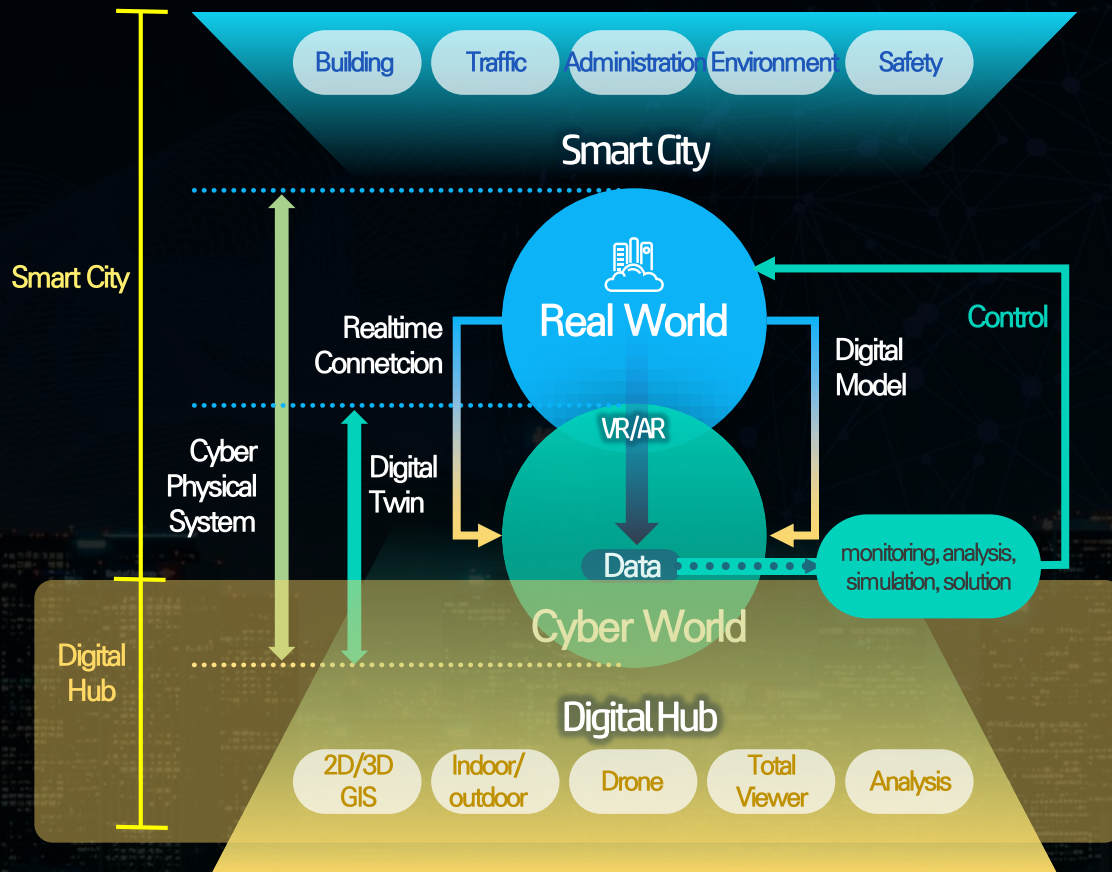


The background of the slide is a nighttime cityscape of Jeonju City, South Korea, with numerous skyscrapers and buildings illuminated. Overlaid on this is a dark blue digital network pattern consisting of interconnected nodes and lines, resembling a globe or a data network. The text is centered in the upper half of the image.

Digital hub case study for smart city (Jeonju City)

2019.06.27
Sangkwan Nam

Concept of Digital hub



Real World



Cyber World



The beginning of a smart city is building a digital hub.

Concept Change of Geospatial Informations

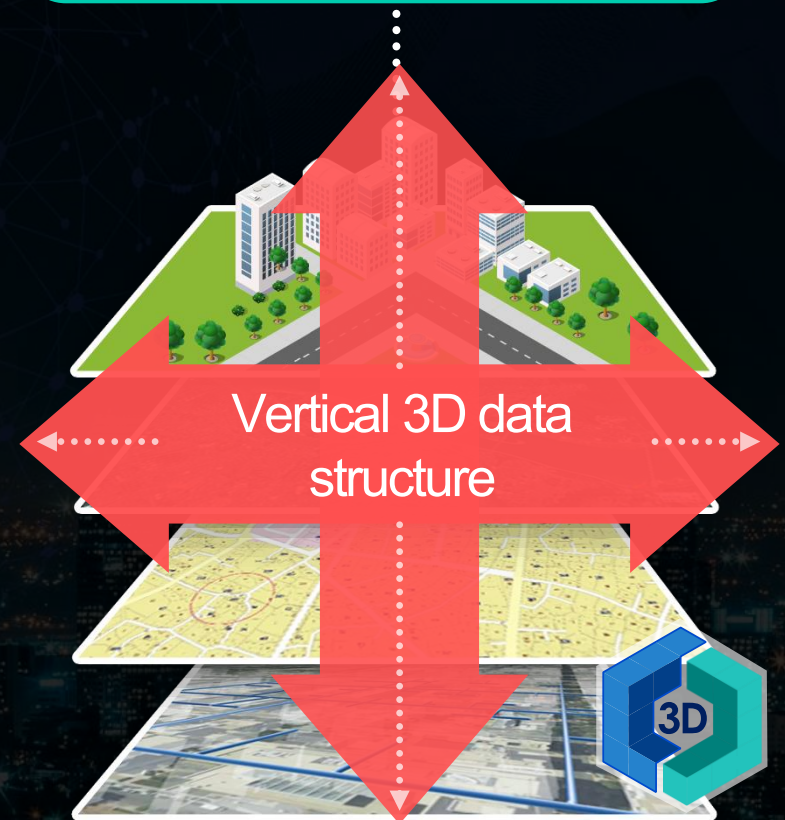
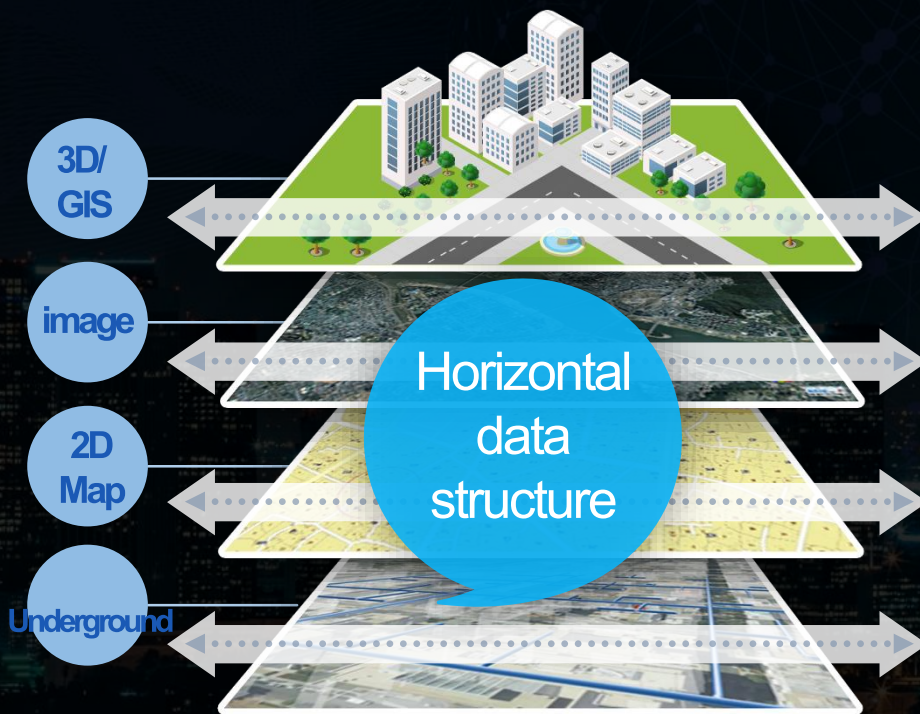
Conversion of **layer-based** spatial information into 3D spatial information based on **LOD**

