

For this analysis, I will be look at dataset about the car accidents (daytime) happened in LA county in 2021. This dataset contains very detailed information, like the severity of the accident, the specific time when the accident occurred and ended, the specific location, the artificial description of the accident, the surrounding markers at the location of the accident (such as stop sign), and the weather conditions when the accident happened (visibility, humidity, etc.). This dataset is very large, so far, I only made an initial analysis. I hope to develop a summary story of the LA County accident in 2021 to provide some experience for the prevention of subsequent accidents.

Overall, there were 3,224 crashes happened in LA County in 2021, mostly of them are level-2 crashes (on a scale of 1 to 4 according to the impact distance on traffic), more than 99%. Here, I think it is necessary to contact the experts who responsible for data collection to obtain more detailed information about how to measure the severity of the accident.

There are 3106 traffic accidents happened without stop signs nearby, so it is necessary to further explore the relationship between the stop signs and the incidence of traffic accidents, especially in combination with some specific dangerous locations as detailed example.

From February to December, the number of crashes increased, but the distance affected by traffic jams decreased. The average distance in 2021 was 0.77 miles, and the longest was 12.99 miles. The average traffic jam in 2021 will last about 2.75 hours. It should be pointed out that the data of January is missing in the downloaded data, so it is necessary to ask the relevant traffic management department to supplement the data.

In addition, I also made an initial analysis of the weather condition at the time of car accidents happened. About 69% of car accidents occurred in Fair weather, while only less than 10% of car accidents occurred in Fog, heavy rain and other bad weather conditions, which may indicate that the car accidents are not directly related to the weather. Even good weather may keep drivers relaxed. At the same time, I also analyzed the average number of humidity, air pressure, visibility, including the average, maximum and minimum values. Since I'm not an expert on weather, I

thought it would be worth contacting a meteorologist who knows about cars to explain the data further.

Finally, I focused on the i-10W highway. I filtered the artificial description about the accidents, using "I-10W" as the key filtering word. In 2021, there were 264 crashes on I-10 W. From March to December, July got the longest average traffic jam distance on I-10 W, about 1.76 miles.

Overall, the data is very informative, and it includes precise locations. Later on, I think we can use this data for map visualizations. The data also has the potential to become a regular visualization project, according to the collector of the data, this dataset is collected and summarized from multiple databases and updated in real time. In addition, potential interviewees may also include DMV, Highway Patrols and other relevant government departments and law enforcement officers, who will further interpret the data of car accidents from the perspective of practical experience.