Profile

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KOR; ENG; INTERMEDIATE GERMAN(B1)

Areas of Interest
Smart City Planning, Urban Informatics, Machine Learning, Micro-mobility, Climate Change, Social Equity

Skills
Word Excel Powerpoint
ArcGIS GIS Tableau Python
STATA Photoshop ClipStudio

Graphic by Seung Jun Choi
COVID-19

Coronavirus Cases: 73,973,280
Deaths: 1,645,260
Recovered: 51,967,619
COVID-19 Effects on Bike-Sharing?
There were seasonal patterns of bike-sharing ridership in Seoul.
There were seasonal patterns of bike-sharing trip duration in Seoul.
Daily total bike-sharing ridership, and trip duration are greater during the COVID-19 pandemic. However, the total bike-sharing ridership suddenly decreases during the COVID-19 waves.
Def:
Short Term: Trip duration smaller than 12 minutes (inclusive)

Long Term: Trip duration greater than 12 minutes

Result:
The amount of long term bike-sharing ridership was similar or perhaps more significant; however, short term travel decreased.
Understanding E-scooter Incidents Patterns
In Street Network Perspective
Identifying Spatiotemporal Transit Deserts in Seoul, South Korea

Number of all station count in administrative boundary (dong)

- 1 - 21
- 22 - 35
- 36 - 53
- 54 - 88
- 84 - 130
- Seoul Dong

- Metro station
- Bike station
- Bus station

Off Peak

Supply
-1.000 to -0.251
-0.250 to 0.000
0.001 to 0.249
0.250 to 0.500
0.501 to 6.000

Demand
Under 20%
20% - 40%
40% - 60%
60% - 80%
Over 80%

[Supply] - [Demand]
Transit Desert
-1.21 to -1.01
-1.00 to -1.00

Peak

Supply
-1.000 to -0.251
-0.250 to 0.000
0.001 to 0.249
0.250 to 0.500
0.501 to 6.000

Demand
Under 20%
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Over 80%

[Supply] - [Demand]
Transit Desert
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-1.00 to -1.00

Note: Green belt refers to Restricted Development Zone (RDZ)
Examining the COVID–19 Effects on Travel Behavior Using Smart IoT Sensors: A Case Study of Smart City Planning in Gangnam, Seoul
Tracking Property Ownership Variance and Forecasting Housing Price with Machine Learning & Deep Learning

Daily Average Sqft Sales Price

![Graph showing average sqft sales price over time with a line indicating a trend.]

Increase Rate

- Increase rate is calculated by:
  - 2017 Average Sqft Sales Price or Prediction / 2016 Average Sqft Sales Price or Prediction

Increase Rate Ranking

- Bottom 10
- Top 10
- Neighborhood

+Note:
- Bottom ten neighborhoods experience decrease in housing price
- Top ten neighborhoods experience increase in housing price

Map showing increase rate ranking with color-coded areas and neighborhood labels.
Field Observation: Who is Using Public Space?

- **Asian**
- **Black**
- **Hispanic**
- **Other**
- **White**

*Note: Time Lapse Taken Every 20 Minutes*
City of New York Masterplan

GROUP 1
Planning Theory, History and Ethics
Instructor: Dr. Michael Oden

Reflection / Discussion Assignment #3

“Strong Water services and wastewater disposal remains essential for health and safety”

Many municipal leaders agree on controlling sanitary water quality remains in public hands (Meltzer, 2008)
NY Sanitary District and Board of Health Established (1866)

Long term plan + Centralization + Universal water for all

Social Characteristics
- Total Population: Approximately 10 million residents reside
- Commuted: Approximately 29.25 million every year (2015)
- Low social diversity: Estimated nearly 6% in 2017 (Gangs, 2019)

Economy & Growth
- Capital of South Korea (Services, Wholesale, Industrial Transport)
- According to Seoul Solution, Seoul was having the highest population density in the 1950s but having almost up to 11 million residents. This is a quarter of the total population of South Korea.

Long History
- Seoul has been the state capital since 1394, Cheose Dynasty
- Therefore a lot of historical preservation planning is taking place and to preserve those resources is in essence.
Thank You

감사합니다

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