

Seoul Open Data Plaza White Paper



<https://data.seoul.go.kr>

Introducing Seoul Open Data Plaza (data.seoul.go.kr).

We asked ourselves:

How can we deliver the public data that citizens want, easily, quickly, and accurately?

That is why we opened the Open Data Plaza.

Now, you can search, view, and use as much data and information as you need.

Seoul, committed to the principles of openness, sharing, and communication, will work together with citizens to complete a new model of public data services that will contribute to creating diverse business opportunities and fostering the IT content industry.



Open, Contain, Gather, Expand



Open

- 005 What is the Open Data Plaza?
- 012 How did the Open Data Plaza begin?
- 016 This is How Seoul Open Data Plaza Was Opened!



Contain / Data

- 027 What is contained in the Open Data Plaza?
- 032 How to use the Open Data Plaza effectively



Gather / Plaza

040 What is happening at Open Data Plaza?

044 Where is public data being used?



Expand / Plaza

056 Seoul Data Hub

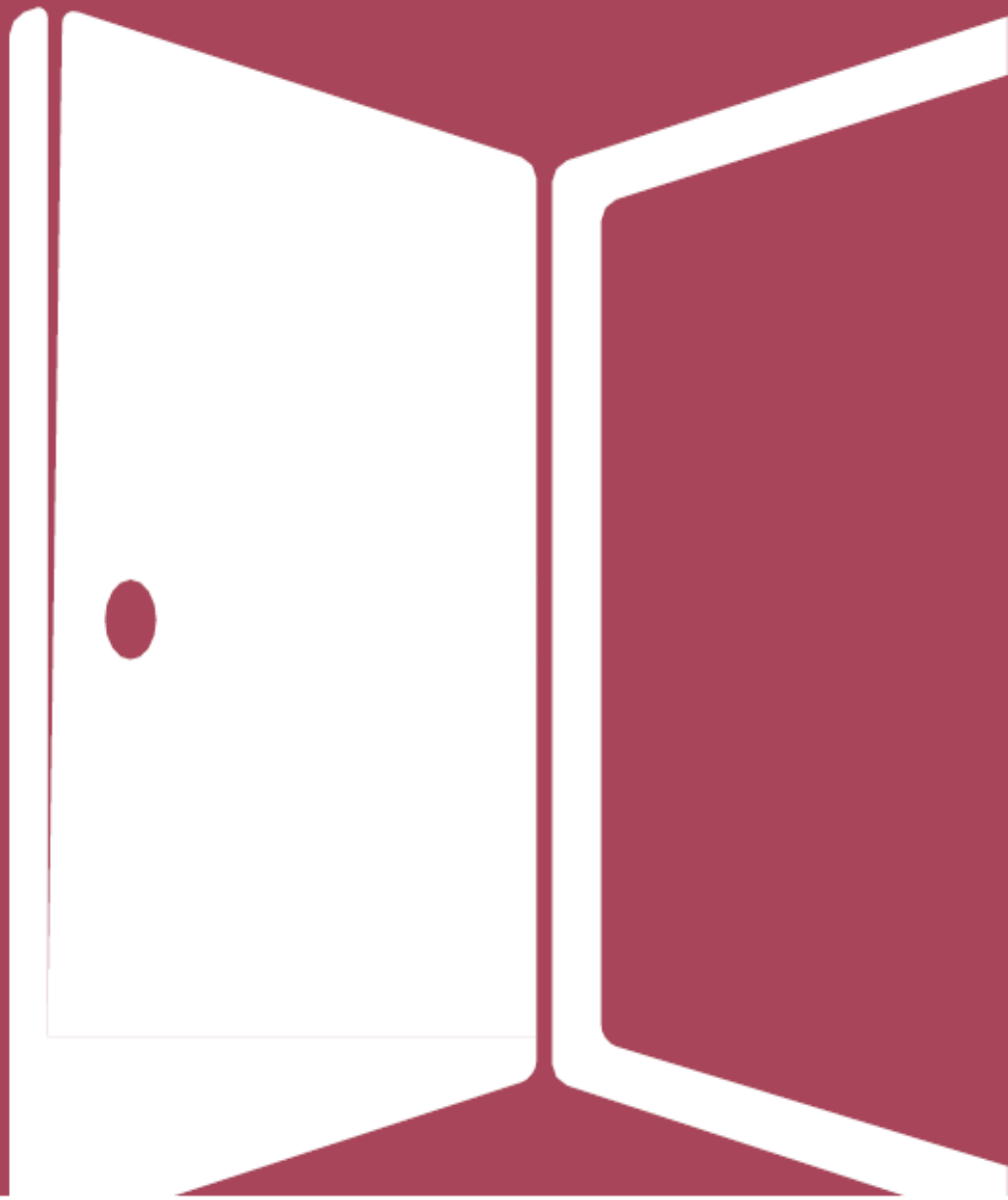
063 Public-Private Integrated Data

Open.

A city government shaped together with its citizens is opening its doors.
The doors to Seoul's public data are now wide open.

This is a new public data service,
created by Seoul and used by its citizens.

The Open Data Plaza is open to all of you.



Open, Contain, Gather, Expand

What is the Open Data Plaza?

What is public data?

Who owns public data?

What does it mean to open public data?

All these questions are answered at the Open Data Plaza.

We are opening a new chapter of communication and participation,
bringing the data that belongs to all of us back into the hands of everyone.

Open, Contain, Gather, Expand

Public Data Opens Up Through the Open Data Plaza!

Seoul maintains databases containing various types of data closely linked to citizens' everyday lives, including transportation, culture, and spatial information. This data represents the accumulated results of Seoul's dedicated efforts to serve its citizens. We call this **public data**^{*}.

Among this public data, there is information that becomes especially valuable when directly accessed by citizens. Seoul Open Data Plaza is where such data is collected and made accessible. Public data previously scattered across Seoul City Hall and affiliated institutions is now accessible through the single gateway of the Open Data Plaza. Through this gateway, citizens can freely communicate and share open public data.

The Open Data Plaza provides multiple ways for everyone to freely and equally access useful public data. Utilizing this data will enhance citizens' daily lives, provide greater convenience, and create opportunities for economic value through the development of diverse and creative content.

In 2009, the Obama administration in the U.S. declared "Transparency and Open Government" as its guiding policy and launched a data repository providing raw data. In 2010, the United Kingdom opened around 7,000 public datasets to the private sector, while Australia established a dedicated agency in 2011 to accelerate the realization of open government.

In line with this global trend, Seoul is actively taking action. It encourages voluntary citizen participation to create new services and generate public value. Seoul prioritizes opening and sharing public data, recognizing it as a critical civic asset. At the center of these efforts is Seoul Open Data Plaza, working together with citizens.

What is Public Data?

Under the *Act on Promotion of the Provision and Use of Public Data*, which took effect on October 31, 2013, "The term 'public data' means any data or information, including databases and electronic files, processed in optical or electronic form, and created or acquired and managed by any public institution for the purposes set forth in statutes."

The Act also defines public data as being in a machine-readable form, meaning: "Any form of data, the particulars or internal structure of which can be ascertained, or modified, converted, extracted, or otherwise processed by software."



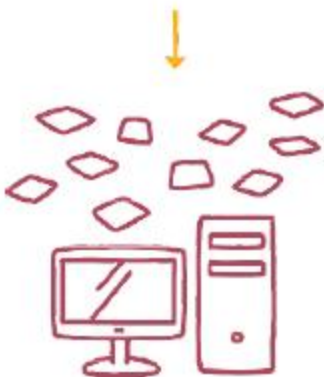
Open City Government 3.0



Seoul Open Data Plaza



Citizen Participation



Opening of Public Data



Enhanced Usability of Public Data



Creation of Public Value

Open, Contain, Gather, Expand

Easy and Fast Public Data Services at Your Fingertips

Before the Open Data Plaza platform was established, businesses, schools, research institutions, and ordinary citizens faced challenges in using public data in diverse ways. To address this, Seoul built a foundation that allows citizens to effectively utilize public data and ensures that anyone can access it freely and equally.

The open public data is provided in various formats that are easy to edit and use, including sheets, charts, maps, open APIs, files, and links. The platform guides users on whether the data they need is available and where they can find it, and allows them to search for and download the desired datasets.



Cultural data and lost-and-found information are provided in sheet format



Statistical data is provided in chart format



Spatial information, such as libraries and bike paths, is provided in map format



Data that can be integrated with private or personal technologies is provided in open API format



Reports, such as data on floating populations or business establishments, are provided in file format

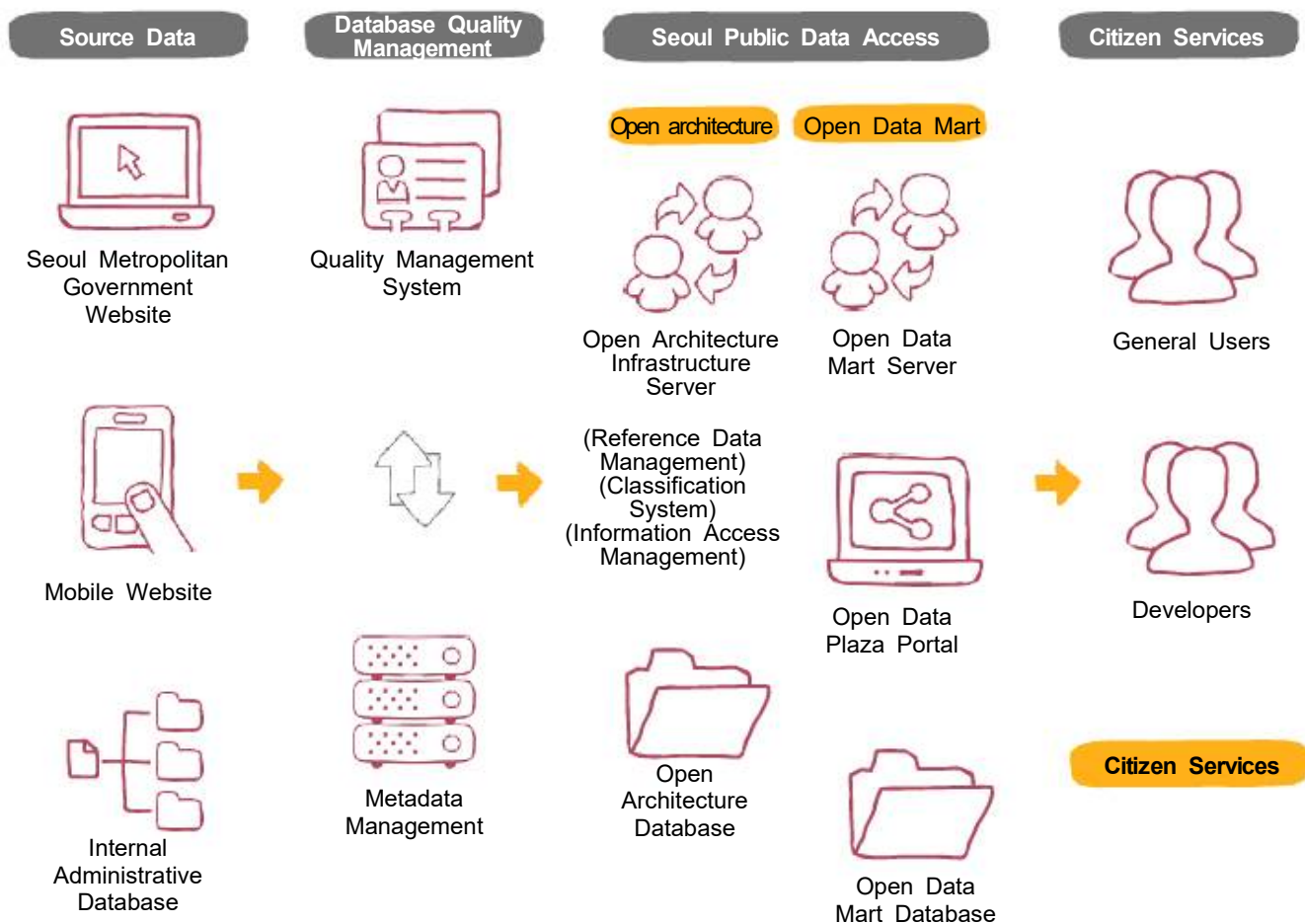


Various information lookup and reservation services are provided through link format

System Configuration and Infrastructure for Real-Time and Periodic Services

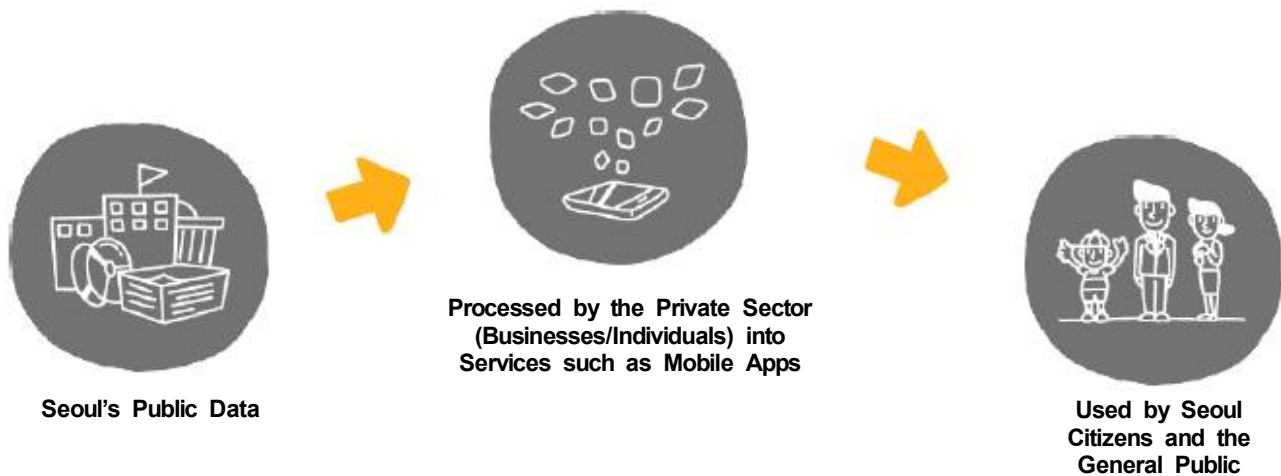
With the rise of mobile internet and the explosive adoption of smartphones, the demand for new types of information services based on smart devices has been continued to grow. In this environment, citizen developers are paying close attention to the usefulness and potential applications of public data.