TO-BE

LOD Based 3D

AS-IS

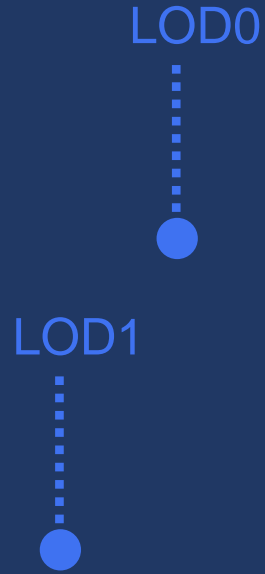
Layer Based





Digital Hub Data Case study (Jeonju city)

Project Location



LOD0 / LOD1

Project Location



전라북도
전주시



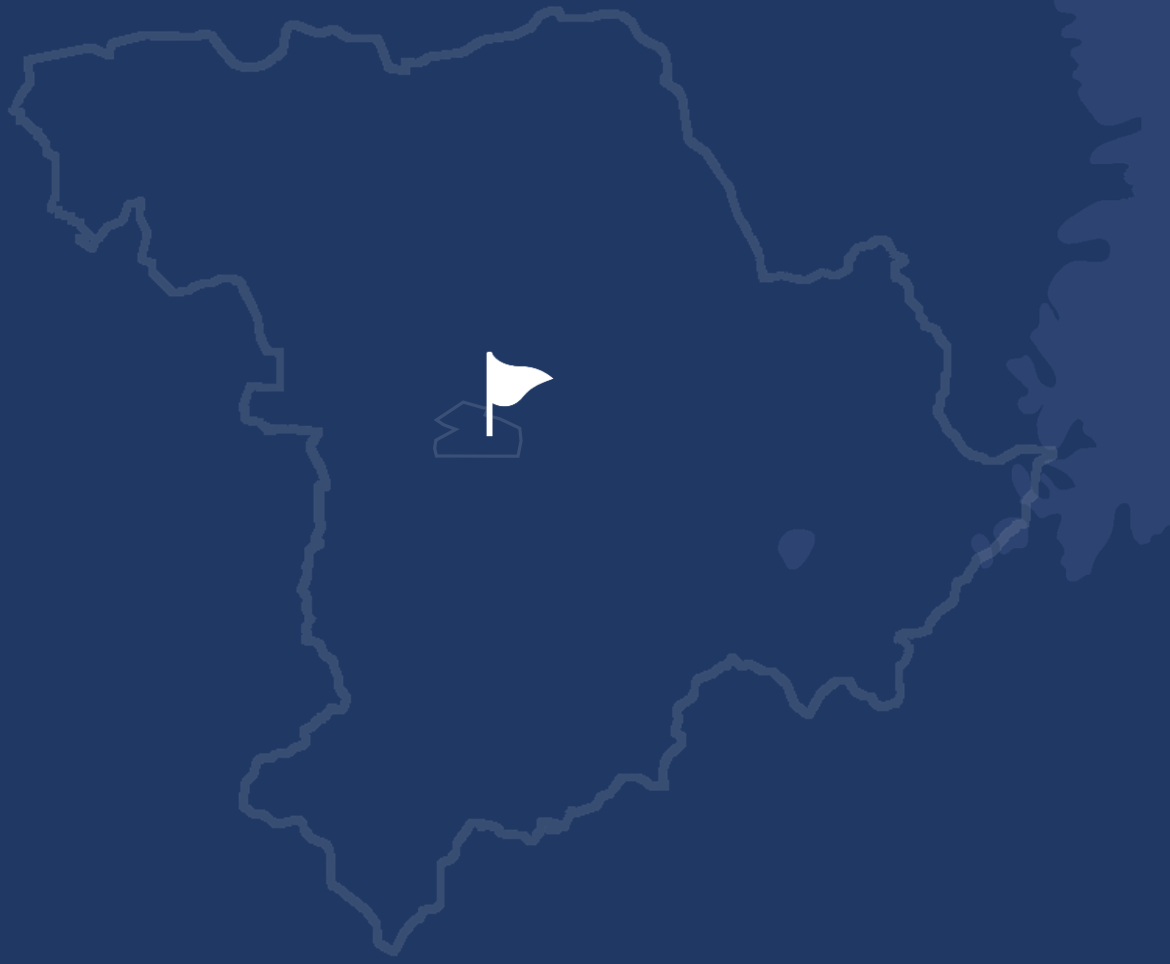
