

# Parking, the Environment, and COVID-19

By Brian Shaw, CAPP

**E**VIDENCE HAS SHOWN THAT THE PLANET'S AIR QUALITY and greenhouse gas emissions improved from the human response to COVID-19. Driving drastically reduced, leading to much cleaner air in many cities. Traffic all but disappeared. Gas prices dropped. Bike sales grew, and some cities closed streets to cars to allow more room for bikes and pedestrians to maintain social distancing while getting some fresh air.

Due to the huge reduction in driving and human activity, wild animals began appearing in cities and other built areas. Some urban waterways were reported cleaner and clearer due to the lack of human water activity.

How did this happen? Many people who could work remotely, far more than was the case prior to the COVID-19 crisis. Transportation network companies (TNCs, i.e. Uber & Lyft) use was way down as was the use of shared mobility (micro-mobility) devices and services. Students used remote learning to various degrees of success. Even doctor visits were done using new telemedicine capabilities. And in general, people did not go anywhere, not that there were many places to go.

What the COVID-19 crisis showed was that when individuals collectively act and change their behavior, the results can benefit the planet. While the motivation and societal rationale for these changes had little to do with improving the health of the planet, it is hard to argue with the beneficial results to the environment. But the severe financial cost of limiting movement and resulting reduced economic activity has been too big a price for all of us to pay. COVID-19's environmental benefits to the planet also show that the approach to addressing the impacts of human activity on the planet cannot be done with such economic peril.

## Another way

Knowing what the environmental results can be when people limit their mobility, the question is, can similar environmental benefits be achieved without a pandemic behind them and the devastating economic impacts?

The parking industry was one of several economic sectors that took a huge hit during the COVID-19 crisis. The lack of driving and mobility activity and shelter-in-place orders resulted in far fewer folks needing to park and huge revenue declines. Airports, universities, and many municipal parking operations have suffered from little to no revenue during the crisis.

A likely scenario is that as states and cities reopen their economies, people will be reluctant to use communal travel modes such as transit, TNCs, shared micro-mobility devices, carpools, and vanpools. As a result, there could be a surge in demand for parking in the coming weeks and months. This assumes there are things to do, places to go, and people want to leave their homes.

But with that will come more pollution and the eventual return of traffic on our roadways.

Can the parking industry help realize the longer-term environmental gains COVID-19 was able to reveal? Based on what the parking industry can do and

what experts believe can contribute toward reduction of greenhouse gases and slow climate change, I would suggest two areas of focus:

- Facilitating the electrification of transportation.
- Transition to cashless and contactless paid parking.

## Greenhouse Gases

People's mobility is not the core issue that leads to greenhouse gas production in transportation. The greenhouse gases are a result of how people choose to get from A to B. While not using our cars, trucks, and vans did lead to greenhouse gas reduction during COVID-19, we all need to be able to exercise our ability to travel. Moving away from a fossil fuel-based fleet and [transitioning more of the vehicle fleet to electricity](#) will help reduce greenhouse gases while enabling mobility and economic activity. The parking industry has a key role to play in facilitating the electrification of transportation. Namely, by ensuring our facilities have an adequate number of electric vehicle charging stations, the parking industry can contribute to electrifying transportation.

In addition, many of us in parking also play a role in facilitating use of other travel modes such as transit, shuttles and micro-mobility. By moving to electric

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based options for buses and shuttles, more greenhouse gases can be eliminated. We can also support and facilitate the use of shared micro-mobility services (bikes, e-bikes, and scooters) as well as providing safe and secure storage for bikes, namely electric bikes in our facilities.

### Payment Options

The other initiative the parking industry should act on post COVID-19 is moving to cashless and contactless paid operations. There are both environmental as well as public health benefits that can result from pursuing cashless and contactless operations. While there are equity concerns with eliminating cash transactions, using cash does have several inherent problems. Safety and security for both the operator and customer is at risk with cash. Leakage is also a problem with cash as some of the cash collected does not always make its way to the bank. Plus pay machines and booths need to have adequate change, armed guards to pick up and drop off cash, and time and resources spent on counting and securing cash. Those who do not have a credit/debit card or online banking access can buy prepaid debit cards with cash at several retailers. Cash transactions also require counting of cash received and the change issued, which increases idling time when paying from the car.

Contactless operations making use of mobile payment platforms, virtual permitting using license plates or other electronic credentials (RFID readers, near-field card readers, etc.) also have the benefits of going cashless. In addition, contactless operations can help reduce exposure to pathogens transmitted on surfaces, such as SARS-CoV-2. They also keep people from having to queue in line to pay for parking at pay stations, meters, or attended booths. Transactions can happen from inside one's car or anywhere from a mobile device. For permit operations, making use of virtual permits with license plates can eliminate face-to-face transactions and save money on acquiring, distributing, and managing physical credentials. Contactless operations also help customers avoid needing to conduct financial transactions from a car idling in line, which helps to reduce emissions.

At Stanford, we have realized the environmental benefits of moving to cashless and contactless operations. Since we made the move to virtual permits, mobile payments, and cashless transactions, our ability to quickly transition to a completely

remote department was relatively easy. Suspending enforcement and paid parking was done seamlessly. Our team quickly adjusted to working from home and still being able to handle customer concerns and inquiries. When we return to paid parking, the process will again be simple and seamless.

With growing concerns about social distancing and reducing the vectors for contracting the Coronavirus, the virtual parking operation built at Stanford is well positioned to support these new and critically important directives. ♦



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