

# Final Presentation: Data and Decision Making

Presented by: Syd McMullen, Jake Merkel,  
Ashlyn Hanks, Julia Pittorino





# Agenda:

01

Our Topic

02

Introduction  
& Goal

03

Methods

04

Data and  
Discussion

05

Conclusion

## Executive Summary



- We chose to focus on what people are purchasing in preparation for a hurricane and whether political affiliation affects what people purchase.
- The data is from Poll 89, weighted, and collected from August 15-18, 2022
- Interesting points to highlight are we originally thought there would be a major difference between political parties & generations, but we found in the end there was minor to no differences.

# Intro to Study: Our Purpose Statement:

Our purpose is to find if there is any correlation between age / political party affiliation and what these two groups buy in preparation for a hurricane.

# Review of Research: Our Research Questions

01

Does political party affiliation affect the supplies bought in preparation for a hurricane?

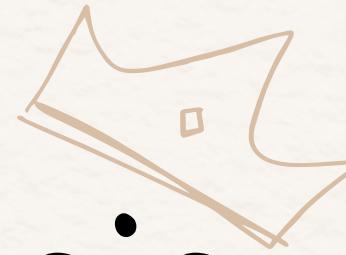
02

Do people of different generations buy different supplies in preparation for a hurricane?

# Methods of Research

| Parameters                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| The population for which the data was taken from is North Carolina adults (18+). There was 1002 respondents; out of those 1002, 786 said they were registered to vote. The survey was completed from August 15 - August 18, 2022.                                                                                                                                                       |   |
| This data was collected via the internet. The data was collected via non-probability from Dynata's online panel.                                                                                                                                                                                                                                                                        |  |
| The data is weighted toward population parameters for age, gender, education, race, and ethnicity published by the U.S. Census. The SRC produces weights through an iterative procedure within SPSS. Approximately +/-3.2 percentage points. This accounts for a standard margin of sampling error of 3.1 (as if it were a probability sample) and a design effect caused by weighting. |  |
| Interviews collected through the High Point University Survey Research Center, recording responses in Qualtrics. Dynata supplied online panel interviews. Survey sponsor and funded by High Point University Survey Research Center, High Point, NC.                                                                                                                                    |  |

