Ultimate Challenge Part 2 Questions

1. The key measure I would focus on is average wait time. Ride volume and profit would also be important to the business. Even if wait time is decreased and ride volume increased, the cost of tolls may cannibalize any additional revenue. However I will focus on ensuring more coverage for both cities, average ride wait time will quantify this well I believe.

2.

1. The effectiveness of the proposal can easily be quantified using the company’s rideshare app or from data collected from the driver's onboard computers. We will record 4 months worth of data after starting the initiative and compare it to the historical data from the previous quarters. It may be wise to gather even more data as I would expect it to take about a month for the initiative to measurably start affecting supply and demand.
2. I would do standard hypothesis and confidence interval testing. My default hypothesis would be that the toll paying initiative will increase overall ride volume and lower average wait times per ride by a decided amount. I would then work to prove the null hypothesis, that the initiative did not increase volume and decrease wait times, to a certain confidence level.
3. A decrease in wait times would imply an increase in ride volume, however this would also decrease cost per ride due to an increased supply of drivers. Combined with the additional cost of paying tolls, Ultimate would need to ensure this venture increases overall profit.