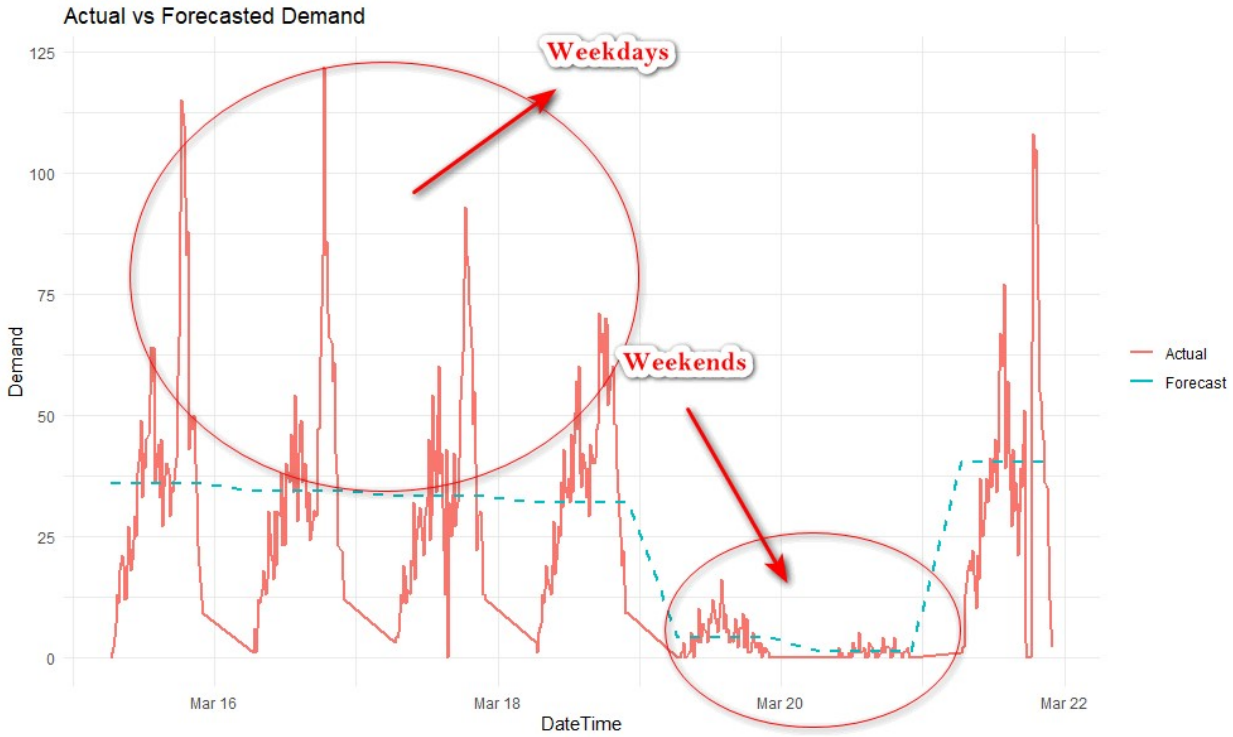
Final Project

I chose a combination of the Arima and Naive methods for my final model. I am not skilled enough to combine the results in R so I will post separate visuals of each model. I combined the models because each model has a strength and weakness when compiling this data. The Naive method's strenght is to capture the weekly seasonality by day and by 15-minute interval. It worked well on weekends where the variability of usage was low but failed at capturing the high variability of usage on weekdays.

Naive Forecast



The Arima model did an excellent job of capturing the weekday variability of usage because it seeks to establish a trend over time with seasonality. It projected that trend/seasonality to weekends where the model did a poor job of capturing the low transit usage. My suggestion would be to combine the models for Arima ~ workdays/weekdays and Naive ~ weekends/slow holidays.

Arima Forecast