

# To Fly American, or nah?

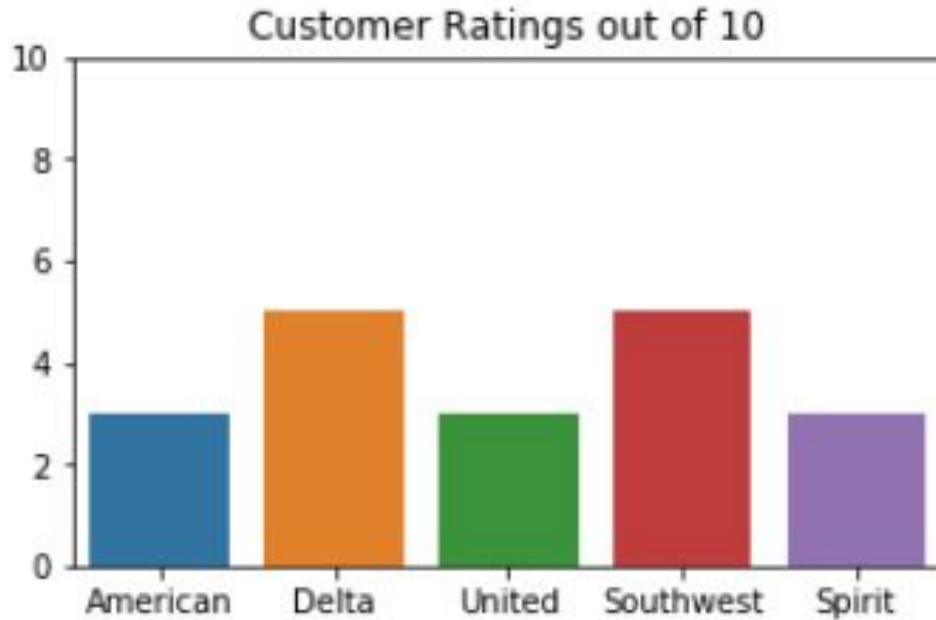
Nateé and Joe's take on it...





# Tell us how you really feel!

*(about top airlines)*





## Key Questions

Generally, is American Airlines more likely to have delays due to carrier fault?

