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SGIS service in Korea

1st UN Forum on Global Geospatial Information Management

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통계청
STATISTICS KOREA

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- **GIS in Censuses**

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- **Future of SGIS**

  * Reference Sites

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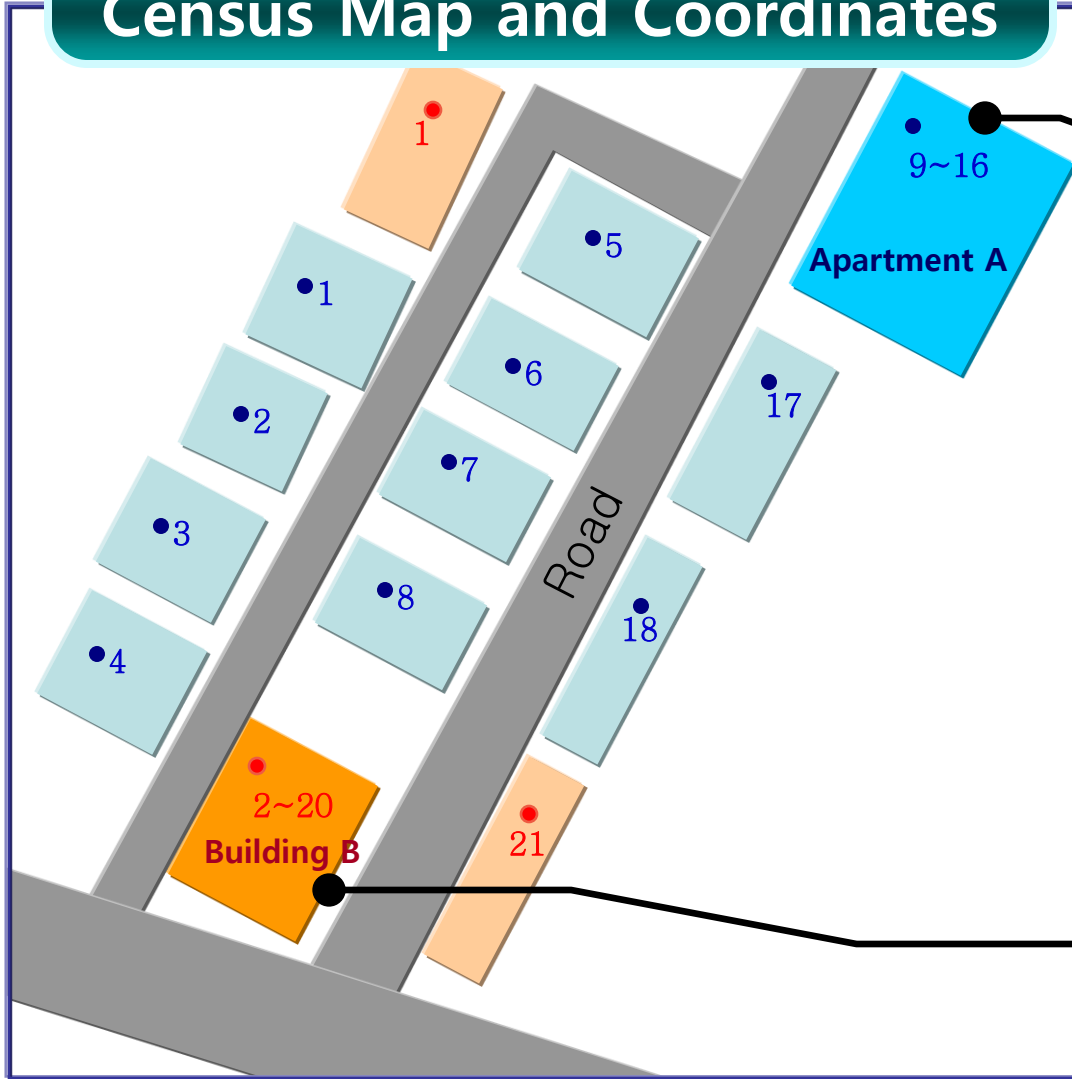STATISTICS KOREA

