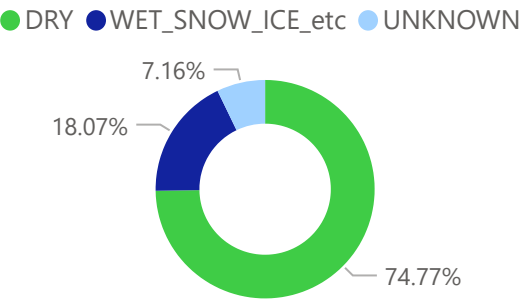


# Chicago, IL Crash Analysis : Pre vs Post COVID-19

The goal of our project was to investigate if there are visible change in road accidents trend pre and post COVID-19 in Chicago, IL. Initial hypothesis was that the number and severity (measured in this case by the number of fatal accidents) declined after COVID-19 as a result of national guidelines during the pandemic which restricted movement substantially.

## Crash Record by Road Conditions



## Key Findings

Changes in crash trend in 2020 (COVID-19 global wide-spread year) compared to 2019 resulted in :

- Overall total number of crashes declined by ~22%
- Fatal crashes increased by ~33%
- Vast majority of accidents occur under normal road conditions between 7am - 7pm

2018

2019

2020

2021

Fatal Crashes % Increase 2020

33.02%

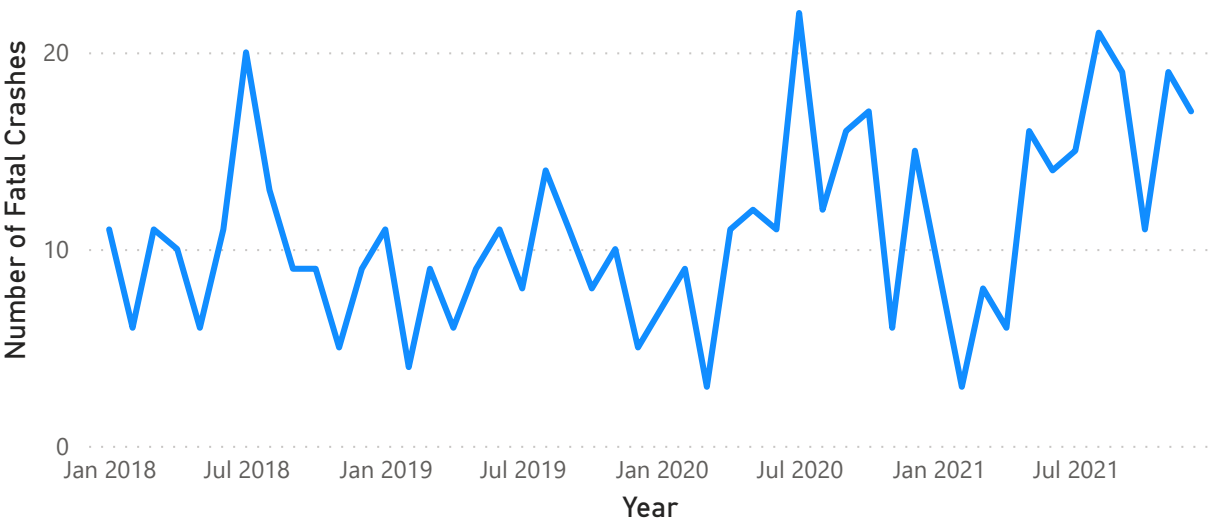
Post COVID-19

Total Crashes % Decrease 2020

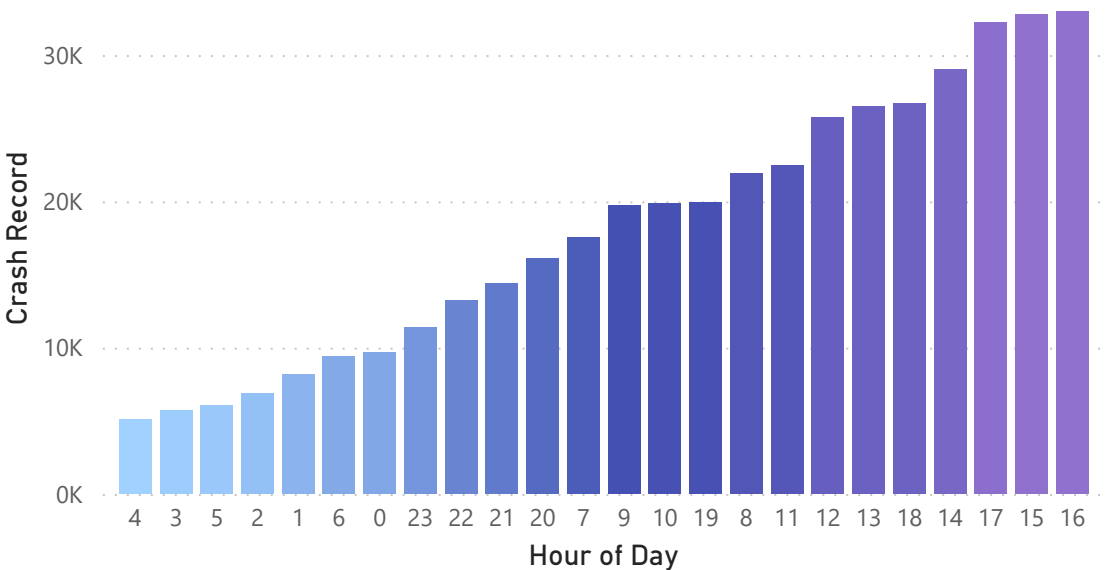
-21.69%

Pre COVID-19

## Fatal Crashes Over Time



## Number of Crashes by Hour of Day



NEXT



Source **Los Angeles Times**  
<https://www.latimes.com/world-nation/story/2021-12-08/traffic-deaths-surged-during-covid-19-pandemic-heres-why>

What made last year's increase so astonishing was that the total miles driven — an estimate calculated by sampling traffic on various roadways — **fell by over 13%** as cities locked down and more people worked from home.

Experts say that this behavior on the road is likely a reflection of widespread feelings of **isolation, loneliness and depression**.

Federal researchers who looked at accidents in which drivers were killed or seriously injured found that the proportion who **tested positive for opioids** nearly **doubled** after the pandemic began. Marijuana use also rose considerably.

For every 100 million miles driven last year, 1.37 people died, a **23% rise** from 2019.

Since the start of the pandemic, a larger share of accident victims — including those who survived — have been **ejected from their vehicles**, typically because they **were not wearing seat belts**.

Chief among them is that the **death rate for black people (drivers) rose more than three times faster than the death rate overall**, a disparity that could reflect a deeper sense of despair in the poorer communities hit hardest by the pandemic.

People's disregard for themselves and others on the road is part of a national **decline in civility that accelerated during the pandemic**.

Disproportionate number of Black people are in the essential workforce, including delivery drivers who are **paid by how fast you can move**.

It was a tally that shocked the experts: **38,680** deaths on U.S. roadways last year (2020), the most since 2007, even though pandemic precautions had dramatically reduced driving.