LOD2 / LOD3

Project Location

LOD2



LOD3



LOD2 / LOD3

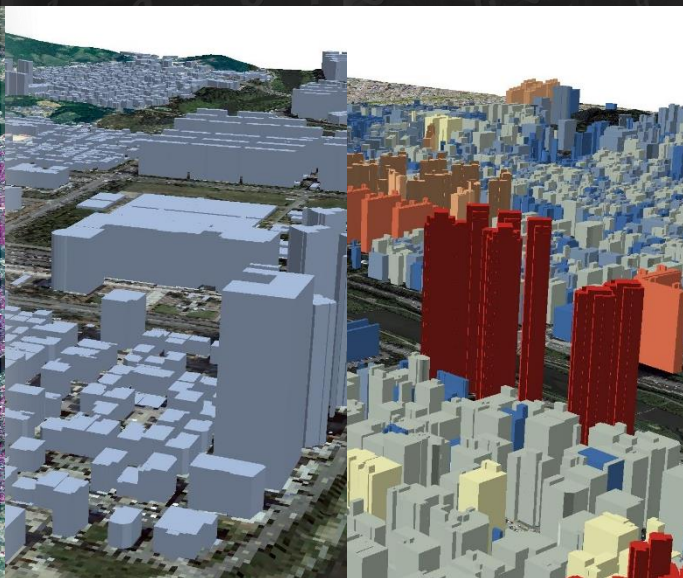
Project Location



LOD Level Of Detail



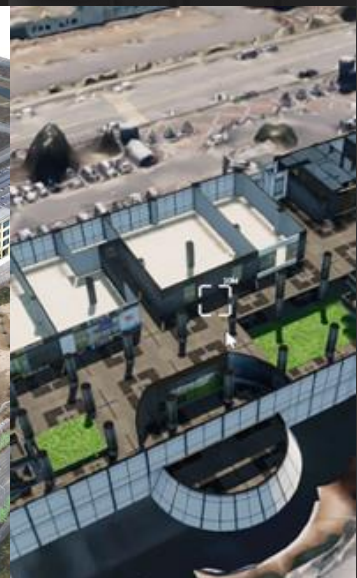
LOD 0



