

Do We Have Enough Bikes?

Forecast on D.C. Bike Share Industry based on Historical Analysis - Breakdown of Casual and Member Usage



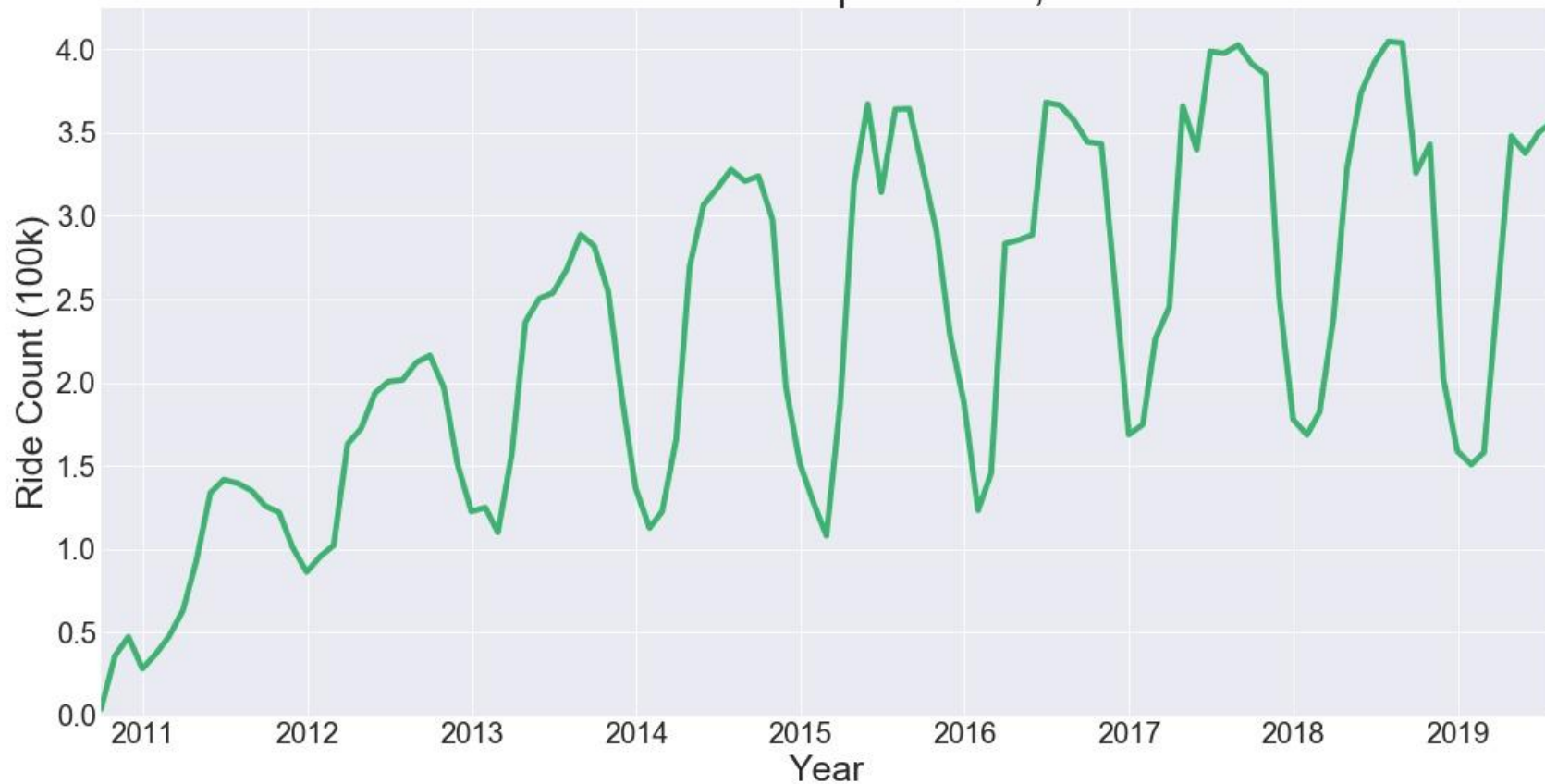
Capital Bikeshare



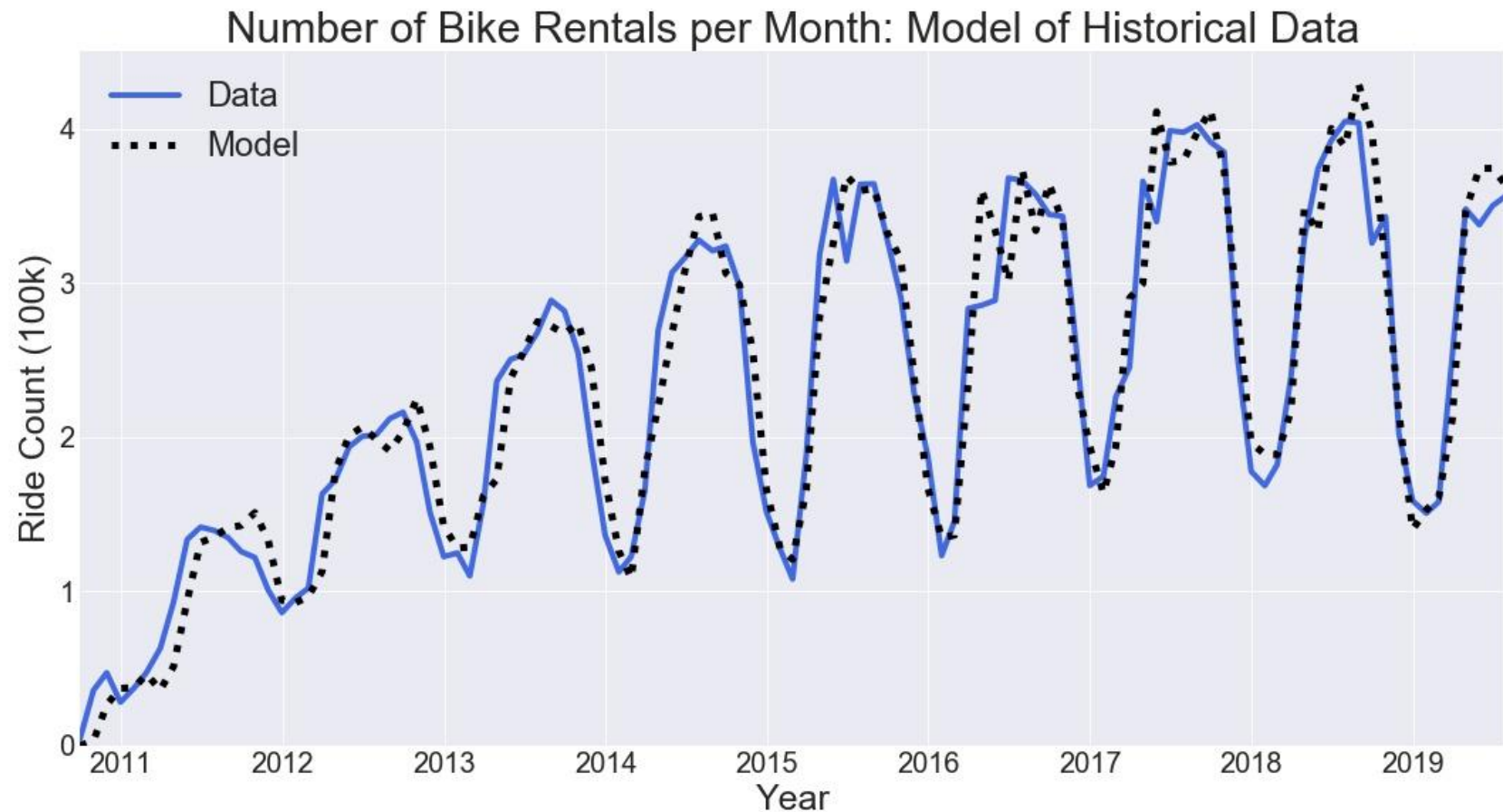
- Started in 2010
- Check out a bike for short period of time and drop off at different station
- 4,300 bikes, 500+ stations across 7 jurisdictions
- Casual use - pay per trip
- Member use - can either pay monthly or annually for unlimited use