- **Establishing Eds and Boundaries**
  - for efficient data capture in censuses

- **Data Services on Census Maps**
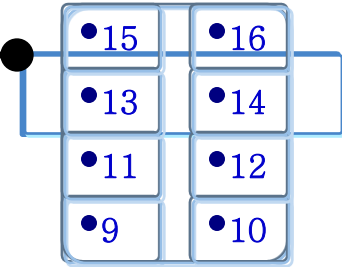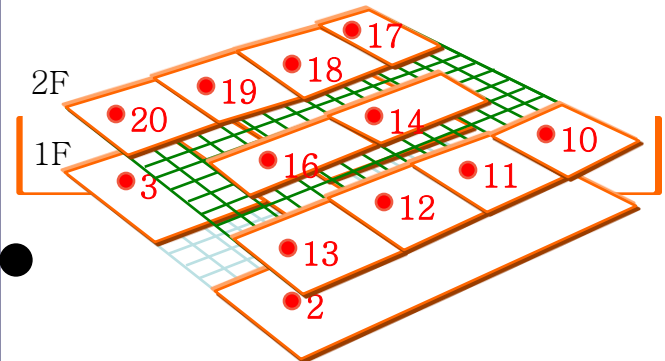 - by nationwide statistical areas such as census blocks, tracts, and hierarchical administrative boundaries
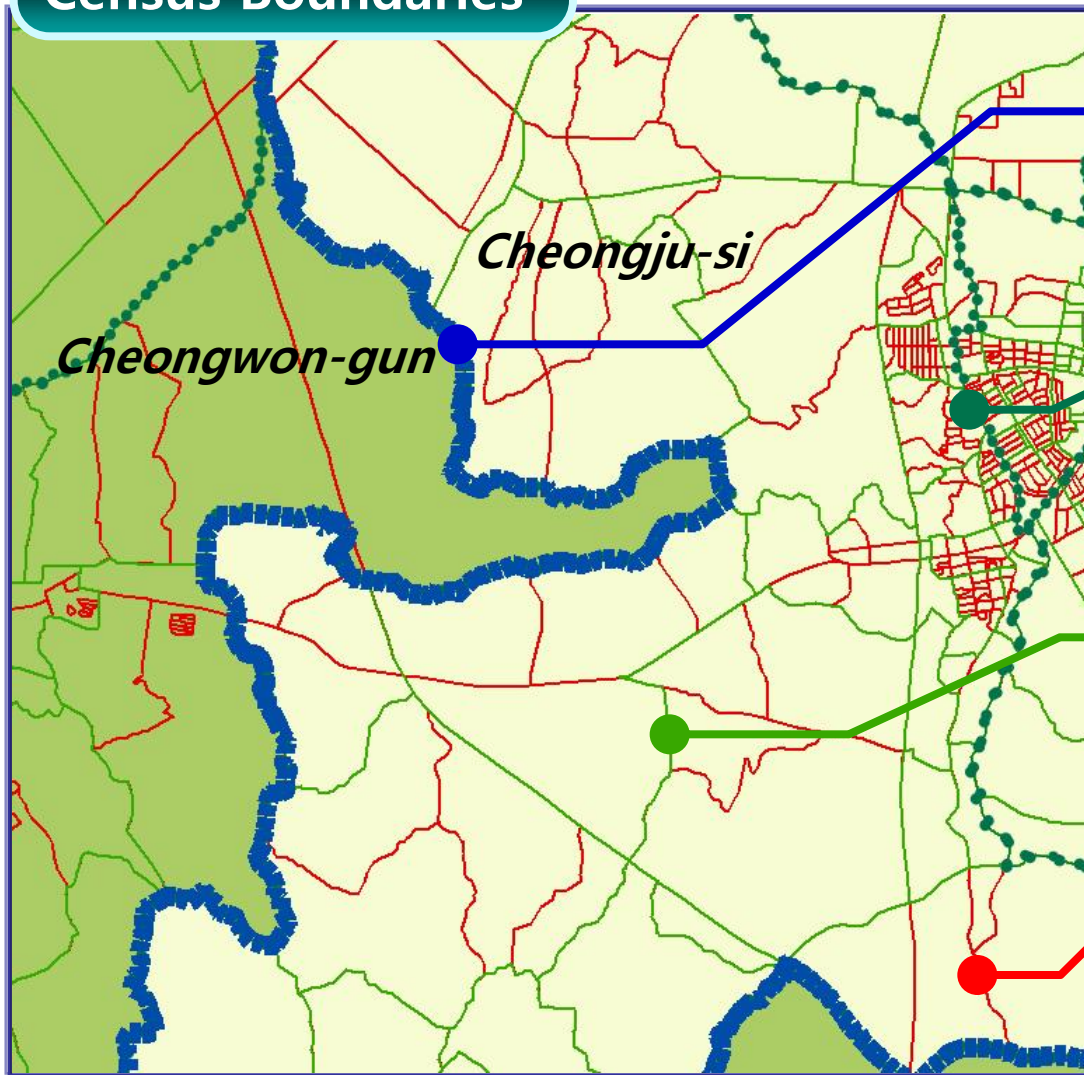
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GIS in Censuses

