Ministry of
the Interior and Safety

AN INTRODUCTION TO THE IMPLEMENTATION PROCESS AND RESULTS OF THE ADDRESS SYSTEM IN S.KOREA

2019. 8

Contents

01 BACKGROUND

Need

A need for an enhanced address system that is suitable fo

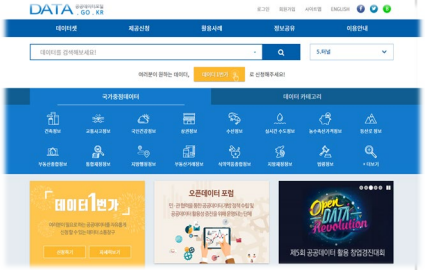
- (Compact City, 3D Development) Trend of Compact and 3D Urban Structure(Overpass, high rise building)

- (Require address representation for non-building facilities) An uncomfortable area because the address is not clear(**Earthquake evacuation zone**, Park, Campground)

the delivery of food in the park

Increased demand for address infrastructure

- (Rising industrial demand and Creating a new industry) Industry demand to use addresses as location identifiers is increasing, but there is a limit to the current address system.
  * 65.8% of public data uses address data



- (Increased use of address information) The use of a basic map of street name addresses is increasing.

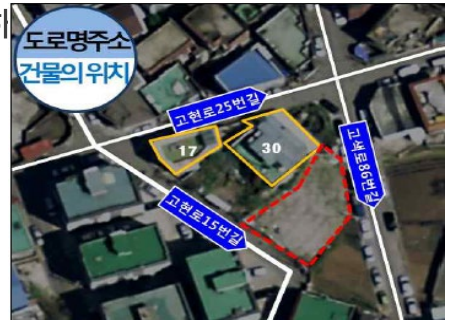
ITEMS	TOTAL	OPEN API	ADDRESS SEARCH SOLUTION	Administrative Information Cooperation Center
Number of associated agencies	25,969	25,121	765	83

01 BACKGROUND

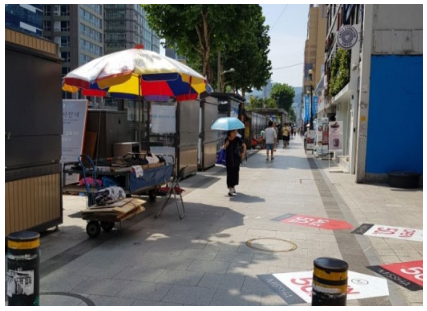
Current Status and Problems

Limitations of address on entire country

- (Open space without building) Only building has the address in current Road Address Act, So there are no address in open space.

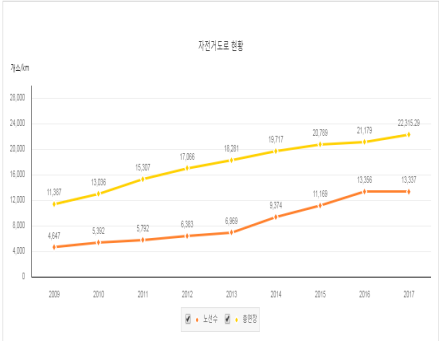


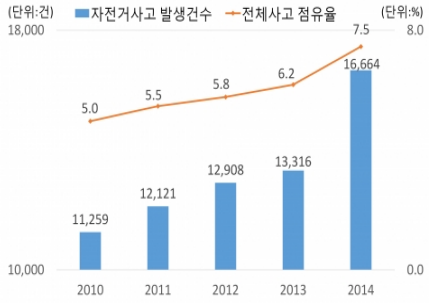
- (Temporary Facility without address) There are difficulties in economic activities, such as away from the traditional market without an address.



limitations of not being able to handle the changing lives of the people

- (Bicycle path and trails no address reference system) Safety accidents on bicycle paths and trails are increasing.





- (Hard-to-guide outdoor activities) There is no address at the outdoor concert hall and stadium.