# Data Analysis



## Generations:

1st - 1920 - 1939

2nd - 1940 - 1959

3rd - 1960 - 1979

4th - 1980-1999

5th - 2000 - 2019

## Key:

1 - Water

2 - Bread

3 - Toilet Paper

4 - Milk

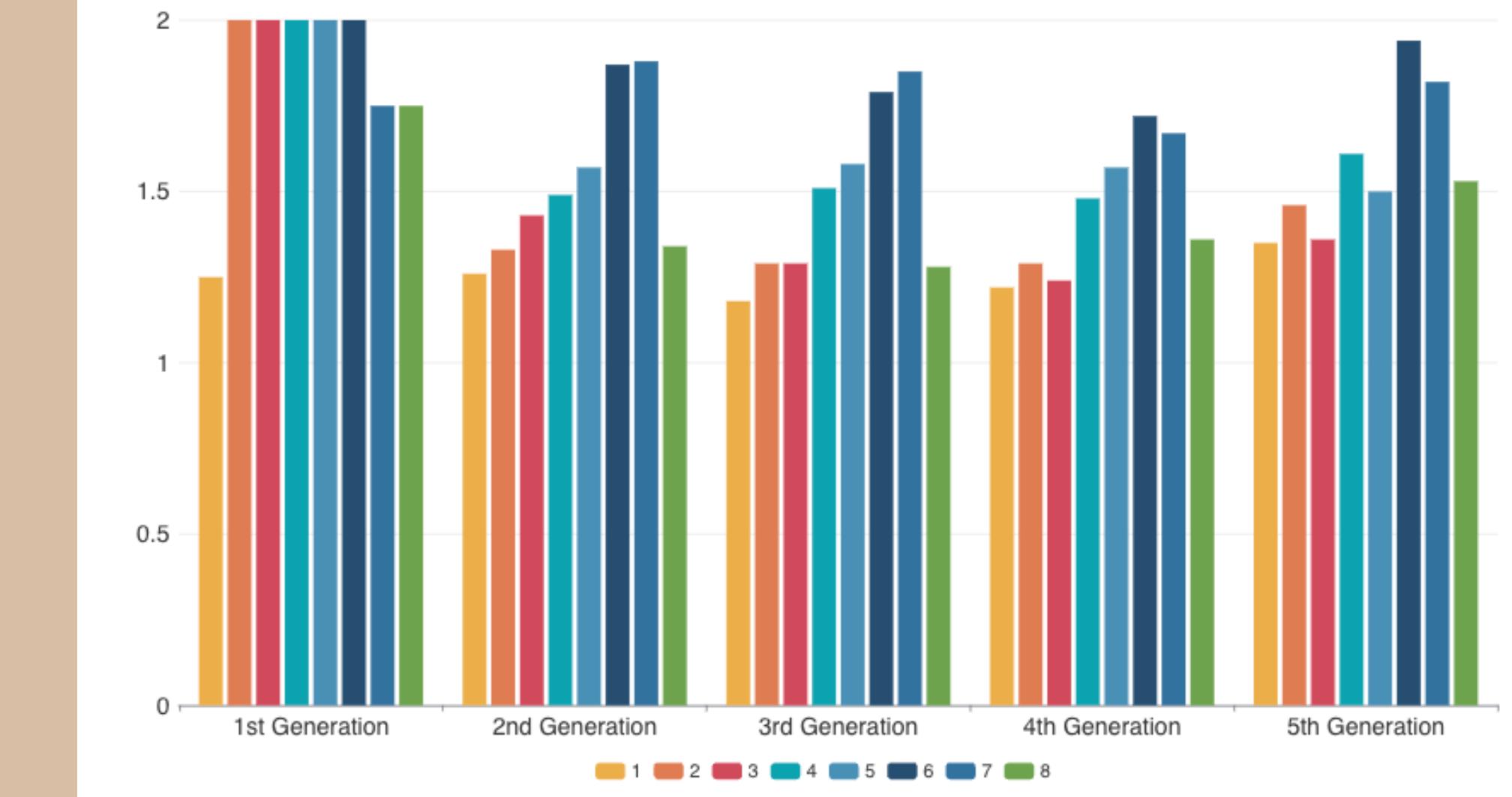
5 - Fruit

6 - Beer or other alcoholic  
beverages

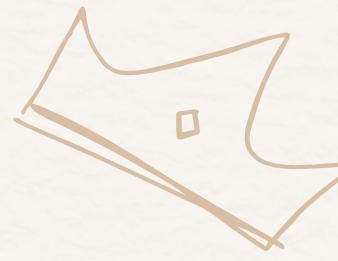
7 - Plywood or other materials to  
protect your home

