

Summary

Changes in travel demand during the Covid-19 pandemic and their implications for climate change

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The Covid-19 pandemic led to a reduction in both car traffic and in the number of public transport passengers. The reduction in use of public transport was larger than in car use. Car traffic rebounded in 2021 and is now at roughly the same level as in 2019. Traffic volume in public transport remains low. The sale of new cars in 2021 was the highest on record. Most new cars are electric. Several factors point in the direction of increased car use and reduced use of public transport in the future: i) changes in preferences during the pandemic towards more individual transport, ii) a higher proportion working remotely in a “new normal” with another “transport profil” (tend to use public transport on work travels more often than those who don’t work remotely), iii) fear of infection during the pandemic may cause increased discomfort during congestion, and iv) an increased volume of electric cars which makes the car journey cheaper due to subsidies.

Changes in travel demand from 2019 to 2020 and 2021

There have been major changes in travel demand in Norway during the Covid-19 pandemic. Figure S.1 shows changes in car traffic volume and the number of public transport passengers from 2019 to 2020 and 2021. Travel demand in 2019 was assigned the value of 100.

There was a 6.1 % reduction in road traffic (which mostly consists of passenger cars) from 2019 to 2020. From 2020 to 2021, road traffic increased by 2.8 %. The number of public transport passengers dropped by 35.5 % in 2020. There was a slight growth of 4.1 % from 2020 to 2021, but the number of passengers remains considerably lower than in 2019.

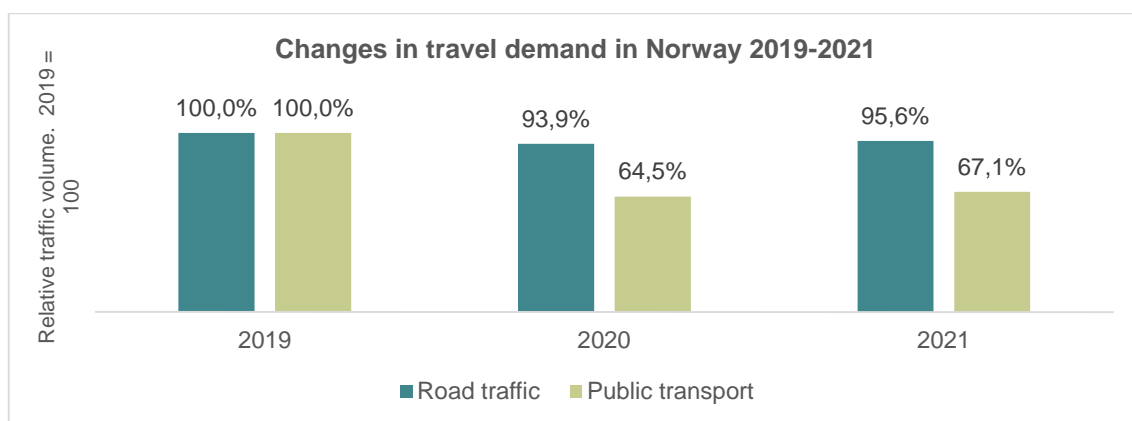


Figure S1: Changes in travel demand in Norway from 2019 to 2020 and 2021. Percent

Will the changes last?

The decline in travel in 2020 was associated with a reduction of climate gas emissions from transport in Norway. However, the changes are inconsistent with current political objectives of shifting travel demand from cars to public transport. The report discusses whether the changes in travel demand during the Covid-19 pandemic are likely to last or not.

Although it is not possible to predict future travel behaviour, it is unlikely, at least in the short term, that public transport will recapture all the passengers lost during the pandemic.

The sale of new cars in 2021 was at an all-time high. A majority of these cars, 64.5 %, were electric. Since electric cars do not contribute to global warming when used (although their production may do so), and since they are cheaper to use than cars with combustion engines, it seems reasonable to expect the growth in car traffic seen in 2021 to continue.

For public transport, several factors point in the direction of reduced use of public transport in the future: i) a change in preferences during the pandemic towards more individual transport, ii) a higher proportion working remotely in a “new normal” with another “transport profil” (tend to use public transport on work travels more often than those who don’t work remotely), iii) fear of infection during the pandemic may cause increased discomfort during congestion. The major challenges for public transport in the short term are: (1) to avoid cutbacks in service, as that will make public transport less competitive, and (2) to avoid large increases in fares to compensate for the loss of income during the pandemic. If services are reduced, while fares increase, there is a risk that public transport may enter a negative spiral in which less demand leads to cutbacks in services and lower income leads to increased fares, which in turn will lead to even less demand and use.