

A high-angle, wide shot of a multi-lane highway completely gridlocked with traffic. The vehicles, including cars, vans, and buses, are packed closely together, filling the entire width of the road and stretching far into the background. The scene is set on a sunny day with trees lining the sides of the road.

# Traffic and Collisions in San Diego

By Bernard Wong

# What is this and why is it so important?

Traffic in San Diego is one of the worst in the world

- Ranked 45th out of 1360 cities for worst traffic in 2017
- ~10% of driving time in SD was spent in traffic in 2017
- Traffic cost the US nearly \$305 billion in 2017

By utilizing data provided by the San Diego government, we can find trends in traffic and car collisions and determine what variables affect these items and what you can do to avoid them

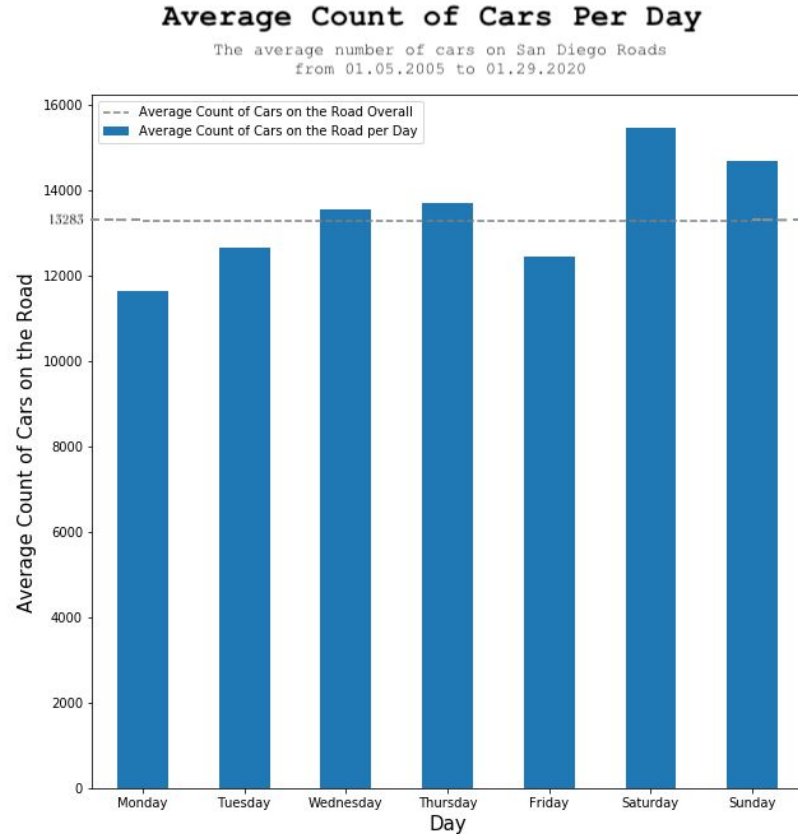
- All data is from Jan. 05, 2005 - Jan. 29, 2020 unless mentioned otherwise

# A general overview of the data and potential trends



- A timelapse of a sample of data points from 2018 (shortened due to the time constraint)
- Gray lines represent all roads, white lines represent roads with data in them, and red lines represent heavily used roads
- Looking at the timelapse shows that there are potential trends

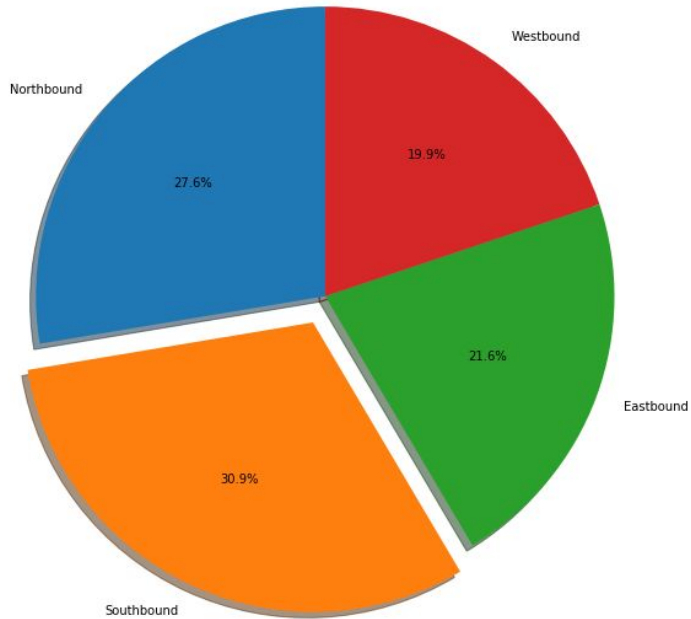
# Measuring the amount of traffic by day