8 - Extra gas for your car

## Generations

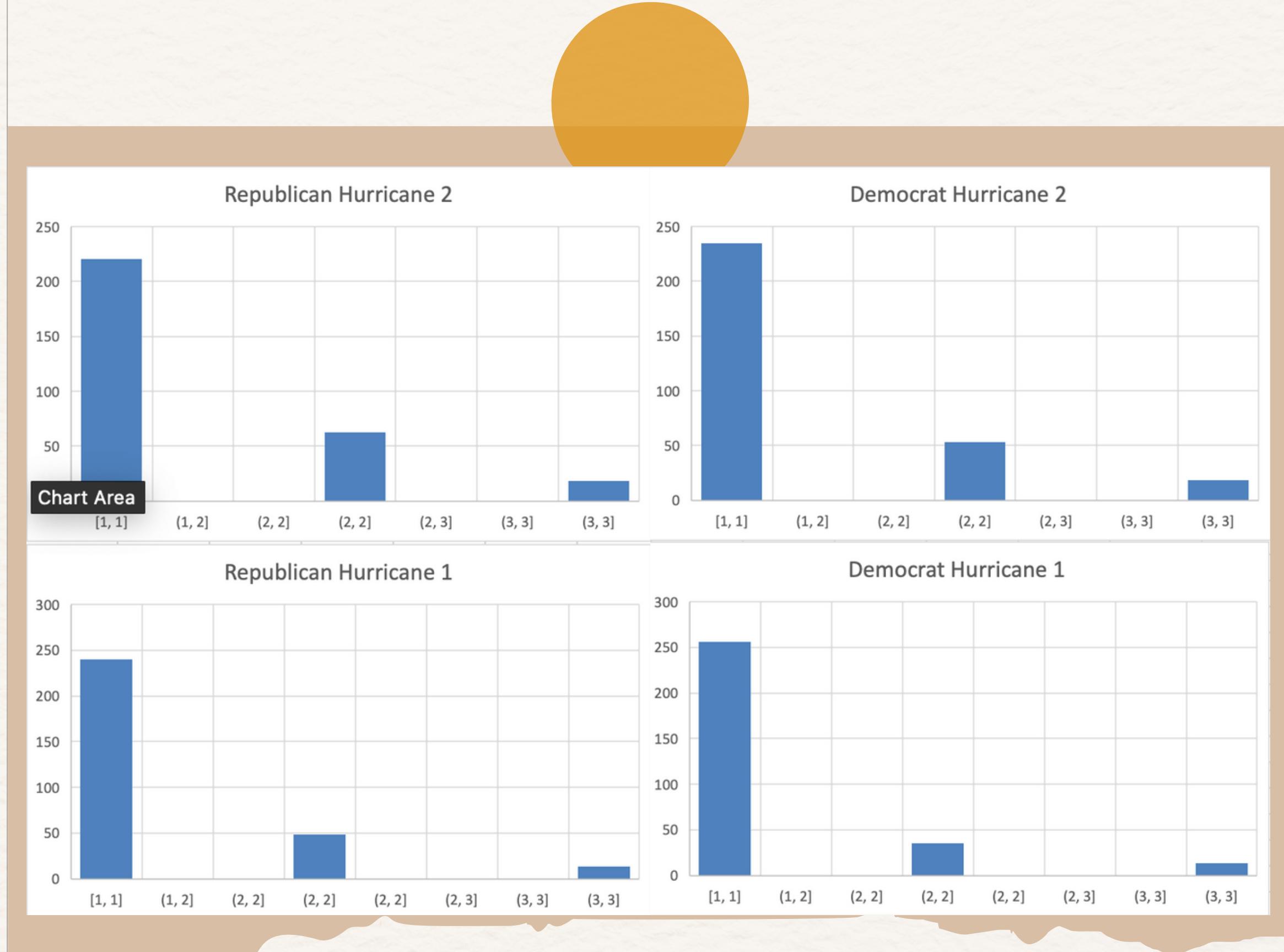


# Data Analysis



By Political Party

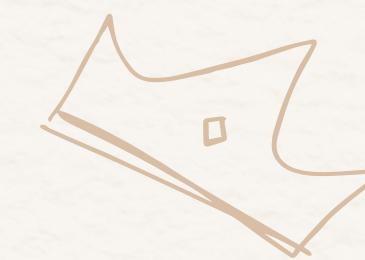