Given a flight delay, does American Airlines have a significant difference in delay times attributed to Carrier fault? (compared to everyone else)

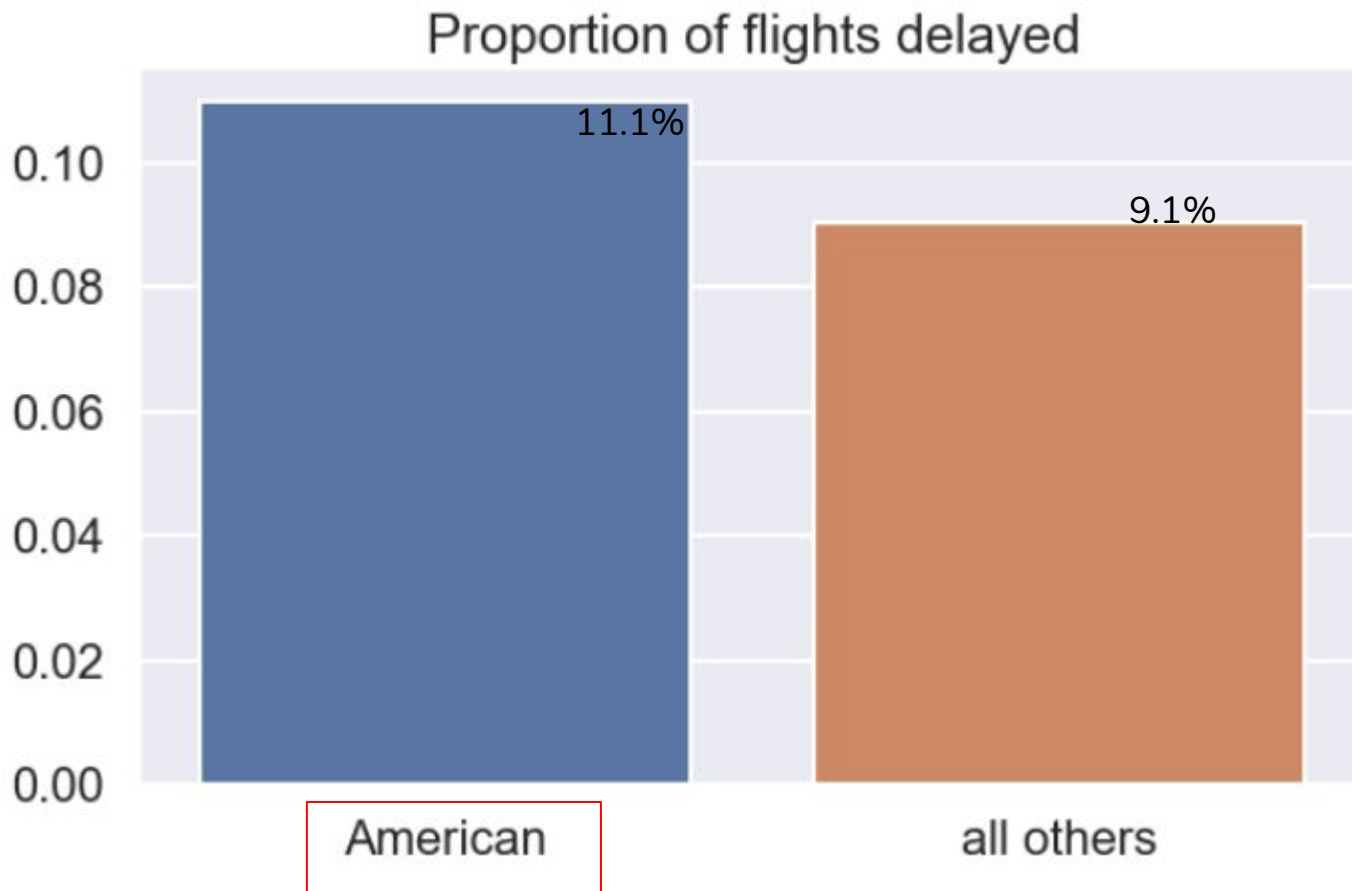
How about compared to just top 3 carriers?