In response, Seoul Open Data Plaza has established a public data provision system and built the necessary infrastructure to ensure that Seoul's public data can be accessed in real time, anytime and anywhere. By directly linking to source data systems, Seoul classifies the data held in its internal administrative databases, manages data quality, and delivers it to citizen clients (developers and general users). The system also regularly updates the latest public datasets.



Open, Contain, Gather, Expand

To ensure these functions operate smoothly, Seoul's dedicated developers continuously monitor service registration management, queries by service type, and the status of data openings by department through the internal management system. Seoul Open Data Plaza is always working from the user's perspective to thoughtfully develop and provide public data sets on topics that feel familiar and relevant to citizens. Thanks to these efforts, Seoul Open Data Plaza has become the most visited and most trusted platform for citizens seeking to access public data.





How to Access Seoul Open Data Plaza:

You can find Seoul Open Data Plaza by typing “Seoul Open Data Plaza” into any internet search engine or by directly visiting the site at data.seoul.go.kr. Mobile access is also available.

Seoul Public Data Opening Guidelines



Public data is provided equally so that all citizens can use it. In principle, all public data is opened except for data classified as non-disclosable. A universal and unified access path is provided to ensure that citizens can easily access the data. Data is offered through standardized and diverse formats to ensure convenient use by citizens. Original data is provided whenever possible so that citizens can freely reuse it. Public data is provided free of charge as a general principle. Public data is, in principle, permitted for free use under an attribution-only condition. Online services are prioritized, where possible, as the standard method for providing public data. Data quality management is strengthened to enhance the reliability of public data. Continuous efforts are made to establish the necessary infrastructure and improve policies for the provision and utilization of public data.

How did the Open Data Plaza begin?

Could Seoul's public data be shared directly with its citizens?

Where could citizens easily find the public data they need?

How could open APIs, essential for app developers, be provided more efficiently?

How could services built using public data be introduced to a wider audience?

Seoul Open Data Plaza began with these very questions.

The moment these "Isn't there a way?" question marks turned into "There is!" exclamation points, public data opens up for you.

Ready and Prepared! Creating Public Data Provision Guidelines

“What does opening public data mean?”

“Do we really have to open that?”

“That’s not our job.”

When Seoul established its public data openness policy and began concrete preparations to build Seoul Open Data Plaza, these were the typical reactions from working-level public officials. This reflected the fact that awareness of public data openness was still limited in Korea at that time.

Therefore, before establishing and carrying out a public data openness process, it was necessary to prepare clear guidelines. These guidelines ensured that officials providing the data fully understood what public data openness meant, why it was important, and how to identify and provide appropriate data. The guidelines included explanations to help officials gain a fundamental understanding of public data openness, as well as step-by-step procedures and specific plans outlining the openness process.

By implementing these guidelines, Seoul successfully secured cooperation in opening public data and improved efficiency in related tasks. The city also provided training programs to foster better understanding and actively encouraged officials to adopt a proactive mindset regarding public data openness.

Thanks to these efforts, the process of opening public data proceeded smoothly, from the initiation of the openness project in 2011 through the completion of the first-phase Seoul Open Data Plaza platform in 2012.

Open, Contain, Gather, Expand

Building a Cultural Foundation for Providing Public Data

[Act on Promotion of the Provision and Use of Public Data]

The *Act on Promotion of the Provision and Use of Public Data* went into effect on October 31, 2013, giving strong momentum to efforts promoting public data openness.

Although there was general agreement on the necessity of opening public data, practical implementation faced challenges due to the underdeveloped culture of openness and insufficient institutional infrastructure. In addition, legal clarity was needed to enable the private sector to use public data without restrictions.

To remove these obstacles, legislation was proposed and successfully passed about a year after being introduced to the National Assembly. Seoul, a leader in promoting public data openness, had long advocated for and actively supported the enactment of this law.

Now that the *Act on Promotion of the Provision and Use of Public Data* is in effect, public officials who previously took a passive attitude toward data openness, as well as the citizens who use public data, are expected to recognize it as a clear legal obligation. This milestone is expected to help make the openness and utilization of public data an integral part of a mature civic culture in our society.

[Highlights of the *Act on Promotion of the Provision and Use of Public Data*]

National agencies, local governments, and public institutions shall open all data, except in cases where there is a legitimate reason for nondisclosure, and shall guarantee citizens the right to use public data.



Public data shall be provided in forms that allow citizens and businesses to easily process, adapt, and utilize the data.



A foundation shall be established to systematically promote the government-wide opening and use of public data.



Measures such as quality assessments, evaluations, and improvement support shall be implemented to ensure stable quality management and maintain an appropriate quality level of public data.



Education and training shall be provided to public officials and employees of public institutions involved in the management and provision of public data, fostering a sound culture of public data use.



Provisions shall be included to exempt public institutions and their officials from liability in relation to the provision of public data.

This is How Seoul Open Data Plaza Was Opened!

The United States's data.gov,
The United Kingdom's data.gov.uk,
and now, Seoul's Open Data Plaza.

Although Seoul began its journey later than some advanced countries,
we have worked diligently,
always from the citizens' perspective,
striving to offer more data, greater reliability, and easier access.

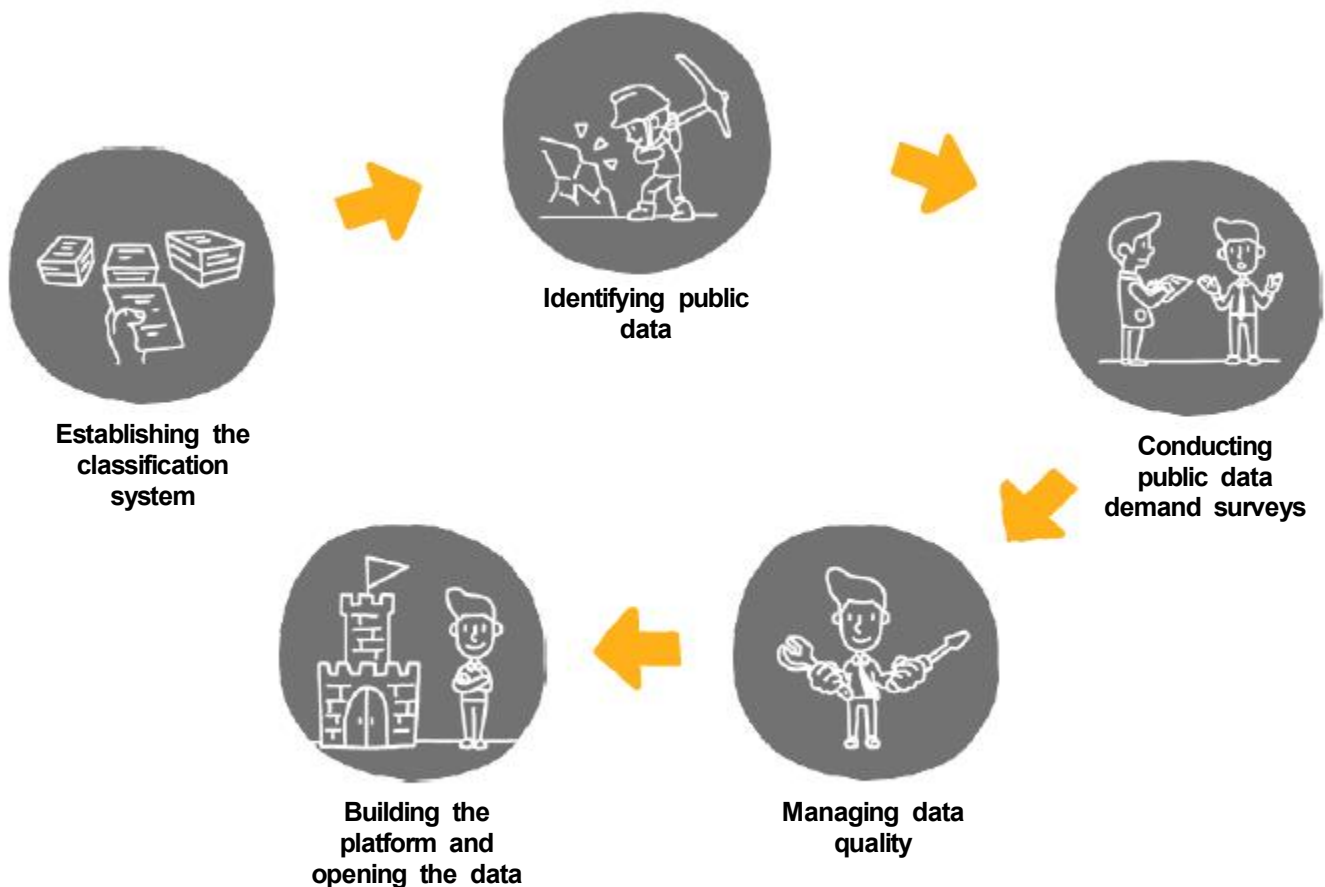
We aim to become the world's leading model
for public data services.

Well begun is half done: Establishing the Public Data Opening Process

For successful public data openness, the first step is to create an inventory of the data held by the institution. From that inventory, the institution must identify which datasets to open and develop a data service system that can conveniently deliver them. Once the data service system is developed, it is operated through a platform, allowing citizens to access and use the data. This is the general process of public data openness.

In line with this process, Seoul has established a detailed plan covering the development of the public data classification system, data identification, demand surveys, quality management, platform construction, and data opening, as shown in the diagram below. You could call this the blueprint for building the Open Data Plaza.

[Seoul Open Data Plaza Public Data Opening Process]



Open, Contain, Gather, Expand

Building the Framework: Establishing the Public Data Classification System

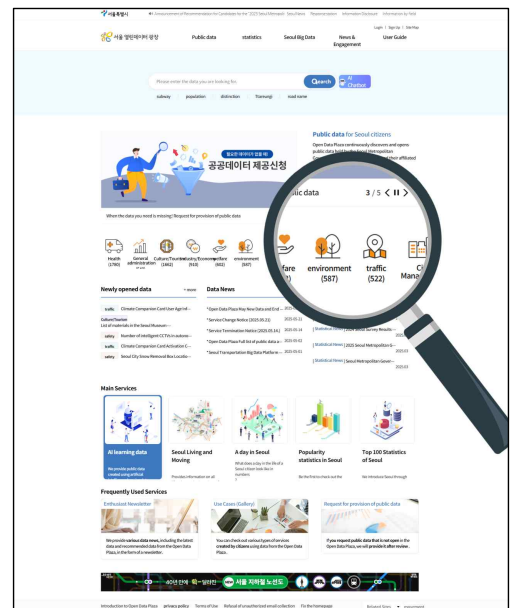
Establishing a classification system for public data is like constructing the basic framework for data provision. To help citizens at all levels effectively search for and utilize the public data they need, it is essential to determine how the data will be categorized and presented. In other words, we have considered how to classify public data from the users' perspective in a way that maximizes the usability of the service.

Previously, the data classification model used by Seoul was structured in a way that was difficult for citizens to quickly understand at a glance. To address this, we set out to create a simpler, more intuitive classification system by analyzing and referencing various public data classification models in Korea and abroad.

Through this process, we have identified the classification system best suited for the Open Data Plaza.

Seoul's public data is divided into 12 sectors: health, general administration, culture and tourism, industry/economy, welfare, environment, transportation, Urban Management, education, safety, population/households, and housing/construction.

When you visit the Open Data Plaza website, you can explore the public data organized by these thematic categories.



<Open Data Plaza's Public Data Classification System>

Sector	Subcategories
Health	Health promotion, health industry, healthcare, social perceptions and status, food, emergency medical services, medical status, pharmaceuticals, diseases, youth health
General Administration	Public official HR, public official status, civil affairs, social perceptions and status, citizen participation, postal services, internet, finance, ICT, ICT infrastructure, policies, major institutions, integrity/anti-corruption, statistics, administration
Culture and Tourism	Tourism, culture, cultural infrastructure, social perceptions and status, sports
Industry/Economy	Economic trends, economy, employment and labor, employment trends, international exchange, financial industry, labor relations, agriculture, trade balance, price trends, businesses, social perceptions and status, industrial income and expenditure, energy, energy resources, distribution industry, human resources, SMEs, startups, ventures, livestock and forestry
Welfare	Family and multicultural affairs, senior welfare, insurance, veterans' welfare, social welfare, social perceptions and status, child and youth welfare, women's welfare, pensions, general welfare, disability, disability welfare
Environment	Parks and green spaces, weather, climate, air conservation, air quality, social perceptions and status, living environment, water conservation, water environment, nature conservation, land environment, waste
Transportation	Transportation infrastructure, transport modes, transportation facilities, traffic operations, traffic status, public transportation, logistics and shipping, social perceptions and status, private transportation
Urban Management	Roads, urban planning, water supply, land and rivers, sewer systems
Education	Higher education, education finance, overall education, social perceptions and status, early childhood education, primary and secondary education, special education, lifelong education, academic research
Safety	Police, rescue and emergency services, crime, social perceptions and status, fire services, facilities, safety, accidents, disasters, special judicial police
Population/Households	Household trends, family perceptions, general family issues, family formation, marriage perceptions, social awareness, children, women's rights, general women's issues, foreign residents, population structure, population movement, population trends, resident registration, youth, births and deaths
Housing/Construction	Architecture, real estate, social perceptions and status, housing, housing sales, housing status

Open, Contain, Gather, Expand

Open Data Plaza



Accessing Services Leveraging Public Data

Unearthing Hidden Gems: Identifying Public Data

To make data publicly available, it is crucial to identify and provide high-quality public datasets with strong usability. As a first step, we assessed what data was held across each system. Seoul manages over 400 internal systems, so we carefully checked whether each department actually held the data, whether the data was duplicated elsewhere, or whether some data had been discontinued and only traces remained. We also conducted a detailed investigation into the content and topics of the datasets.

Through this initial full-scale survey, we compiled a list of datasets that could potentially be opened. The first selection narrowed it down to about 60 systems, and we then added datasets with high public demand and usability, ultimately creating a final list of around 150 systems.

[Process of Identifying Public Data]



Understanding the Usage! Public Data Demand Survey

To select which datasets would be most useful in citizens' daily lives, we needed clear criteria. To define these criteria, we conducted a demand survey by gathering input from public data users, providers, and expert groups.