02 Policy process for object address system

(2017.11.27.) Included in the Ministry of Government Administration and Home Affairs' Top 3 Innovative Growth Industries

(2017.12.27.) Included in the Government's Economic Policy Direction

Public Discussion on the Necessity of Address-Based Industry

A Report on the Policy of Enhancing the Address System and Creating a New Growth Industry Based on the Address

Advance the address system and implement the creation of innovative growth industries

(2017.2.17.) discuss the creation of a fourth industrial revolution base on address information

(2017.3.24.) Public-private partnership discussions attended by experts and practitioners

(2017.6.23) A Study on the Improvement of Address System and Mid-to Long-Term Development Strategies preparatory research

(2017.12.18.) Policy Proposal for Creating an Address-Based Industry

(2018.6.18.) A Study on the Improvement of the Address System to Support the Innovation and Growth Industry Based on the Address-based System

(2018.9.) Launching a pilot project to upgrade the address system

03 Performance of implementing the object address system

Defining the object address ➧ a location identifier assigned to an object

Prioritizing the assignment of address to objects

✓ An object needed in case of disaster

Earthquake evacuation zone

✓ a place of high use

* electric vehicle charging station

The way to express object address

✓ The component of object address

component	example
Administrative name	Jincheon-eup, Jincheon-gun, Chungcheongbuk-do
Road name	Munwha7gil
Object number	7-3
Object type	The park in the riverside
name	Baekgokcheon public Parking Lot

Installation the object address nameplate

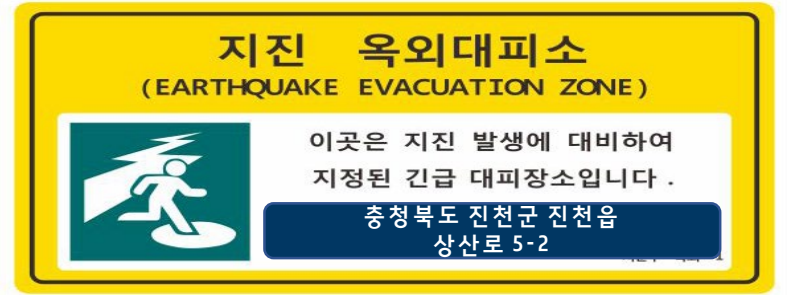
Object address plate(ex)

- Installation at the front and rear gates

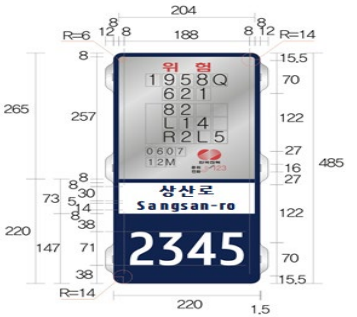
- installing on the front of an object

Replace existing facility nameplates

- State the name of the road and the base number on the lower part of the existing facility nameplate of the existing facility



- Replace identification code by using road name and base number



03 Performance of implementing the object address system

The selected object

items	facility(3type)	Object (15type)	place(16type)
Disaster Safety	• forest fire monitoring booth • Movement control booth	• Recue box • emergency water supply facility	• Earthquake evacuation zone • Tsunami evacuation zone • Parking lot in the riverside
Economic Industry	• solar power generation station	• electric charging station • Public wifi spot	• Business area for food truck • Delivery site for drone • Delivery site for droide
Road network Transfortation	-	• Downtown Bus stop • intercity bus stop • Tax stop • Rest area for sleepiness • pedestrian overpass lift	• Parking lot in the wayside • Public parking lot
Life Leisure	-	• recycling bin • Bicycle station • asynchronous transfer mode • Fountain	• Small size park • Swimming pool outside • campground • Fishing ground • ecological park • Complex sport stadium • Playground
Culture Sighting	-	• Monument • Cliff hanging training site	• Outside concert hall

