
Abstract

In January 2020, the COVID-19 suddenly came to us. People's way of life has changed a lot. This change led to coexistence of work and home, school and non-face-to-face classes, and the number of meetings with co-workers and friends was limited. In addition, performances, sports events, religious ceremonies, and weddings and funerals attended by large crowds were either impossible or permitted under a limited number of people. Changes in people's way of life appear as changes in consumption and travel patterns.

This study was conducted by dividing it into three fields. First, we investigated changes in people's lifestyles(travel, at-home, non-face-to-face consumption, and delivery motorcycles, etc.) and preferences due to COVID-19. Next, the traffic volume for all modes of transportation for the year since January 2020, when COVID-19 occurred in Korea, was compared and analyzed with 2019. Finally, technological changes in response to climate change, which are closely related to COVID-19, and changes in global transportation policies were identified. Through this, the direction of transportation policy in the post-corona era was presented.

Infectious diseases experts predict that the COVID-19 virus will coexist with humans. The emergence of a new COVID-19 mutant virus in 2021 raises the credibility of this outlook. So far, the impact of COVID-19 on people's travel behavior and environmental changes in the transportation sector can be summarized into three categories. One is that the risk of infection with COVID-19 has become an important factor in people's choice of transportation. Next, large cities around the world are transforming automobile-type cities into pedestrian- and

bicycle-friendly cities in response to climate change to prevent the emergence of new infectious disease viruses. Lastly, global companies with 4th industrial revolution technology are working hard to develop new transportation means and transportation services to respond to the new demands of people and climate change caused by COVID-19.

This study proposes a transportation policy direction in the post-corona era that can accommodate people's changed lifestyles due to COVID-19 and suppress the occurrence of new infectious diseases. As a result of research and analysis of surveys, urban traffic-related big data analysis for one year in 2020, and new traffic policies in large cities around the world, four meaningful results that can set a new traffic policy direction were derived. First of all, most workers want to keep working from home even after COVID-19. In particular, young people are more likely to want to keep working from home than middle-aged people. Second, people have come to recognize the risk of infectious diseases as an important factor in choosing a means of commuting to work. People feel that the current congestion rate in public transport is not safe from the risk of influenza. Third, pedestrians and vehicle users are experiencing the threat of traffic accidents caused by the motorcycles of courier and delivery platform workers. This threat has emerged as an increase in motorcycle traffic accidents since the COVID-19 pandemic. Finally, the mayors of large cities around the world are establishing transportation policies, recognizing that climate change is the cause of the emergence of viruses such as COVID-19. At present, the core of transportation policies in large cities around the world is "climate change countermeasures". In this study, the direction of transportation policy in the post-corona era was established based on the results of this analysis.

In this study, the direction of transportation policy in the post-corona era was established based on the results of this analysis. First, the vision and goals of transportation policy in the post-corona era were set. The vision was set to “Establish an urban transportation system that is safe from infectious diseases and increases the use of eco-friendly transportation means”. The goal for realizing the vision was set to “increase the use of eco-friendly means of transportation by 10%.” Five strategies were presented in the direction of transportation policy to achieve the vision and goal.

First, the cross-section of the road is changed from vehicle-centered to human-centered.

Second, increase the supply by resetting the capacity of public transportation vehicles.

Third, a free public transportation plan is implemented for the elderly over the age of 65.

Fourth, promote the Gyeonggi-do-type mobility service business.

Fifth, implement safety measures for motorcycles suitable for the delivery platform era.

Four effects are expected from the implementation of this strategy. First, the infection rate is zero when using public transportation. Second, there is an increase in the use of walking, bicycles, and personal mobility (PM), which have a low risk of infection. Third, the return to eco-friendly public transportation in the post-corona era is increasing. Finally, the safe operation of delivery transportation, which has increased due to COVID-19.

Keyword Postcorona, Transportation Policy, Fare Free Public Transportation, MaaS