From the user perspective, we conducted surveys and interviews targeting a wide range of private-sector users, corporate users, schools, and research institutes. From the provider perspective, we reached out to portals, mobile carriers, app development centers, and private developers. We also analyzed demand trends on social media, examining over 220,000 tweets containing keywords related to Seoul's public data. This helped us identify highly useful public datasets requested by diverse groups of citizens.

Conducting demand surveys for public data is an essential step toward creating a list of datasets that are helpful to citizens and can be continuously utilized. We will continue to collect feedback through various channels to promote the active use of public data.



Comment

"If the list registered in the system does not match the actual data, it can create challenges in advancing the opening process. From the perspective of someone managing information systems, I would like to request working-level public officials to pay closer attention to basic data management before moving forward with public data openness efforts."

- A Seoul Open Data Plaza consultant

Creating a Space for Participation and Communication: Building the Platform

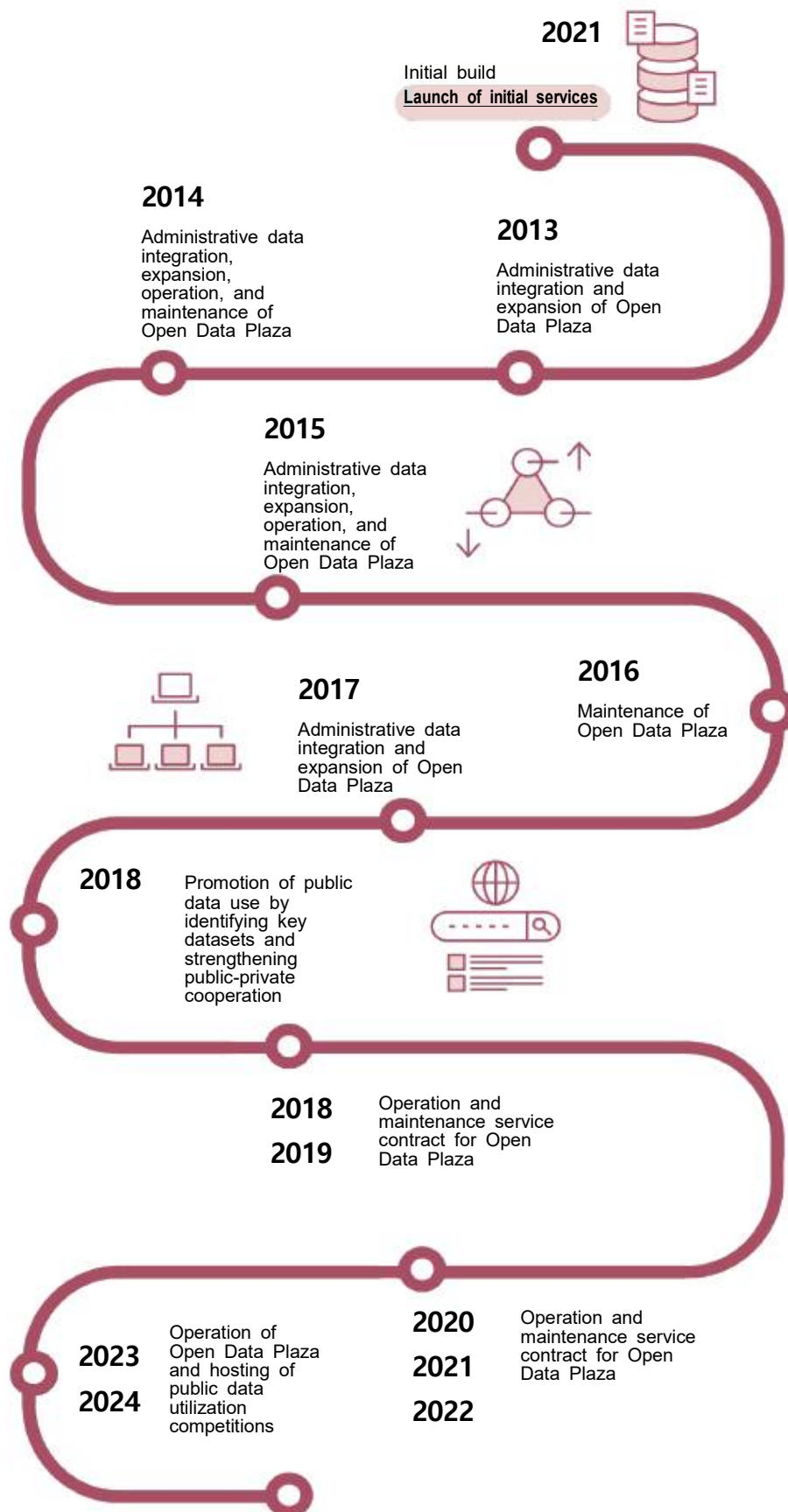
Based on the public data openness guidelines and process, we built an integrated platform for sharing and utilizing public data. In the first phase of construction, carried out from October 2011 to May 2012, we developed a portal site that supports the public data opening process and effectively manages related operations. This portal was built on international standard technologies compatible across various environments, integrating server, storage, security systems, and system software into a shared database management infrastructure, supports the public data opening process, and enables the effective management of tasks related to data openness.

We categorized the system list, compiled through the data identification process, into 12 main themes and continue to operate the opening process to make 150 systems available by 2014 and over 400 systems by 2024.

We enabled the integration and collection of newly added internal and external Seoul data in real time and on a regular basis to make it available to citizens. In addition, we maximized usability by processing individual datasets into various formats such as sheets, charts, maps, open APIs, files, and links. To facilitate communication with citizens, we established diverse feedback functions, including multi-channel social media communication, public data utilization competitions, and developer communities. We also linked the platform to the government-operated Public Data Portal, Seoul's administrative information disclosure site (Seoul Information Communication Plaza), and several developer communities.

In February 2013, we launched a renewed version by improving the areas identified as issues in the first phase. This renewal aimed to enhance the functionality of the public data service, maximizing citizen accessibility and usability. Today, Open Data Plaza continues to evolve, not just as a space for providing public data, but as a space where citizens actively use, participate in, and communicate around public data.

Open, Contain, Gather, Expand



Contain.

We have filled the platform with public data essential to citizens' daily lives.

Public datasets with high usefulness to citizens, in areas such as transportation, culture, education, and health, are collected here.

We will continue to contain even richer and more meaningful public data so you can access what you need whenever you need it.



Open, **Contain**, Gather, Expand

What is contained in the Open Data Plaza?

Want to check real-time Ttareungi bike rental information
and know where to find it?

Wondering if you can search for locations
with public Wi-Fi?

Thinking of opening a restaurant
and want a quick overview of exemplary restaurants in your neighborhood?

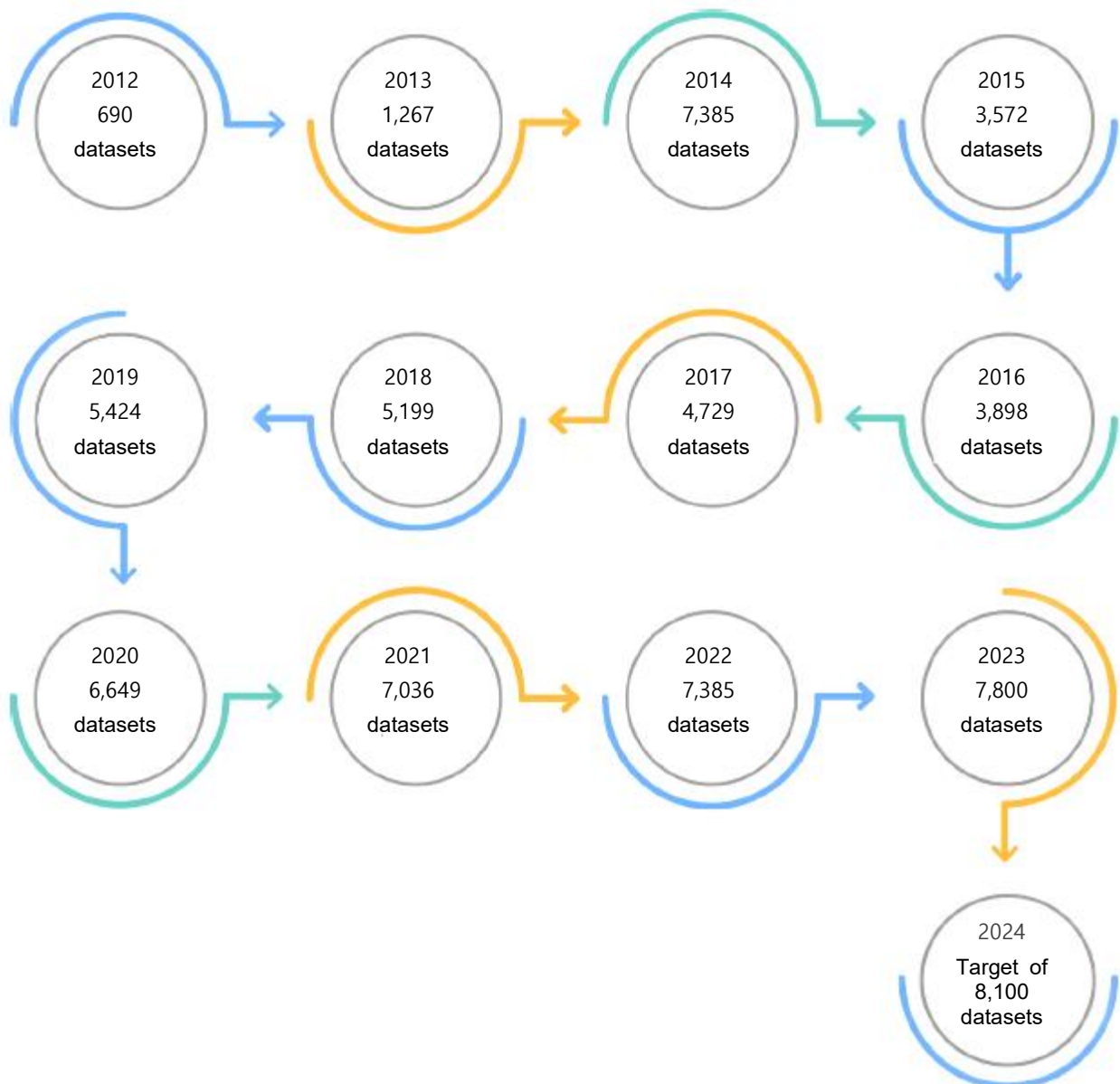
The answer is Seoul Open Data Plaza.
Here, you can discover valuable and practical public data.

Open, **Contain**, Gather, Expand

Packed with Public Data Essential to Daily Life

Seoul Open Data Plaza offers public data services across 12 sectors, including transportation, safety, environment, general administration, Urban Management, health, welfare, industry and economy, culture and tourism, and education. Within the plaza, the most frequently viewed and used datasets are organized into weekly, monthly, and all-time popularity rankings, making it easy for users to see what is trending. So far, the most popular datasets have included real-time urban data, subway station boarding and alighting counts, regional real-time air quality, and Seoul's living population data. These datasets are closely tied to citizens' everyday lives. In addition, newly added datasets, such as cultural event information and subway station search features, have recently attracted significant interest from users.

[Seoul Open Data Plaza's Gradual Opening of Public Data]



Status of Public Data Opening at Open Data Plaza

Since 2012, Open Data Plaza has opened public datasets, and as of September 2024, it provides a total of 7,928 datasets. Among the 12 main sectors, health (22.68%) and culture/tourism (20.51%) account for the largest shares of the open data.

*7,928 datasets across 12 sectors (as of September 2024)

No.	Sector	Subcategories	No. of Datasets	Percentage
1	Health	Health promotion, health services, healthcare, social perceptions and status, food, emergency services, healthcare administration, pharmaceuticals, diseases, youth health	1,777	22.41%
2	Culture and Tourism	Tourism industry, cultural institutions, social perceptions and status, sports	1,624	20.48%
3	Industry/Economy	Employment and labor, economy, employment trends, taxation data, financial industry, labor status, agriculture and fisheries, manufacturing, trade trends, industry and energy, energy management, public energy, social perceptions and status, statistics, statistical surveys	911	11.49%
4	Welfare	Family, senior welfare, childcare and childcare fees, social welfare, social perceptions and status, welfare for persons with disabilities	616	7.77%
5	Environment	Public green spaces, weather, climate, air management, air quality, air improvement, social perceptions and status, living environment, natural environment, resource circulation	590	7.44%
6	Education	Higher education, vocational education, educational environment, social perceptions and status, early childhood education	545	6.87%
7	General Administration	Public official HR, public official administration, civil affairs administration, social perceptions and status, general society and participation, best practices, online information, information reporting, information management, policy promotion, legislation and anti-corruption, administrative statistics	535	6.75%
8	Transportation	Transportation, transport modes, transportation facilities, traffic congestion, public transportation	422	6.32%
9	Population/Households	Family relations, birth, marriage, marriage immigrants, households, birth rates, divorce	272	3.43%
10	Urban Management	Roads, urban planning, water supply, land, natural drainage systems	240	3.03%
11	Safety	Police, rescue and emergency services, crime, crime facts, criminal cases, crime management, social perceptions and status, firefighting facilities, safety, safety facilities, emergency response, crime situation management	238	3.00%
12	Housing/Construction	Architecture, real estate, social perceptions and status, housing, housing sales, housing status	158	1.99%
Total			7,928	100%

Open, **Contain**, Gather, Expand

Diverse Methods of Public Data Services, Including Linked Data

"It feels like public datasets are scattered everywhere."

"Can't we access not only Seoul's public data on Open Data Plaza but also public data from other sources in one place?"