- The weekend has the largest average count of cars on the road
- Could be explained by time off work leading to more time spent traveling or relaxing

# What direction are most drivers driving?

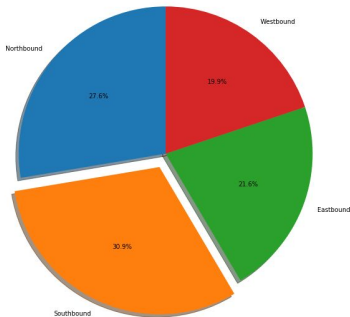
Distribution of Average Car Count by Direction (Monday)



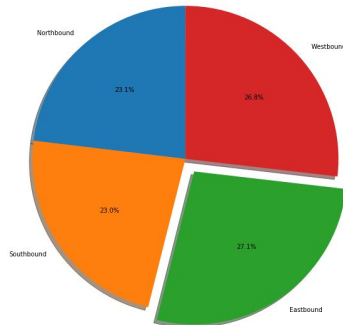


# What direction are most drivers driving (cont.)?

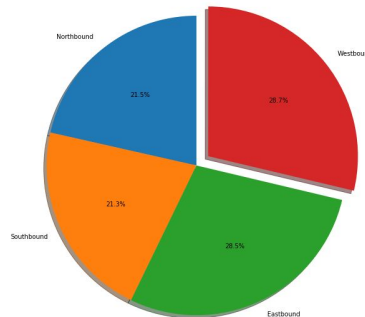
Distribution of Average Car Count by Direction (Monday)



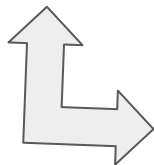
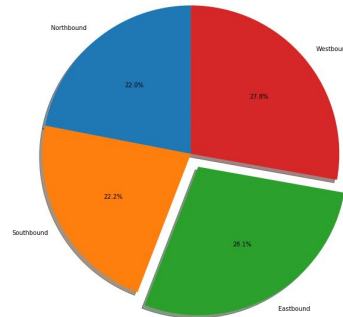
Distribution of Average Car Count by Direction (Tuesday)



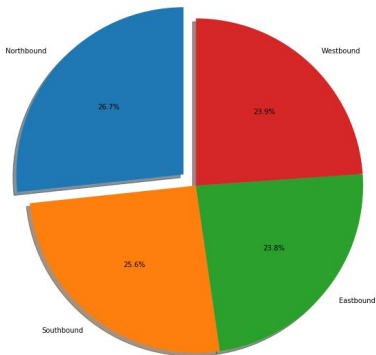
Distribution of Average Car Count by Direction (Wednesday)



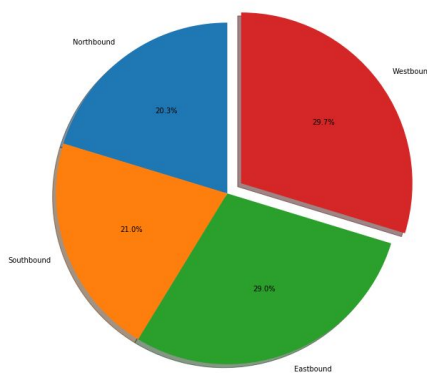
Distribution of Average Car Count by Direction (Thursday)



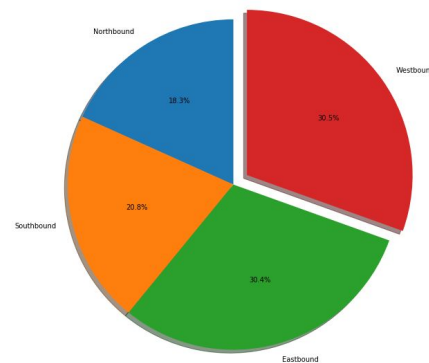
Distribution of Average Car Count by Direction (Friday)



Distribution of Average Car Count by Direction (Saturday)