Census Map and Coordinates

（**Apartment A**）

Apartment A

15	16
13	14
11	12
9	10

9~16

1

5

1

6

2

7

17

3

8

18

Road

2~20

Building B

21

4

（**Building B**

17

2F

18

19

20

1F

14

3

16

10

11

12

13

2

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GIS in Censuses

Census Boundaries

Cheongju-si

Cheongwon-gun

Statistical Areas and Administrative Boundaries

Whole Country

Si-Do

Si-Gun-Gu

Dong-Eup-Myeon

Tong-Ri

UAs

CMAs

MAs

Open Areas For longform data

Open Areas For Shortform data

Basic Unit Areas

GRIDs

School Districs

Railway Station Spheres

Police Jurisdictions

Administrative Boundaries

Statistical Areas

Applied Areas

GIS in Censuses
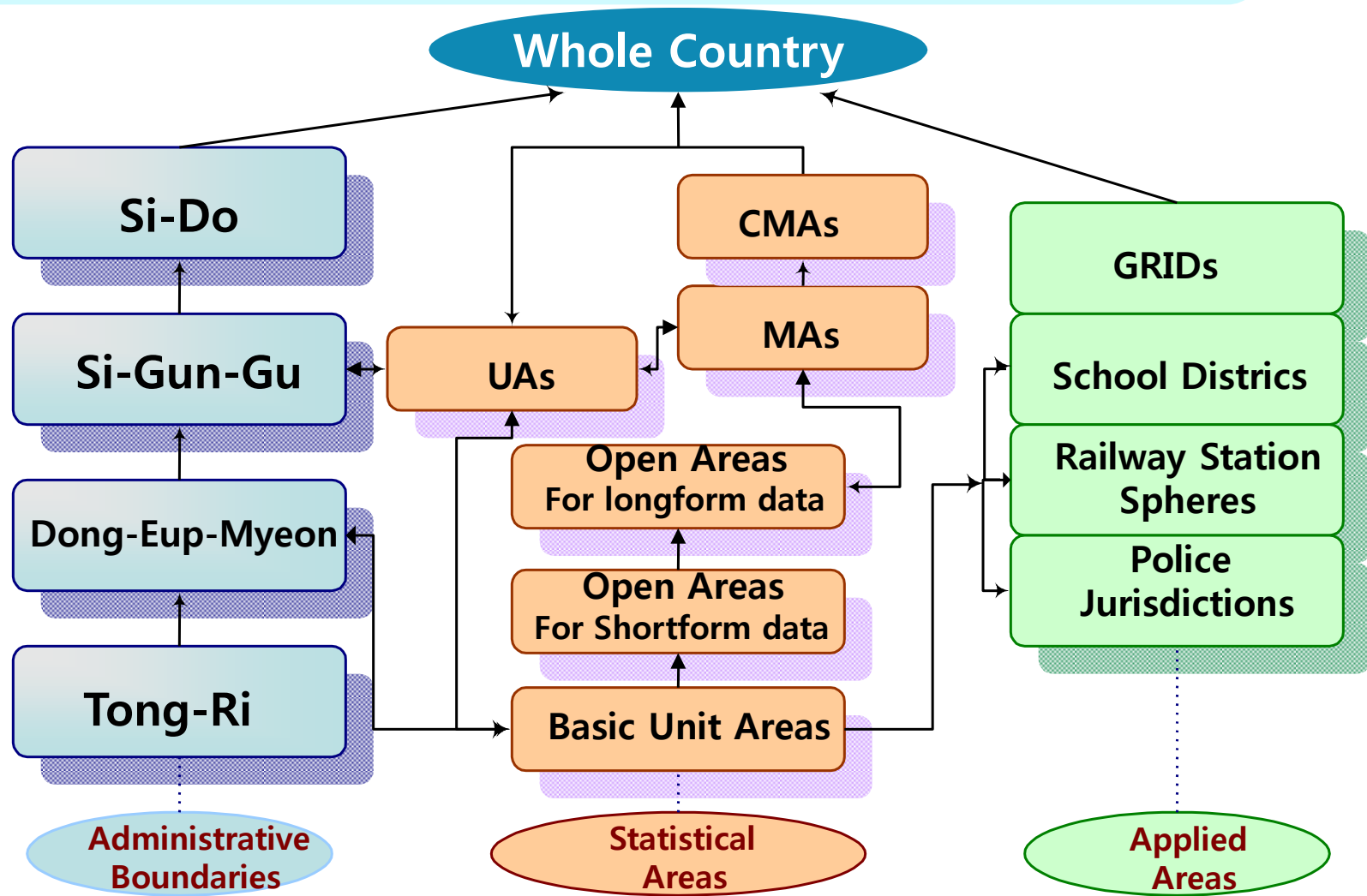
Census individual data

Population and Housing Census