LOD 1



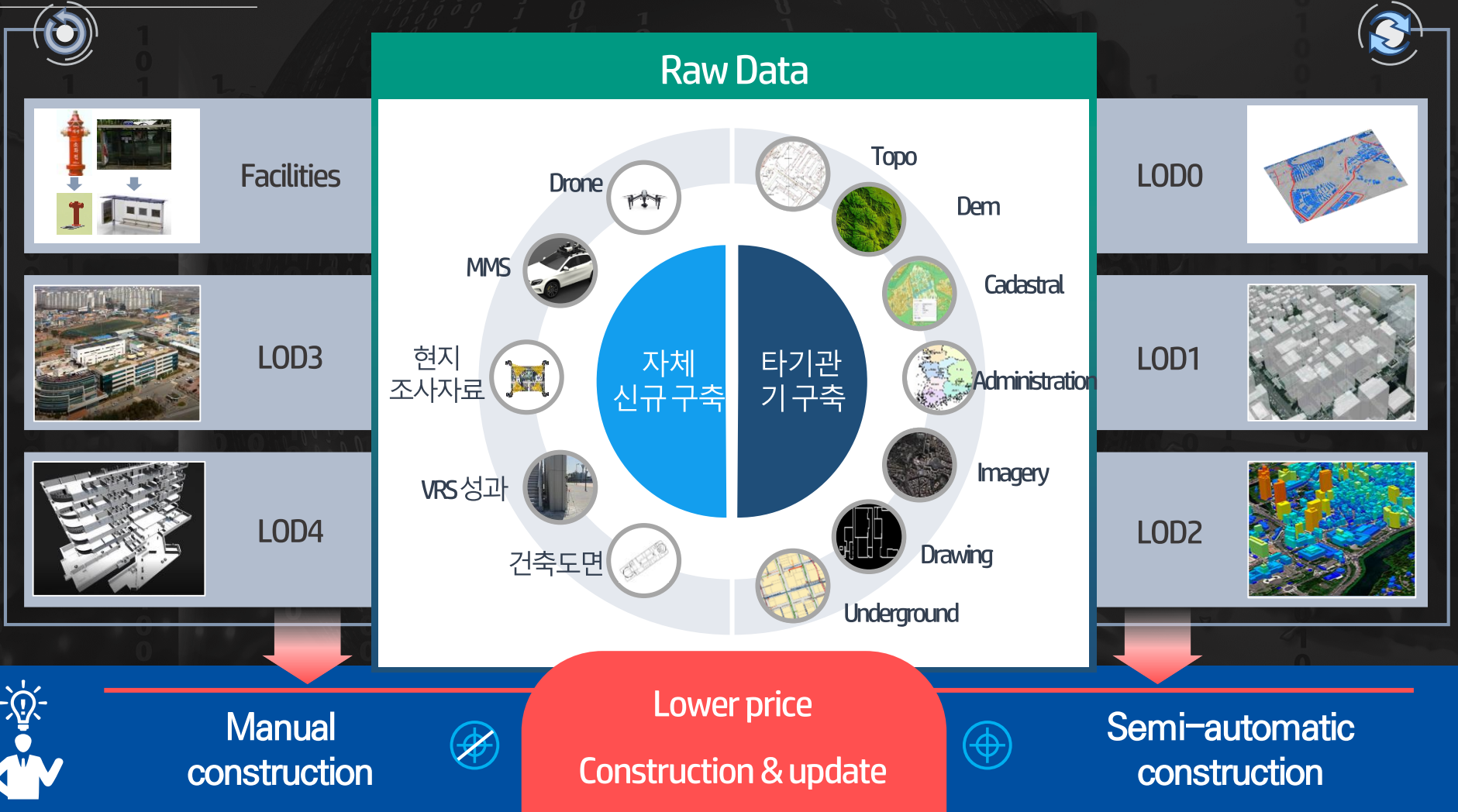
LOD 2



LOD 3

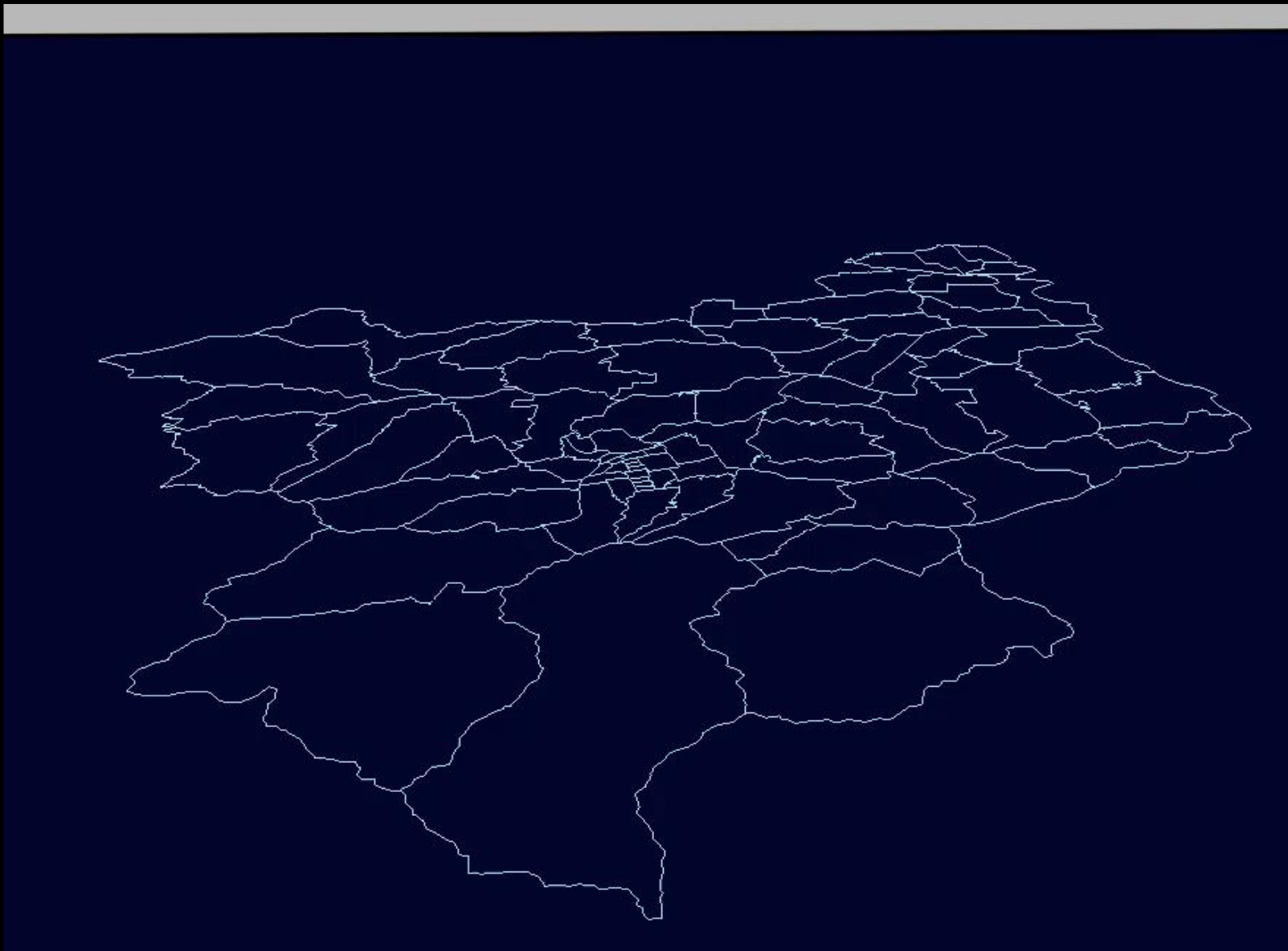
LOD 4

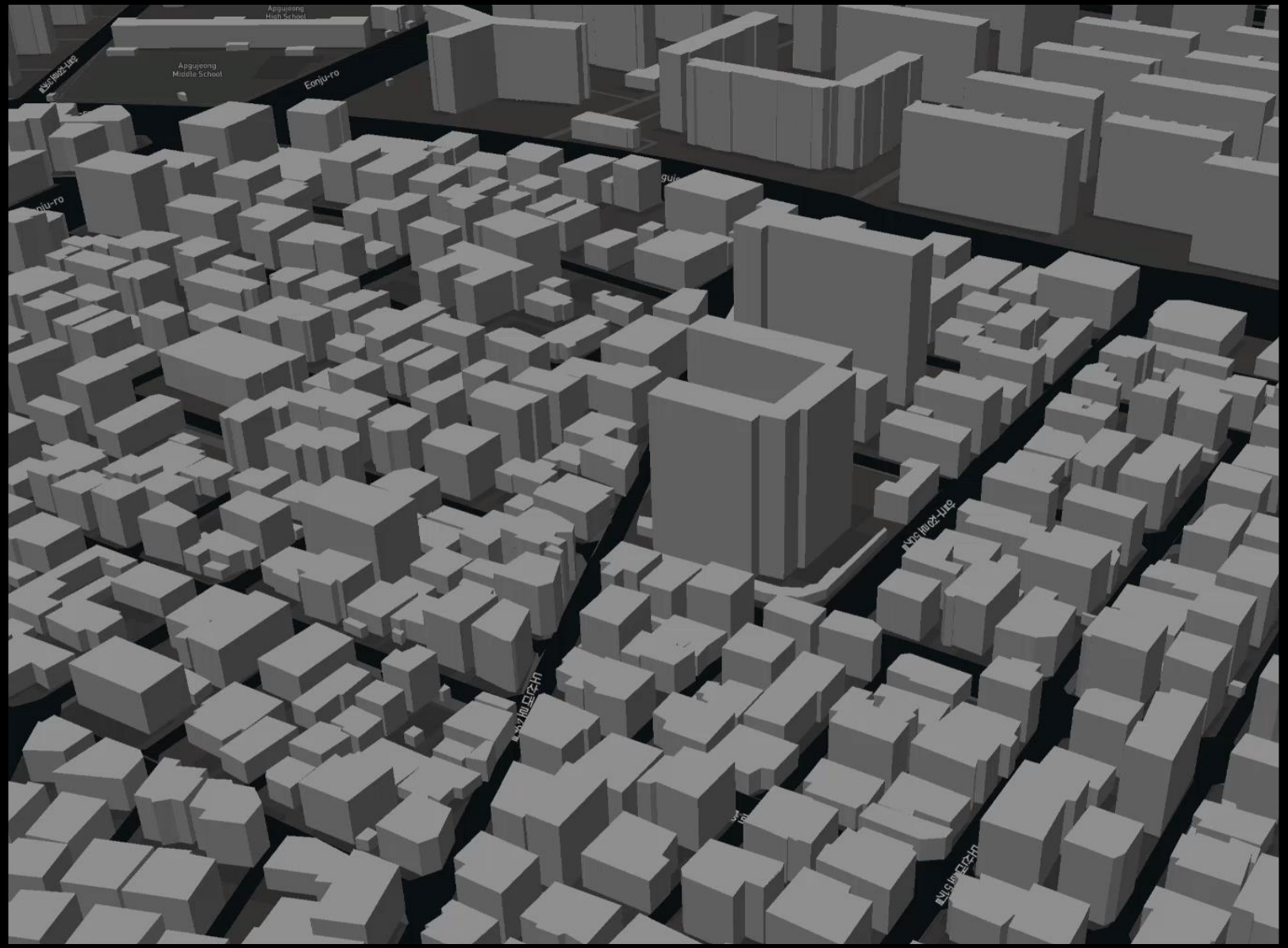
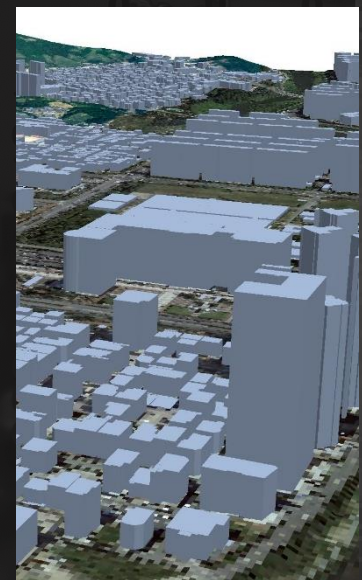
LOD Level Of Detail



