



# PROJECT BENSON

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- ❏ Daily ridership in the millions
- ❏ Decrease inefficiency
- ❏ Keep spending within a limited budget





## Data Introduction and Objective

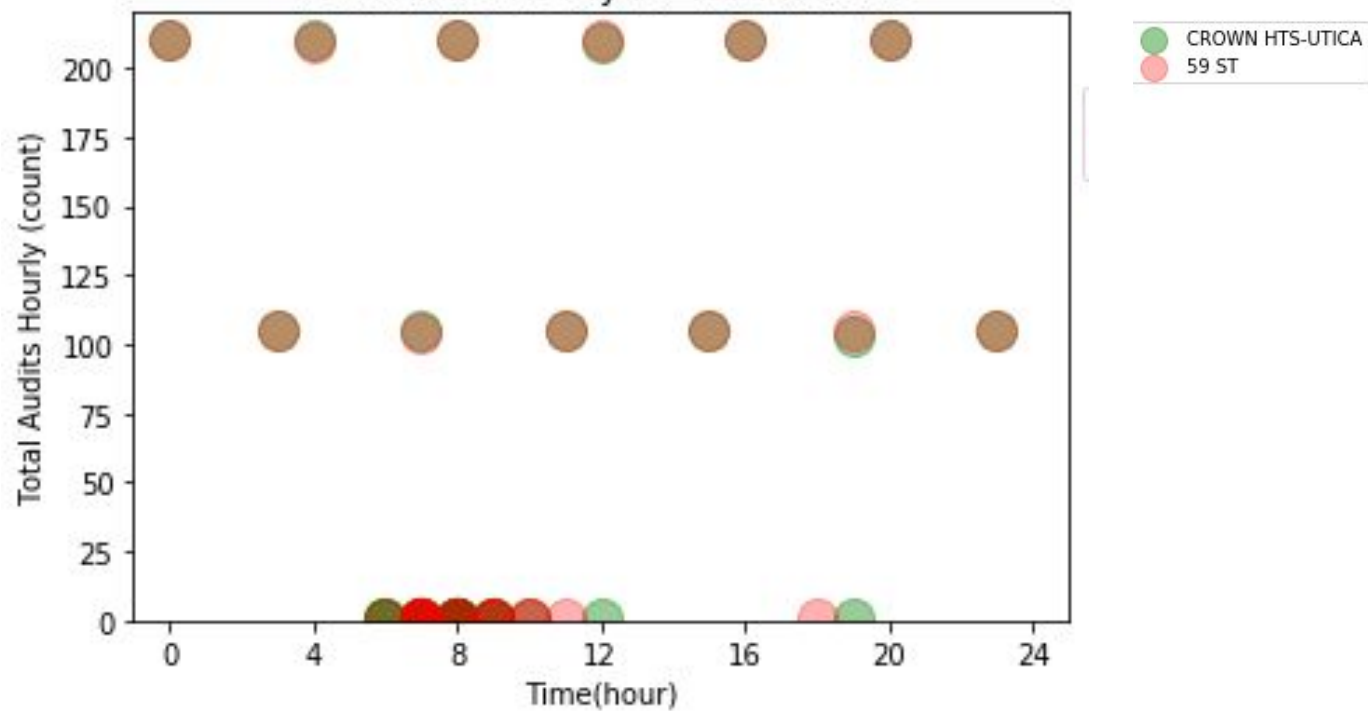
- ❑ Analyze turnstile data from 2017
- ❑ Establish relationship between broken turnstiles and other features
- ❑ Groundwork for a predictive model