For Water and Bread



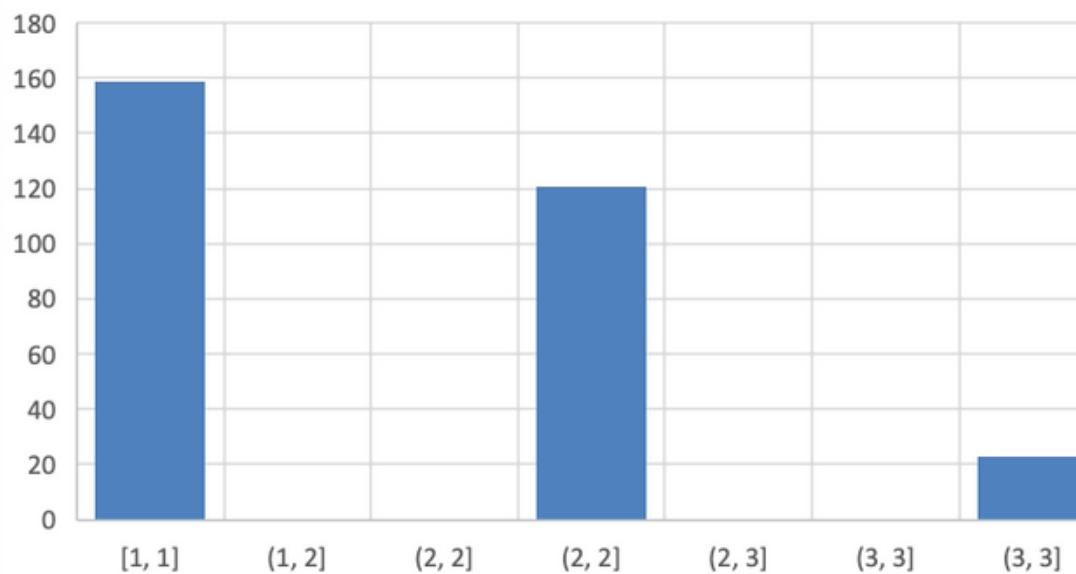
# Data Analysis

By Political Party

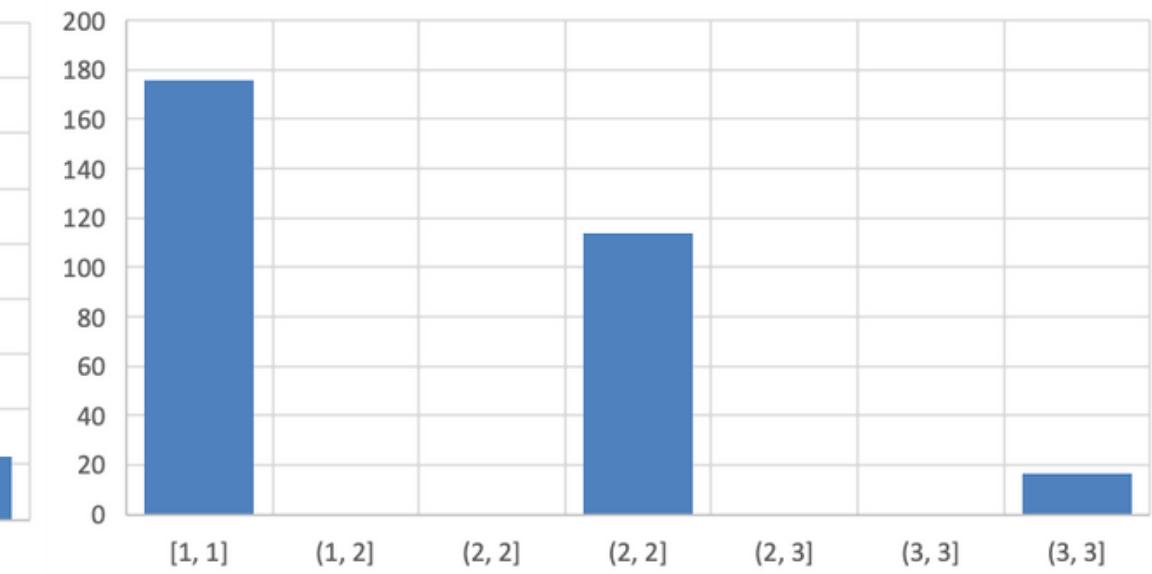