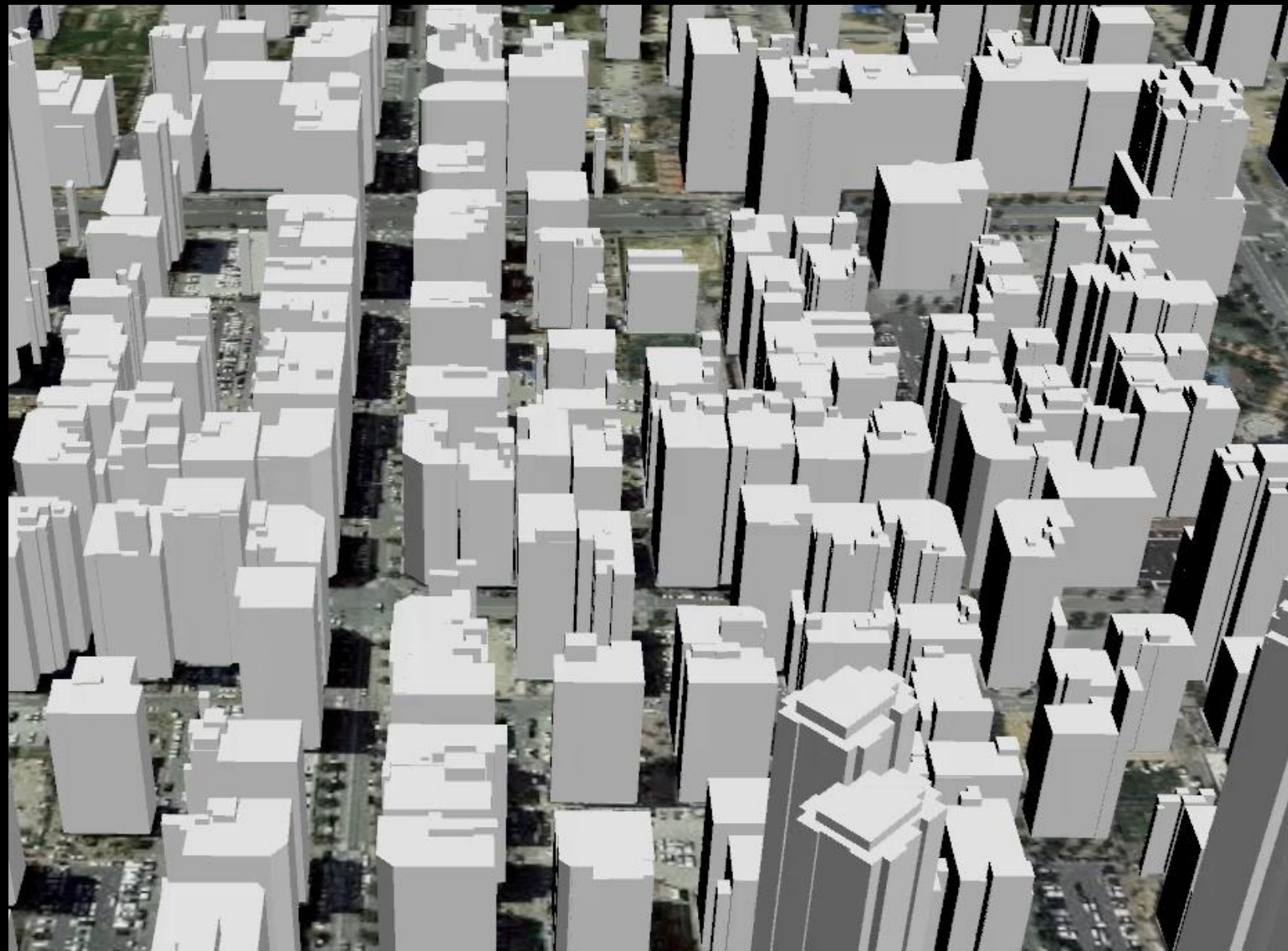
LOD Level Of D

LOD 0

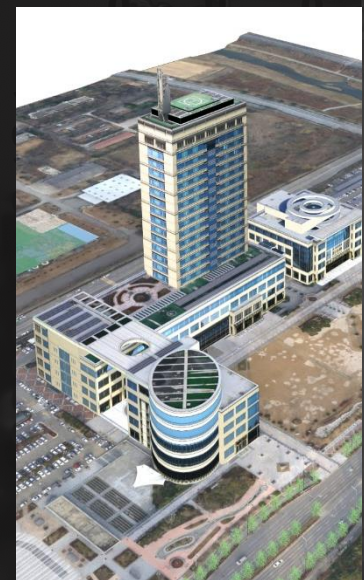




LOD 1

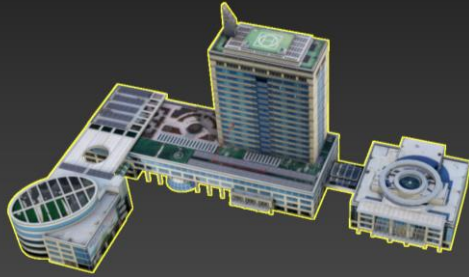


LOD 2

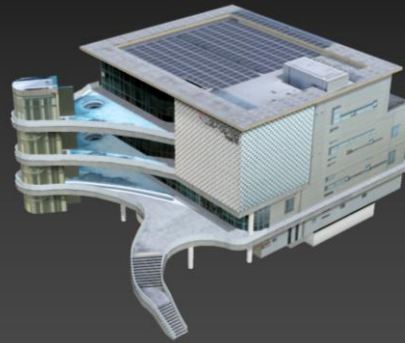


LOD 3

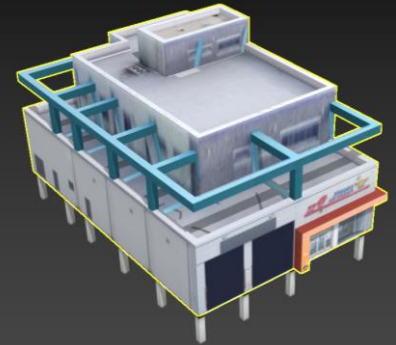
Province Office



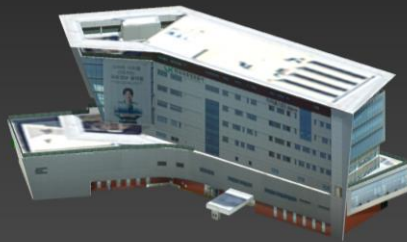
Library



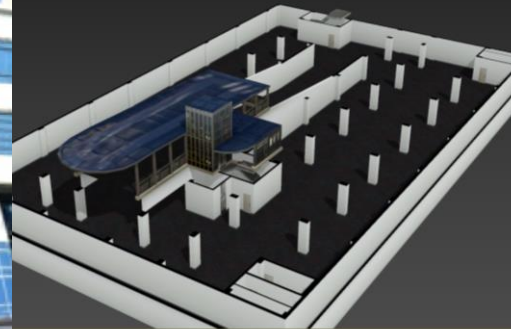
119 Safety Center



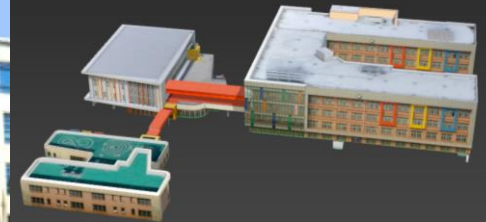
LX



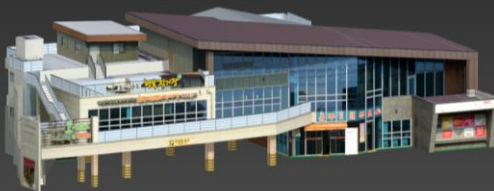
B-boy square



Elementary School



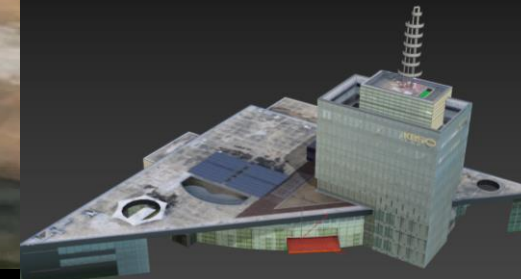
Local Food Market



Chamber of Commerce



KBS



LOD 4
3D Indoor

Facility (Bridge)