## Data Preparation

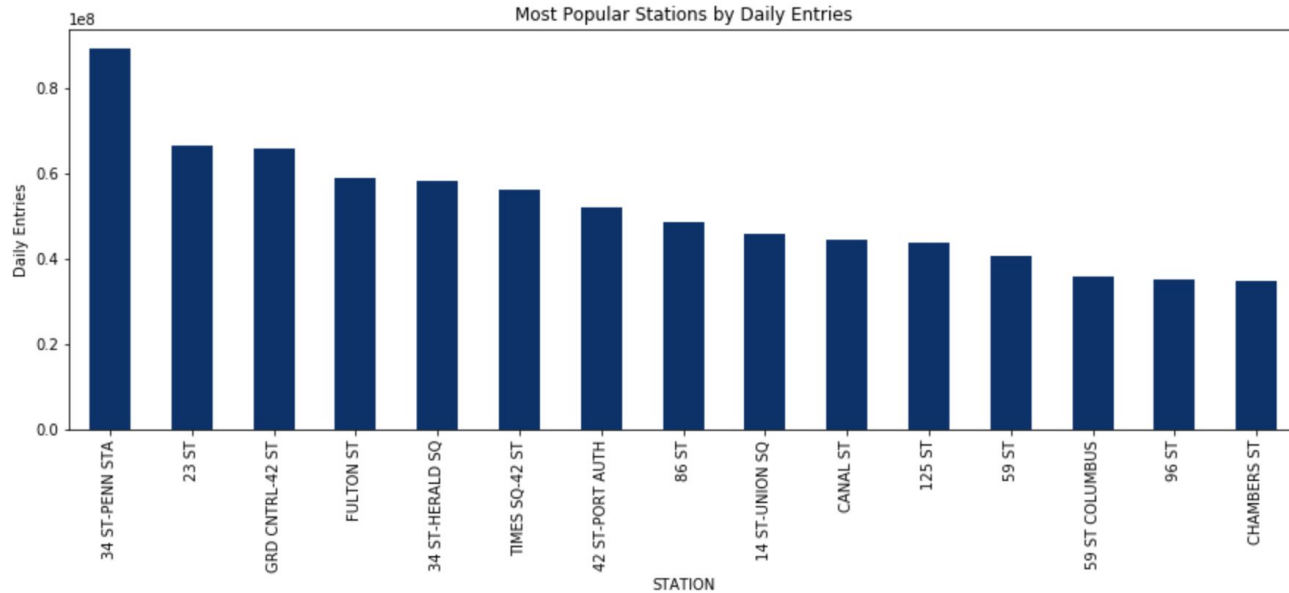
- ❑ Observe data: “regular” or “recovered” audits
- ❑ Transform data: transform table into DataFrame for further analysis

