

Figure S1. Map of Seoul with four expressways.

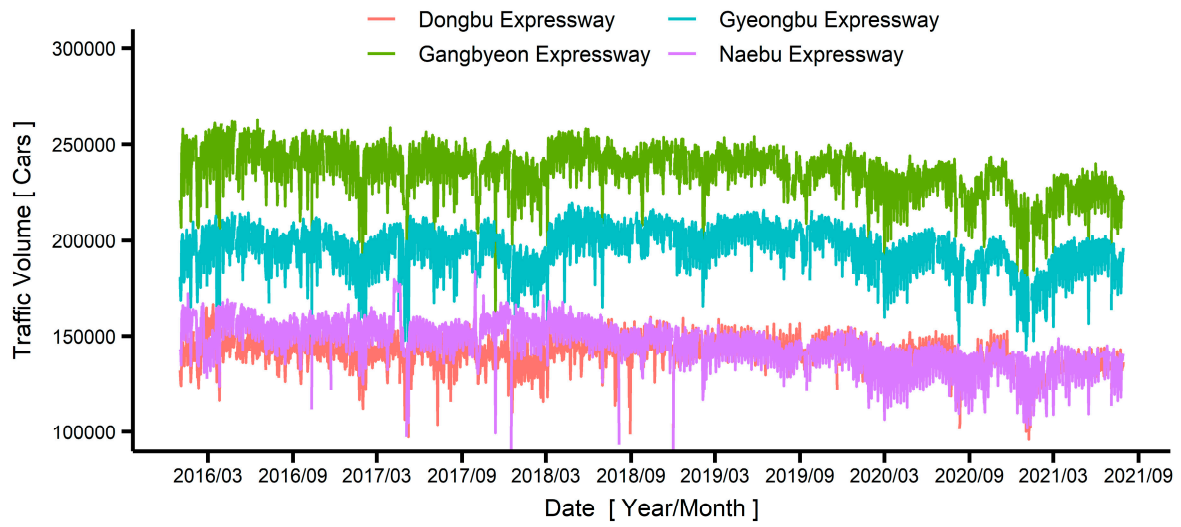


Figure S2. Daily traffic volume at four expressways in Seoul from 2016 to 2021.

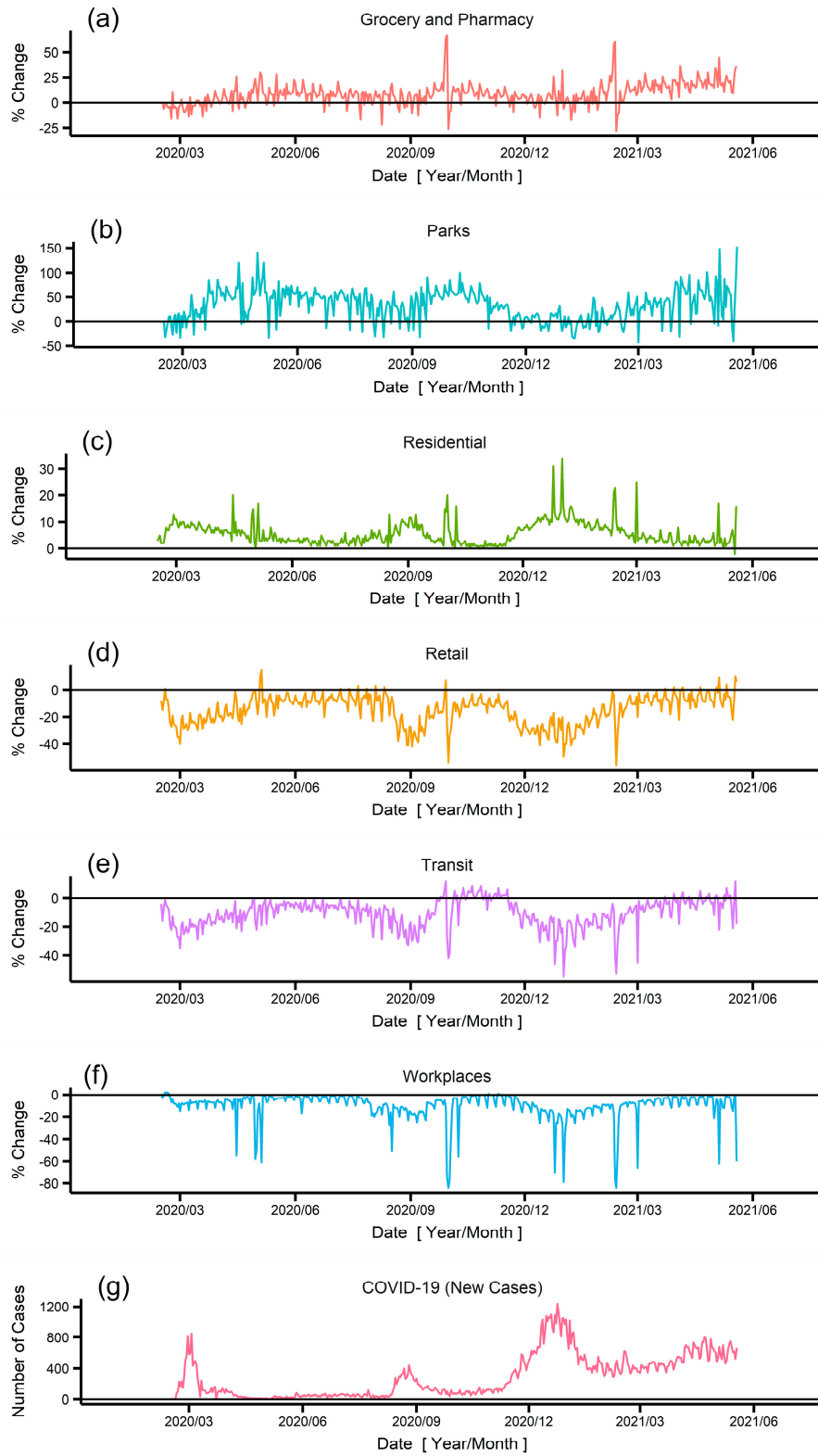


Figure S3. (a)–(f) Google Mobility data in Seoul: (a) Grocery and Pharmacy, (b) Parks, (c) Residential, (d) Retail, (e) Transit, (f) Workplaces. (g) the number of new COVID-19 cases in South Korea between February 2020 and June 2021.

Table S1. Fitness test (R^2) of the models and significance test of the traffic factor.

	R^2 of the Model	Traffic		
		Coefficient	Std. Error	P-value
PM ₁₀	0.44	0.219 $\mu\text{g}/\text{m}^3/\%$	0.157 $\mu\text{g}/\text{m}^3/\%$	0.162
PM _{2.5}	0.37	0.233 $\mu\text{g}/\text{m}^3/\%$	0.099 $\mu\text{g}/\text{m}^3/\%$	0.018
CO	0.62	2.161 ppb/%	0.955 ppb/%	0.023
NO ₂	0.64	0.257 ppb/%	0.066 ppb/%	0.000
O ₃	0.70	0.033 ppb/%	0.057 ppb/%	0.560
SO ₂	0.59	-0.0007 ppb/%	0.006 ppb/%	0.913