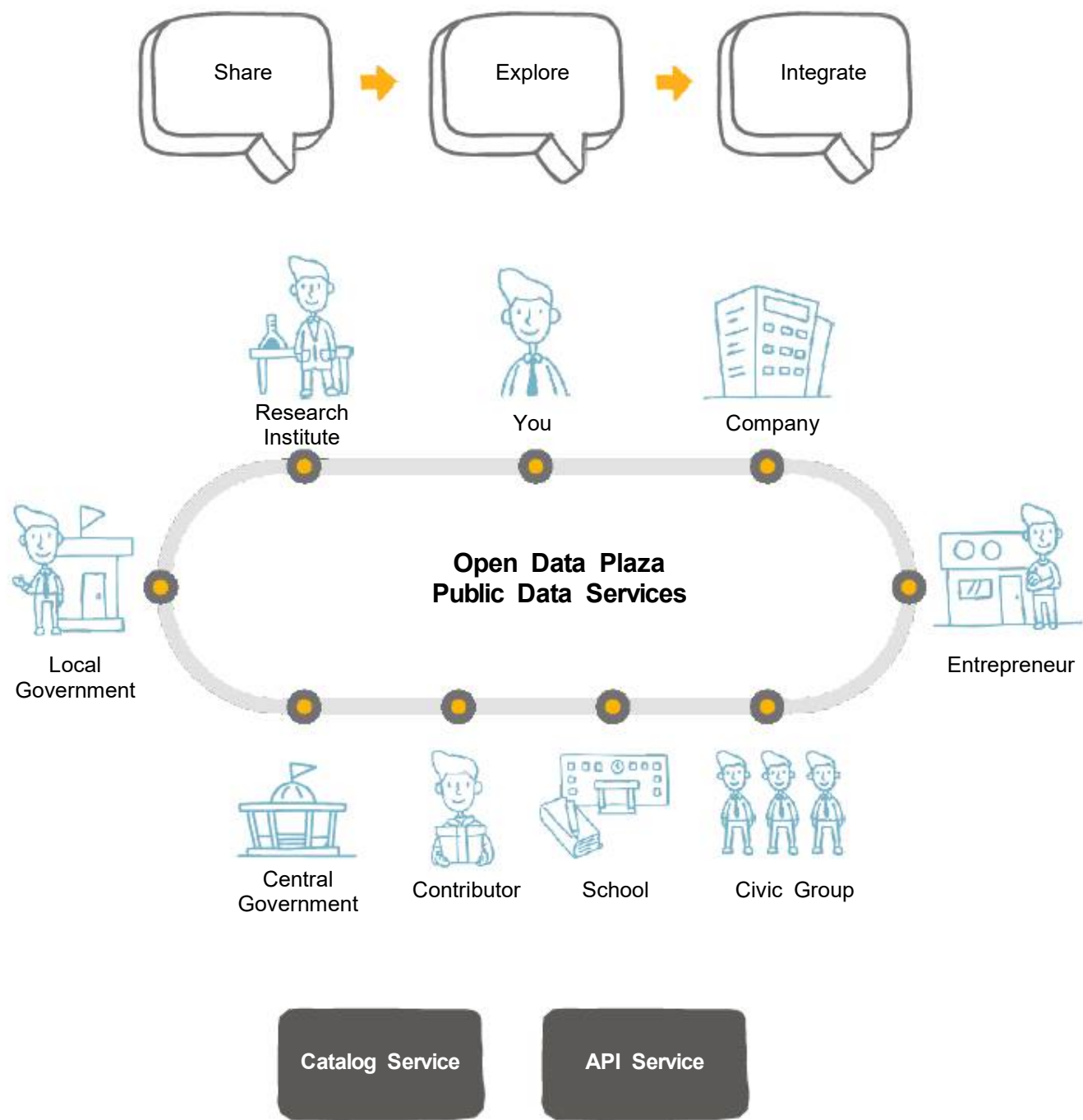
"It's too hard to figure out where specific public datasets are located. Please create a way to access all public data more easily."

While operating Open Data Plaza, Seoul has listened to a wide range of opinions from citizens and experts. Based on this feedback, the city incorporated the suggestions in its renewed services opened in February 2013. Now, in addition to Seoul's public datasets, users can also browse API service listings from the Public Data Portal run by the Ministry of the Interior and Safety."

Open Data Plaza plans to expand its catalog services to include public-interest datasets held by other public institutions, companies, and even individual citizens. However, while demand for public data openness is growing in Korea, there is still a tendency for data holders to be reluctant to open up their own datasets. Public awareness will need to shift going forward.

Seoul aims for Open Data Plaza to go beyond the narrow definition of public data openness, which traditionally refers only to providing data from public institutions, and evolve into a truly open data service where public institutions, businesses, and private individuals can share data freely across boundaries. Public data openness is set to become an unstoppable cultural shift of our time, and Seoul Open Data Plaza is determined to stand at the center of it.

[Open Data Plaza Service Concept Map]



Open, **Contain**, Gather, Expand

Seoul, the First Local Government to Open District-Level Public Data

From Seoul's public data to local district-level life information, all accessible in one place!

Open Data Plaza initially expanded its data-opening institutions from Seoul City Hall and affiliated offices in February 2013 to include organizations funded or invested in by Seoul and is now working to further expand public data openness across all 25 autonomous districts (gu).

Starting with pilot districts Seodaemun-gu and Guro-gu, Seoul began opening public data in the hygiene sector (specifically, food sanitation businesses and public hygiene businesses) in November 2013. By 2014, the city expanded to open all public data in six sectors—hygiene, local industry, culture, environment, livestock, and health—within the pilot districts, and then implemented full data openness across all six sectors in all 25 districts.

To support the establishment of district-level data platforms, Seoul provided a stable system using the know-how gained from developing Open Data Plaza. Individual datasets held within each district's own systems are opened and managed on the district's platform, while datasets from systems jointly operated by all 25 districts are opened using the shared infrastructure of Open Data Plaza. Citizens can view the datasets opened by each district either through Seoul's central platform or through each district's own open data site. On Seoul Open Data Plaza, they can search and access data from both the city and all 25 districts in one place. This system improves the efficiency of district-level data operations, enhances convenience for citizens, and minimizes the costs and burdens associated with building and maintaining separate open data platforms at the district level.

Since most services directly related to citizens' daily lives and economic activities are handled at the district office level, opening the public data held by the autonomous districts is expected to make public data more familiar and practically useful in citizens' everyday lives.

Open, **Contain**, Gather, Expand

How to use the Open Data Plaza effectively

Open the Seoul Bus Information app
to head to your meeting spot.

While riding the bus, you search for one of Seoul's "recommended walking paths"
to explore with your friend.

For the friend driving over, you send the Seoul Public Parking Lot Availability information
so they can easily find a spot.

And don't forget to check the Seoul Nighttime Library Information
for your evening plans.

Enjoy a seamless day empowered by Seoul's public data,
available through the Open Data Plaza.

Open, **Contain**, Gather, Expand

Q&A on Open Data Plaza



Q. Can anyone create an app using public data?

- A. Anyone with app development skills can freely use the public data on Open Data Plaza to develop new and convenient apps, without any restrictions. You are welcome to contribute your talent by developing creative and original apps that benefit citizens, or you can even use the data for commercial projects that generate economic value.



Q. Can I download useful apps that are essential for smart city life?

- A. When you visit the Open Data Plaza website, you'll find the "Usage Gallery" page, where a variety of apps created by citizens using Seoul's public data are listed. You can browse the functions and descriptions, then download the apps for free from the Google Play Store or Apple App Store.



Q. Can Open Data Plaza serve as a public data hub connecting the public and private sectors?

- A. That is exactly what Open Data Plaza strives to achieve. Through its catalog services, linked data, and the data plazas of Seoul-funded organizations and autonomous districts, Open Data Plaza engages with private developer communities and aims to become the gateway to all public data.

Exploring the Public Data in Service

Are you curious about what kinds of public data are available on Open Data Plaza?

Let's take a look at the dataset status for 19 key data types across 12 main sectors.

Content Name	Related Datasets
Public Bicycle Usage Information	Seoul Public Bicycle Fault Reports, Seoul Public Bicycle Rental History, Seoul Ttareungi Station Master Data, Seoul Public Bicycle Station Information, Seoul Public Bicycle Usage (by time), Seoul Public Bicycle Usage (daily), Seoul Public Bicycle Usage (monthly), Seoul Public Bicycle New User Information (daily), Seoul Public Bicycle New User Information (monthly), Seoul Public Bicycle Station Usage (monthly), Seoul Public Bicycle Usage Overview, Seoul Public Bicycle Foreign User Rentals (daily), Seoul Public Bicycle Foreign User Rentals (monthly), Seoul Public Bicycle Rental History Data, Seoul Public Bicycle Real-Time Rental Information
Public Parking Lot Information	Seoul City-Managed Parking Lot Real-Time Availability, Seoul Public Parking Lot Season Pass Sales, Seoul Public Parking Lot Guide Information
Transportation Card Usage	Seoul Subway Line and Station Passenger Counts, Seoul Public Transportation Mode Usage Statistics, Seoul Subway Line and Station Paid/Free Passenger Counts, Seoul Subway Line and Station Hourly Passenger Counts, Seoul Bus Line and Stop Passenger Counts, Seoul Bus Line and Stop Hourly Passenger Counts
Car-Sharing Location Information	Seoul Car-Sharing Hub List Information
Real-Time Road Traffic Information	Seoul Real-Time Road Traffic Information, Seoul Traffic Volume Information, Seoul Monthly Traffic Volume Data, Seoul Road Classification by Function, Seoul Traffic Service Link Interpolation Data, Seoul Traffic Standard Link Mapping Information, Seoul Traffic Incident Region Information, Seoul Traffic Incident Link Vertex Information, Seoul Traffic Incident Road Information, Seoul Traffic Volume Point Information, Seoul Incident Type Code Information, Seoul Traffic Incident Road Link Information, Seoul Traffic Incident Road Classification Information, Seoul Traffic Volume History Information, Seoul Traffic Incident Link Information, Seoul Real-Time Incident Information, Seoul Incident Subtype Code Information
Bus Operation Information	Seoul Bus Route Basic Information Item Information, Seoul Bus Stop Location Information, Seoul Bus Route Operation Information, Seoul Bus Arrival Information, Seoul Bus Location Information, Seoul Bus Stop Information, Seoul Public Transport Transfer Route Information, Seoul Bus Route Information

Open, [Contain](#), Gather, Expand

Content Name	Related Datasets
Subway Operation Information	Seoul Subway Real-Time Arrival Information, Seoul Subway Real-Time Train Location Information, Seoul Subway Transfer Information
Subway Station Information	Seoul Subway Station Elevator Location Information, Seoul Subway Station Connected Underground Passage Information, Seoul Subway Station Entrance Lift Location Information, Seoul Metro Station Name Origins, Seoul Metro Station Addresses and Phone Numbers, Seoul Subway Station Convenience Facility Status, Seoul Subway Station Timetable Search by Station Code, Seoul Subway Line First and Last Train Times (Station Code, External Code), Seoul Metro Station Information by Line, Seoul Subway Last Train Timetable Search by External Code, Seoul Subway Last Train Timetable Search by Station Code, Seoul Subway Timetable Search by External Code, Seoul Subway Station Information Search (by Name)
Public Service Reservation Information	Seoul Public Service Reservation (General) Information, Seoul Public Service Reservation Information, Seoul Public Service Reservation (English) Information, Seoul Public Medical Service Reservation Information, Seoul Public Cultural Event Service Reservation Information, Seoul Public Educational Service Reservation Information, Seoul Public Facility Rental Reservation Information, Seoul Public Sports Facility Reservation Information
Cultural Event Information	Seoul Public Cultural Event Service Reservation Information, Seoul Public Service Reservation (English) Information, Seoul Foundation of Women and Family Event Information, Seoul Cultural Event Information, Seoul Cultural Venue Information, Seoul Sejong Center Performance and Exhibition Information
Mosquito Forecast Information	Seoul Mosquito Forecast Information
Price Information	Seoul Price-Stable Model Business Product List Status, Seoul Personal Service Fee Information, Seoul Daily Necessities Agricultural, Fisheries, and Livestock Price Information, Seoul Good Price Business Status, Seoul Price News Information, Seoul Discount Event and Direct Trade Market Information
Weather Observation Information	Seoul Rainfall Information, Seoul Air Pollution Display Board Location Information, Seoul Annual Ultrafine Dust Alert Information, Seoul Air Pollutant Monitoring Station Height Information, Seoul Hourly Average Air Pollution Information, Seoul Annual Fine Dust Alert Status, Seoul Annual Ozone Alert Status, Seoul Roadside and Three-Dimensional Atmospheric Daily Average Air Quality Status by Period, Seoul Roadside and Three-Dimensional Atmospheric Real-Time Air Quality Status by Monitoring Station, Seoul Hourly Average Air Quality by Period, Seoul Regional Real-Time Air Quality Status, Seoul Daily Average Air Quality by Period, Seoul Annual Average Air Pollution Information, Seoul Daily Average Air Pollution Information, Seoul Monthly Average Air Pollution Information, Seoul Monitoring Station Administrative Code Information by Local District, Seoul Real-Time Average Air Quality Status, Seoul Real-Time Air Quality Status by Autonomous District
Construction Project Information	Seoul Construction Notification Information, Seoul Housing & Communities Corporation Construction Contract Information
Facility Management Information	Seoul Rainfall Information, Seoul River Water Level Status, Seoul Rainwater Pumping Station Spatial Information
Disability Call Service Information	Disability Call Service