Facilities



Volunteered Data Update



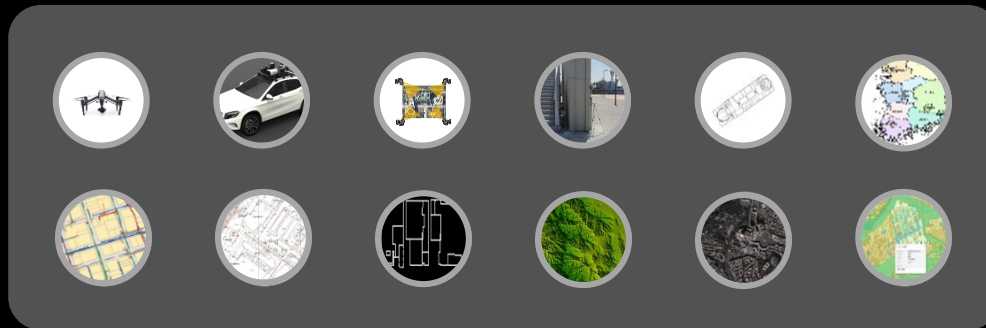
Volunteered Data Update



Digital Hub data update

TCS-BSE

Manual Construction



Semi-automatic Construction



Low Efficiency



High Efficiency



Digital Hub data update



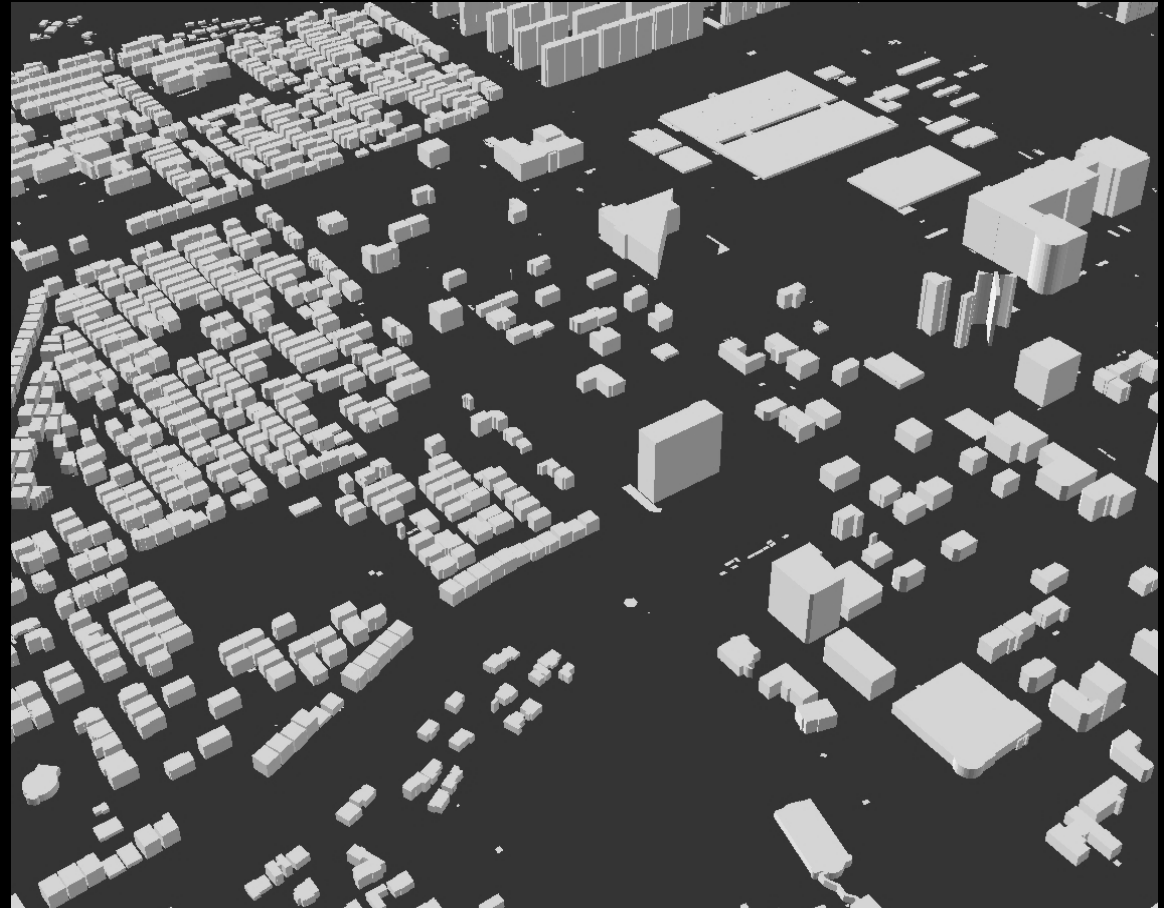
GeoServer



New Data

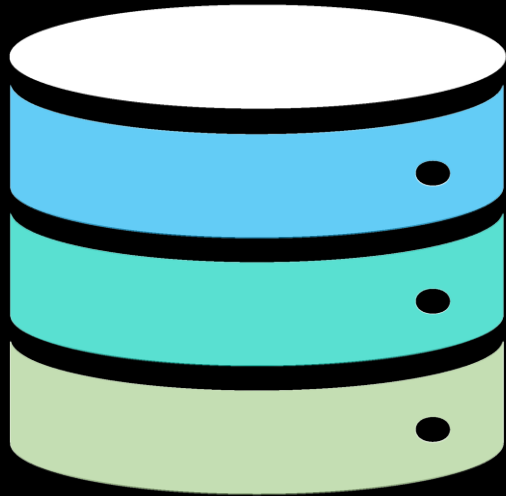
Replacement of simple
DB Update

2016's map





Administrator Data

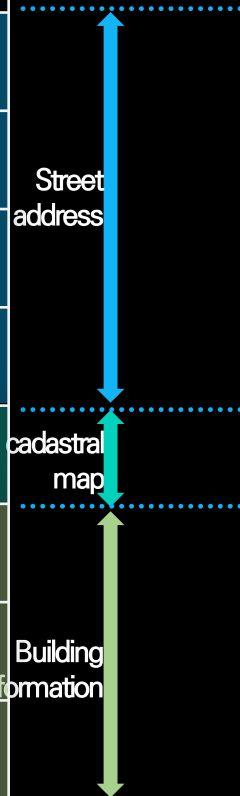


LOD Data



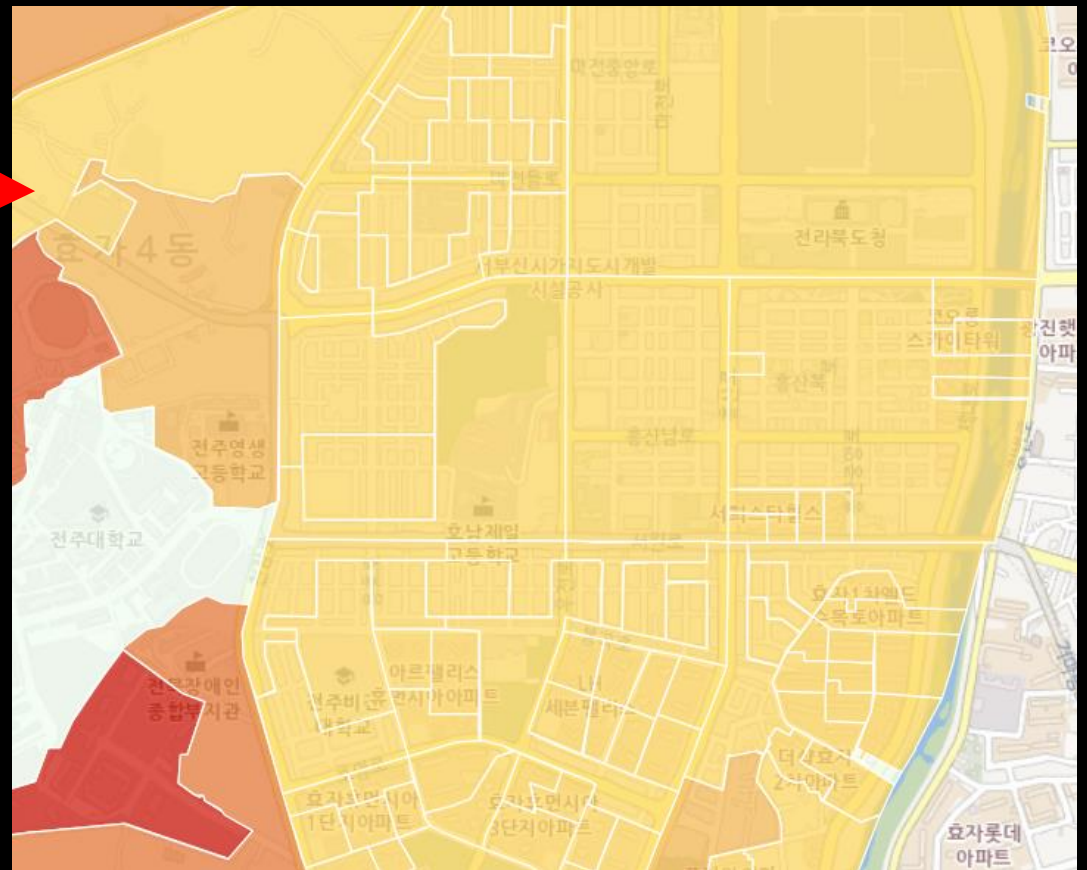
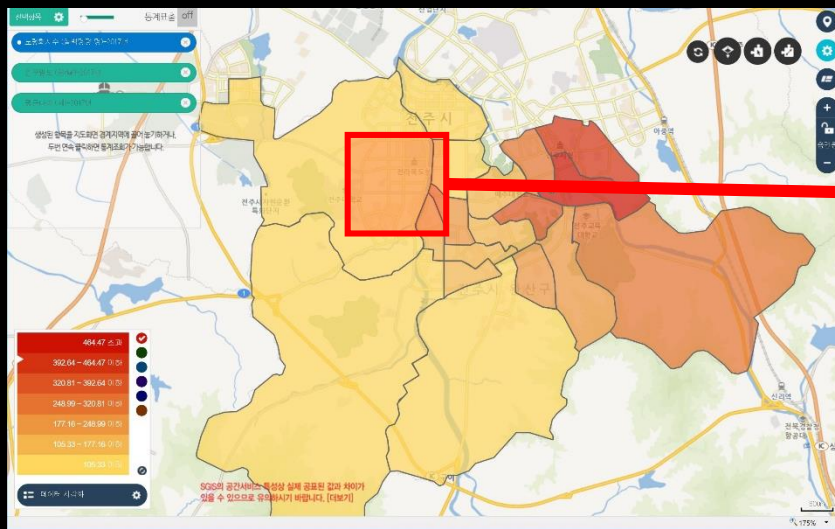
Administrator Data

