

Flattening the Curve

Opportunities to change travel behaviour in post-COVID-19 times

With the arrival of COVID-19, road congestion largely disappeared and public transport ridership plummeted overnight, as business and educational institutes pivoted to remote work. The significant changes to how we live and work could have lasting implications. Increased remote working and learning will reduce the demand for mobility and may make the demand more flexible over time. Additionally, an expected shift away from public transport threatens the sustainability, safety, inclusiveness and quality of our mobility system.

We can't foresee the exact nature of our "new normal", nor can we predict the shape of the recovery to come. COVID-19 will likely accelerate trends that had emerged pre-crisis, but the magnitude of the threats and opportunities that this provides is hard to predict. Deloitte has therefore analysed the impact of COVID-19 on mobility so far, gauged changing preferences and illustrated four scenarios to assess implications for the medium-term future (next three to five years).

← PUBLIC TRANSPORT

CAR USE →

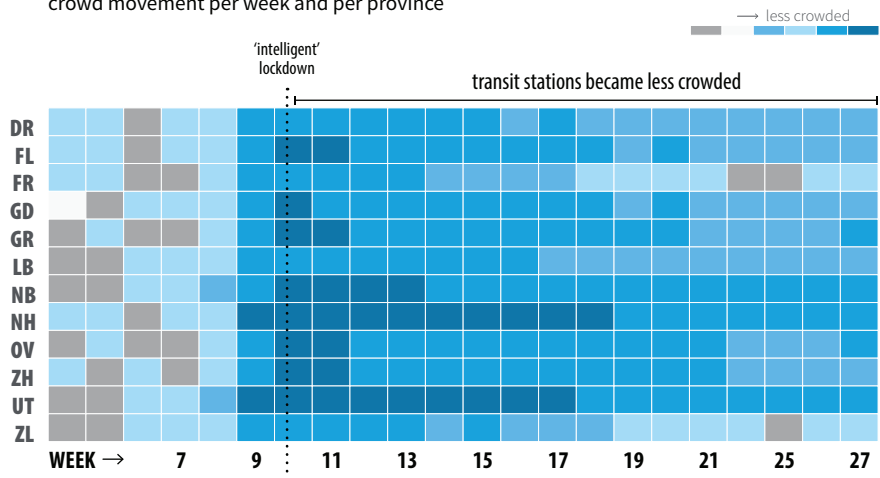
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COVID-19 FORCED PEOPLE TO CHANGE THEIR MOBILITY HABITS

Both road traffic intensity and public transport ridership dropped significantly since the start of the lock-down. Initially we started travelling less often and less far. But after that the distance that we travelled started to return to normal levels again. The mid June level even topped the level in the week of the 9th of March. Interestingly, road congestion levels did not increase proportionally. This is because the large majority of traffic jams occur during the rush hour and are simply a result of demand exceeding road capacity. Since the lockdown travelers have largely been avoiding travelling during rush hours as clearly illustrated by the travel demand peaks which largely leveled off.

