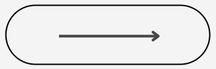
BLAZING THE TRAIL

Creating a Customisable Web Map for Yellowstone and Grand Canyon National Parks



CARTOGRAPHY M.SC.
ITC

PRESENTED BY
Vanessa Henkes

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INTRODUCTION

1872

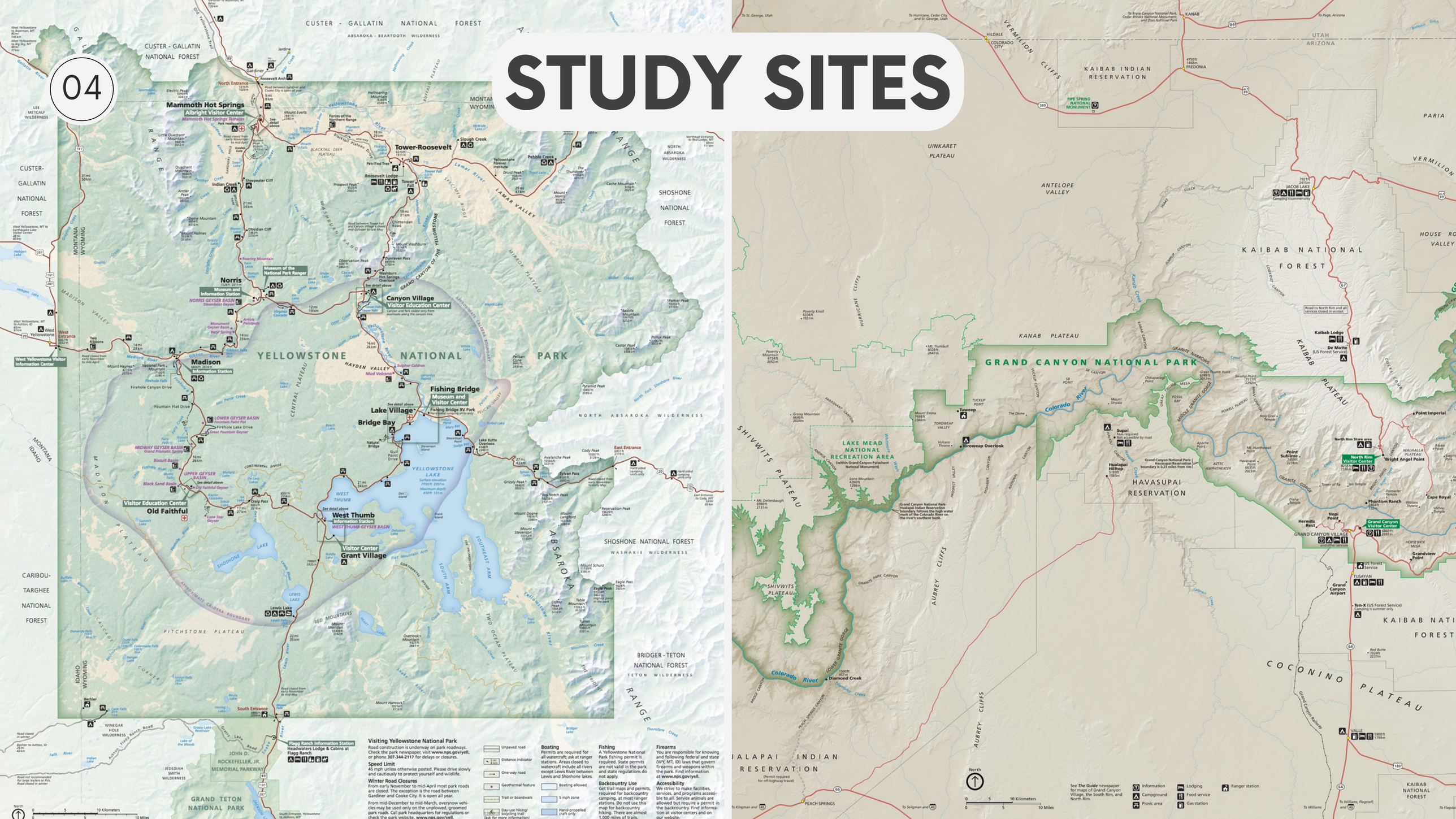
"To preserve the natural and cultural resources and values of the National Park system, unimpaired, for the enjoyment, education, and inspiration of this and future generations"