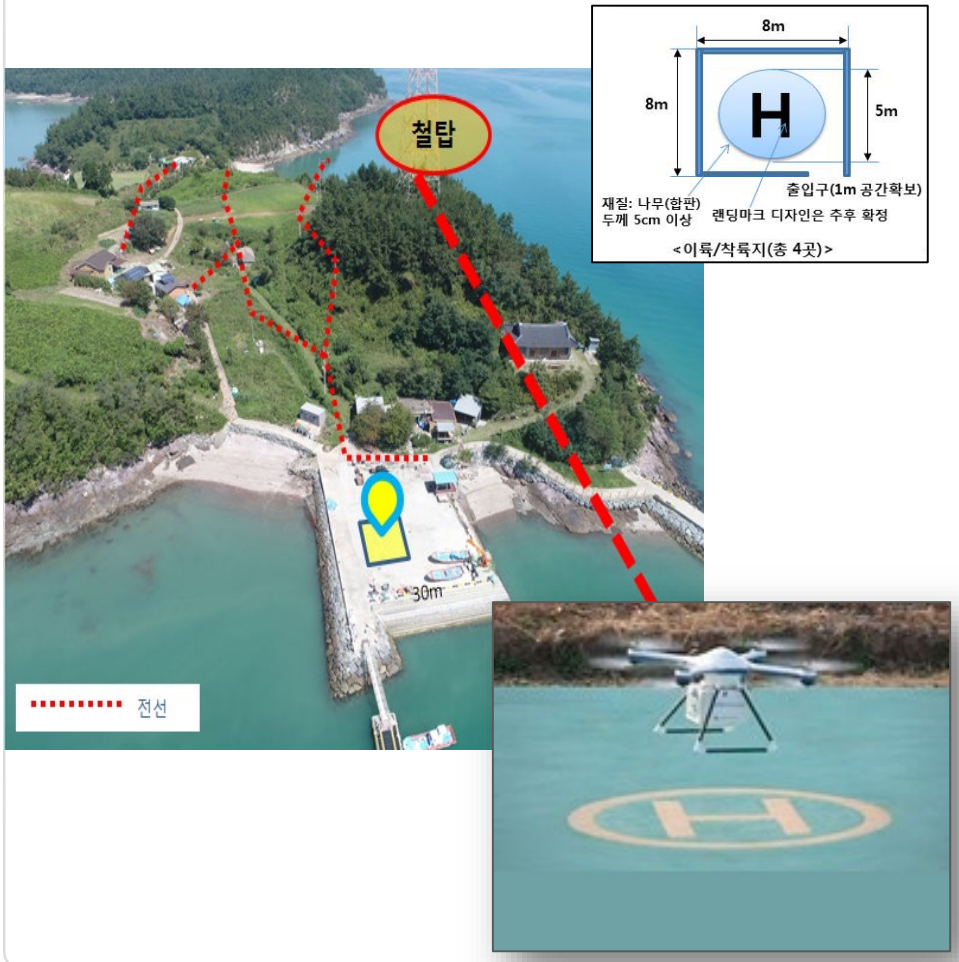
04 Pilot project

pedestrian overpass lift

Street store

Street store		example
feature shape	main entrance	
polygon	point	

Delivery site for drone



Earthquake evacuation zone

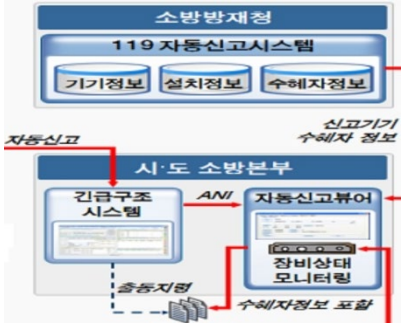
Shelter for earthquake		Example
Feature shape	polygon	
Entrance	point	
Center point	point	

05 Utilization model

Automatic sending of object addresses through location notification

Status

Improvement Plan (Example)



Ease management through a consistent object address system

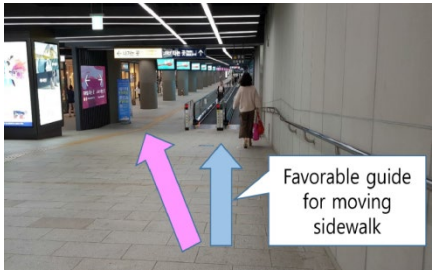
Status

Improvement Plan (Example)

A guide to the shortest walking path for the traffic-impaired.

Road guide

Favorable guide for moving sidewolk

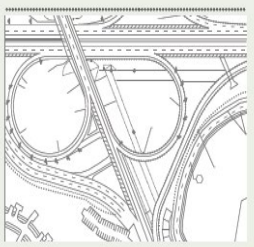


Expression the Object Addresses on a Precision Map for Autonomous Driving

IoT시설물 지도

지형지물 지도

정밀도로지도



06 Expected Effects

Effects

"Economic effect of 405 billion won over 10 years.

+ Economic ripple effects such as creating new jobs"

disaster safety field

- Reducing the cost of damage due to the reduction of the time required to respond to location services for disaster sites

4.4 billion a year

– increasing damage when response time increase by one minute X emergency response save time X disaster move number(an annual average)

regional economic revitalization field

- Economic Performance of Mobile Smart Town Service Reducing Public Relations Costs

24 billion a year

– Number of store * the cost of advertising

venue management field

- Economic Performance of Location-Based Services for Safety and Facility Management of crowded Places

12.1 billion a year

– Number of service expansion X System Deployment Costs