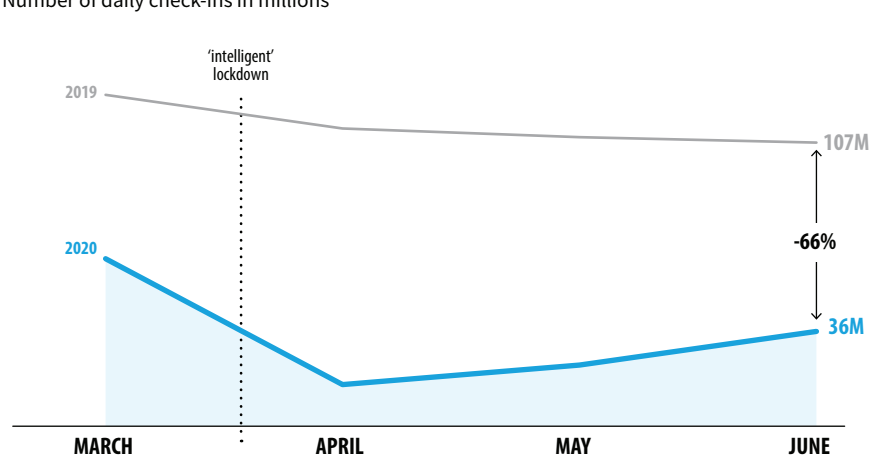
Transit stations still 40% less crowded

crowd movement per week and per province



Public transport check-ins decreased with ~70%

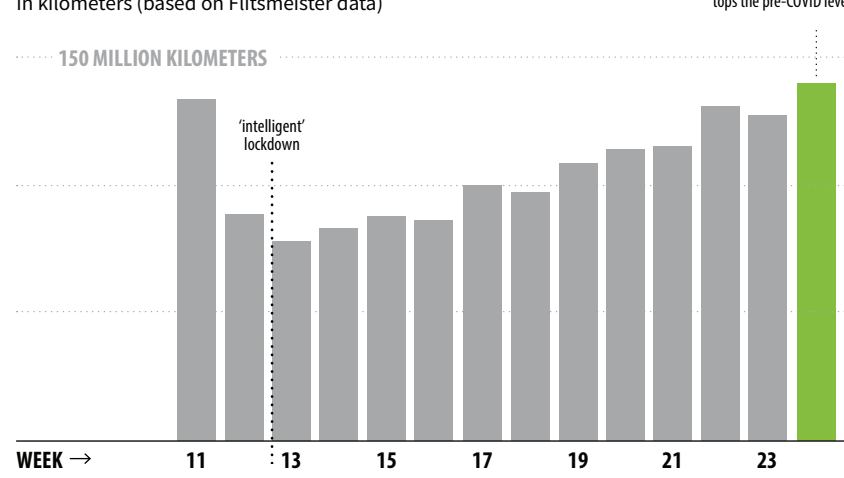
Number of daily check-ins in millions



Distance travelled on the road increases...

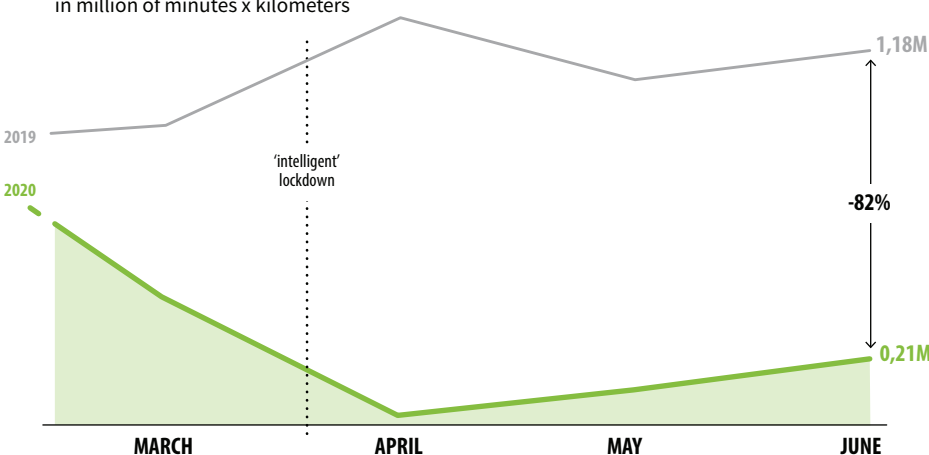
in kilometers (based on Flitsmeister data)

Flitsmeister data shows that the total distance travelled in week 24 June tops the pre-COVID level of week 11.



... But road congestion still >80% lower in June

in million of minutes x kilometers



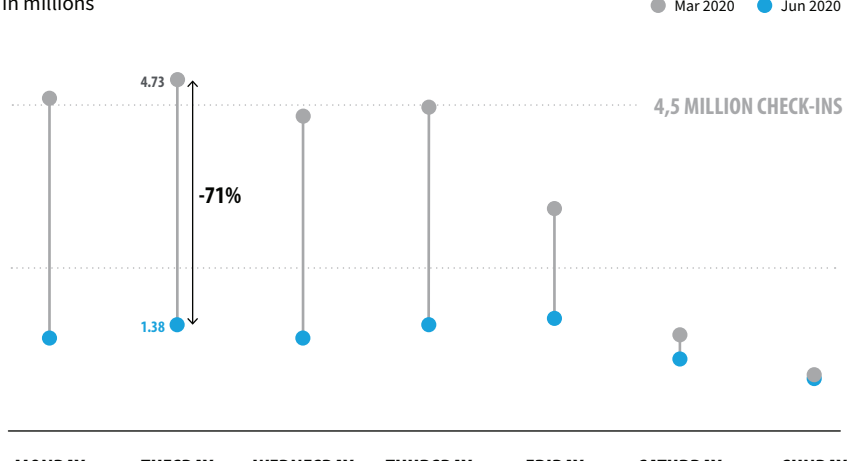
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'FLATTENING THE CURVE'

Reducing traffic congestion is largely about 'flattening the transport demand curve' by getting more people to avoid travelling during rush hours.