3.1 Billion USD

279 Million USD - Visitor Services

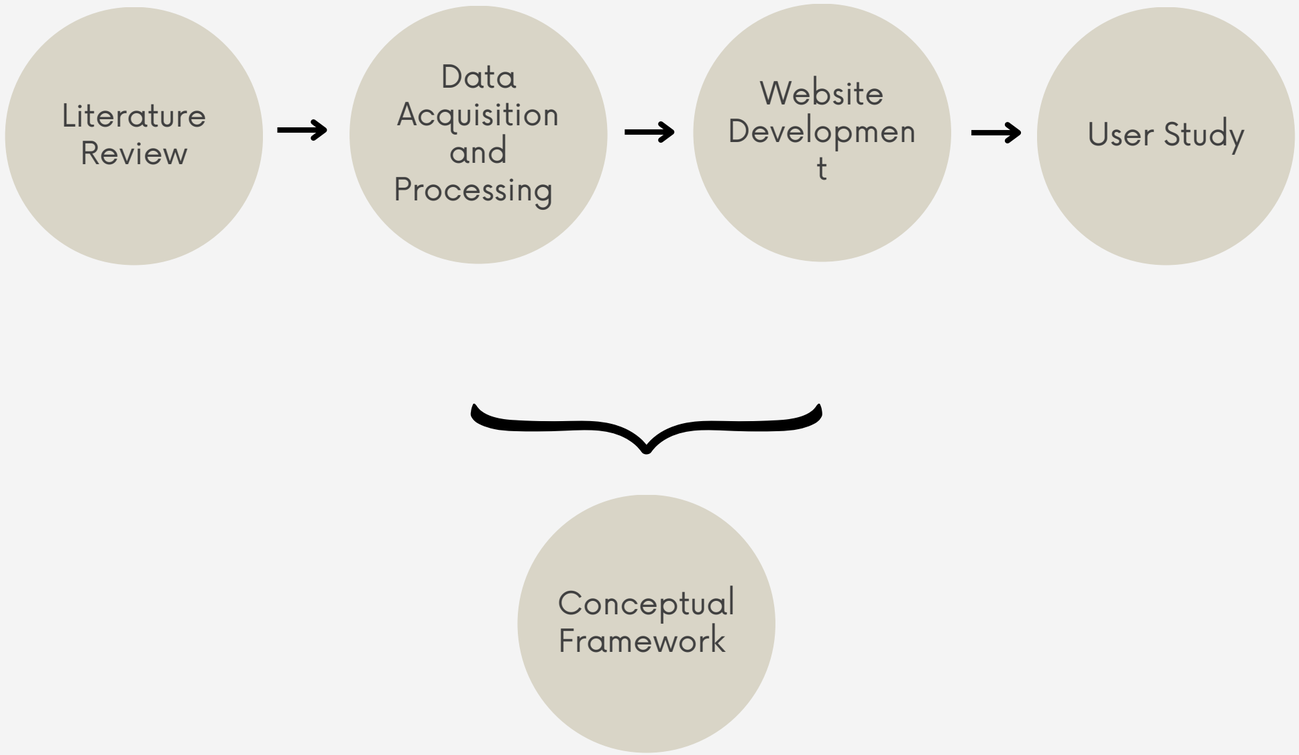
04

STUDY SITES



METHODOLOGY

05

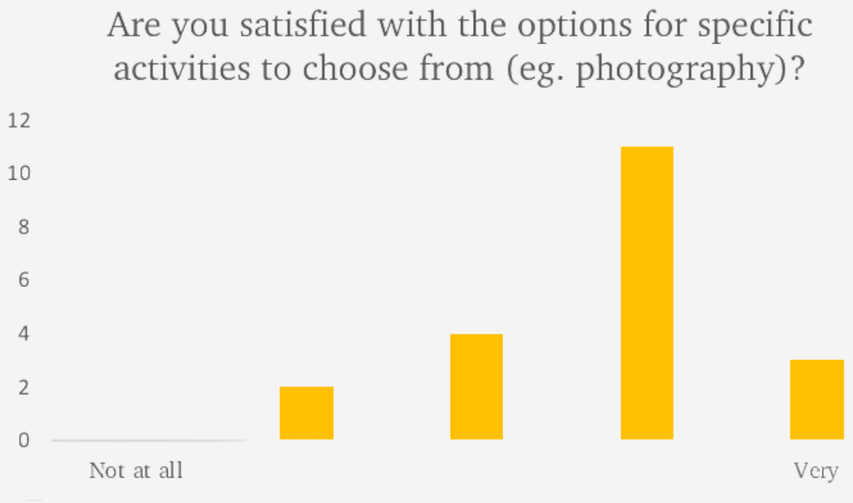


RESULTS

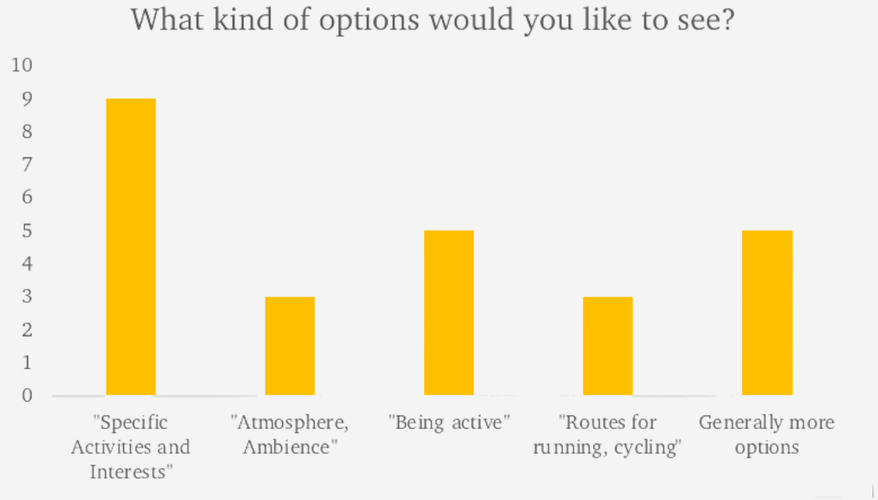
06