Total Audits Hourly for Two Stations



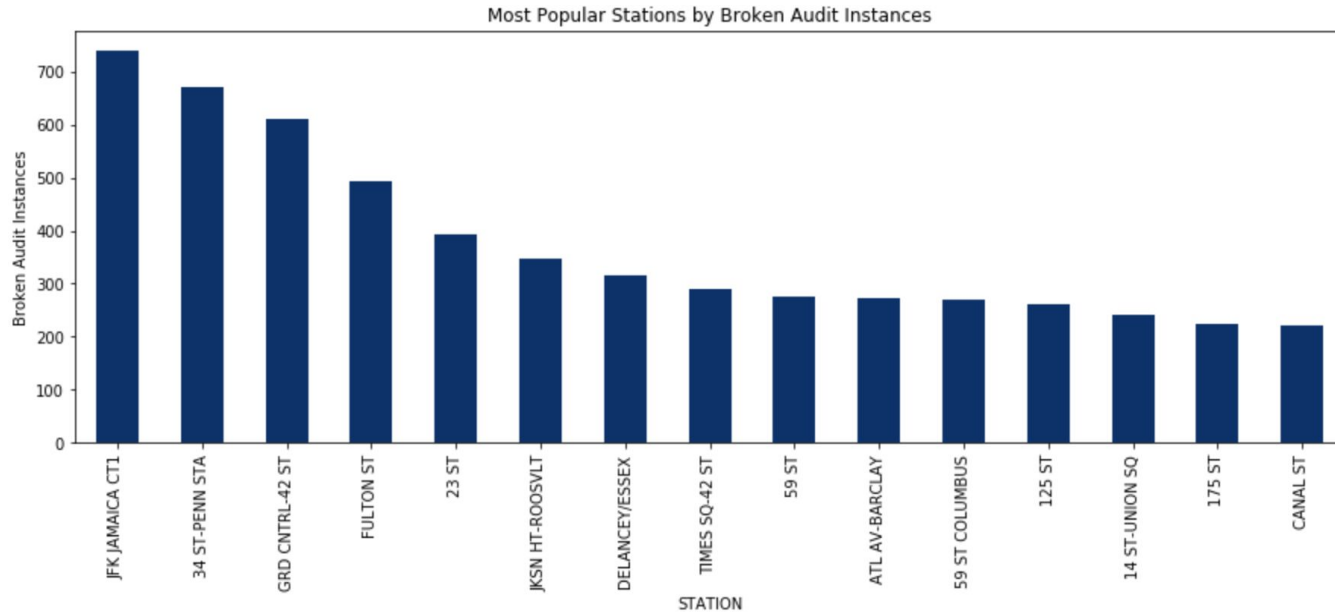


# Most Popular Stations



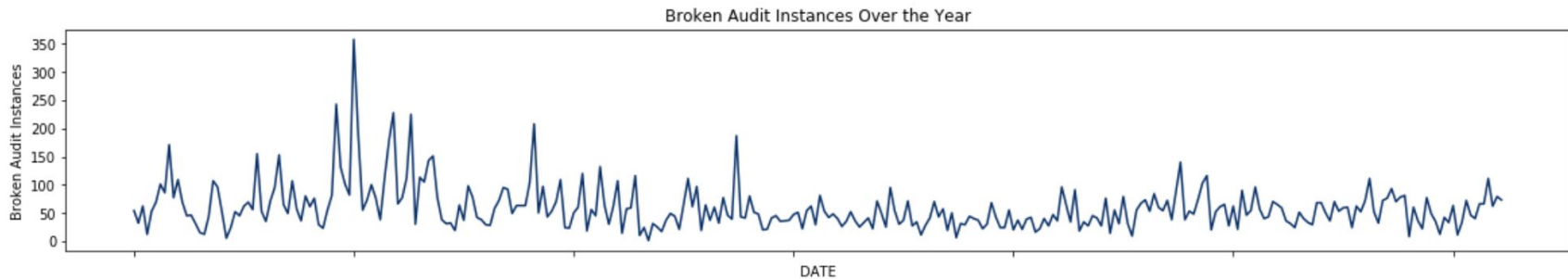
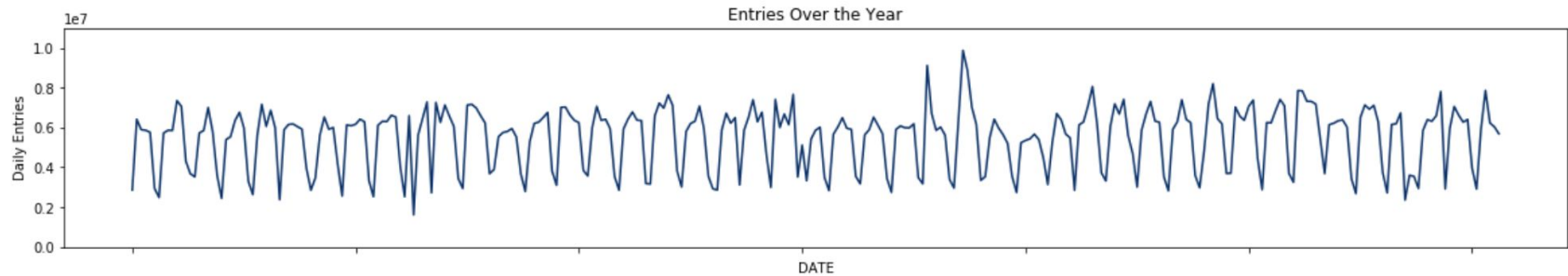