If you must fly American, what's the best local airport where you can avoid long delays?

# Does AA have higher proportion delayed flights?

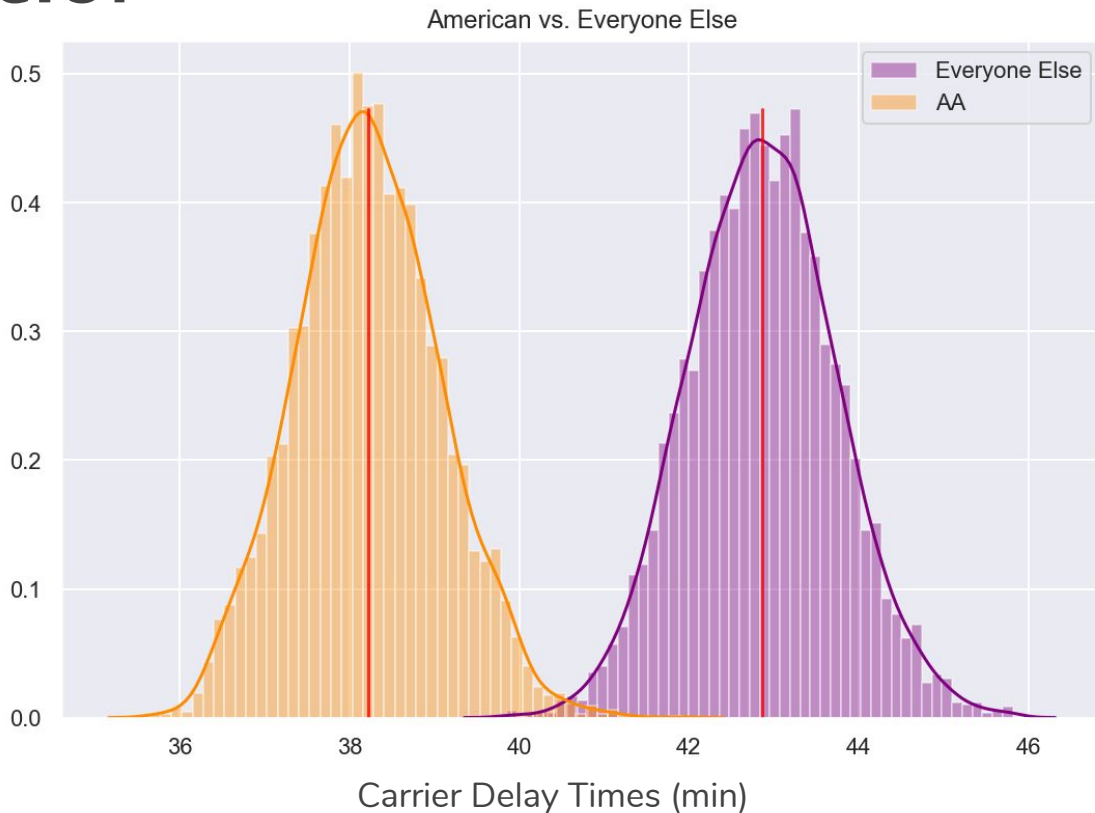


Results were  
significant with  
proportions  
T-test alpha =  
.05



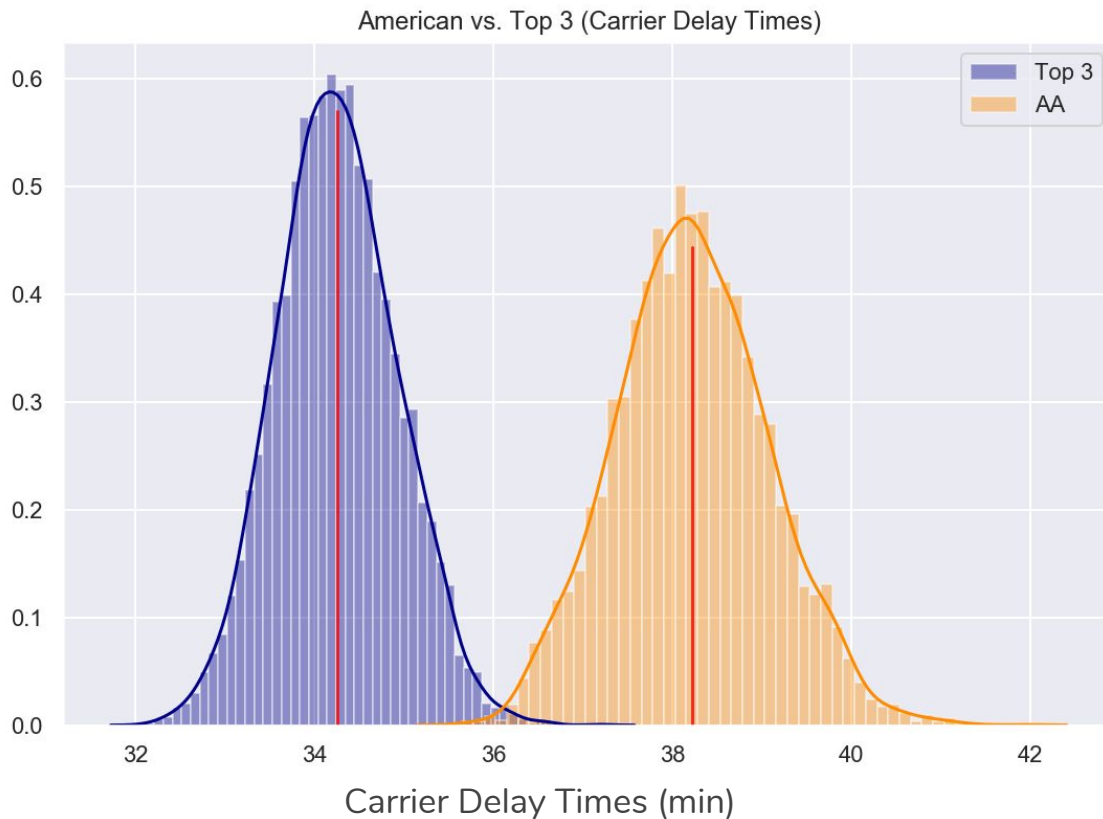
# How does American compare to all others?