Statistical Analysis - mixed-methods approach

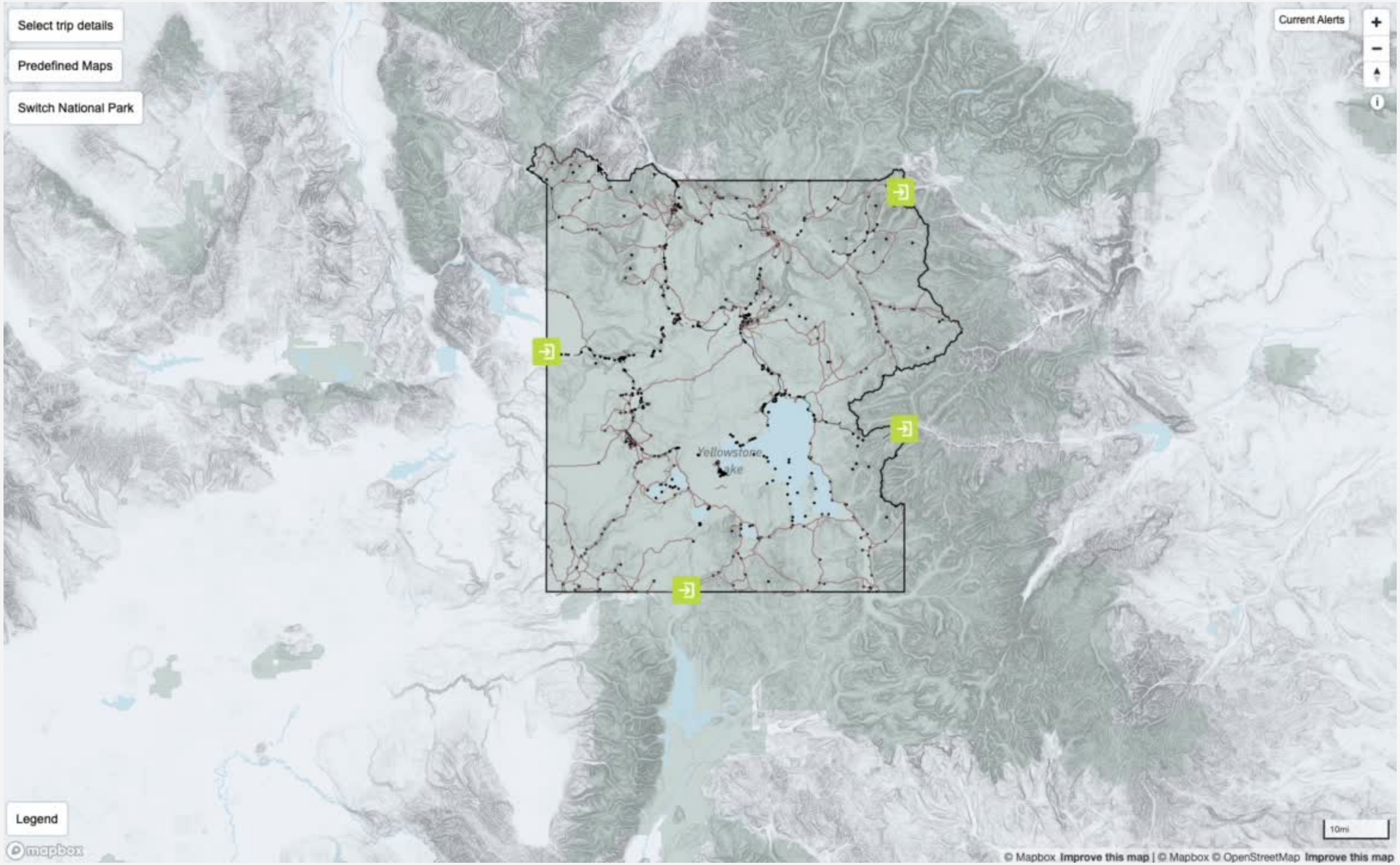
Mean, Variance, and Standard Deviation for Likert Scale questions



Subjective clustering approach for open ended short-answer questions



07


Select trip details
Predefined Maps
Switch National Park
Current Alerts
Yellowstone
Legend
10mi
mapbox
© Mapbox Improve this map | © Mapbox © OpenStreetMap Improve this map

ANALYSIS

08

Sub-Section One

- participants value both filtering mechanisms
- “more information”

