

# CPL DCI R Analysis

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Hi Zach,

I hope the semester is going well for you. We wanted to check in regarding the DCI study for CPL. Lily and I were able to format all three years worth of data for R, along with the SNOTEL and avalanche risk data. (We have linked a folder with all of these documents [here](#)). We have also worked with Maddie and Melanie to develop a list of questions we hope to answer with the help of R. Please let us know if you would be able to write a script to perform these analyses and generate relevant graphs. If there are other trends you notice or questions you think would be beneficial to explore we would love to know. We are hoping to have the scripts ready by the end of December if possible. If you have questions or would like to discuss further we will both be available beginning November 30th. Thanks in advance for your time.

1. How do trail visitor counts correlate to an increase in snowfall during the previous day(s)? (what patterns of snowfall yield the most visitors/changes in visitation)
2. How does an increased avalanche risk impact the numbers of hybrid and motorized visitors to specific trailheads?
3. What combination of weather conditions yields the highest/lowest number of visitors?
4. What sample size is needed to represent the entire season ?
5. Which days of the week have the highest number of visitors? Weekdays vs weekends?
6. How do visitation rates for different user groups vary seasonally?
7. Which days of the year are busiest?
8. Do different groups of users utilize the trail more during different times of the season?
9. How did covid affect visitation rates and use patterns?
10. What are major year-to-year trends in visitation?
11. How do the days with the highest avalanche risk affect visitor rates?

Thank you,

Kathryn