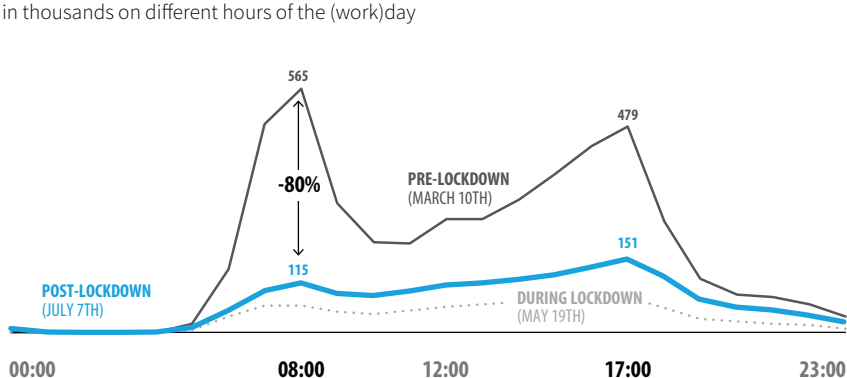
Number of public transport check-ins decreased with ~70%

in millions



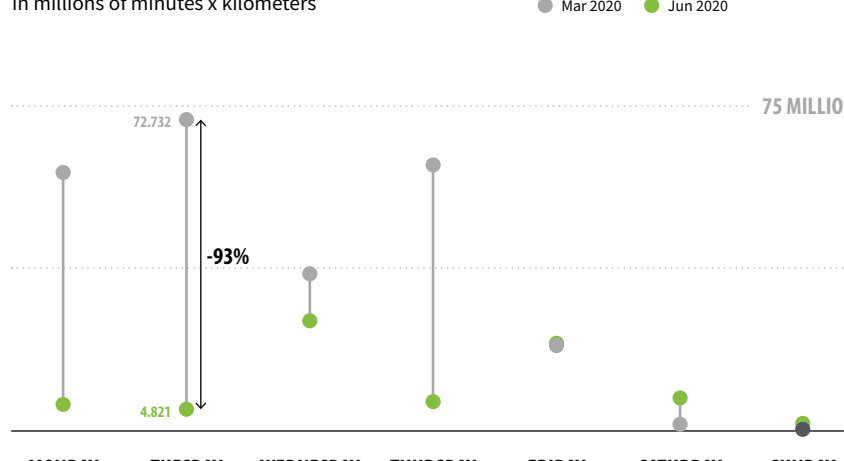
Number of public transport check-ins

in thousands on different hours of the (work)day



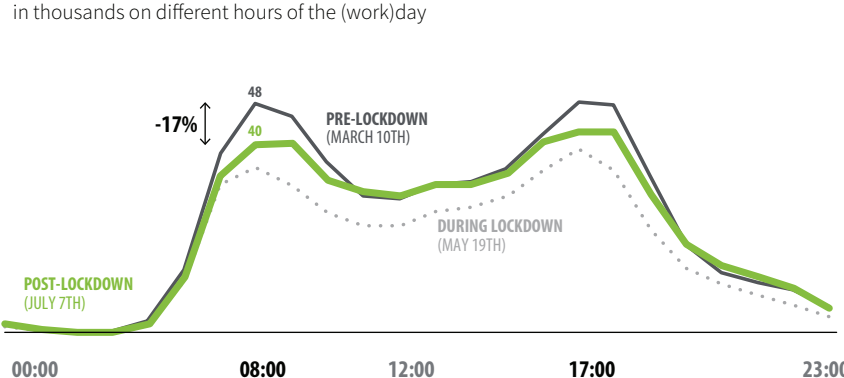
Road congestion on workdays decreased up to 90%

in millions of minutes x kilometers



Number of passing vehicles

in thousands on different hours of the (work)day



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CONSUMER PREFERENCES ARE CHANGING

Stated consumer preference indicators (i.e. surveys) and revealed consumer preference indicators (i.e. sales figures) help to assess where we are heading in the near future.