D.C. Bikeshare Industry - A Look at the Past

Number of Bike Rentals per Month, Time Series

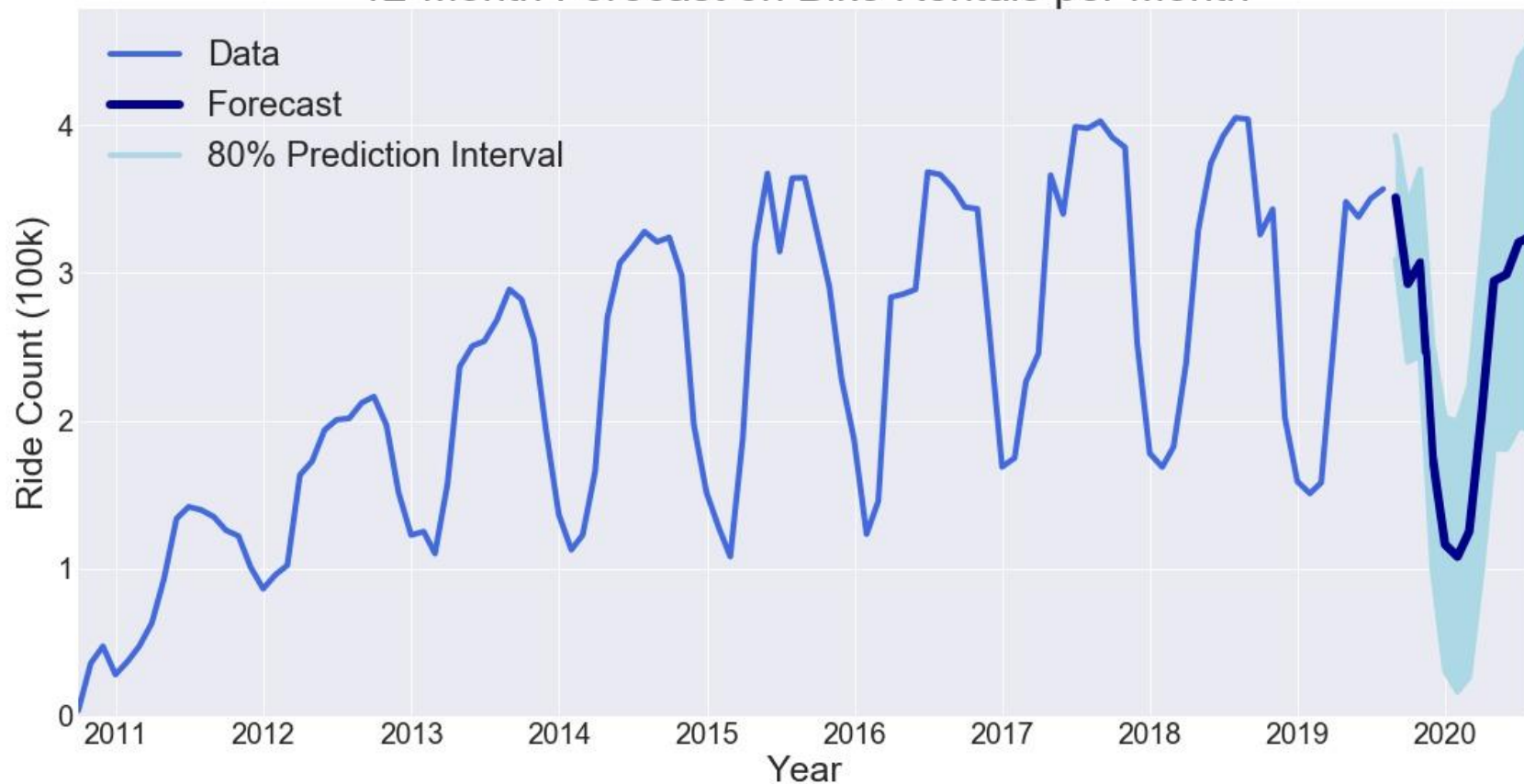


Building a Model

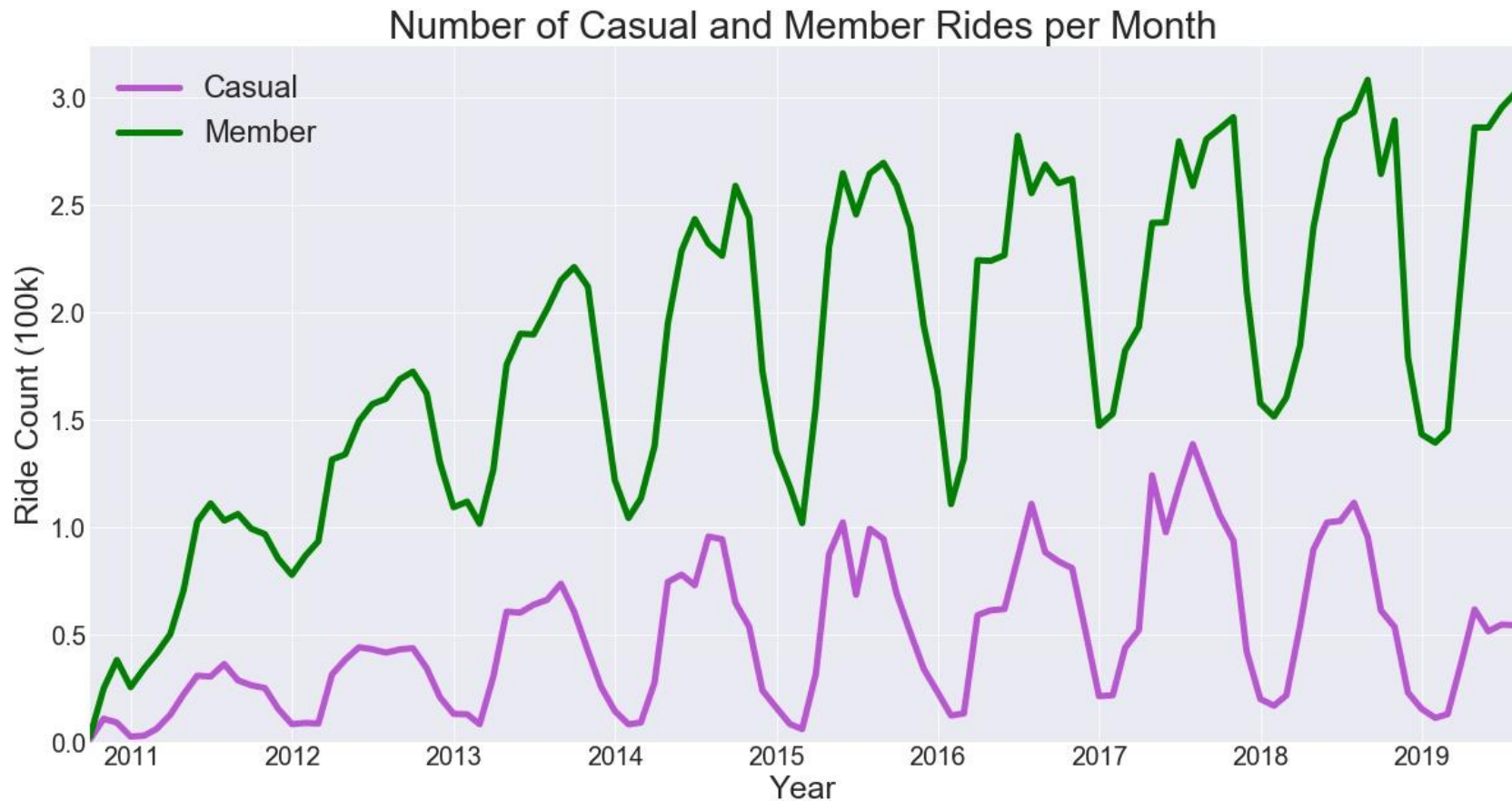


Forecasting the Next Year

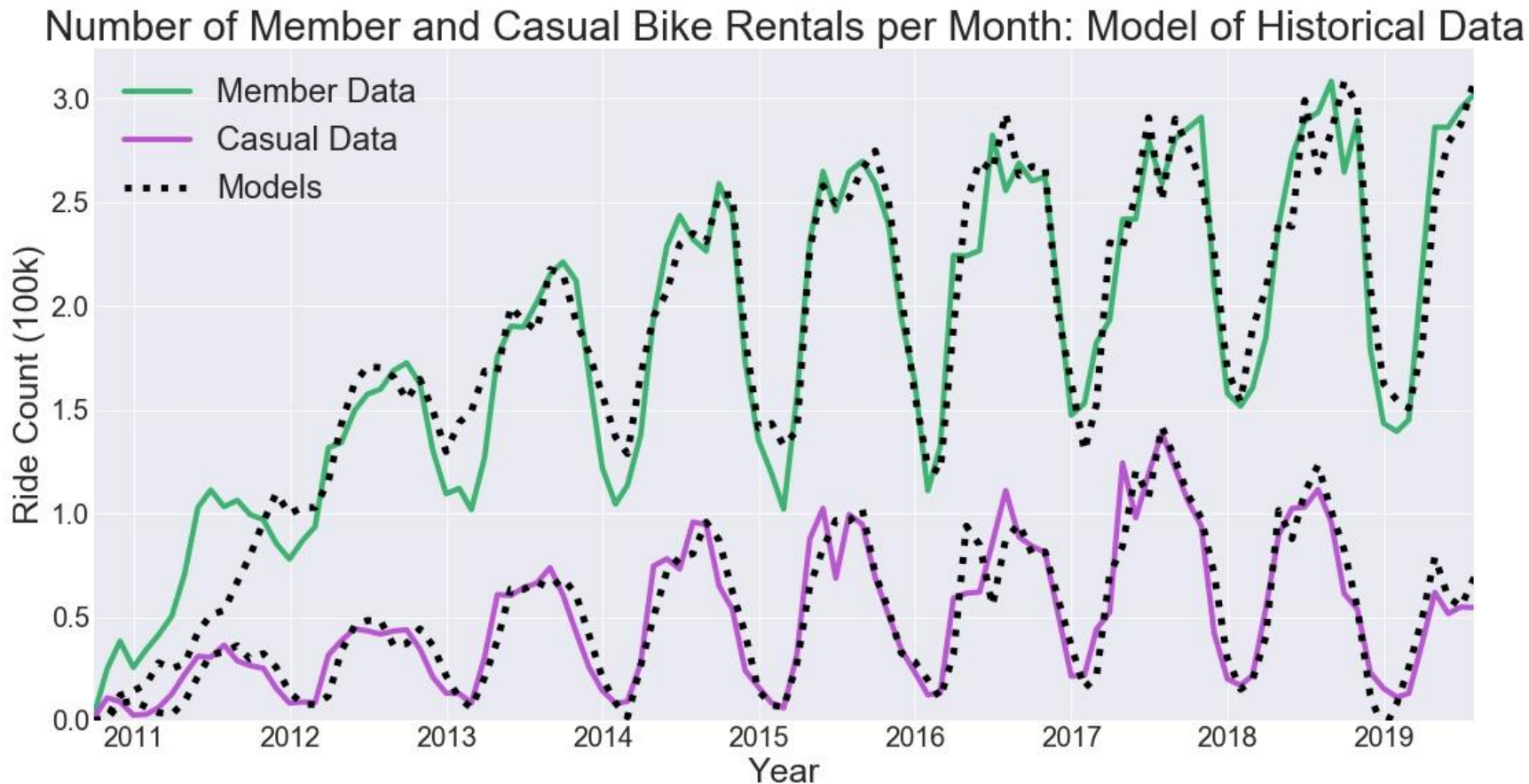
12-Month Forecast on Bike Rentals per Month



Breaking Down Member Use and Casual Use



Models for Member Use and Casual Use



Forecasts on Models for Member Use and Casual Use

12-Month Forecast on Bike Rentals per Month



Recommendations & Limitations

Do we have enough bikes?

- Trends indicate yes, but we need more data on casual usage to make predictions, need to monitor next months/years closely

Other Recommendations

- Less usage in the winter, perform maintenance in winter months
- Maintain loyal membership base

Limitations

- Cannot reliably predict casual usage
- Sums rentals over each month, does not consider weekly or daily data.
- Relatively short time frame, hard to find a stable trend

Further Research and Next Steps

Further Research

- Consider outside variables, other industries:
 - daily weather patterns
 - competitor industry trends
 - pricing
- Industry is new and sensitive
 - frequently remodel
 - pay attention to new trends

Next Steps

- Break down trends by region
- Look at scooter rental industry trends
- Find factors that correlate with casual ridership



Thank You!