Sub-Section Two

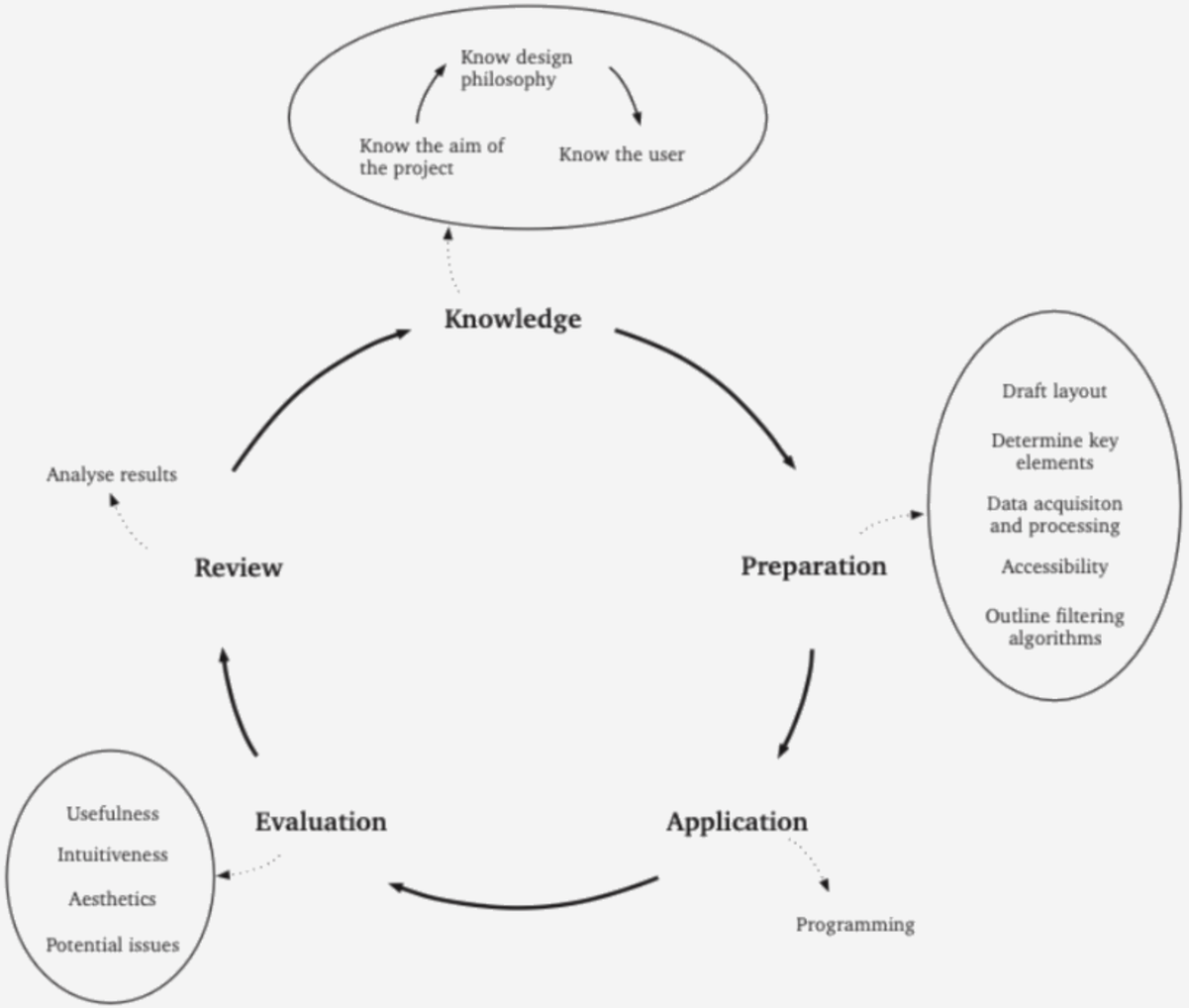
- ease of navigation
- adjusted zoom levels for POIs

Sub-Section Three

- seamless loading process
- tool for planning (no matter the time frame)

FRAMEWORK

09



CONCLUSION

- User study highlighted interface's intuitiveness, usefulness, and aesthetics
- Additional options like hiking and considering atmospheric factors
- Button comprehension and element visibility - added areas of improvement
- Effective for both planned and spontaneous trip planning
- Conceptual framework for creating adaptable and intuitive map interfaces
- User feedback synthesised into actionable design strategies

FUTURE WORK

- More user studies (with more participants)
  - continued evaluation and review of the newly added Grand Canyon NP
- More emphasis on platial (dis-)similarities between the parks and how to depict them cartographically
- Enhance and refine the code to make it easier to understand
- Enhance and refine the conceptual framework