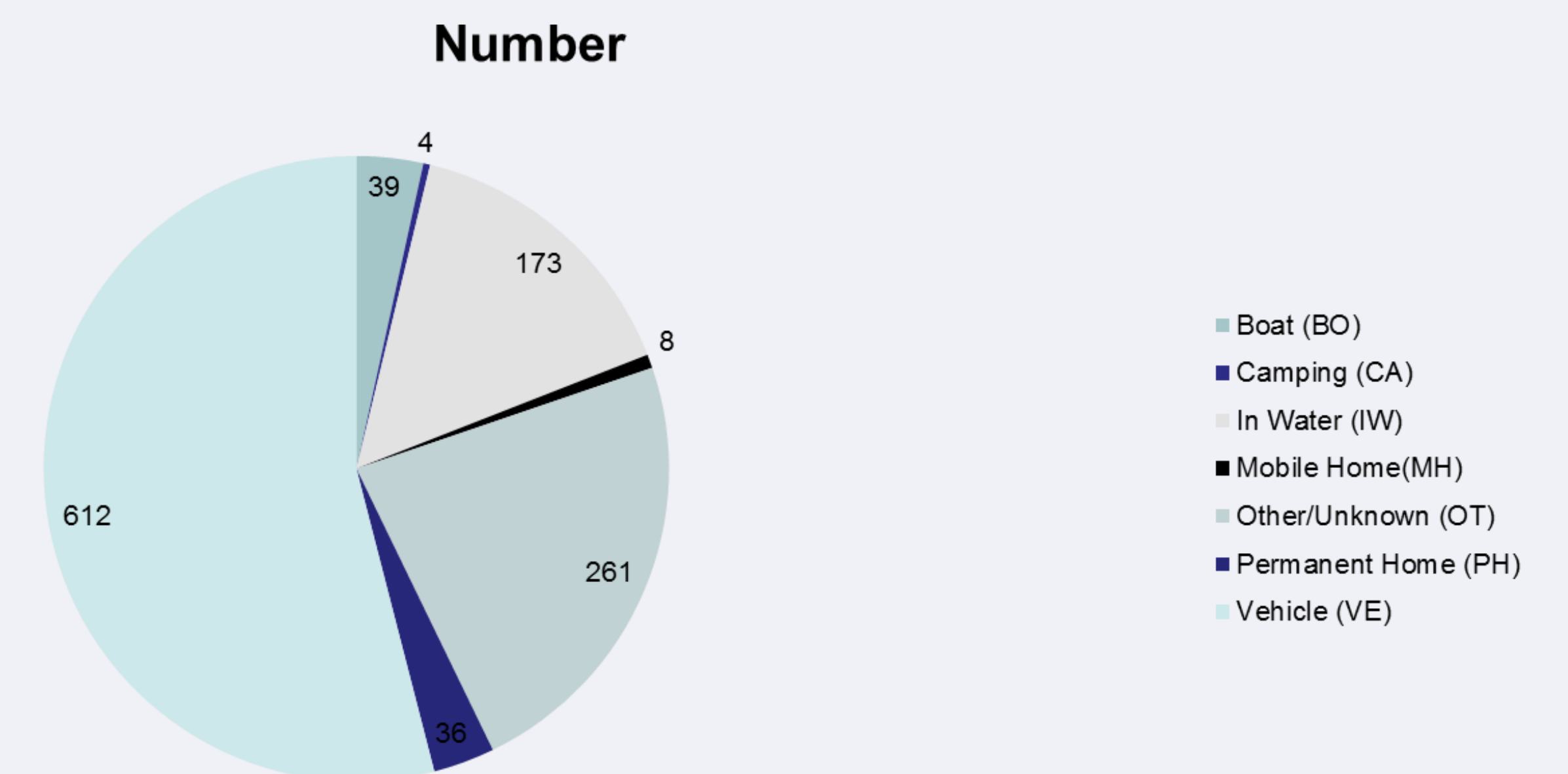


Fig. 3. Deaths by location

### Skills and Experience

- Data Acquisition
- Data Compilation
- Excel experience

### What I Learned

I learned that during flood events, it is best that you stay in your home and wait to be rescued. Many deaths indicate that a majority of flood fatalities were due to vehicular involvement. I also learned database skills that helped me extract data that was important to what I needed

### Future Plans

I plan to take this internship experience and apply it to future internships and potential job offers. Completing this internship has allowed me to understand what its like to be a research assistant and hopefully will lead me to more opportunities within the TSERI department.

### Acknowledgments

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### References

- Ncei. "Storm Events Database." *National Centers for Environmental Information*, [www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=720861](http://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=720861). . Accessed: Jul-12-2019