Personal: name, sex, age, education, religion, marital status, commutation, economic activities, ...
Household: household type, occupancy period, ...
Housing: type, size, height, construction year, ...

Census on Establishments

Name, established years, organization type, employees, industry classification, ...

+

Coordinate

Residence 005

name	sex	age	edu'n	rel'n	...	h'hold	...	h'sing	...
김막동	남	35	대졸	없음	...	...	...	...	...
이영에	남	32	...	기독교	...	...	...	...	...
김 솔	여	9	...	...	...	...	...	...	...
김 훈	남	6	...	...	...	...	...	...	...

Establishment 002

name	year	chang	owner	type	...	sales	...	empl	...
희망분식	03	존속	개인	분식집	...	5천만	...	2	...

Enumeration Districts

Floor maps for establishments census

SGIS services of Stat Korea
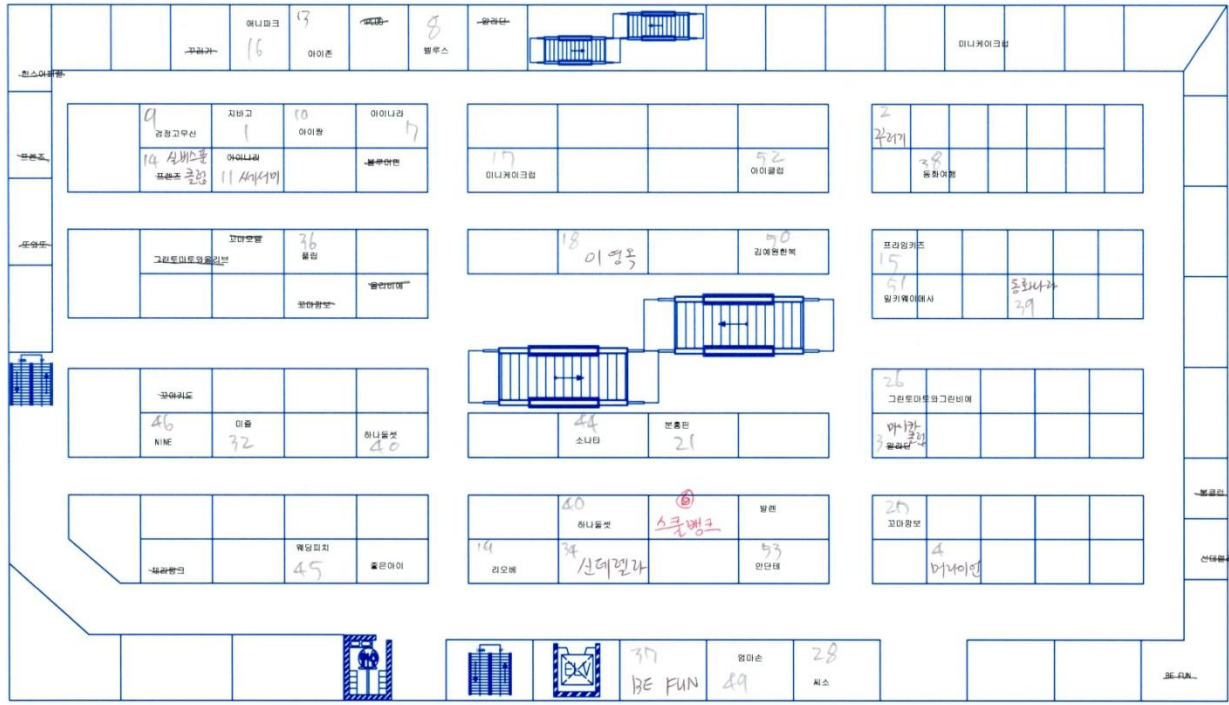
Geo-Statistical Information Services on a Census Map