# Stations With Most Broken Turnstiles





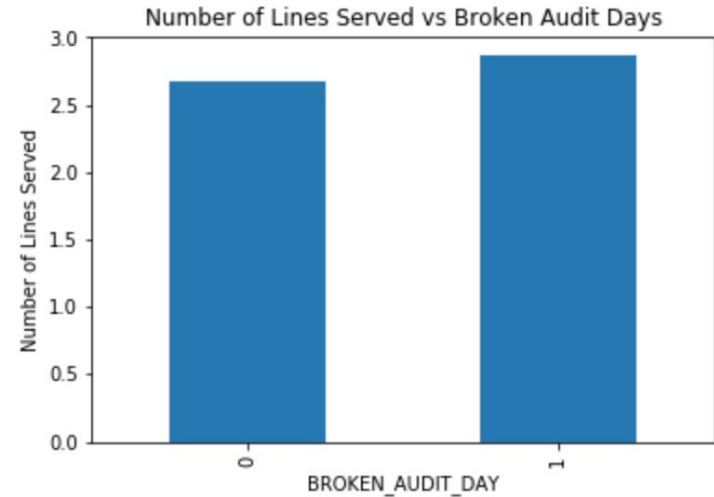
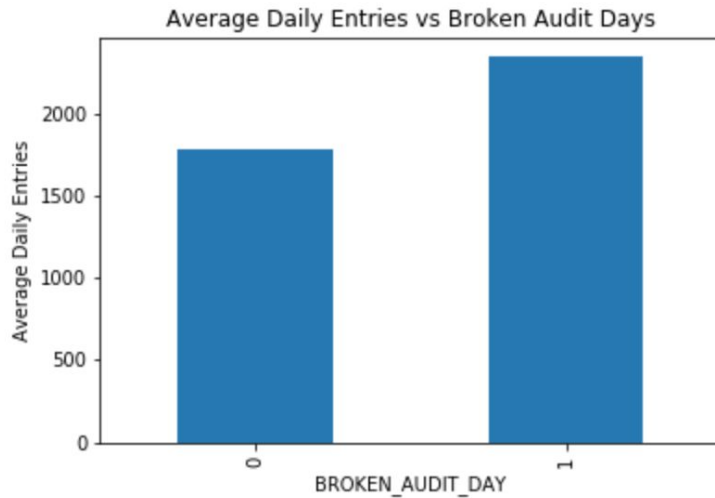
# Trends Over the Year



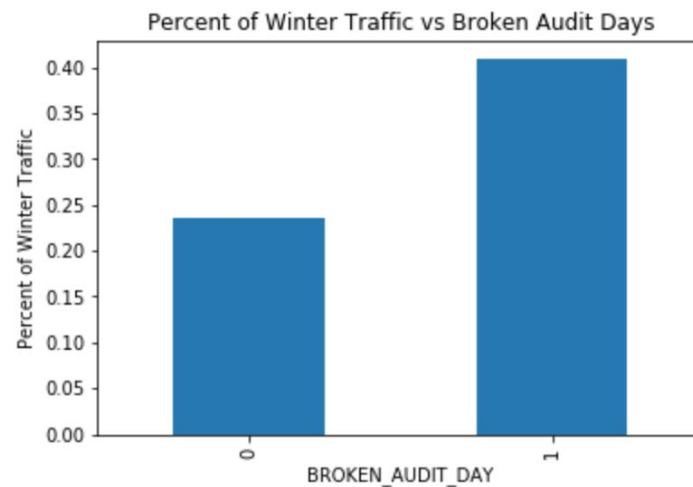
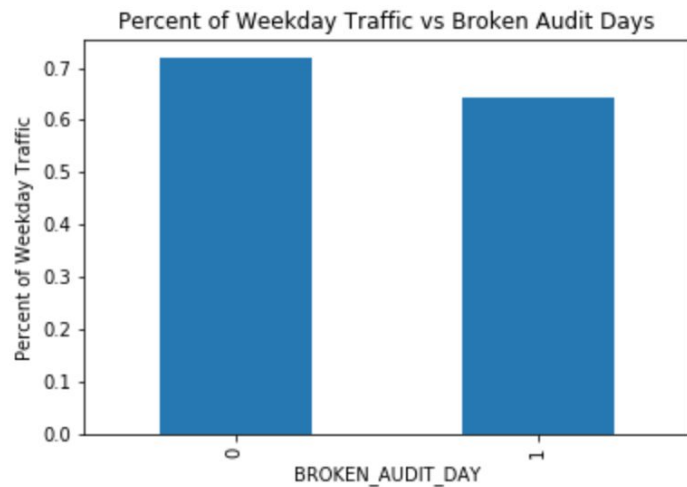


