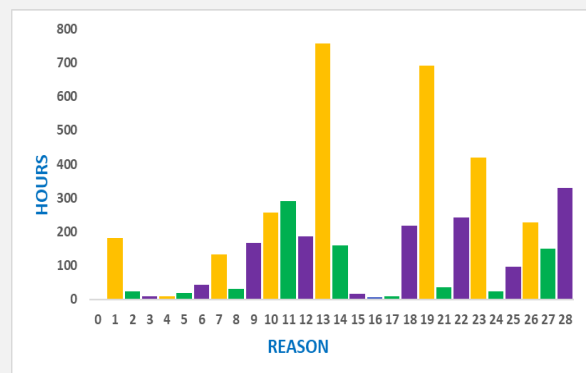


The Absentee analysis is conducted using 12 columns of data and 700 observations during the years 2015 - 2018. The focus of the inquiry is centered around the absentee hours which totals 4733 hours. The usable data is the employee ID number, number of hours, and dates absences occurred. Employee identifications and reasons for absences presented as numbers only for categorical data and blind to the analyst. Other observations are the distance traveled and traveling expenses submitted by the employees. Daily workload is observed as numerical data and categorized as hours performed monthly. Age is an observation used to identify which groups are using more hours over the others. The number of children is considered because the data suggest it is a significant cause for employee's absences. Body mass index, education, and pets has been demonstrated as not being a significant factor in the reasons for absences.

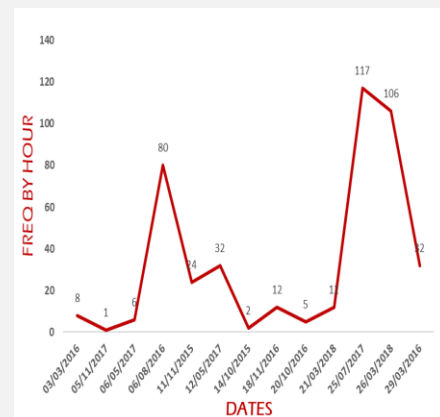
The total count of days for reporting absence in the four-year period is 1424. The reasons for absence are numbered 1-28 with the overall top reason for absence is #13 seeing 757 total hours being reported. Reason #19 has the second most recorded hours with 692 hours being recorded.



Reason #23 is recorded third highest with 420 hours recorded. Reason #16 is the least used absence with 6 hours recorded. 2015 ended with 729 absence hours with reason #19 being recorded the most, 192 hours. Second top rated is reason #23 with 129 hours recorded. Third top rated is #14 with 88 hours being recorded. The highest reported year 2016 increased to 1726 with an average of 11 hours per reported day. The top reason for absence is #13 with 360 hours being reported. Second top reason is #11 with 246 being reported. Third top rated is reason #19 with 175 hours reported. The least reported hours are 8 with the reasons spread across #4, 5, 15, 17, and 24. In 2017 absences decreased down to 1373 with an average of 11 hours per reported day. Top reason for absences is #13 with 264 hours reported. The second top rated is #28 with 183 hours reported. #23 is the third top rated with 164 hours reported. 2018's absence hours came down even further from the previous year with 865 hours being report. The average is 12 hours per report day. The top-rated reason is #19 with 213 hours being reported. Second is reason #12 with 155 hours reported. Third is reason #27 with 98 hours being reported. The age with the highest absence reporting is the 28-year-old with 626 reported hours. The average expense for all years is \$222.35 with an average commute distance 29.89 miles. The top ID #3 reporting 113 in four years an average 28 hours per year.

Based off the current absence activity the usage rate does increase at a predictable rate for those that are absent regularly. The reason or dates are not predictable. What the analysis shows is the number of hours is predictable and expected to increase over the next 4 years. The probability shows that ID #3, 14, and 11 will likely increase their absence hours by 4 hours over the next 4 years. ID #3 shows a absent hour per year ratio 121:1. ID#14 shows a absent hour per year usage ratio 117:1. ID #11 shows a absent hour per year ratio 111:1. By 2022 the ratios are expected to increase to 125:1 for ID #3. Expected increase for ID #14 is 121:1. Expected increase for ID #11 is 115:1.

The ID with the least number of absences compared to the number of years with the company are ID #8 with 8 hours recorded in 30 years of service. ID #19 has recorded 6 hours absence in 17 years of service. ID #16 has recorded 8 hours in 20 years of service. The



highest reported dates are July 25, 2018, with 117 recorded hours which is not a government or organizational date of significance. March 26, 2018, has 106 recorded hours. It is reported as the second highest recorded date which does not have a government or organizational date of significance. August 8, 2016, is the third

highest recorded date with 80 hours being recorded. It does not have any government or organizational significance. The ages that have the lowest overall absence hours are 46-year-old. Age with the most recorded hours is 28-year-old. The age group with the most recorded hours are the 30-year-old but the data is biased because of the larger number of ID number that fall into the 30-year-old group.

Absentee data suggests in 4 years 55% of the company's work hours are used for absences. Out of those absence 36 employees have recorded absence hours. Reason #13 is recorded the most in 4 years. The average transportation expense is \$222.35 which equates to \$55.59 per year. The average distance traveled is 29.89 miles. ID behaviors can be predicted and is expected to increase of the next 4-year period at a rate of 1 hour per year. The most recorded dates that reported the highest recorded hours have no government or organizational significance. These dates are not government holidays. There have not been any reports of the organizational activity to cause the spiked rates of absences. The data suggest that most absences are based on human behavior alone with no known causes other than the reported reasons.