**Clara Siefke | Project 2 Analysis Report | 11/15/24**

The following data exists to help the Squeaky Clean Car Wash decide whether to buy new equipment to reduce the time of each car wash from 4 minutes to 3 minutes. Their goal is to reduce the average time each car waits to be washed as well as minimize the number of cars waiting 10

minutes or longer.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Day | 4-Minute Bay | | 3-Minute Bay | |
| Avg Wait | #Cars with >9 Min Wait | Avg Wait | #Cars with >9 Min Wait |
| Monday | 63 | 133 | 12 | 60 |
| Tuesday | 55 | 131 | 27 | 138 |
| Wednesday | 58 | 134 | 19 | 109 |
| Thursday | 73 | 151 | 24 | 123 |
| Friday | 48 | 127 | 23 | 122 |
| Saturday | 52 | 144 | 18 | 100 |
| Sunday | 71 | 146 | 17 | 113 |
| Week Avg | 60 | 138 | 20 | 109.2857143 |

Based on the data, it would be beneficial for the Squeaky Clean Car Wash to buy the new equipment. The average of the average wait times per day dropped from 60 minutes to 20 minutes, thus implying that the average wait time of each car would be reduced, just as the business desires. Additionally, the average number of cars with long waits per day dropped from 138 cars to about 109 cars, suggesting that the number of cars with long waits each day would be reduced, which the business also wants.