# CONCLUSION

## More Obvious Relationships



# Less Obvious Relationships



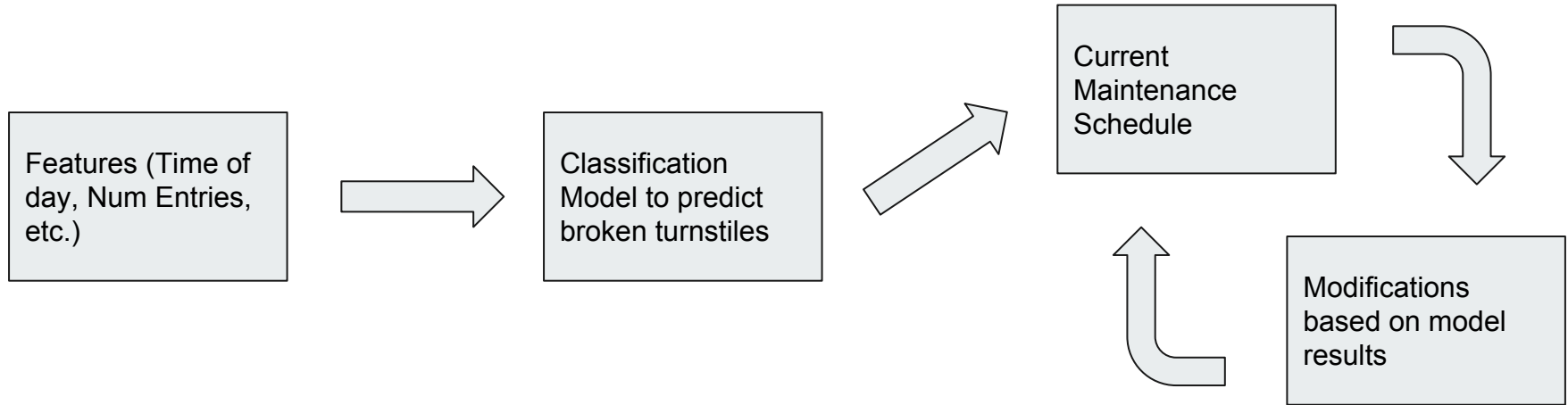


## Conclusion

- Relationship between rate of recovered audits and foot traffic (entries and exits)



# Implications and Future Directions





# Thank you for your time.

Any questions?



# Interesting Insights

```
turnstiles_daily_use.describe()
```

	DAILY_ENTRIES	DAILY_EXITS	
count	1.462563e+06	1.462563e+06	1.462563e+06
mean	4.266795e+04	1.425506e+04	7.100000e+03
std	6.519426e+06	2.747700e+06	4.400000e+06
min	0.000000e+00	0.000000e+00	0.000000e+00
25%	2.800000e+02	1.550000e+02	0.000000e+00
50%	8.640000e+02	5.330000e+02	1.000000e+00
75%	1.675000e+03	1.211000e+03	1.000000e+00
max	2.122193e+09	1.145297e+09	1.000000e+00