Welch's:  
 $t > 270$   
 $p \approx 0$

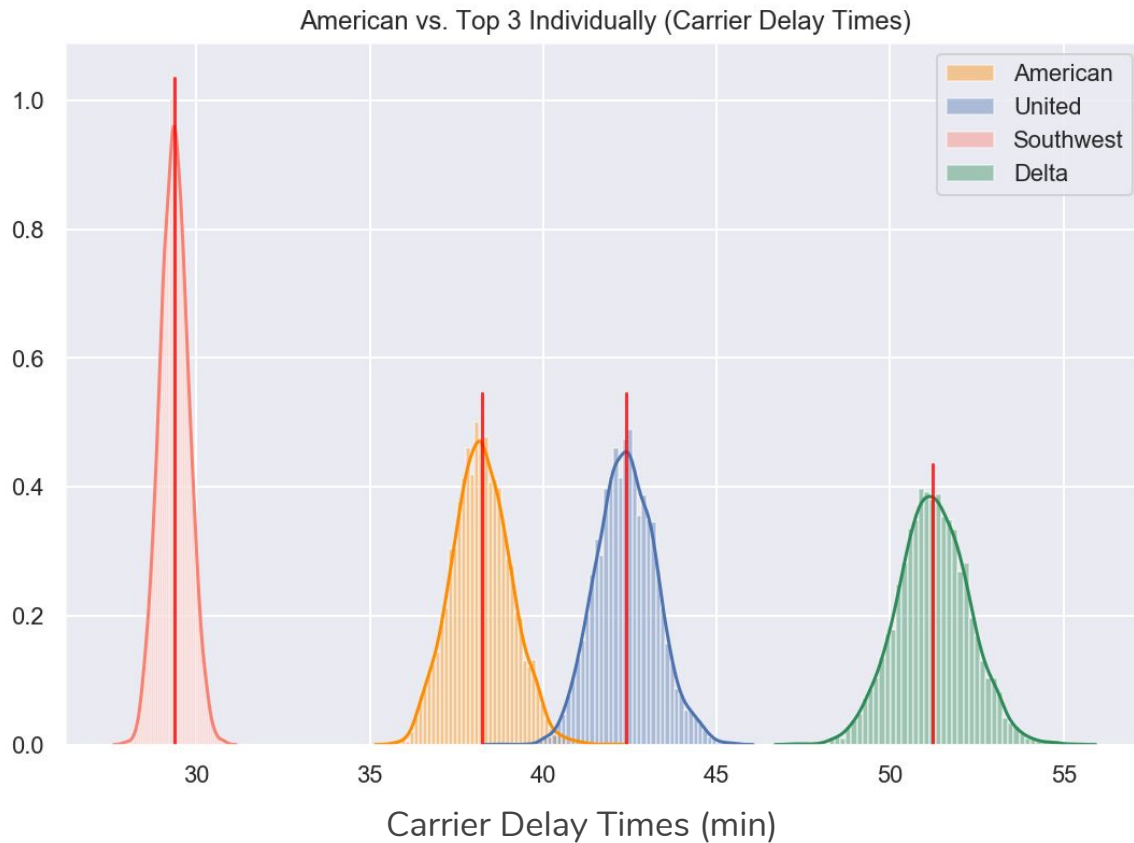


# How does American compare to top US Carriers?

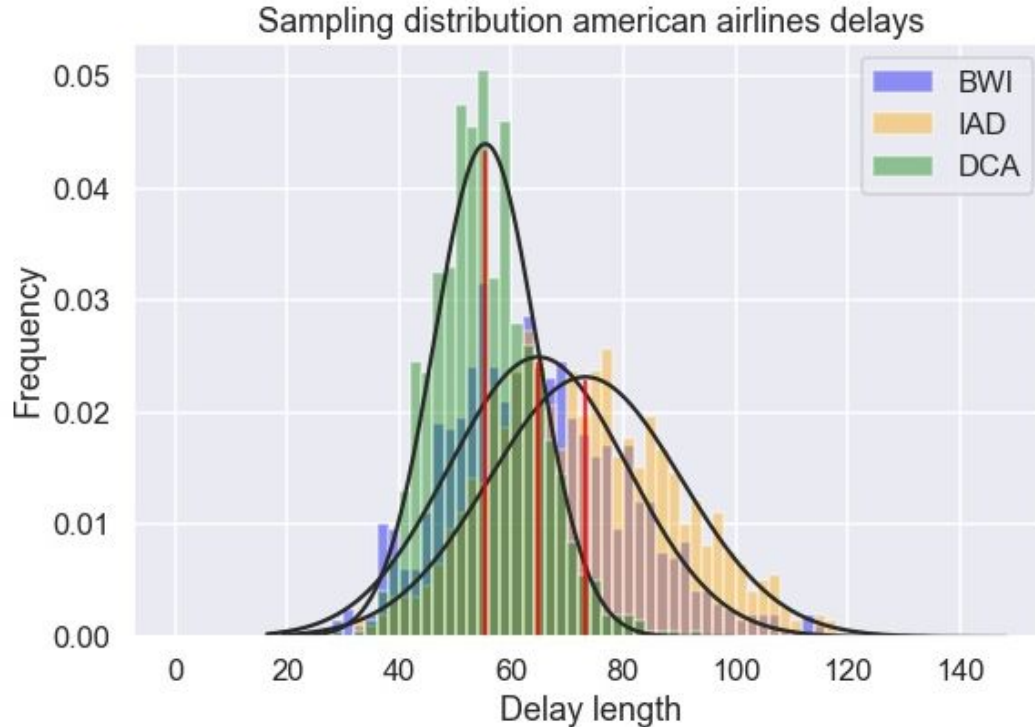
Welch's:  
 $t > 270$   
 $p \approx 0$



# How about top 3 individually?



# If you have to fly AA in DC area, where should you go to avoid long delays?



Differences in delay times between each airport are significant with one sample Anova  $\alpha = .05$