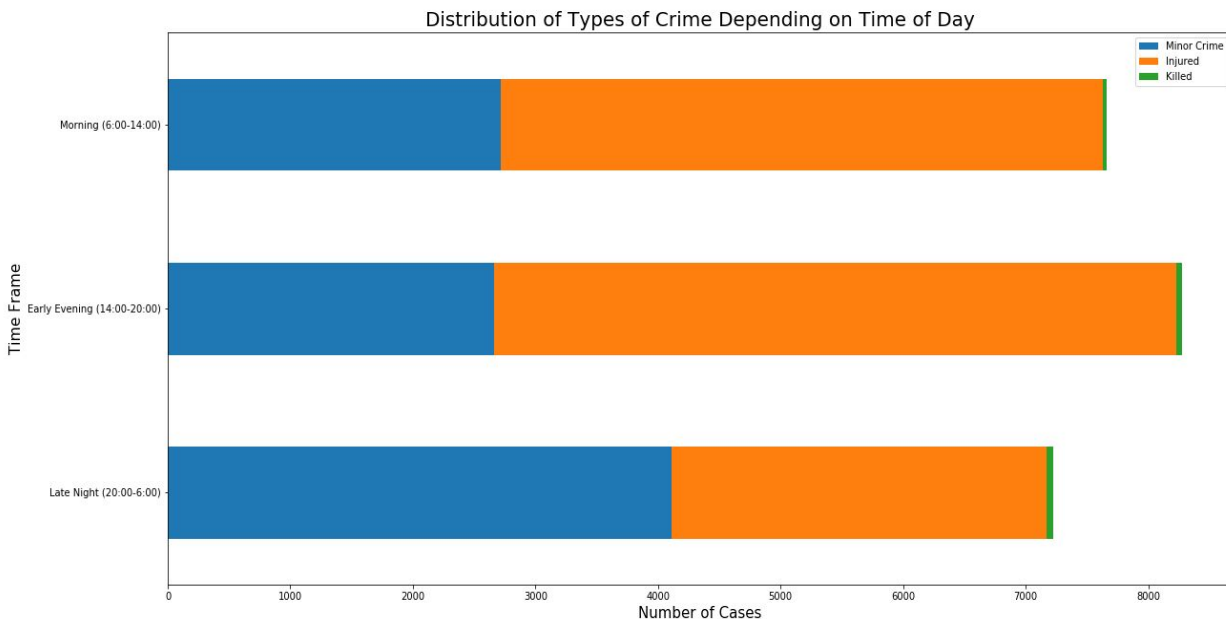


Distribution of Average Car Count by Direction (Sunday)



What about collisions?

# Infractions by time (by time)

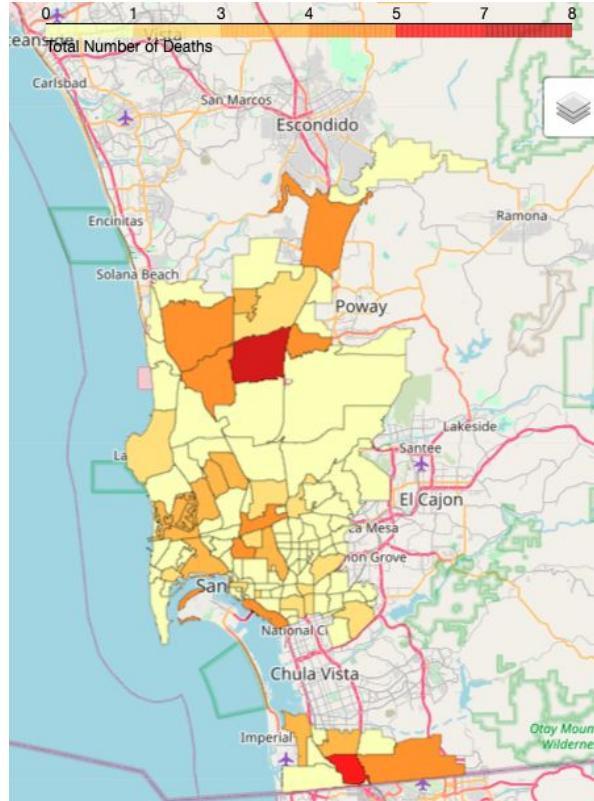
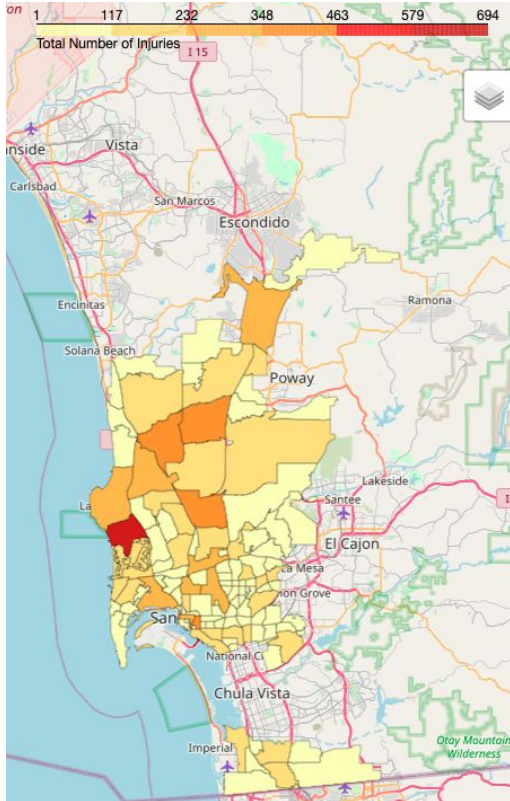