Content Name	Related Datasets
Weather Forecast Information	Seoul Regional Ozone Alert Status, Seoul Fine Dust Alert Status, Seoul Ultrafine Dust Alert Status, Seoul Yellow Dust Alert Status,
Local Commercial District Analysis Information	Seoul Commercial District Analysis Service (Estimated Sales – Commercial Catchment), Seoul Commercial District Analysis Service (Income and Consumption – Commercial District), Seoul Commercial District Analysis Service (Area – Commercial Catchment), Seoul Commercial District Analysis Service (Area – Administrative <i>Dong</i>), Seoul Commercial District Analysis Service (Area – Autonomous <i>Gu</i>), Seoul Commercial District Analysis Service (Area – Seoul), Seoul Commercial District Analysis Service (Apartment – Administrative <i>Dong</i>), Seoul Commercial District Analysis Service (Apartment – Autonomous <i>Gu</i>), Seoul Commercial District Analysis Service (Apartment – Seoul), Seoul Commercial District Analysis Service (Income and Consumption – Administrative <i>Dong</i>), Seoul Commercial District Analysis Service (Income and Consumption – Autonomous <i>Gu</i>), Seoul Commercial District Analysis Service (Income and Consumption – Seoul), Seoul Commercial District Analysis Service (Attraction Facilities – Administrative <i>Dong</i>), Seoul Commercial District Analysis Service (Attraction Facilities – District), Seoul Commercial District Analysis Service (Attraction Facilities – Seoul), Seoul Commercial District Analysis Service (Store – Administrative <i>Dong</i>), Seoul Commercial District Analysis Service (Store – Autonomous <i>Gu</i>), Seoul Commercial District Analysis Service (Store – Seoul), Seoul Commercial District Analysis Service (Estimated Sales – Administrative <i>Dong</i>), Seoul Commercial District Analysis Service (Estimated Sales – Autonomous <i>Gu</i>), Seoul Commercial District Analysis Service (Estimated Sales – Seoul), Seoul Commercial District Analysis Service (Street-Level Population – Administrative <i>Dong</i>), Seoul Commercial District Analysis Service (Street-Level Population – Autonomous <i>Gu</i>), Seoul Commercial District Analysis Service (Street-Level Population – Seoul), Seoul Commercial District Analysis Service (Resident Population – Seoul), Seoul Commercial District Analysis Service (Resident Population – Autonomous <i>Gu</i>), Seoul Commercial District Analysis Service (Resident Population – Administrative <i>Dong</i>), Seoul Commercial District Analysis Service (Workplace Population – Administrative <i>Dong</i>), Seoul Commercial District Analysis Service (Workplace Population – Autonomous <i>Gu</i>), Seoul Commercial District Analysis Service (Workplace Population – Seoul), Seoul Commercial District Analysis Service (Street-Level Population – Commercial District), Seoul Commercial District Analysis Service (Attraction Facilities – Commercial Catchment), Seoul Commercial District Analysis Service (Street-Level Population – Commercial Catchment), Seoul Commercial District Analysis Service (Attraction Facilities – Commercial District), Seoul Commercial District Analysis Service (Resident Population – Commercial Catchment), Seoul Commercial District Analysis Service (Resident Population – Commercial District), Seoul Commercial District Analysis Service (Apartment – Commercial Catchment), Seoul Commercial District Analysis Service (Store – Commercial Catchment), Seoul Commercial District Analysis Service (Commercial District Change Indicators – Commercial District), Seoul Commercial District Analysis Service (Commercial District Change Indicators – Administrative <i>Dong</i>), Seoul Commercial District Analysis Service (Estimated Sales – Commercial District), Seoul Commercial District Analysis Service (Workplace Population – Commercial District), Seoul Commercial District Analysis Service (Income and Consumption – Commercial Catchment), Seoul Commercial District Analysis Service (Workplace Population – Commercial Catchment), Seoul Commercial District Analysis Service (Commercial District Change Indicators – Autonomous <i>Gu</i>), Seoul Commercial District Analysis Service (Apartment – Commercial District), Seoul Commercial District Analysis Service (Zone – Commercial District), Seoul Commercial District Analysis Service (Store – Commercial District)
Real Estate Information	Seoul Real Estate Actual Transaction Price Information, Seoul Real Estate Lease (Jeonse and Monthly Rent) Price Information, Seoul Real Estate Standard Market Price Table Information, Seoul Global Real Estate Agencies Status, Seoul Multi-Unit Apartment Information, Seoul Individual Official Land Price Information, Seoul Redevelopment and Reconstruction Maintenance Project Status, Seoul Real Estate Brokerage Office Information

Gather.

Private companies, public institutions, organizations, and academia gather to use and collaborate through open public data.

A plaza for communication, a plaza for participation, and a plaza for sharing unfold in the online world.

We hope it will become a space where even more creative ideas using public data can come together.



Open, Contain, **Gather**, Expand

Where is public data being used?

Where is the public data provided
by Open Data Plaza being applied?

Which datasets are the most widely used?
What do citizens think about public data?

Here, we present the highlights of how the data has been used
from its first launch in May 2012 to today.

Open, Contain, **Gather**, Expand

Public Data's Meaningful Transformation: A Variety of Citizen-Centered Services

By leveraging the public datasets offered by Seoul Open Data Plaza, the Plaza site operates a “Usage Gallery,” where citizens can share the apps and websites they have developed. Below are some standout apps that gained attention after being featured in the Usage Gallery.

‘Hello, Independent Bookstore’ App

“Hello, Independent Bookstore” is your guide to a unique bookstore experience.

Do you know the charm that only indie bookstores can offer, something you can't feel at large chains?

This app introduces hidden gem independent bookstores across the country.

Do you have a favorite indie bookstore that's missing here?

Why not add it and share it with others?

Experience the special appeal of indie bookstores with “Hello, Independent Bookstore”!



‘Raon’ App

“Seoul's Cultural Events at a Glance”

Raon uses Seoul's public data to deliver cultural event information provided by the Seoul Culture Portal.

We hope you enjoy the unexpected discoveries and check out the features Raon offers!





‘A.Dot’ App

A. Provides necessary information to users in advance, based on their schedule or commuting patterns, rather than requiring them to search for it

B. Uses data on users’ main transportation modes to deliver information relevant to their typical travel



‘Seoul Hotspot’ Web

Seoul Hotspot is a React web application that uses Seoul’s real-time population data to provide real-time congestion levels at major attractions in Seoul, along with predicted congestion levels up to 12 hours in advance.

Users can view visualized charts showing the gender ratio, age ratio, and resident/non-resident ratio of the current population at each location.



‘Startup Community’ Web

This platform provides a community information service that shares details on government support programs and institutions for startup founders.



‘Shall We Go Here?’ Web

This website offers information on tourist spots, regional festivals, and recommended destinations across Korea.

When you’re in the mood to go somewhere, “Shall We Go Here?” provides a variety of details on attractions and travel ideas to help you plan a memorable trip.

Public Data Usage by Sector on Open Data Plaza

From 2012 to September 2024, the cumulative number of uses of public datasets opened through Seoul's Open Data Plaza has reached approximately 23.4 billion. Among the 12 sectors, transportation (69.5%) and environment (28.43%) together account for 98% of total usage. This is largely due to the high number of API calls for real-time transportation and environmental data.

*Cumulative usage: 23.4 billion (from 2012 to September 2024)¹⁾

(Unit: million uses)

No.	Sector	Subcategories	Usage Count	Percentage
1	Transportation	Transportation, transport modes, transportation facilities, traffic congestion, public transportation	16,289	69.50%
2	Environment	Public green spaces, weather, climate, air management, air quality, air improvement, social perceptions and status, living environment, natural environment, resource circulation	6,664	28.43%
3	Culture/Tourism	Tourism industry, cultural institutions, social perceptions and status, sports	192	0.82%
4	General Administration	Public official HR, public official administration, civil affairs administration, social perceptions and status, general society and participation, best practices, online information, information reporting, information management, policy promotion, legislation and anti-corruption, administrative statistics	81	0.35%
5	Housing/Construction	Architecture, real estate, social perceptions and status, housing, housing sales, housing status	53	0.23%
6	Health	Health promotion, health services, healthcare, social perceptions and status, food, emergency services, healthcare administration, pharmaceuticals, diseases, youth health	44	0.19%
7	Safety	Police, rescue and emergency services, crime, crime facts, criminal cases, crime management, social perceptions and status, firefighting facilities, safety, safety facilities, emergency response, crime situation management	38	0.16%
8	Urban Management	Roads, urban planning, water supply, land, natural drainage systems	28	0.12%
9	Industry/Economy	Employment and labor, economy, employment trends, taxation data, financial industry, labor status, agriculture and fisheries, manufacturing, trade trends, industry and energy, energy management, public energy, social perceptions and status, statistics, statistical surveys	22	0.09%
10	Population/Households	Family relations, birth, marriage, marriage immigrants, households, birth rates, divorce	11	0.05%
11	Welfare	Family, senior welfare, childcare and childcare fees, social welfare, social perceptions and status, welfare for persons with disabilities	9	0.04%
12	Education	Higher education, vocational education, educational environment, social perceptions and status, early childhood education	7	0.03%
Total			23,438	100%

1) This refers to cumulative usage counts from 2012 to September 2024, including clicks, downloads, and API calls.

Open Data Plaza Usage by Service Type

Over the past four years, API-based usage has consistently accounted for more than 99% of total activity on Open Data Plaza.

Category	2021	2022	2023	2024 (as of Sep.)
Total	2,791,726,981 cases	2,469,876,946 cases	3,227,773,160 cases	2,923,965,848 cases
API	2,770,071,531 cases (99.22%)	2,463,644,103 cases (99.75%)	3,220,665,338 cases (99.78%)	2,908,605,025 cases (99.47%)
Page Views + Downloads	21,655,450 cases	6,232,843 cases	7,107,822 cases	15,360,823 cases

Open Data Plaza Top 50 Usage by Sector

Based on usage counts in 2024, the top 50 datasets are distributed as follows: transportation (27), environment (10), culture and tourism (5), Urban Management (3), housing and construction (2), general administration (2), and safety (1). Notably, the top three datasets are all in the transportation sector, highlighting strong user interest in public transportation data. Additionally, the high ranking of environmental datasets reflects increasing public interest in air quality and fine dust issues.

*(From January to September 2024)

Top 50	Transportation	Environment	Culture & Tourism	Urban Management	Housing & Construction	Safety	General Administration
No. of Datasets	27	10	5	3	2	1	2
No. of Uses	2,048,433,500 cases	759,793,694 cases	80,308,218 cases	1,084,586 cases	1,627,841 cases	936,748 cases	956,529 cases

Open, Contain, **Gather**, Expand

Top 50 Most-Used Datasets

*(From January to September 2024)

No.	Sector	Dataset
1	Transportation	Seoul Subway Real-Time Arrival Information
2	Transportation	Seoul Real-Time Road Traffic Information
3	Transportation	Seoul Subway Real-Time Train Location Information
4	Environment	Seoul Regional Real-Time Air Quality Status
5	Environment	Seoul Annual Ultrafine Dust Alert Status
6	Environment	Seoul Annual Fine Dust Alert Status
7	Environment	Seoul Regional Ozone Alert Status
8	Environment	Seoul Yellow Dust Alert Status
9	Transportation	Seoul Public Bicycle Real-Time Rental Information
10	Culture/Tourism	Seoul Real-Time Population Data
11	Environment	Seoul Real-Time Air Quality Status by Autonomous District
12	Culture/Tourism	Seoul Real-Time Urban Data
13	Transportation	Seoul Traffic Volume History Data
14	Transportation	Seoul Nanum Car (Car Sharing) Hub List
15	Transportation	Seoul Real-Time Traffic Incident Information
16	Transportation	Seoul Bus Line and Stop Passenger Counts
17	Transportation	Seoul Traffic Incident Link Information
18	Transportation	Seoul Subway Station Timetable Search by Station Code
19	Transportation	Seoul Subway Timetable Search by External Code
20	Culture/Tourism	Seoul Real-Time Population Data (English)*
21	Transportation	Seoul Subway Timetable Search by External Code
22	Transportation	Seoul Metro Station Information by Line
23	Environment	Seoul Real-Time Average Air Quality Status
24	Transportation	Seoul Subway Real-Time Arrival Information (Batch)
25	Transportation	Seoul Traffic Broadcasting System (TBS) FM Schedule Information

No.	Sector	Dataset
26	Urban Management	Seoul Building Registry Information
27	Culture/Tourism	Seoul Public Service Reservation Information
28	Transportation	Seoul TBS TV Schedule Information
29	Transportation	Seoul Traffic Incident Link Vertex Information
30	Environment	Seoul Rainfall Information
31	Transportation	Seoul Subway Nearby Facility Information Search by Station Code
32	Transportation	Seoul Public Bicycle Rental History Information
33	Transportation	Seoul Metro Mobility-Impaired User Facility (Elevator) Operation Status
34	Environment	Seoul Hourly Average Air Pollution Information
35	Transportation	Seoul Public Parking Lot Guide Information
36	Housing/Construction	Seoul Construction Notification Information
37	Transportation	Seoul Incident Type Code Information
38	Transportation	Seoul Subway Station Convenience Facility Status
39	Safety	Seoul River Water Level Status
40	Transportation	Seoul Incident Subtype Code Information
41	Transportation	Seoul City-Managed Parking Lot Real-Time Availability
42	Environment	Seoul Han River and Major Tributary Water Quality Measurement Data
43	Culture/Tourism	Seoul Cultural Event Information
44	Transportation	Seoul Bus Stop Location Information
45	Urban Management	Seoul Sewer Pipeline Water Level Status
46	Housing/Construction	Seoul Real Estate Actual Transaction Price Information
47	General Administration	Seoul Living Population by Census Block (Korean Nationals)
48	Transportation	Seoul Subway Line and Station Passenger Counts
49	General Administration	Seoul Public Wi-Fi Service Location Information
50	Urban Management	Seoul Regional Hourly Water Quality Status

Top 10 Public Data by Views

Based on the 2024 view count, the top 10 datasets include five from the Transportation sector, two from Population/Households, and one each from General Administration, Safety, and Housing/Construction. As with the usage rankings, Transportation datasets dominated the top spots, and registered population statistics from the Population/Households sector also ranked high.

*(From January to September 2024)

No.	Sector	Dataset
1	Transportation	Seoul Subway Line and Station Passenger Counts
2	Transportation	Seoul Subway Line First and Last Train Times (Station Code, External Code)
3	Population/Households	Seoul Registered Population Statistics (by <i>Gu</i>)
4	Transportation	Seoul Subway Line and Station Hourly Passenger Counts
5	Transportation	Seoul Public Transportation Lost and Found Information
6	Transportation	Seoul Metro Inter-Station Distance and Travel Time Information
7	General Administration	Seoul Living Population by Administrative Neighborhood (Korean Nationals)
8	Safety	Seoul Five Major Crime Statistics
9	Population/Households	Seoul Registered Population Statistics (by <i>Dong</i>)
10	Housing/Construction	Seoul Real Estate Actual Transaction Price Information

Top 10 Public Data by Downloads

Based on the 2024 download count, the top 10 datasets include five from the Transportation sector and five from General Administration. As with usage and view rankings, Transportation datasets ranked high, and several datasets related to living population under General Administration also stood out.

