

Part 2 - Experiment and Metrics Design

Firstly, I make assumptions that there is an electronic device which we can check counts of the cars on the bridge, and we have data before the experiment.

We know that Ultimate Gotham is most active at night and Ultimate Metropolis is active during the day on weekdays. So, the toll bridge is active all the time during weekdays. According to this assumption. I would use a hypothesis test.

Null hypothesis H_0 : The mean counts of the cars on the bridge before reimbursements were offered of all toll costs is not significantly different from the mean counts of cars after reimbursements were offered.

Alternative hypothesis H_1 : The mean counts of the cars on the bridge before reimbursements were offered of all toll costs is significantly different from the mean counts of cars after reimbursements were offered.

I would use z-test to find p- value of the hypothesis.

If we consider the significance level to be at 0.05, then to accept the null hypothesis, p-value should be more than the chosen significance level.

If p- value is less than 0.05, then I will reject the null hypothesis. I will accept that there is a significant difference between these two experiments.