- Visualizing statistical information at neighborhood level

Statistical Information

+

Census Map

→
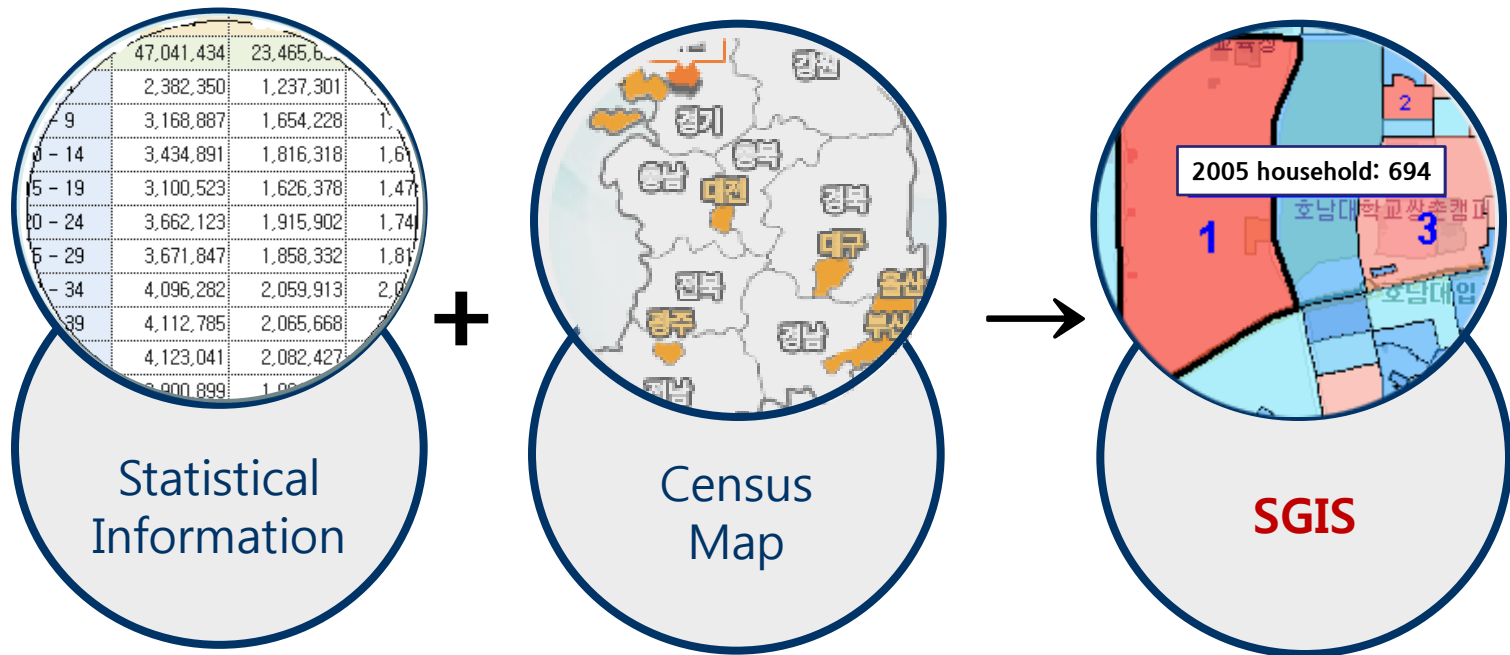
SGIS

SGIS services of Stat Korea

Web Page : http://sgis.kostat.go.kr

SGIS services of Stat Korea

Family of Statistics Navigator

Statistics Navigator