For Toilet Paper and Milk



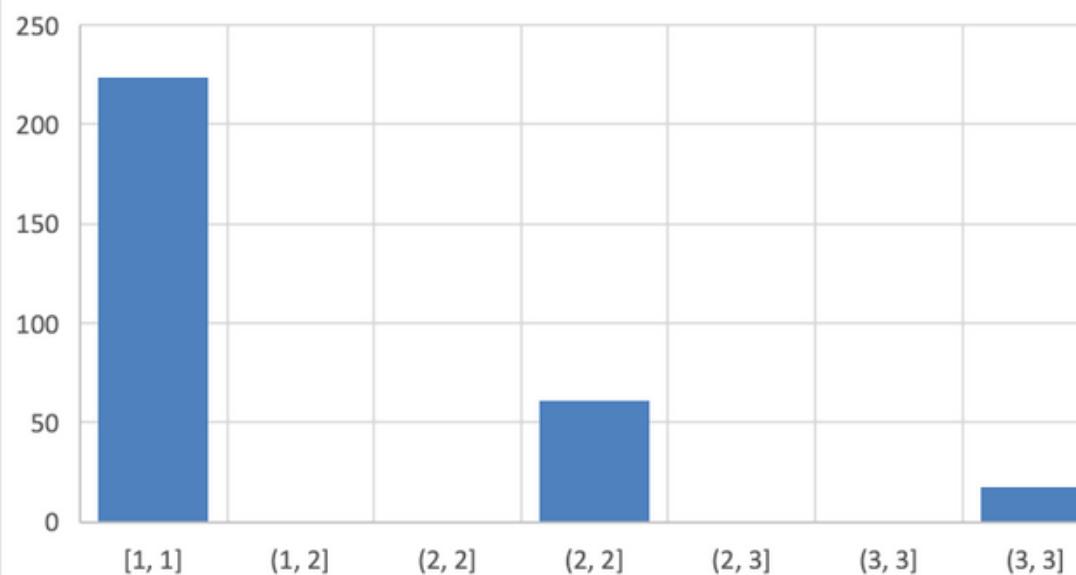
Republican Hurricane 4



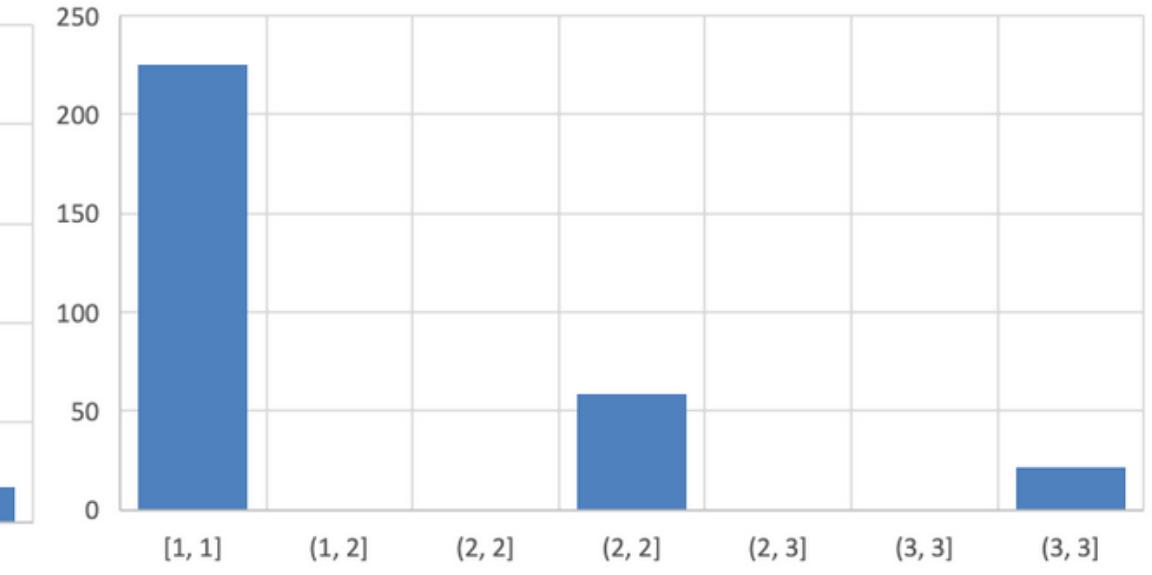
