

Ministry of Infrastructure and Water Management

#### 2021 ITF Pre-Summit

# The impact of COVID-19 on mobility in the Netherlands

Insights based on the Netherlands Mobility Panel (MPN)

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### **Motivation**



#### Newly hospitalized COVID-19 patiënts Netherlands

Inform policy makers about impact of COVID-19 (and measures) on mobility:

- During the pandemic
- After the pandemic

### Method



- Netherlands Mobility Panel (MPN) (since 2013)
- Longitudinal household panel (≈2000 complete households, ≈ 7000 persons)
- Household members >= 12 years
- Household survey, personal survey, 3-day diary
- 'Regular' survey sept-oct (yearly), possibility for additional surveys
- During COVID: Representative subsample ( $\approx$  2000 people)
  - March/April 2020 ('intelligent lockdown')
  - June/July 2020 (first relaxations)
  - Sept/Oct 2020 (more relaxations)
  - Jan 2021 (strict lockdown)
  - April 2021 (first relaxations, soon to be analyzed)



https://english.kimnet.nl/thenetherlands-mobility-panel/access-tompn-data



### Insights



### Outdoor activities (1)



#### Development in activity outdoors (compared to pre-covid)



0% 20% 40% 60% 80% 100%

■ Just as often ■ Less often

- In March/April 2020 approximately 80% of people reported to participate in fewer activities.
- In the follow-up measurements, this number dropped slightly, while increasing again in January 2021.
- Especially less shopping outdoors, visiting bars and people.

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More often





#### Perception social interaction



Strongly disagree Disagree Agree/not agree Agree Strongly agree

- During both March/April 2020 and January 2021, about 40% of people reported to be unhappy with the restricted possibilities for social interaction.
- Only a limited number of people reported digital solutions to be a full replacement for meeting people physically.

### Outdoor activities (3)



#### I expect to do the following activities also less often after covid (compared to pre-covid)



- During the first months of the crisis, >90% of people expected to go back to their pre-COVID frequency of outdoor activities after the crisis.
- In the follow up measurements, the share of people who expect to reduce outdoor activities post-pandemic increased a bit.

#### Agree Strongly agree

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## Working (from home) (1)



#### Share of hours working from home

- In March/April 2020, we observed the highest share of people working from home.
- The share of home-workers dropped somewhat afterwards, but increased again in January 2021 (strict lockdown). Compared to March/April 2020, the share of people working (almost) fulltime from home was lower in January 2021.

Overall, most home-workers reported positive ٠ experiences with this (new) way of working during the different measurements.

#### 100% 80% 60% 40% 20% 0% 2020 2020 2020 2020 2020 2020 2021 2020 2020 2021 2020 2020 2020 2020 2020 2020 2020 2021 202 202 January January January Sept/okt Sept/okt Sept/okt Sept/okt March/april March/april March/april Sept/okt March/april June/july June/july June/july June/july January January March/april June/july Working from I have a good Positive I experience I miss my experiences home is easy workplace to good support colleagues work from with for me when from my workina home employer to workina from home from home work from home 8

#### Experience working from home

## Working (from home) (2)

#### I also expect to work from home more often (compared to pre-covid)...



#### Pre-covid number of hours working from home and post-covid expectations



- At the start of the crisis, more than a quarter of home-workers expected to work from home more often in the post-COVID future compared to pre-COVID behavior.
- This increased to 40-50% in January 2021.
- Especially 1-3 days working from home is expected and these expectations are quite stable in the last months.

### (Remote) education

#### **Experiences remote education**



#### I also expect to follow more remote education (compared to pre-covid)...



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- During the beginning of the crisis and the measurement in January 2021, schools were mostly closed. A large group of students followed education from home
- Students and school pupils, who had to follow education from home during several periods of school closing, are decidedly less happy than workers are and have problems concentrating. They did experience to have good working facilities though.
- In January 2021, most students expect to also follow more remote education due to measures still in place. For the future (after corona), we see that the number of students expecting to do more remote education after corona has increased compared to the start of the crisis. Still, most students expect that the situation will go back to the pre-covid situation.

### Travel (1)



Average distance travelled (km) in three

#### Average number of trips in three days 10 8 6 4 2 0 Sept March/april June/july Sept/oct January 2019 2020 2020 2020 2021

#### Changes in outdoor activities, work and education as well as the virus itself have affected people's travel behavior. The amount of trips and distance travelled reduced by 55% and 68% respectively at the beginning of the crisis when compared to the fall of 2019.

 Distances and number of trips increased again during relaxations, although not to the pre-covid level. A drop was again observed in January 2021 (strict lockdown), however levels were higher than at the beginning of the pandemic.



### Travel (2)





Modal split (trips)

 Also the modal split changed. The share of walking increased, while the share of public transport sharply decreased. The use of public transport was affected the most with a decrease of over 90% of trips (March/April).

### Travel (3)





#### Attitude travel modes

 Attitudes towards the car became more positive over time, people's attitudes towards public transport have decreased strongly.



### Expected usage of travel modes after covid (compared to pre-covid)



- Some structural changes in the way we travel are expected. As of January 2021, approximately 25% of people expect to cycle and walk more in the future, while only 4% expects a decrease in walking or cycling. Also for car usage, the number of people expecting an increase is higher than the ones expecting a decrease.
- One in four people expects to travel less by public transport compared to pre-COVID behavior (vs 13% expecting an increase in use).

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The travelled walking distance increased since COVID-19. This also holds for people who work (almost) full time from home.

Cycling distance decreased (both regular bicycle and e-bike) for all groups.

The total travelled distance by active modes decreased. The decrease is the largest among people without a job. Among workers, people who work (almost) full time from home show a larger decrease than those who do not work from home.



### Summary and implications?

- During COVID: Large effect of COVID on mobility in the Netherlands, with slight changes across measurements. Largest impact at the beginning of the pandemic.
- After COVID: Most people expect to go back to pre-COVID outdoor activity behavior. However, a considerable group expects changes in their way of working and travel behavior.

Are impacts recognizable? Which more, which less?

Reflecting on this, at least the following aspects need policy attention:

- Increased importance of ICT: digital solutions for grocery shopping or social contacts, or econferencing to work from home, etc. → Digital divide may have become larger with an increasing reliance on ICT. Important to address the apparent shortcomings of available ICT solutions to facilitate behavioral changes that rely on ICT.
- Increased preference for individual travel modes and more negative attitude towards public transport: How structural effects on mobility will turn out may depend on accommodating policies by governments and employers (e.g. to stimulate working from home and active mode use when pivoting to a post-COVID (-crisis) world).

### Additional thoughts on policy directions?



### Next steps

- Additional measurements panel during/after COVID
- Structural effects remote working/remote education
- Structural changes in attitudes towards traffic modes
- Structural changes in online shopping
- Learning from effects and policy initiatives abroad

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### Thanks!