

TE360 Final Project Presentation

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Hypothesis

- Hypotheses:
 - density of businesses negatively affects traffic conditions
- Determine the best timing to avoid congestion

Datasets Used

Chicago Data Portal:

1. Congestion Estimates by Regions
 - a. MPH
2. Historical Congestion Estimates by Region - 2018-Current
3. Traffic Crashes - Crashes
4. Business Licenses

Approach

1. Get Region
2. Keep only weekdays
3. Get average congestion
4. Find regions
5. Find average congestion in a day
6. Polynomial Regression

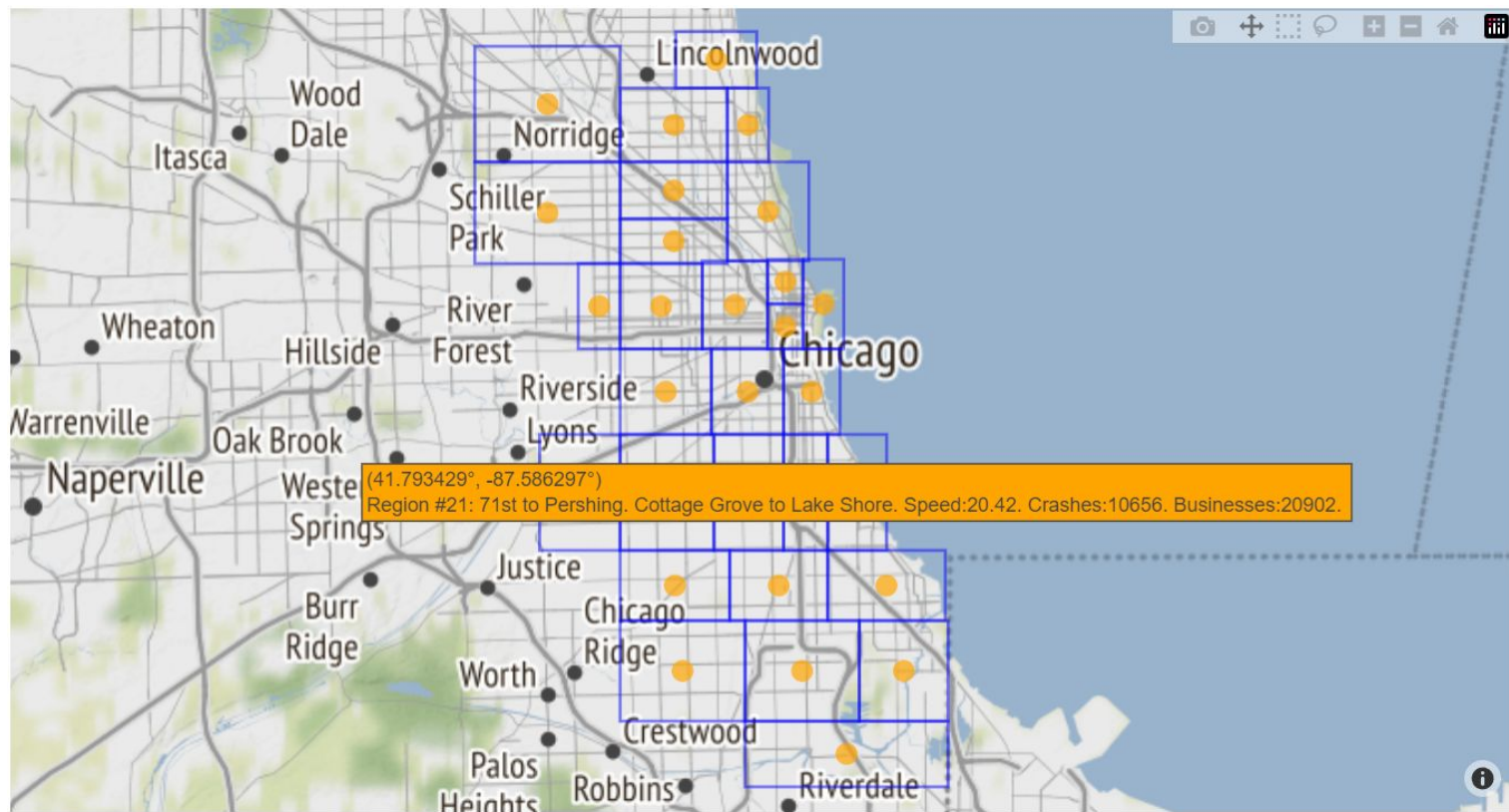
Challenges

Efficient data structure

Convert data type

Plot geographical content

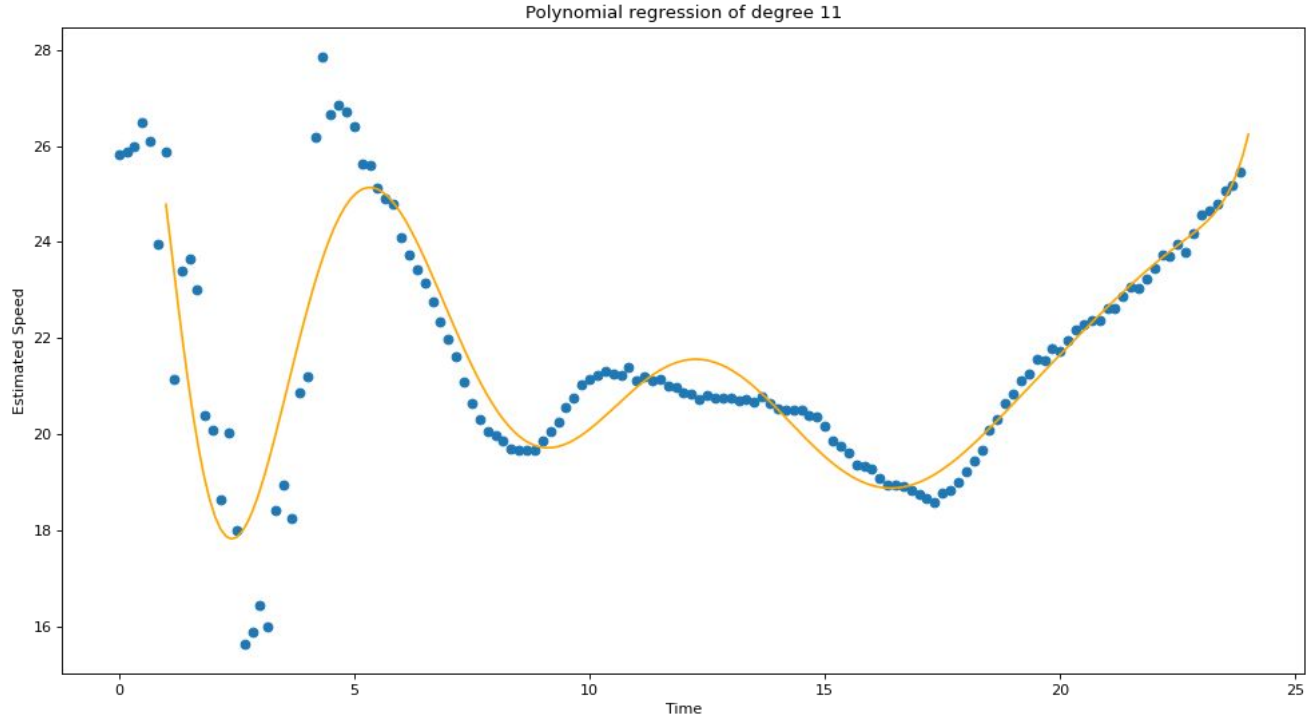
Outcome



Correlation Matrix

	Business	Speed	Crash
Business	1.000000	-0.486493	0.656232
Speed	-0.486493	1.000000	-0.104016
Crash	0.656232	-0.104016	1.000000

Estimated speed and polynomial fit



Conclusion

- Intuitive results
- supported my personal experience
- congestions are heavier during peak hours