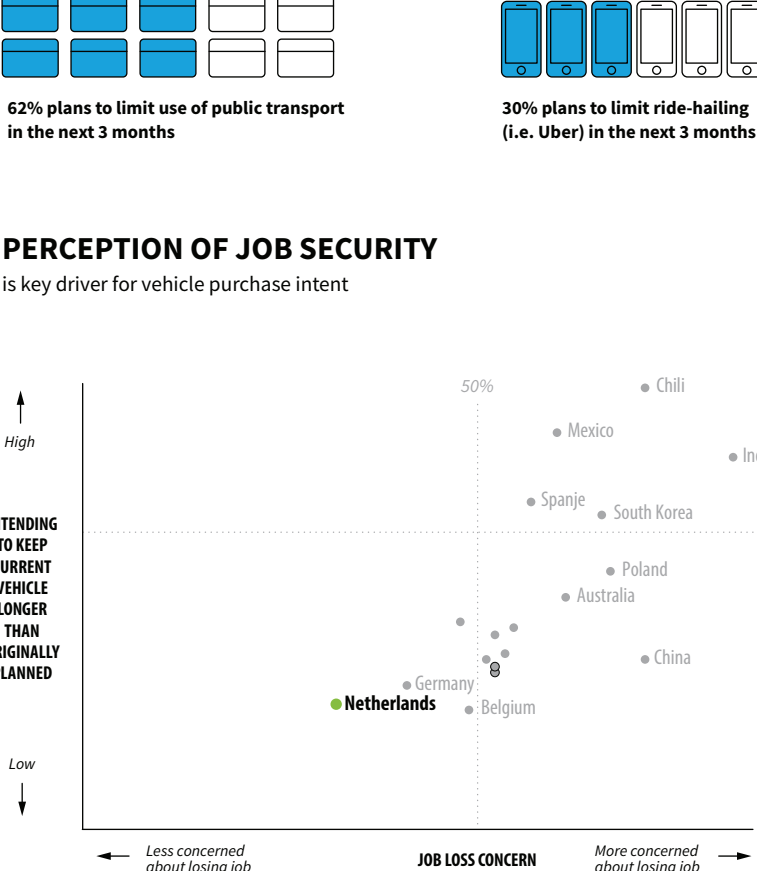
LIMITED USE OF PUBLIC TRANSPORT AND RIDE-HAILING

62% plans to limit use of public transport in the next 3 months

30% plans to limit ride-hailing (i.e. Uber) in the next 3 months

PERCEPTION OF JOB SECURITY

is key driver for vehicle purchase intent

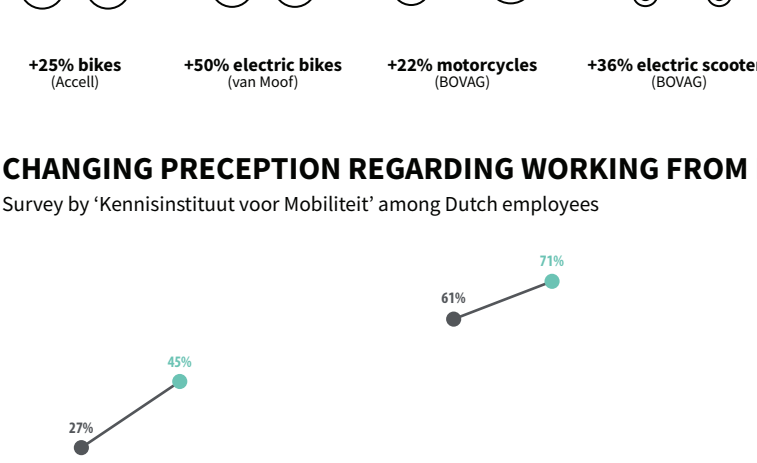


TWO-WHEELER PURCHASE FIGURES

+25% bikes (Piccolt) +50% electric bikes (van Moof) +22% motorcycles (BOVAG) +36% electric scooters (BOVAG)

CHANGING PRECEPTION REGARDING WORKING FROM HOME

Survey by 'Kennisinstituut voor Mobiliteit' among Dutch employees

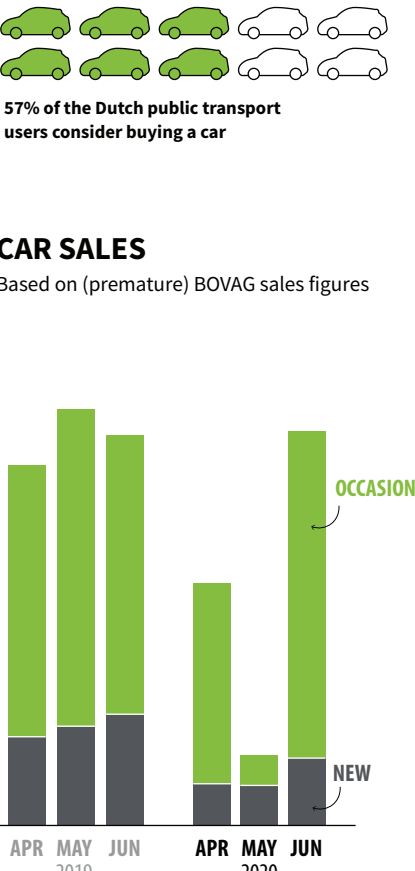


HIGHER INTENT TO PURCHASE A NEW CAR OR TO KEEP THE CURRENT CAR

57% of the Dutch public transport users consider buying a car 36% of Dutch car owners plan to keep their current vehicle longer than originally expected