## Concluding remarks

Statistically shorter delays caused by American Airlines than other carriers at large.

Statistically longer delays caused by American Airlines than the top 3 other US carriers combined (Delta, Southwest, United), though when you split these apart AA is actually better than Delta/United.

Statistically more delays than the airline population at large.

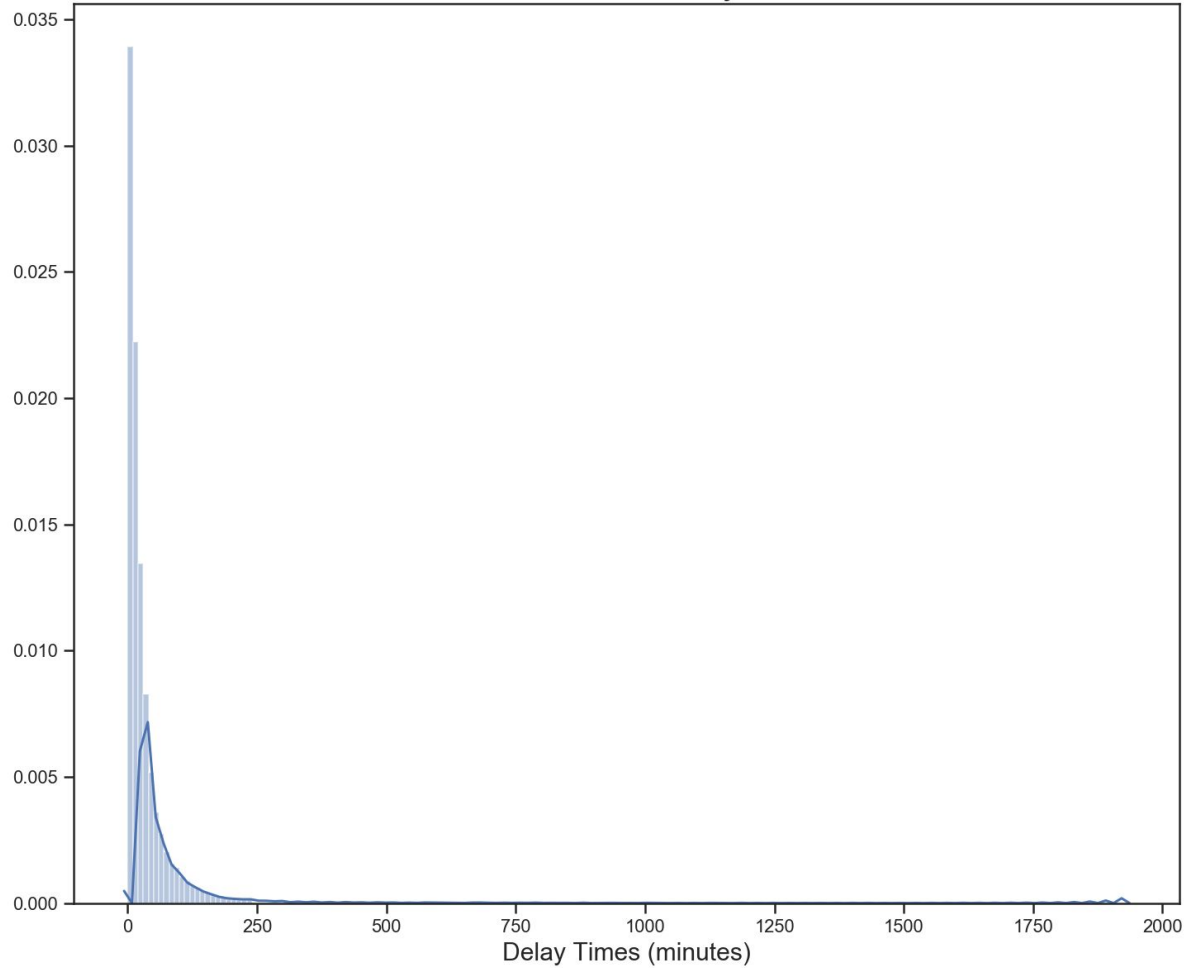
Delays caused by American at DCA are shorter than other DC regional airports.



