Planning for NPS Storyboard

# 5 W’s

Who: Voters and Law makers

What: Usage of national parks throughout the year and over time

When: 2011 – 2021

Where: The United States of America

Why: Educate voters and lawmakers on the NPS system to encourage to continue to support the National Park Service as a vital government service.

# Outline:

1. Background on the National Park System
   1. Aggregate Sums of National Park Visitation Data
   2. Geographic Data of NPS Facilities per State
2. Initial Data Exploration
   1. Relationship between average monthly temperature and recreational visits.
      1. Show graph displaying the trend
      2. Initial Hypothesis that there is a connection between the two.
3. Regression Testing
   1. Ran a linear regression test on the relationship between Monthly Avg. Temp and the Recreation Visits and Monthly Avg Temp and the Number of Campers.
   2. Show Charts
   3. Explain how test failed, trend is exponential not linear.
4. Clustering Analysis.
   1. Reran testing using K-Means and determined that parks fell into three categories.
      1. High Visitation
      2. Mixed Recreation and Non-Recreation Visitation
      3. Low Visitation
   2. High Visitation Cluster is located in the 50-80 degrees.
   3. Shows that the “nice weather” is a significant variable in recreation visits.
5. Time-Series Analysis
   1. Visitation is Highly Seasonal, with an increase in visitors over the summer.
   2. The general Trend is an increase in visitors over the past ten years.
      1. The COVID-19 Pandemic Hurt Visitation, however NPS maintained visitations through the pandemic and experienced a quick recovery in 2021.
6. Overall takeaways
   1. National Park Systems are widely used by people across the country for recreational and non-recreational purposes.
   2. National Parks provide access to outdoor recreation, evidenced by continued usership during the COVID-19 pandemic.
   3. Weather and Climate are important to the NPS and further research into Climate Change and their impacts on NPS should be the next steps.