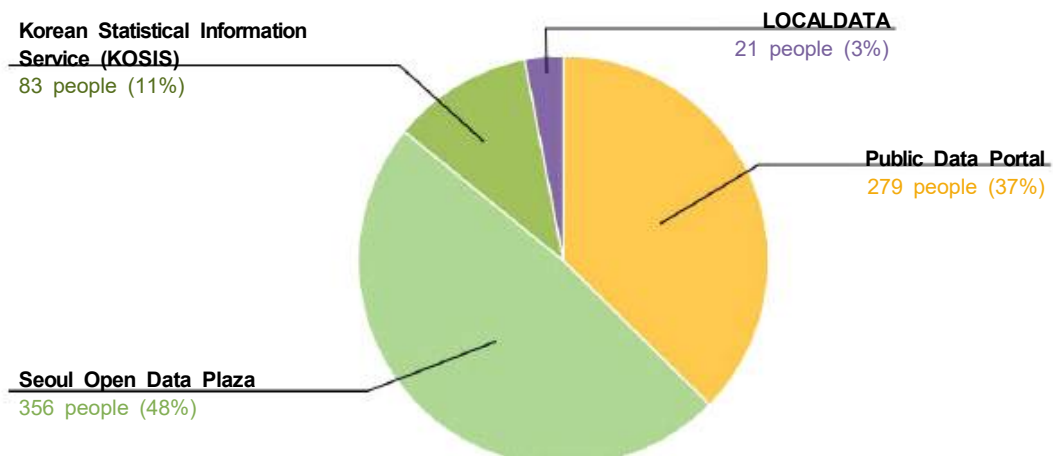
*(From January to September 2024)

No.	Sector	Dataset
1	Transportation	Seoul Subway Line and Station Passenger Counts
2	Transportation	Seoul Public Transportation Origin/Destination Passenger Counts by Administrative Neighborhood
3	Transportation	Seoul Public Transportation Mode Origin/Destination Passenger Counts by Administrative Neighborhood
4	General Administration	Seoul Living Population by Census Block (Korean Nationals)
5	General Administration	Smart Seoul Data of Things (S-DoT) Floating Population Measurement Information
6	Transportation	Seoul Ttareungi Public Bicycle Rental/Return Passenger Counts by Station
7	Transportation	Seoul Public Bicycle Rental History Information
8	General Administration	Seoul Living Population by Administrative Neighborhood (Korean Nationals)
9	General Administration	Seoul Living Population by Census Block (Short-Term Foreign Residents)
10	General Administration	Capital Region Population Movement (by Age, Origin–Destination) – Foreigners

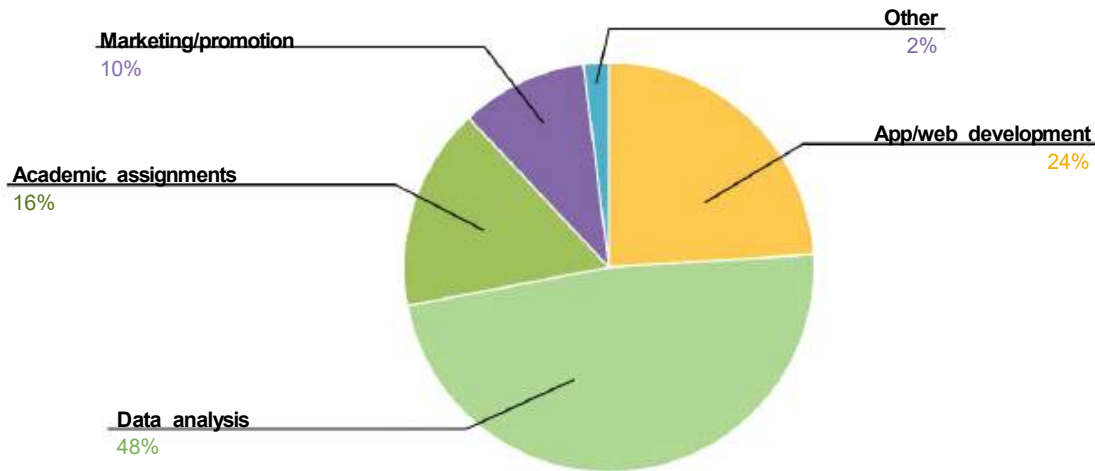
Citizen Feedback on Open Data Plaza

From October 25 to November 11, 2024, Seoul conducted a 17-day online survey targeting the general public to gather feedback on Open Data Plaza. According to the results, 48% of respondents were aware of Open Data Plaza, and among them, 96% expressed satisfaction with its public data services. The types of services most commonly used were: Open API (32%), sheet (25%), chart (14%), map (12%), file (10%). This shows that citizens are engaging with data through a wide range of service types. Seoul plans to actively reflect these survey results in future promotional activities and in efforts to open up even more high-quality datasets. We will continue working to ensure that even more citizens become aware of and can benefit from Open Data Plaza.

Experience with Open Public Data Platforms

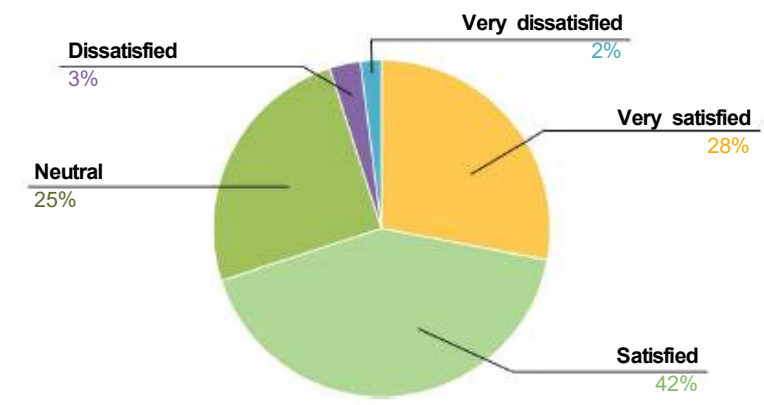


Purpose of Using Open Public Data

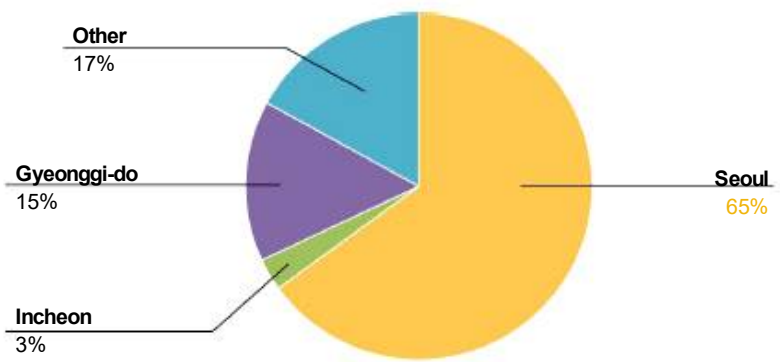


Open, Contain, Gather, Expand

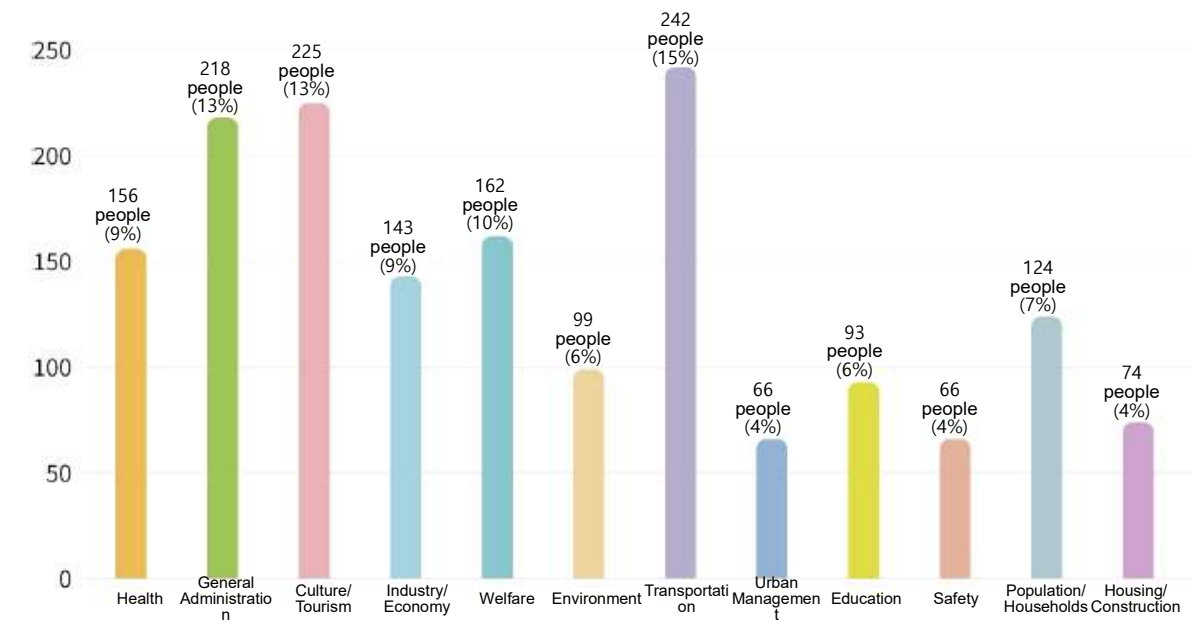
User Satisfaction



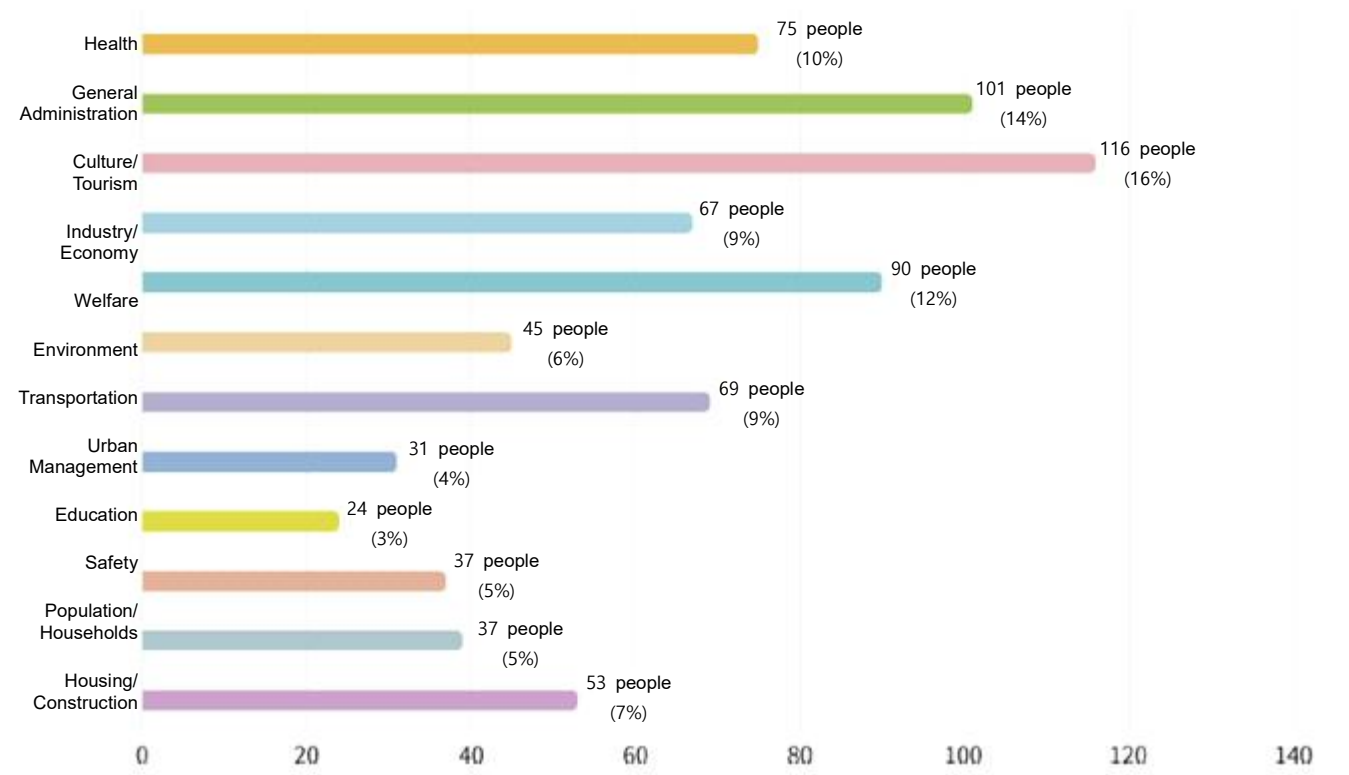
Region of Residence (Capital Area)



Data Usage by Sector



Future Data Demand by Sector



Comment

“I find the diverse public data provided by Seoul’s Open Data Plaza truly useful. I especially appreciate the datasets that help solve everyday problems faced by citizens. I’m grateful to be able to use them.”

- Citizen feedback on social media

What is happening at Open Data Plaza?

Today, people talk naturally about public data.

They speak about the changes that have come since public data was opened, the connection between open data and transparent governance, and the ways public data can improve daily life, even when no one asks.

At Open Data Plaza, stories of communication and participation are being created every single day.