No	ID	Name
1	Elevation	Height
2	Ele_Type	Type
3	AD_NGT_SN	Address
4	GRO_flo	Ground Floor Number
5	OS_BUL_NM	Building Name
6	UND_flo	Underground Floor Number
7	PNU	Parcel Number
8	UFID	Building No
9	JUSO	District
10	JIBUN	Number



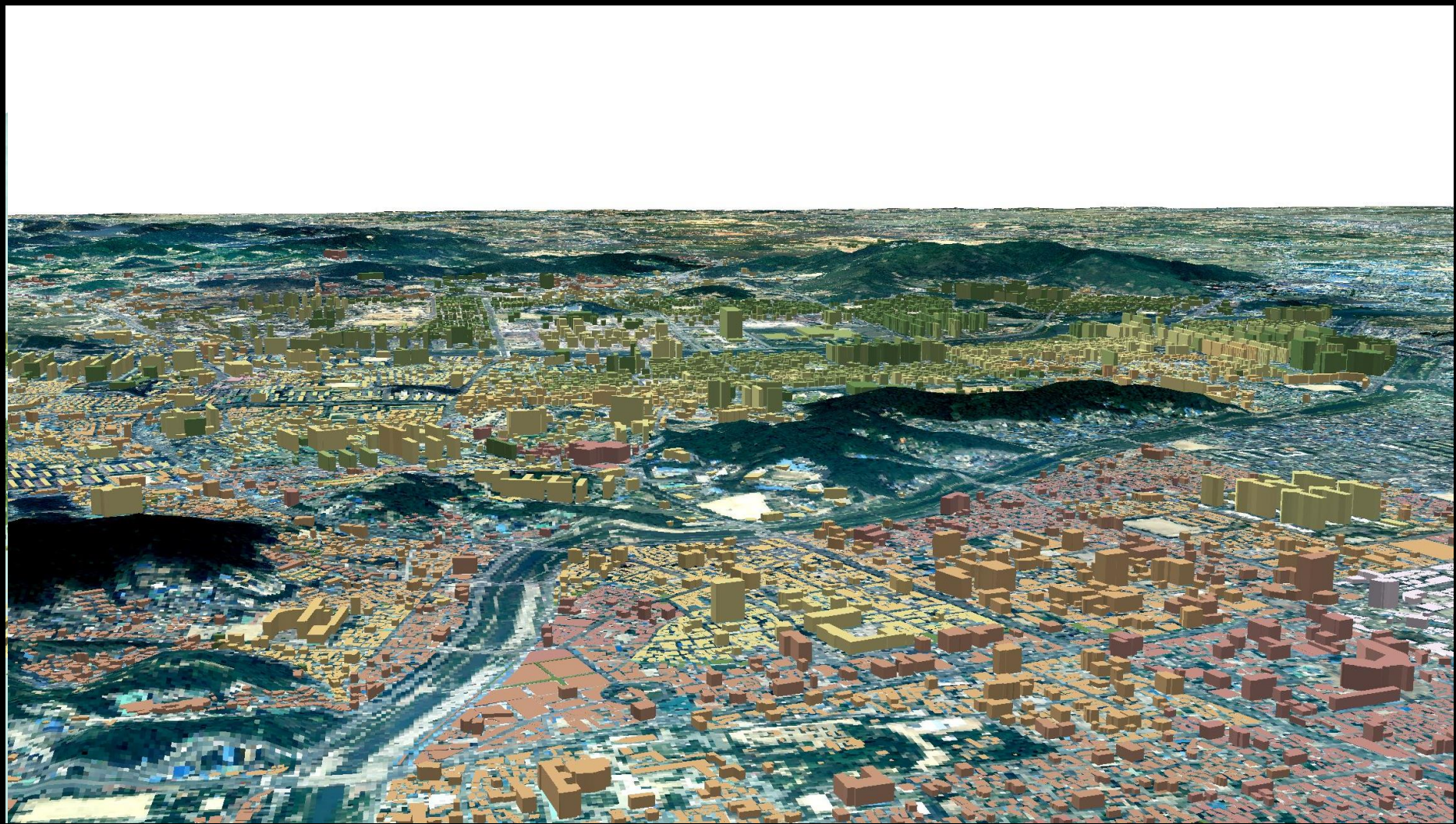
Aging statistics

Aging index by administrative area



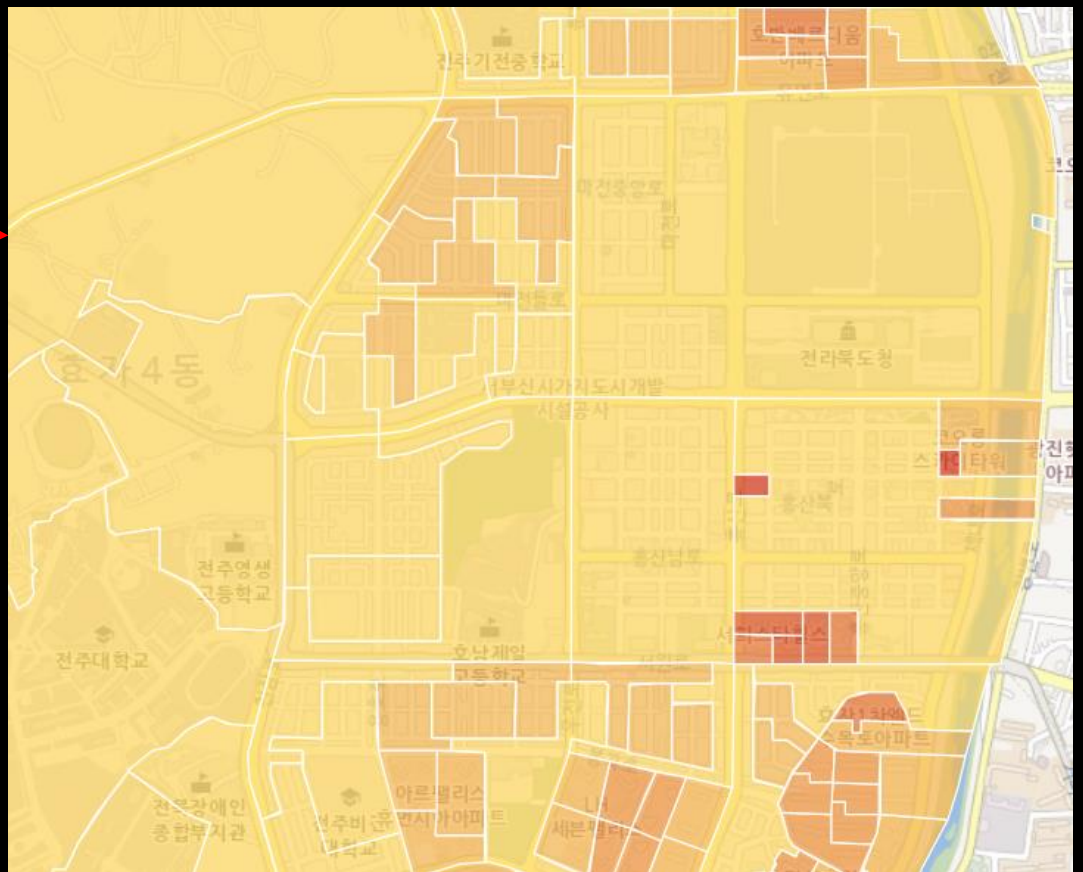