- Finding New Neighbor
- Supporting Aging Policy
- Moving Population Pyramid
- Surname Distribution
- Experiencing Statistical Maps
- Monthly SGIS
- Changing Localities
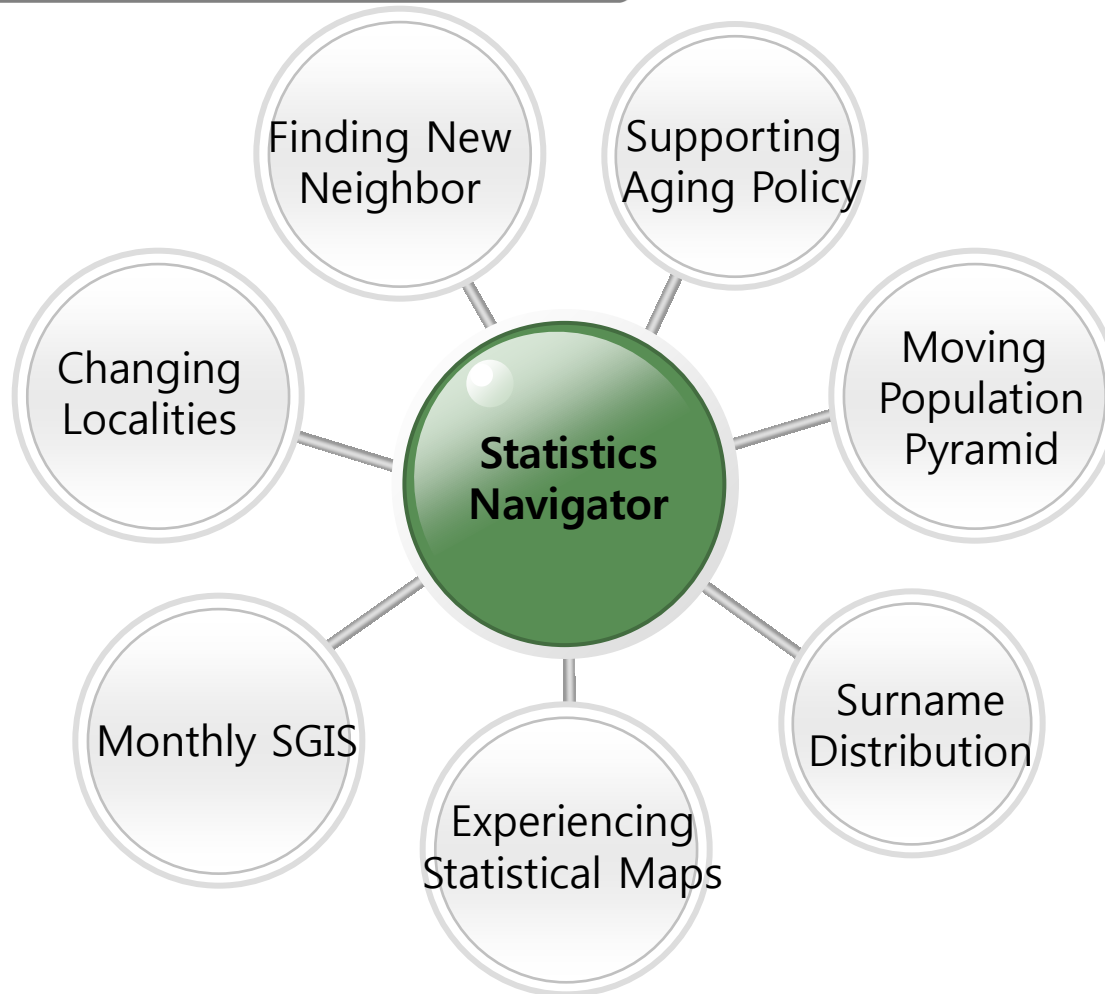
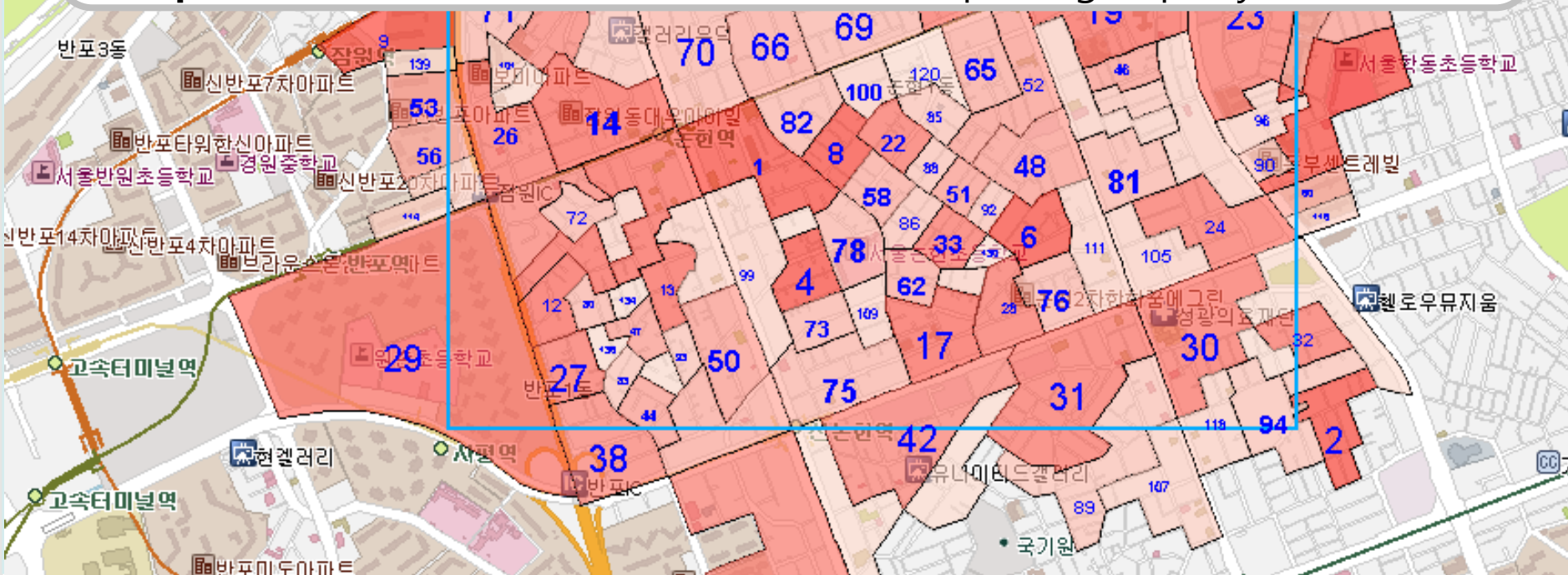# SGIS services of Stat Korea

