Impact of COVID-19 on Traffic Safety

Problem description
Covid-19 is a major pandemic that is affecting every area of our lives in a dramatic way. Travel mobility has been directly influenced by the applied measures. As exposure is one of the key dimensions of accident risks (Rumar, 1999) this pandemic will most likely have implications as well for traffic safety now, after the relaxation of some of the currently applied measures by the different countries and after a complete re-opening of the society. These implications are highly dependent on the applied measures in different countries, mobility patterns, enforcement of the regulations and as well cultural factors. While reduction in mobility and travel might reduce the number of accidents, lower traffic intensities on the roads could also give room for speeding which in return could increase the risk and severity of accidents. In order to have an evidence-based research on objective safety, traffic fatalities and serious injuries (2010-2020) will be compared between different countries and as well to the average trend before the pandemic of each country using time-series analysis. Other measures related to safety, such as driving speeds, speeding, and red-light running will also be included depending on their availability for each county.

Assignment
- Review of the literature with respect to impact of previous pandemics on mobility and traffic safety;
- Using publicly available data sources for collecting data on accidents, intensities and other data that may be available (speeding, red-light running, etc.);
- Conduct a statistical analysis to compared the trends before, during and after the relaxation of different measures applied during the pandemic;
- Writing a thesis report (and optionally a scientific paper for international journal).

Research group
Transport & Planning
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Information
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