CAR SALES

Based on (premature) BOVAG sales figures

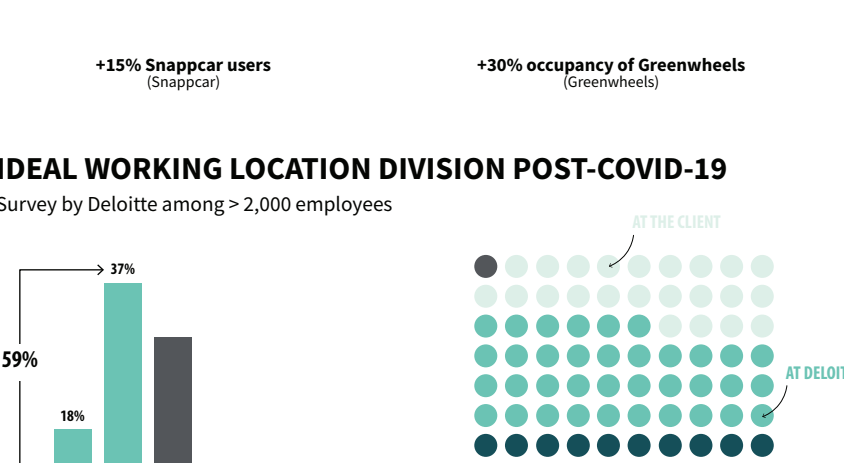


CAR SHARING SERVICE UPTAKE

+15% Snappcar users (Snappcar) +30% occupancy of Greenwheels (Greenwheels)

IDEAL WORKING LOCATION DIVISION POST-COVID-19

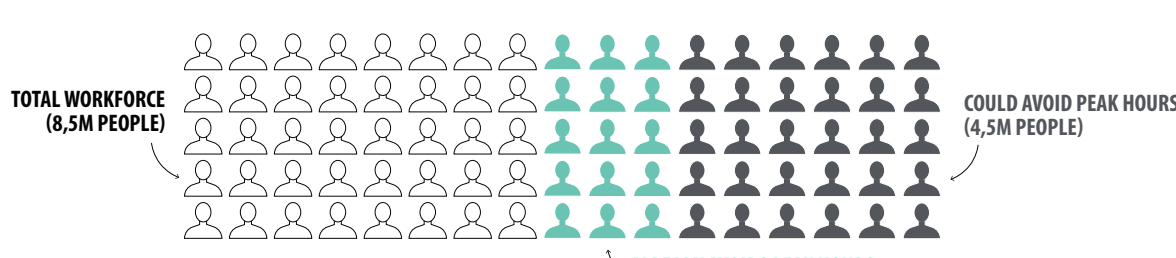
Survey by Deloitte among >2,000 employees



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CALL TO ACTION

Regardless of the uncertainty we face around how transport demand will evolve in the coming years, we can already draw some initial conclusions from this unique situation. Our data analysis clearly shows that many people can actually avoid travelling during peak times when they really need to. This aligns with a high-level estimate¹ of Carlo van de Weijer, General Manager of the Eindhoven AI Systems Institute at Eindhoven University of Technology, which indicated that out of the workforce of 8,5 million people in the Netherlands, 4,5 million could avoid travelling during the during rush hour. 1,5 million of them already does so. Additionally, a share of the remaining 4 million people, including students, could start avoiding travelling during the rush hour if their timetables are changed. Therefore, the aim is to leverage the four scenarios to develop better rush hour avoidance strategies as we return to 'a new normal'.



How to capitalize on the opportunity and mitigate the risk? No silver bullet solution is available because of the great uncertainty we face.

After all, the trajectory of the future of the mobility could vary dramatically depending on how the pandemic evolves, the health of the overall economy, and on the collective decisions made by governments, businesses, and individuals over the coming months. To explore those alternatives, we look at **four possible scenarios** for a postcoronavirus world, identify four trends that will persist, irrespective of which of the four scenarios plays out and provide a **basis for no-regret moves**. Download **our report** here.

LEVERAGE THE SITUATION TO DEVELOP BETTER PEAK HOUR AVOIDANCE STRATEGIES

Potential impact: less congestion, less emissions, increased traffic safety and positive health effects, better livability in cities and increased public transportation profitability.

RISK OF MODAL SHIFT FROM PUBLIC TRANSPORT TO CARS

Potential impact: more congestion, more emissions, decreased traffic safety and health effects, less livability in cities and decreased public transportation profitability.