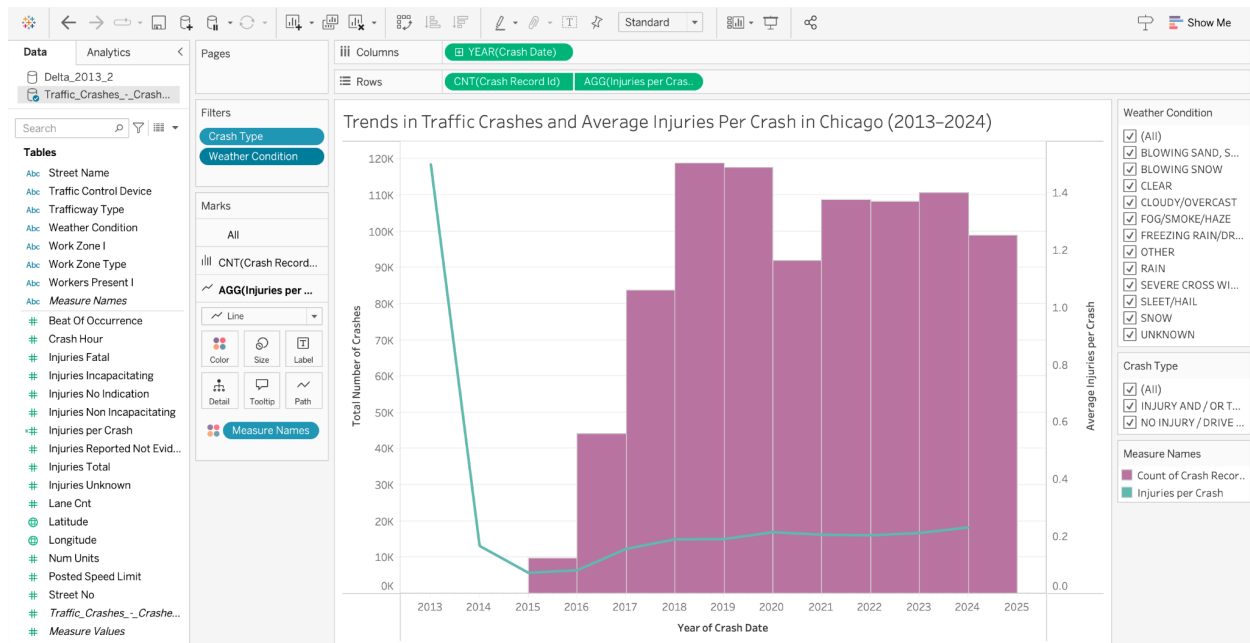Saisha Badgujar
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Traffic Crashes in the City of Chicago

This visualization shows the trends in total traffic crashes and average injuries per crash in Chicago from 2013 to 2024. The bar chart represents the total number of crashes per year, while the line graph shows the average injuries per crash. I grouped the data by year to make it easier to see patterns and significant changes over time. For the injuries per crash, I created a calculated field using the formula **SUM([Injuries Total]) / COUNT([Crash Record ID])** to normalize the injury data and better understand the severity of crashes regardless of how often they occur. I also added filters for crash type and weather condition to allow for a more detailed analysis, such as seeing how crashes differ in clear weather versus foggy or snowy conditions.

The results of this analysis were interesting. The total number of crashes sharply increased between 2016 and 2019 before stabilizing, which might be due to better reporting or changes in traffic patterns. Meanwhile, the average injuries per crash stayed relatively consistent, fluctuating between 0.2 and 1.2. This shows that while the number of crashes varied, the severity in terms of injuries didn't change much. The filters also helped highlight how specific conditions impact crashes. For example, snowy or rainy weather might lead to fewer crashes overall but more severe injuries per crash due to slippery roads. On the other hand, clear weather might have more crashes because of higher traffic volume but lower injuries on average.

Adding the crash type filter made it possible to see which types of crashes, like pedestrian-related accidents or rear-end collisions, had the highest injury rates. Pedestrian crashes, for instance, might not happen as often but could have much higher injuries per crash, which is an important insight for improving safety. Overall, this visualization helps provide a clear

picture of traffic crash trends in Chicago and shows how different factors like weather and crash types influence both the frequency and severity of accidents. It can be a helpful tool for making decisions about where to focus road safety efforts.