Statistics Navigator

Small Area Geo-Statistical Information Service System based on
the point information of 13 million Residences and 3.5 million Establishments
 - **Open Areas**: about 1/30 in size of a Township(Dong-Eup-Myeon)

STATISTICS KOREA

Utilization of SGIS in Korea

KoROAD's TAAS

The Korea Road Traffic Authority

Traffic Accident Analysis System

Utilization of SGIS in Korea

Seoul Metro City's UIS

http://stat.seoul.go.kr

Densi

Custo

Extraction for New Customers

Legend:
- 0~160
- 160-300
- 300~470
- 470~1400

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A GIS Consulting Service
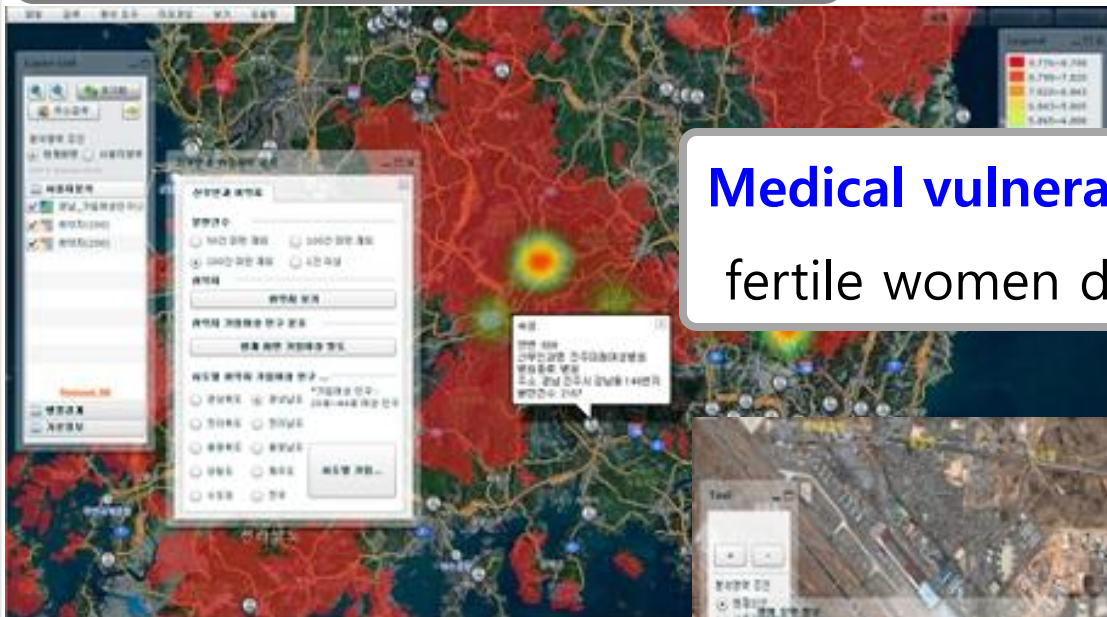
Medical vulnerable areas