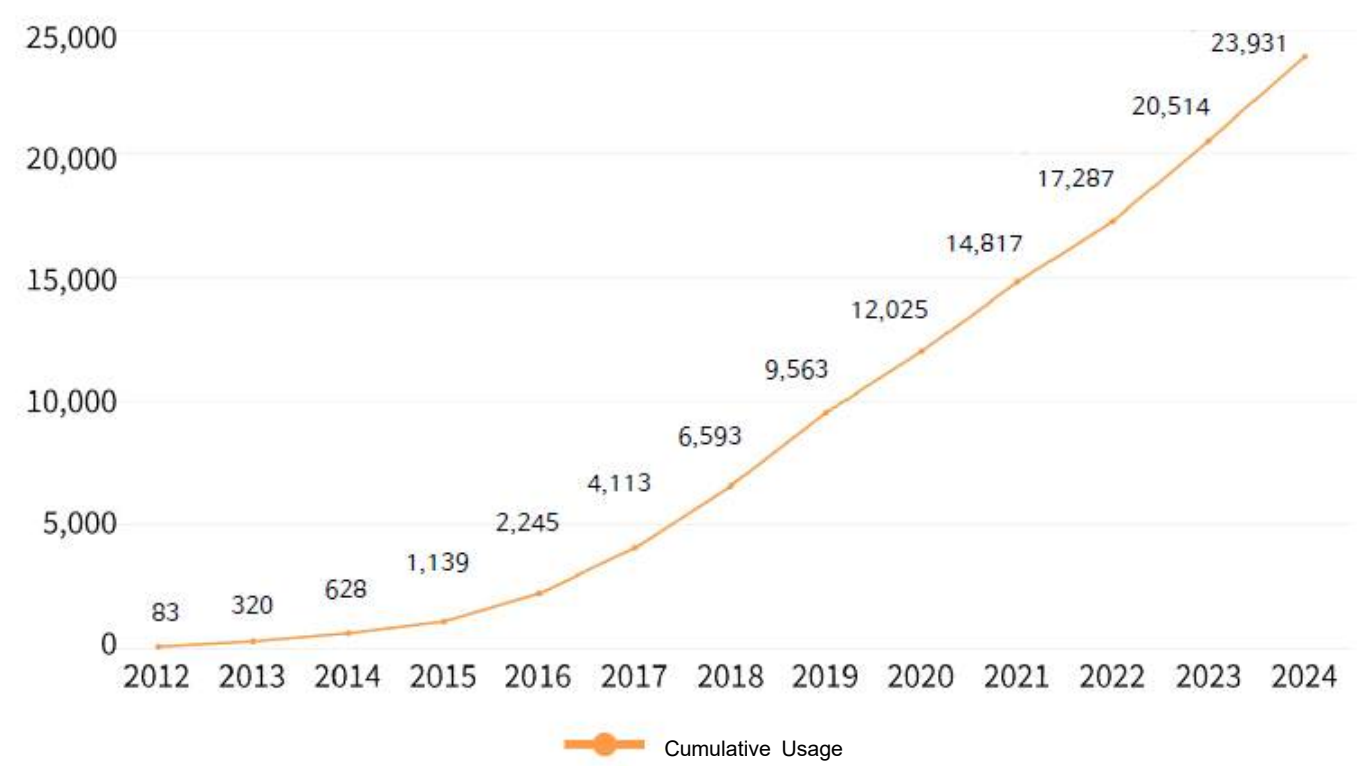
Steadily Growing Public Data Usage

As the fastest local government to implement public data openness and service delivery, Seoul has generated high expectations for the opening and effective use of public data through extensive preparation, the development of an accessible platform, and active engagement with its citizens.

These expectations are backed by concrete results. When Seoul Open Data Plaza first launched in May 2012, it recorded only about 20,000 uses in its first month. But as of November 30, 2024, the cumulative number of uses has reached approximately 24 billion. Even now, usage continues to grow steadily, with citizens and organizations making use of around 1 million datasets per day on average.

[Open Data Plaza Cumulative Usage¹⁾: approximately 24 billion (as of Nov. 30, 2024)]

(Unit: million cases)



1) Refers to cumulative use from 2012 to November 30, 2024 (including clicks, downloads, and API calls)

Open, Contain, Gather, Expand

Seoul, Recognized as a Leading Example of Public Data Openness

Seoul's public data openness initiatives have drawn significant attention as a benchmark across the private sector, public institutions, and academia. Seoul's case is regularly presented at related workshops, forums, and councils, and other local governments such as Gyeonggi Province and Busan are actively benchmarking Seoul's approach. Seoul's efforts, including the establishment of Open Data Plaza, have earned recognition: in 2012, the city received the Minister of the Interior and Safety Award at the Public Informatization Awards and was selected as the top institution for public information openness at the Smart & Open Government Competition. In terms of service quality, Seoul's Open Data Plaza has also been rated as outstanding, achieving a score of 82.9 out of 100, the highest among major global cities, ahead of New York (73.3), London (74.3), and Berlin (60.1).

Not resting on these achievements, Seoul remains committed to becoming a leading global model for public data openness, not only within Korea but on the international stage.

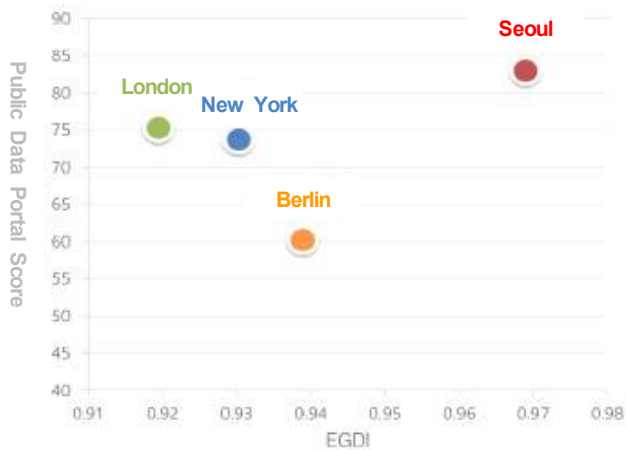
<Comparison of Major Global City Public Data Portal 1>



※ Source: Study on the Potential of Big Data Utilization in Preparation for AI Adoption in Urban Policy Development and Analysis

<Comparison of Major Global City Public Data Portal 2>

Governance Indicator – Public Data Portal Score



- **Social Indicator (Population)**
 - ✓ Seoul has a higher score compared to London and New York, which have similar population sizes.
 - ✓ There is a tendency for the score to increase as the population increases.
- **Economic Indicator (GRDP)**
 - ✓ Seoul has a higher public data portal score compared to Berlin and London, which have similar GRDPs.
 - ✓ Although New York's GRDP is significantly higher than Seoul's, its public data portal score is actually lower, showing that the scale of the economy does not guarantee data openness.
- **Governance Indicator (EGDI)**
 - ✓ Seoul ranks highest in both the EGDI (E-Government Development Index) and the public data portal score.

※ Source: Study on the Potential of Big Data Utilization in Preparation for AI Adoption in Urban Policy Development and Analysis

A World of Public Data Built Together with Citizens

Open Data Plaza is a space built together with citizens. From the start, Seoul's top priority in opening public data was minimizing user inconvenience while encouraging natural communication and participation. However, apart from some active developer groups, citizen engagement with public data still leaves room for improvement. While data usage has clearly increased, the cultural groundwork for the private sector to share its own data alongside public datasets still seems underdeveloped. This is a challenge that both Seoul and civil society must work on together. Compared to advanced countries, Seoul's journey into public data openness may have started somewhat later. Yet, we are confident that the quality of the data, the openness processes, and the shared platform infrastructure stand proudly alongside the best international examples. It is true that, in terms of the sheer number of open datasets, Seoul may appear to lag behind major global open data sites. But we believe this should not be viewed as a simple numbers game. There are differences in scale that make direct comparisons difficult, and considering Korea's relatively short history of public data openness, we are by no means falling short. There is still much to accomplish, and we invite you to watch with warm interest and support, rather than cool criticism, as we continue this journey forward.

Open, Contain, Gather, Expand

Seoul Open Data Plaza Public Data Startup Competition

The 2024 Seoul Open Data Plaza Public Data Startup Competition brought together creative ideas and innovative services powered by public data. This competition is designed to generate new value by leveraging the 8,000+ public datasets available through Seoul Open Data Plaza and to support participants in turning those ideas into real-world startups.

Building on the pilot program from 2023, the 2024 competition strengthened both its awards and startup support programs. Extensive promotional activities were carried out to increase participant convenience, and practical mentoring and startup support were actively provided to help transform public data-based ideas into viable businesses.

As a result, a total of 222 ideas and products were submitted, and six teams ultimately received awards. The winning teams received tailored mentoring on development, presentation, and startup preparation, along with additional support through startup programs sponsored by the Seoul Center for Creative Economy and Innovation and the Korea Student Aid Foundation. Moreover, the two grand prize winners had the opportunity to represent Seoul in the Ministry of the Interior and Safety (MOIS)'s Government-Wide Public Data Startup Competition.

To make it easier for participants to join, a dedicated competition menu was set up on the Open Data Plaza website (<https://data.seoul.go.kr>), enabling convenient online submissions. Seoul also promoted its winning entries on the MOIS competition bulletin board and shared award-winning cases from the MOIS and other government agencies for reference.

This competition demonstrated that public data can serve as a valuable springboard for innovation and entrepreneurship, providing real opportunities and support for aspiring founders. Looking ahead, Seoul plans to institutionalize the competition through continuous improvement, creating an environment where public data-driven startups can thrive.

Start your innovative entrepreneurship journey using public data with Seoul Open Data Plaza!

2023 Grand Prize Winners

General Category (Grand Prize): SEOUL SEE (Web)



SEOUL SEE is a platform that provides real-time air quality information in Seoul. Users can check air pollution indices such as fine dust, ultrafine dust, and ozone levels by district in real time, and visually explore conditions through an air quality road view. The platform also offers ten years of fine dust data analysis and information on nearby fine dust shelters, helping protect citizens' health and supporting policy development.

Student Category (Grand Prize): Public Transportation Communication Platform for Persons with Mobility Challenges (Web)



This public transportation communication platform for persons with mobility challenges provides real-time congestion levels and accessibility facility information. Users can check real-time congestion on buses and subways and access customized details about accessibility facilities for persons with mobility challenges. This service also provides congestion status and rankings for major areas and supports smoother, more convenient travel through real-time user communication features.

2024 Grand Prize Winners

Idea Category (Grand Prize): Moa Guide



Moa Guide is a platform that aggregates security token offering (STO) investment information in one place. It allows users to easily and quickly compare various STO products, offering real-time updates and customized analysis reports. Through a keyword-based news matching service, it automatically delivers the latest relevant news to investors, helping address information asymmetry. This innovative service supports investors in making safer and more efficient investment decisions.

Development Category (Grand Prize): My Home

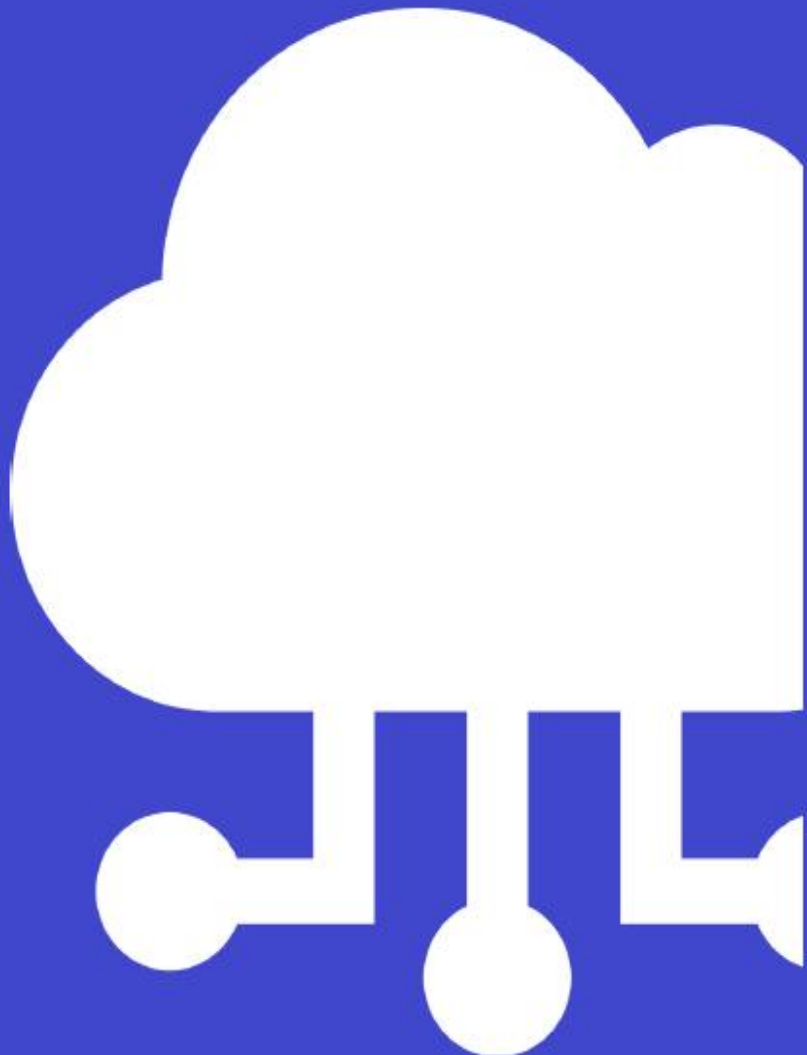


Nae-Zip is an integrated platform that allows users to view all redevelopment and reconstruction information at a glance. It accurately provides comprehensive details on all maintenance projects, from active zones to pre-sale, organized by redevelopment district. By combining public data, it uniquely offers key information such as average prices, area sizes, and the number of units. The platform also features an intuitive UI/UX and terminology guide, making it easy to understand even for beginners.

Expand.

Seoul is continuously working to develop diverse datasets and expand the scope of public data utilization.

Explore how Open Data Plaza has grown through Seoul Data Hub and public-private integrated data initiatives.



Open, Contain, Gather, [Expand](#)

Seoul Data Hub

Through Seoul Data Hub,
Seoul has broadened the scope of public data use.

It offers an environment where even those without specialized knowledge
can easily access and make use of public data.

With Seoul Data Hub,
you can easily search for the public data you need,
conveniently explore its features and usage potential,
and discover new possibilities
through a variety of visualization content.

Open, Contain, Gather, Expand

AI Chatbot for Searching Public Data in Everyday Language

With the AI chatbot provided by Seoul Data Hub, you can easily search for the public data you need through a conversational interface without needing complicated search queries or expert knowledge.

“Show me parking lots at Hangang Park in Yeouido.”

“Compare the number of libraries by district.”

The AI chatbot not only understands everyday language questions like these and finds the relevant datasets, but it can also provide direct answers without requiring you to download the full datasets. Additionally, it supports simple data analysis and offers charting features for comparisons.

To further improve the chatbot's responses and service quality, Seoul plans to carry out ongoing upgrades to the model, data quality management, and software updates.

<Example AI Chatbot Responses>

Tell me about the parking lot at Hangang Park in Yeouido



We will provide information on Hangang Park parking lots provided by Hangang Business Headquarters and companies in operation. We provide information on each district, parking lot name, location information, area, number of disabled spaces, number of regular spaces, weekday use times, weekday use fees, weekend use times, weekend parking fees, parking lots, operating companies, company representative name, company business registration number, company phone number, and operating period. The Hangang Park parking lots in Yeouido are as follows.