Democrat Hurricane 4



Republican Hurricane 3



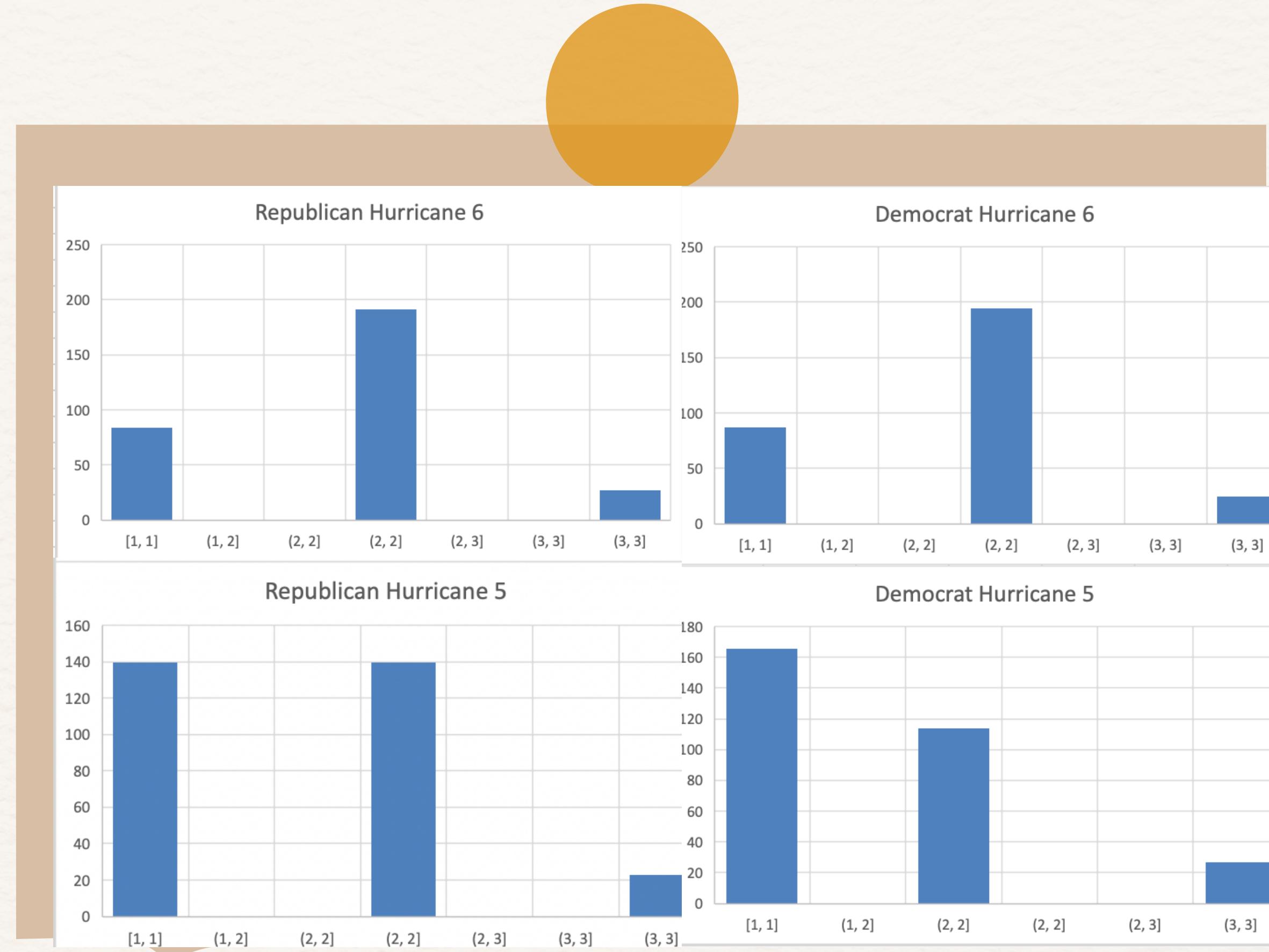
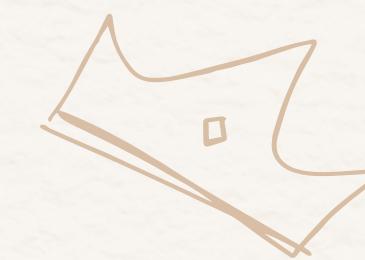
Democrat Hurricane 3