fertile women density and maternity hospitals

Marketability analysis

demographic/housing factor and sales

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Future of SGIS
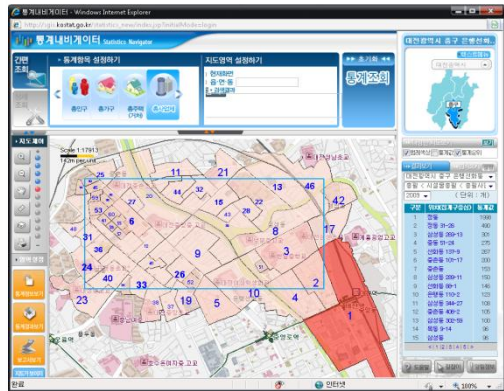
Geo-Statistical Knowledge System as a Platform

- Interoperability with the official map and major service maps

- Open API services enabling mash-up with external geo-data

- Developing problem-solving models
  and interactive & community mapping solutions

- Mobile services

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Future of SGIS

**Potential Landslide Monitoring
System - KFS**
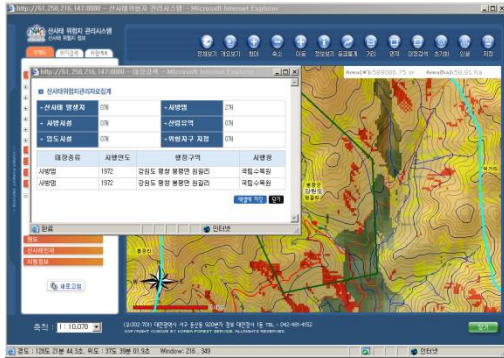
SGIS

- **Potential Landslide sites**
- **Reconversion Priorities**
- **Evacuation- Handicapped,
  infirm, elderly**

Population

- **1,750 by 300 households**
  - Apt 210 / Multiplex 46 / detached 44
  - owned 105 / lease 67/ monthley rent 28
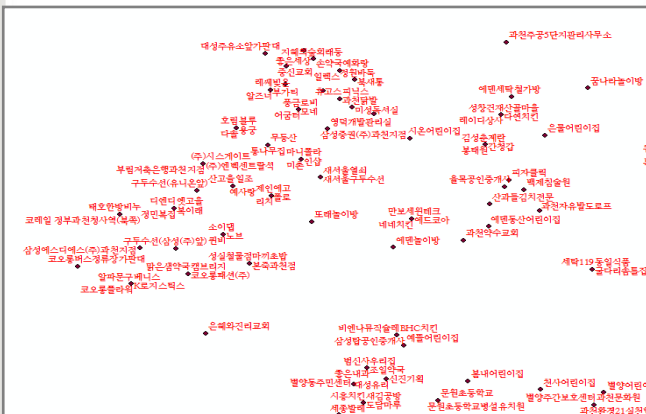 - adolenscent 135 / adult 137명 / over 65 238명

Business

- **25 companies**
  - 1,500 employees: eatery, accommodations /
                 banks/public offices/manufacturer / …
  - damage estimate : turnover x reconversion period

Future of SGIS

Internet portals, Navigation Business by private sector

SGIS – Establishments Information

Yearly Nationwide 3,600,000 sites (for 10 yrs)

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Thank you

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