Population mobility indicators at regional level: an analysis based on information from Facebook's "Data for Good" Initiative
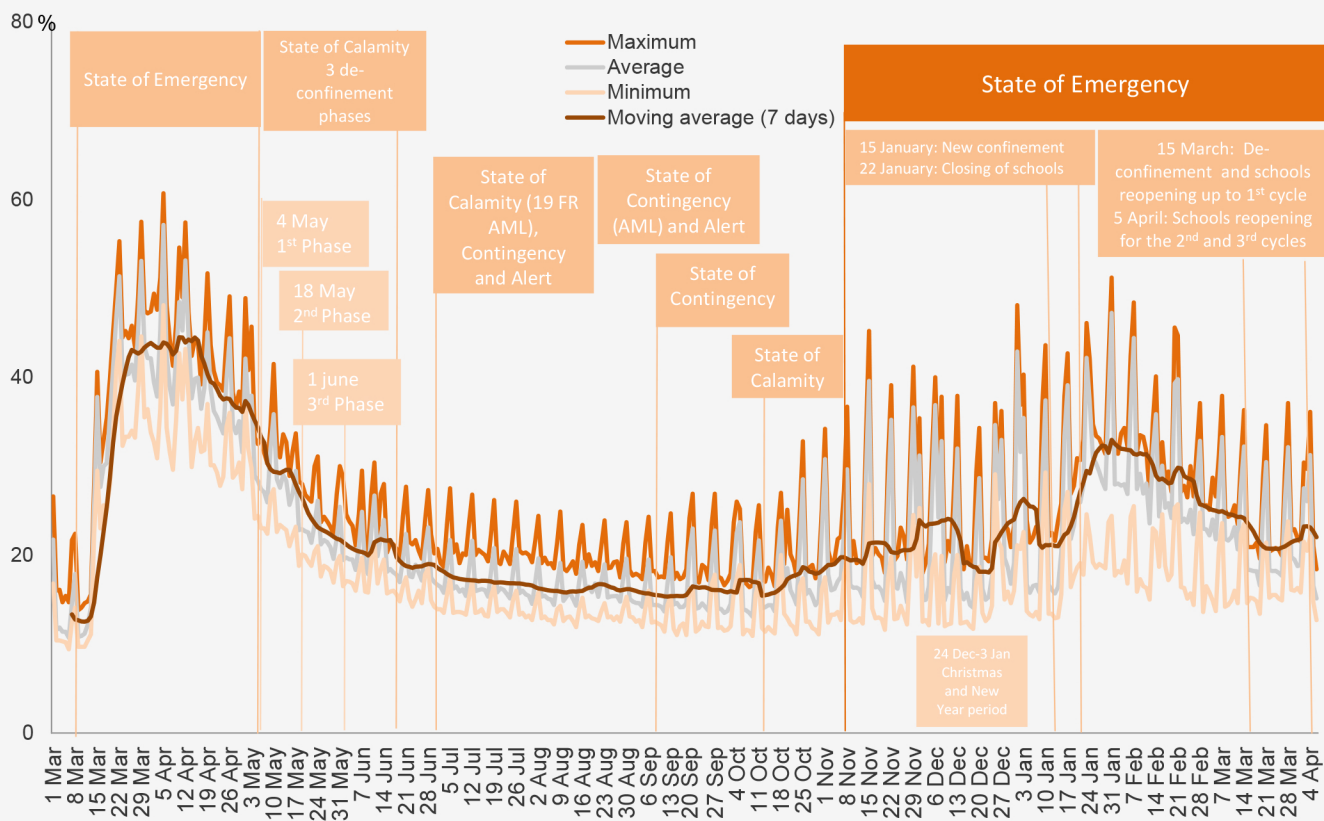
Taking advantage of Facebook's "Data for Good" initiative, the figure below shows the proportion of the population "staying put" between 1 March 2020 and 6 April 2021, namely the minimum, average and maximum values calculated based on the NUTS 3 sub-regions. The proportion of population that "stayed put" is based on the number of Facebook users associated with a single reference grid of 600mx600m during 8 am and 8 pm on day x, requiring at least three occurrences during that time period.

It is possible to observe that on Sundays there is generally less mobility of the population than on other days of the week. It is also noteworthy that after the first confirmed cases of COVID-19 and following the declaration of the first State of Emergency, there is a decrease in the mobility of the population, followed by an increase in the levels of mobility after the implementation of the de-confinement measures.

Considering the moving average of the last 7 days there has been an overall reduction in the average levels of mobility following the declaration of the State of Emergency on November 9 and subsequent renewals. In this context, the days before Christmas and after New Year are the exception, where there is an increase in mobility due to the general cancelling of measures restricting circulation. This tendency to reduce mobility is accentuated after the entry into force, on January 15, 2021, of extraordinary measures to limit the spread of the pandemic, including a new confinement period, followed by the closing of schools on January 22.

From the second week of February onwards there is an overall upward trend in mobility levels, which is accentuated following the lifting of restrictive measures and the reopening of schools up to the 1st cycle of basic education from 15 March and the reopening of 2nd and 3rd cycle schools from 5 April. There is, however, a slight increase in the proportion of the population "staying put" on the days associated with the school holidays and Easter period.

Proportion of the population "staying put" between 1 March 2020 and 6 April 2021 – minimum, average and maximum values of NUTS 3 sub-regions

Source: Facebook's "Data for Good" Initiative. Data provided by Carnegie Mellon University. Note: The dates marked on the graph axis correspond to Sundays.