Table S1. Result of two regression models in 500 m × 500 m

Variables	Model results (coefficients and significance)	
	Model 1 (Resilience in June 2020)	**Model 2** (Resilience in December 2020)
COVID-19		
Case number	0.029	0.010 **
Population characteristics		
Elder density	0.107	-0.056
Urban built environment components		
Accessibility		
Road density	0.193 ***	0.160
MTR station number	0.027	0.034 *
Land Use characteristics		
Land use index	1.047 ***	0.803 ***
Building coverage ratio	0.544 ***	0.592 ***
Private residential	-0.067	-0.018
Public residential	0.166 ***	0.191 ***
Rural Settlement	-0.106 **	-0.097 ***
Agglomeration		
Commercial area	0.044	-0.028
Shopping Mall number	0.175 ***	0.124 ***
Market number	0.303 **	0.423 ***
Amenity		
Hospital number	-0.290	-0.389 **
Park number	0.091	0.175 *
Intercept	1.496 ***	0.630 ***
Observations	496	793
Adjusted R-squared	0.520	0.555
Moran's I for residuals	0.047	0.038

Note: * p<0.10. ** p<0.05. *** p<0.01.

Table S2. Robustness test results for two regression models in 1 km × 1 km using the bootstrap percentile method.

Variables	95% confidence interval	
	Model 1 (Resilience in June 2020)	**Model 2** (Resilience in December 2020)
COVID-19		
Case number	(-0.0543, 0.0662)	(-0.0058, 0.0084)
Population characteristics		
Elder density	(-0.1614, 0.1966)	(-0.2687, 0.1529)
Urban built environment components		
Accessibility		
Road density	(-0.1331, 0.1206)	(-0.0644, 0.1037)
MTR station number	**(0.0118, 0.0874)**	(-0.0155, 0.0686)
Land Use characteristics		
Land use index	**(0.518, 2.458)**	**(0.478, 1.849)**
Building coverage ratio	**(0.3218, 0.8624)**	**(0.4163, 0.8503)**

Private residential	(-0.1656, 0.1078)	(-0.0659, 0.1652)
Public residential	**(0.0938, 0.3922)**	**(0.2570, 0.5766)**
Rural Settlement	(-0.2250, 0.0643)	(-0.1984, 0.0434)
Agglomeration		
Commercial area	(-0.2691, 0.1615)	(-0.0737, 0.1892)
Shopping Mall number	**(0.0004, 0.1769)**	(-0.0230, 0.1559)
Market number	**(0.0173, 0.4876)**	**(0.0253, 0.4661)**
Amenity		
Hospital number	(-0.2223, 0.4277)	(-0.4569, 0.0340)
Park number	(-0.0543, 0.0662)	(-0.1015, 0.2151)
Intercept	**(0.449, 1.810)**	(0.0885, 1.0782)

Table S3. Robustness test results for two regression models in 500 m × 500 m using the bootstrap percentile method.

Variables	**95% confidence interval**	
	Model 1 (Resilience in June 2020)	**Model 2** (Resilience in December 2020)
COVID-19		
Case number	(-0.0367, 0.1041)	(-0.0020, 0.0259)
Population characteristics		
Elder density	(-0.0242, 0.2529)	(-0.2355, 0.2575)
Urban built environment components		
Accessibility		
Road density	**(0.0503, 0.3260)**	**(0.0536, 0.2997)**
MTR station number	**(-0.0181, 0.0860)**	(-0.0199, 0.0927)
Land Use characteristics		
Land use index	**(0.434, 1.677)**	**(0.2806, 1.1950)**
Building coverage ratio	**(0.3981, 0.6883)**	**(0.4295, 0.7099)**
Private residential	(-0.1702, 0.0335)	(-0.1234, 0.0600)
Public residential	**(0.0551, 0.2723)**	**(0.0285, 0.2890)**
Rural Settlement	(-0.2183, 0.0098)	**(-0.1641, -0.0021)**
Agglomeration		
Commercial area	(-0.0452, 0.1531)	(-0.0926, 0.0580)
Shopping Mall number	**(0.0865, 0.2853)**	**(0.0355, 0.2232)**
Market number	**(0.0762, 0.5570)**	**(0.1883, 0.6204)**
Amenity		
Hospital number	(-0.7825, 0.2456)	**(-0.7302, -0.0129)**
Park number	(-0.1011, 0.3254)	(-0.0148, 0.3620)
Intercept	**(1.060, 1.949)**	**(0.3373, 1.0034)**