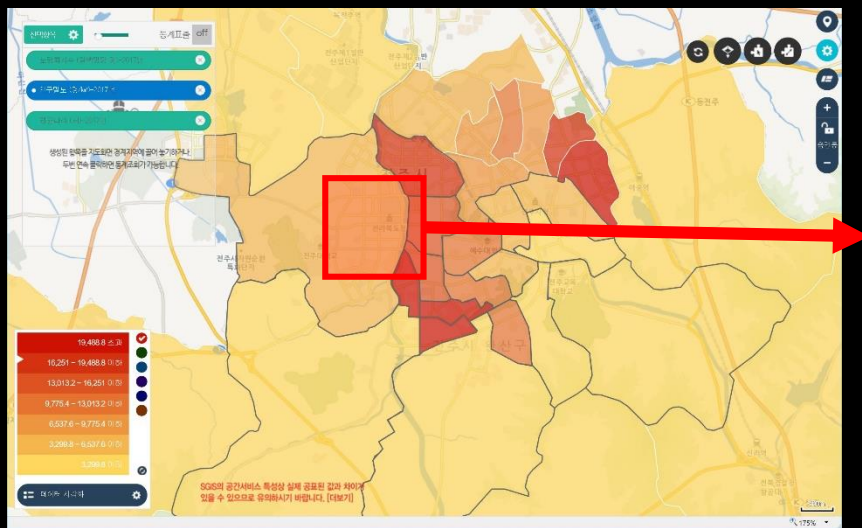
- ✓ Statistics gis
- ✓ Aging index
- ✓ Aggregate unit

Aging statistics – digital hub



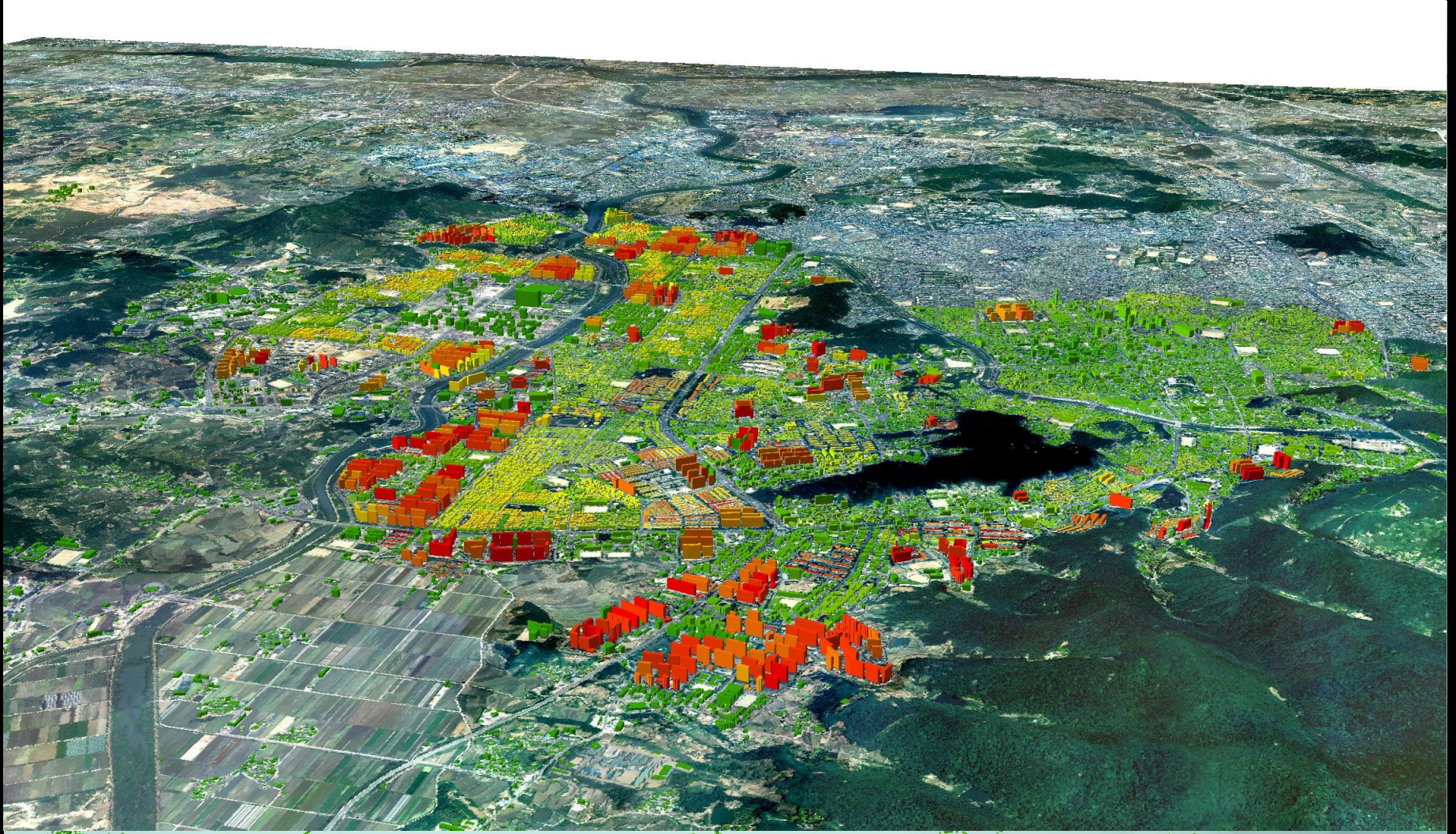
Population density

Population density by administrative area



- ✓ Statistics Korea
- ✓ Population density (km²)
- ✓ Aggregate unit

Population density – digital hub



Digital hub viewer



Thank you

Thank you



Q&A

Q & A