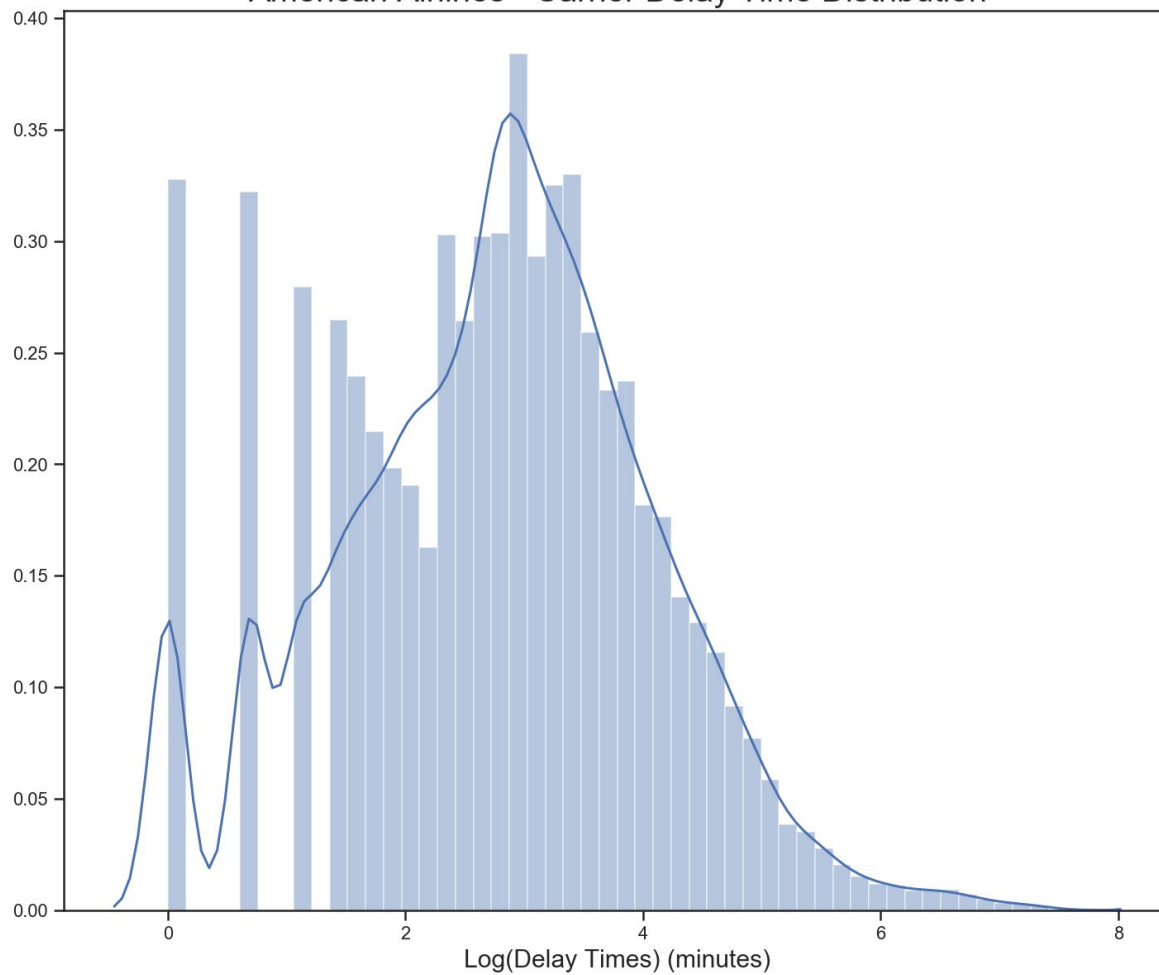
# Back-up Slides



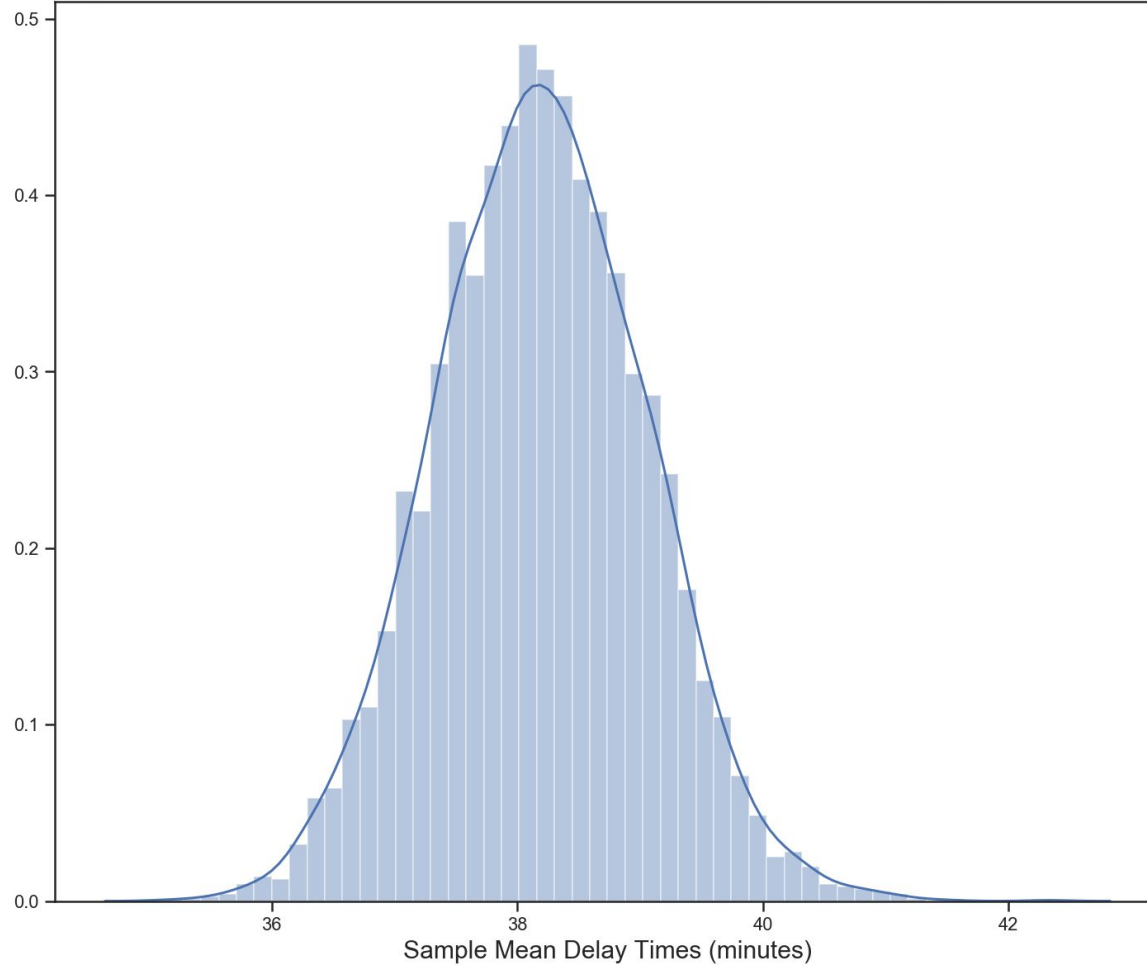
American Airlines - Carrier Delay Time Distribution



American Airlines - Carrier Delay Time Distribution



Sample Distribution  $n = 10000$  and number of samples = 5000, std error = 0.017



Resampled Mean of Carrier Delays for Individual Airlines