# Data Analysis

By Political Party

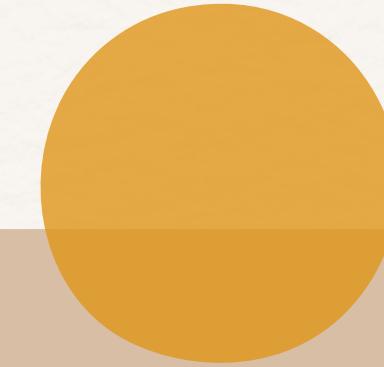
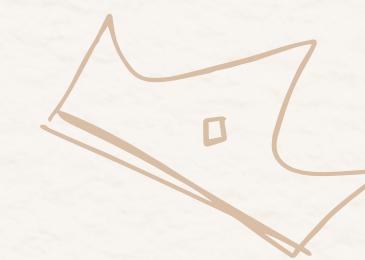
For Fruit and Alcoholic Beverages



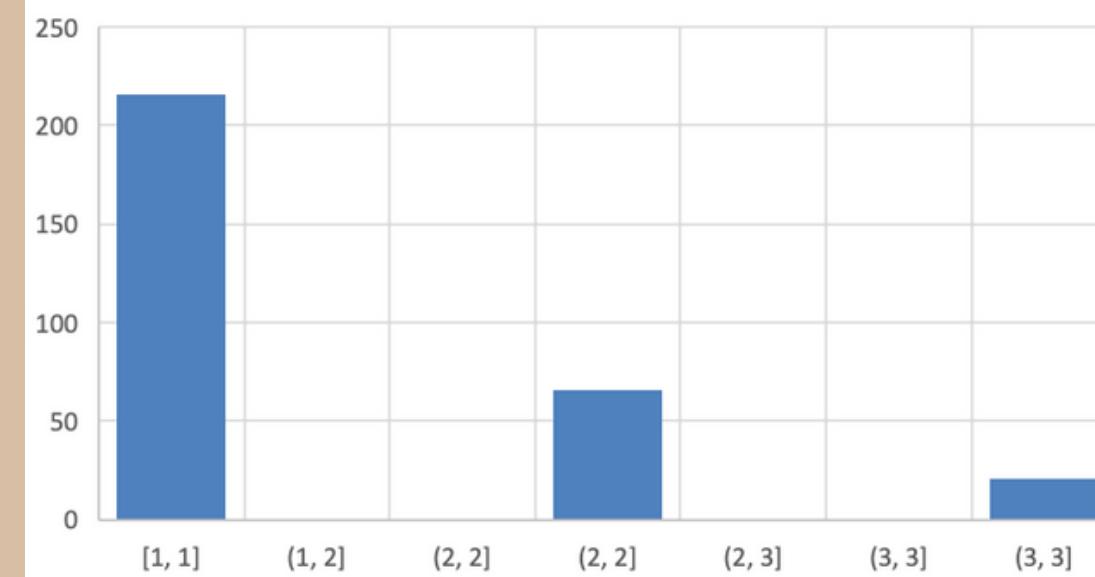
# Data Analysis

By Political Party

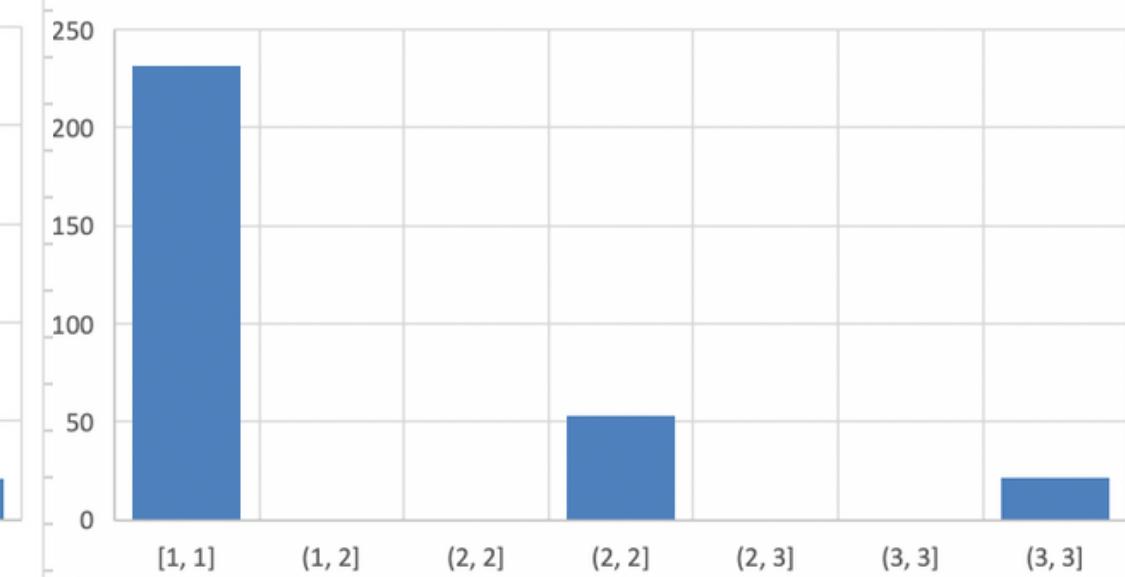
For Plywood and Extra Gas



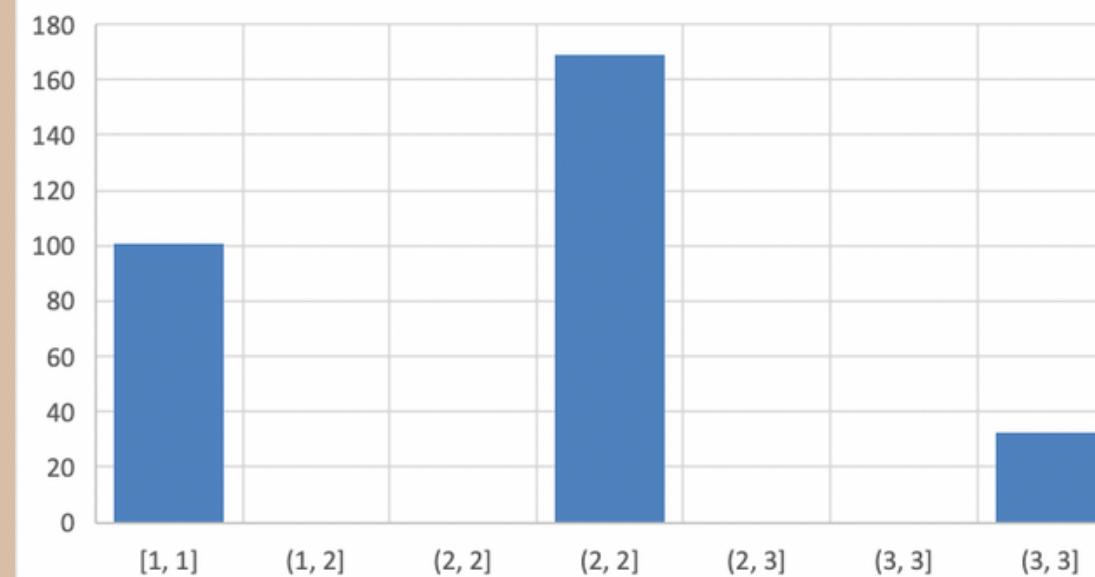
Republican Hurricane 8



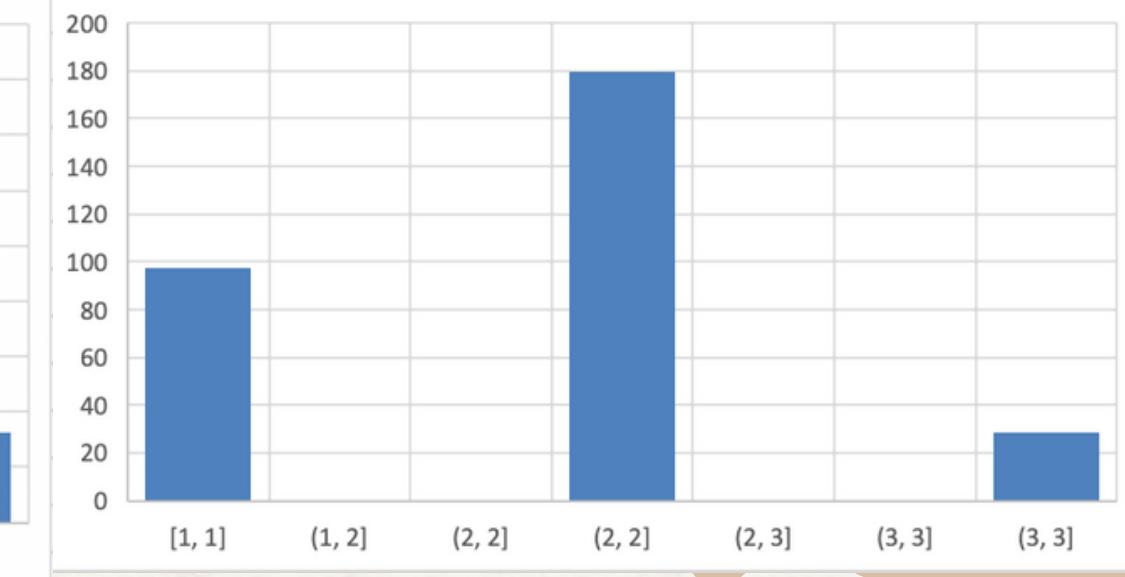
Democrat Hurricane 8



Republican Hurricane 7



Democrat Hurricane 7



# Survey Research Findings

| t-Test: Two-Sample Assuming Equal Variances |            |            | t-Test: Two-Sample Assuming Equal Variances |            |            | t-Test: Two-Sample Assuming Equal Variances |            |            |
|---------------------------------------------|------------|------------|---------------------------------------------|------------|------------|---------------------------------------------|------------|------------|
| Hurricane 1                                 |            |            | Hurricane 6                                 |            |            | Hurricane 8                                 |            |            |
|                                             | Republican | Democrat   |                                             | Republican | Democrat   |                                             | Republican | Democrat   |
| Mean                                        | 1.25412541 | 1.20846906 | Mean                                        | 1.81188119 | 1.7980456  | Mean                                        | 1.35643564 | 1.31596091 |
| Variance                                    | 0.28288855 | 0.25705222 | Variance                                    | 0.3320438  | 0.32509421 | Variance                                    | 0.36922169 | 0.36062677 |
| Observations                                | 303        | 307        | Observations                                | 303        | 307        | Observations                                | 303        | 307        |
| Pooled Varian                               | 0.2698854  |            | Pooled Varian                               | 0.32854614 |            | Pooled Varian                               | 0.36489596 |            |
| Hypothesized                                | 0          |            | Hypothesized                                | 0          |            | Hypothesized                                | 0          |            |
| df                                          | 608        |            | df                                          | 608        |            | df                                          | 608        |            |
| t Stat                                      | 1.08526837 |            | t Stat                                      | 0.29807458 |            | t Stat                                      | 0.82741813 |            |
| P(T<=t) one-ta                              | 0.13911646 |            | P(T<=t) one-ta                              | 0.38287404 |            | P(T<=t) one-ta                              | 0.20416237 |            |
| t Critical one-                             | 1.64736367 |            | t Critical one-                             | 1.64736367 |            | t Critical one-                             | 1.64736367 |            |
| P(T<=t) two-ta                              | 0.27823293 |            | P(T<=t) two-ta                              | 0.76574807 |            | P(T<=t) two-ta                              | 0.40832473 |            |
| t Critical two-                             | 1.96387339 |            | t Critical two-                             | 1.96387339 |            | t Critical two-                             | 1.96387339 |            |

# Conclusion / Recommendations



Thank you for listening,  
have a great break!