- Minor crimes include items such as speeding tickets, jaywalking, red light stops, etc.
- Despite popular belief, late night is **not** the most dangerous
- More injuries in the morning and early evening can potentially be explained by more drivers driving
- However, there are more casualties driving at night, with ~40% of fatalities occurring at night (similar to the US statistic)

Source:  
[https://www.vititoelawgroup.com/2016/12/10/a\\_closer\\_look\\_at\\_car\\_accident\\_statistics\\_at\\_night/](https://www.vititoelawgroup.com/2016/12/10/a_closer_look_at_car_accident_statistics_at_night/)



# Distribution of Injuries and Deaths by County



- Outlier areas can easily be identified with choropleths
- Pacific Beach has the largest number of injuries (694) followed by Mira Mesa (427)
- Mira Mesa dominates in total number of deaths (8)

# What's wrong with Mira Mesa?


- Possible explanation: I-15, named one of the deadliest roads in the US according to Scripps Howard News
- Mira Mesa is also a heavy residential area which leaves more room for potential accidents

mira mesa traffic

CHP sees less traffic, more speeding drivers on freeways as COVID-19 concerns keep people home

With schools and many businesses closed due to the coronavirus outbreak, traffic on southbound Interstate 15, near Carroll Canyon Road, in ...

Mar 18, 2020



NBC 7 San Diego

Mixed-Use Community Could Replace Big-Box Stores in Mira Mesa

Mira Mesa's community planning committee began weighing several ... the traffic here is famous, everyone knows it gets very crowded on Mira ...

Oct 2, 2019



The San Diego Union-Tribune

Woman hit by pickup, fatally injured, in Mira Mesa

Officers blocked the intersection, then opened all traffic lanes except southbound Black Mountain Road. Updates: 6:11 PM, Dec. 14, 2019: This ...

Dec 14, 2019

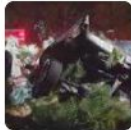


CBS News 8

Driver loses control of truck and hits tree leaving three dead

traffic. Driver loses control of truck and hits tree leaving three dead.

Mar 14, 2020



The San Diego Union-Tribune

Two dead, one injured in I-15 crash in Mira Mesa

A freeway crash in the Mira Mesa area Friday night left two people dead and ... Road off-ramp are closed, due to a multi-vehicle traffic collision.

Nov 2, 2019

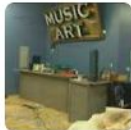


CBS News 8

Water main break in Miramar floods San Diego Music and Art ...

Forecast · Radar · 10-Day · Hourly · Gas Prices · Traffic ... the Mira Mesa and Scripps Poway areas, servicing the greater San Diego community.

Dec 15, 2019



# Takeaways

As a general rule of thumb:

- If you're trying to avoid traffic, avoid driving on the weekends and driving South on Monday or north on Friday
- If you're trying to avoid collisions, try to avoid driving between 2PM-10PM; although driving at night is still relatively safe, it's better to be cautious due to the irregular fatality rate
- Don't get too caught up in PB or Mira Mesa, as these counties tend to be more accident prone