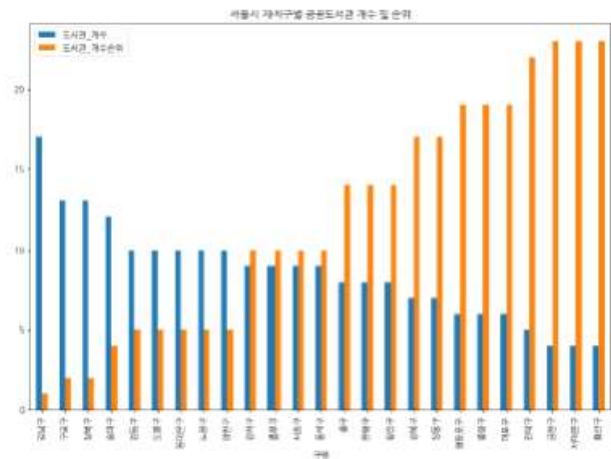
Yeouido Hangang Park Parking Lot Information

By parking lot	address	Interview
Yeouido 1st parking lot	86-5 Yeouido-dong, Yeongdeungpo-gu, Seoul (Yeouido-dong, Jinseongnaru)	462.0
Yeouido 2nd parking lot	84-4 Yeouido-dong, Yeongdeungpo-gu, Seoul (Yeouido-dong, Yeouinaru Station)	171.0
Yeouido 3rd parking lot	83-6 Yeouido-dong, Yeongdeungpo-gu, Seoul (Yeouido-dong)	785.0
Yeouido 4th parking lot	19 Yeouido-dong, Yeongdeungpo-gu, Seoul	218.0
Yeouido 5th parking lot	63 Yeouido-dong, Yeongdeungpo-gu, Seoul (Yeouido-dong, Yeouido St. Mary's Hospital)	141.0

Please refer to the address and number of each parking lot to avoid any inconvenience when using them.

Hangang Park Parking Lot Information

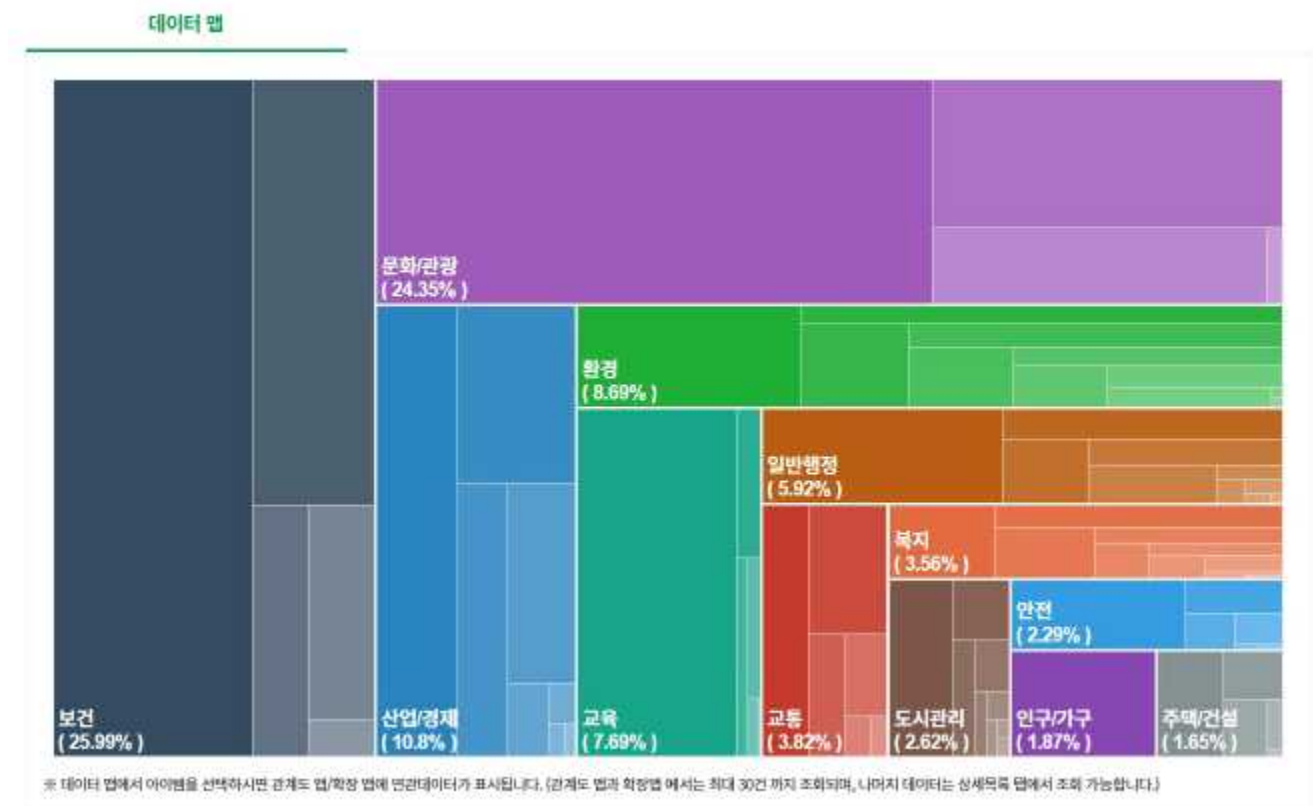
Did you like this answer? Please leave a comment so I can get smarter!



Data Maps and Data Guides to Help You Explore Data

Seoul Data Hub offers a “Data Map” service that visually organizes and presents the vast array of public data available on Open Data Plaza, analyzed by sector and topic. Users can quickly grasp the distribution of public datasets across sectors at a glance and conveniently explore the data they need with just a few clicks.

<Data Map>




For each public dataset, the detailed view is provided under the name “Data Guide.” The Data Guide not only displays the dataset’s metadata but also presents graphs and tables that show the data format, potential value, and other practical insights at a glance.

This allows users to understand key details without having to download and open the entire dataset first.

Open, Contain, Gather, **Expand**

<Data Guide>



[Culture/Tourism]

Open Data Plaza CSV JSON

Current status of Seoul City public libraries

This is information on the status of public libraries in each autonomous district of Seoul.
Provides library name, name, address, phone number, website address, operating hours, regular closing days, location information, etc.

[Add data basket](#) [Copy URL](#) [Go to original data](#)


128 36

Data components ⓘ


location	Old code, rescue, address, latitude, longitude
Time series	Operating hours, regular closing days
cord	Library category, library category name
black eye	-

Data properties ⓘ


Very high



Very low



height



Publication date	2018.11.29	Last modified date	2025.05.29
Renewal cycle	Irregular (when data changes)	classification	Culture/Tourism
Original system	Seoul Metropolitan Library Homepage	Copyright holder	Seoul Metropolitan City
Provider	Seoul Metropolitan City	Provided by Department	Seoul Metropolitan Library Knowledge and Culture Department
manager	Lee Hyun-woo (02-2133-0215)		
Original form	Dataset		
License	Public domain type 1		
Related Tags	Library, User Guide, Location		

Diverse Visualization Content Showcasing the Value of Public Data Utilization

Seoul Data Hub offers a range of visualization content services that present public data in diverse ways. This allows users to intuitively grasp insights across various topics and sectors without having to perform their own data analysis.

First, there’s the “Thematic Analysis Visualization” service, which selects topics of high public interest and deeply analyzes the related data, presenting it as infographics.

Unlike static infographics, the Thematic Analysis Visualization service provides filter functions such as by region and time, allowing users to view the data they want in graphic form.

For example, under the “Tourism” topic, users can check monthly tourism statistics in Seoul, select from dozens of major attractions, and explore details like the number of domestic and foreign visitors, visitor age groups, visitor origin by region, and annual visitor trends.

Currently, nine topics are available, including “Daily Mobility, Tourism, Employment, Traditional Markets, Childcare, Life Stages, Seniors, Parks, and Housing,” with plans to continuously expand topics based on citizen feedback.

<Thematic Analysis Visualization>



Next is the “3D Visualization” service, which brings various data to life through 3D characters and animations. Topics like “Population, Life Expectancy, Education, Daily Life, Pets, Happiness Index, and Local Commercial Districts” are presented in 3D, featuring Seoul’s mascot, Haechi, as a 3D character that also provides voice explanations for the data.

The 3D Visualization service also lets users open and compare two or three datasets simultaneously and includes a real-time chat function, enabling users to share and exchange opinions while viewing the data together.

Open, Contain, Gather, **Expand**

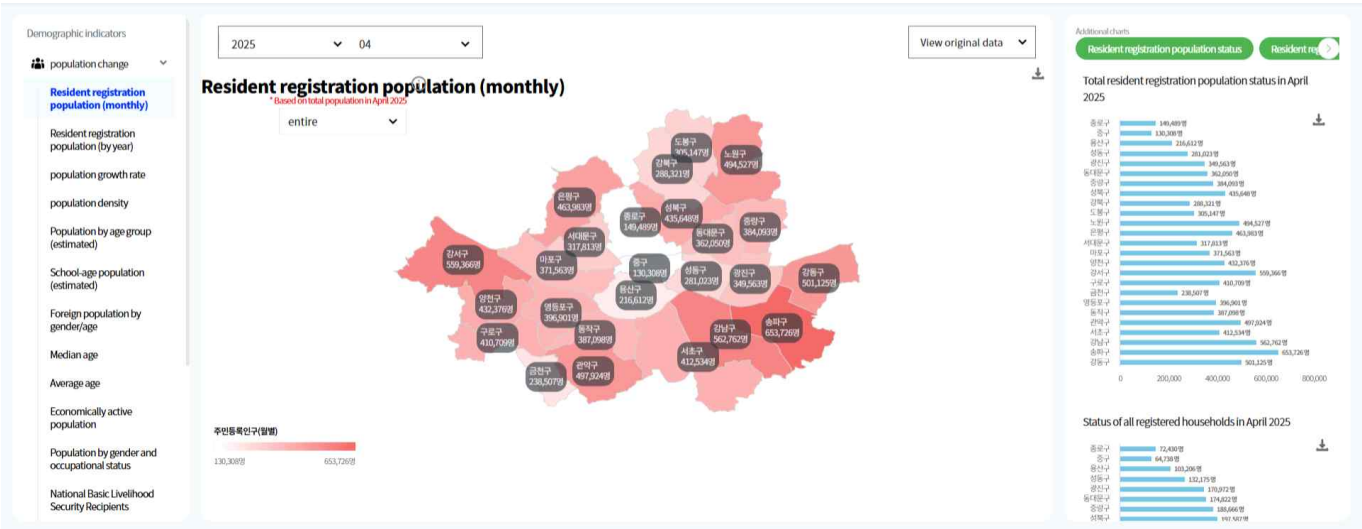
<3D Visualization>



There are also specialized visualization services focused on specific fields, such as the “Population Visualization” service, which presents data most closely tied to citizens’ daily lives, like population, births, deaths, marriages, migration, and households, using region-based infographics.

In the Population Visualization service, users can explore detailed information across 48 population- and household-related indicators through regional charts and supplementary visualizations. Each chart offers period and region filters, allowing for a more detailed breakdown. All charts can also be downloaded as images for further use.

<Population Visualization>



Over 12,000 Active Users and 60,000 Views in Just Two Months after Launch

Since its official launch on November 1, 2024, Seoul Data Hub has attracted more than 12,000 users in just two months, recording over 60,000 total views.

Seoul plans to continuously enhance Seoul Data Hub's public services by actively incorporating user feedback and leveraging the platform for better policymaking.

In addition, the city will continue raising public awareness of open data by hosting contests and competitions that address social issues using data.

Open, Contain, Gather, [Expand](#)

Public-Private Integrated Data

In addition to public data, a vast array of data is being generated across Seoul from countless sensors.

Seoul collaborates with telecommunications companies, card companies, logistics providers, and credit information agencies to develop and release public-private integrated data beyond just public sources.

Planning to visit the Yeouido Cherry Blossom Festival?

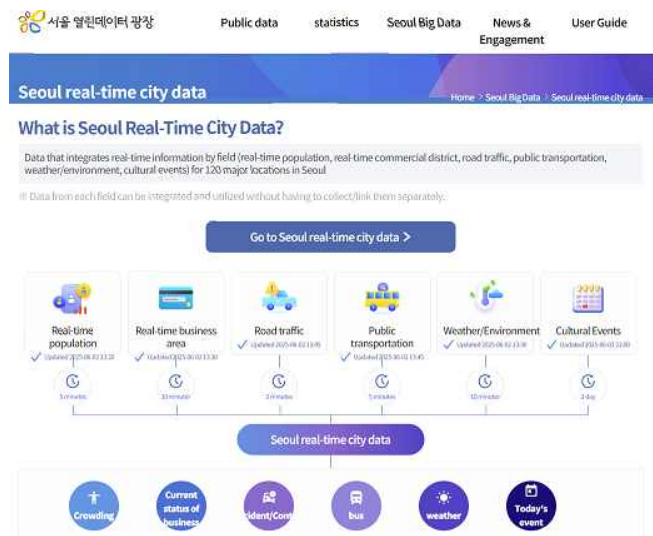
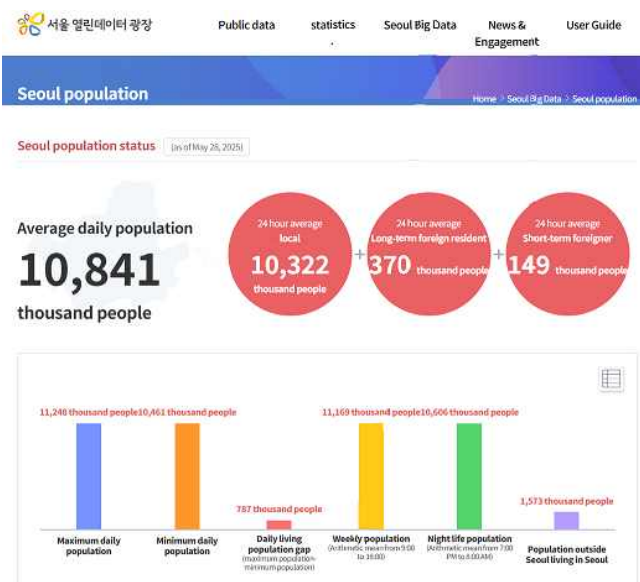
Check all the real-time information you need for Yeouido Hangang Park, including live population congestion, public transportation, and parking lot status!

A Variety of Visualization Content Demonstrating the Value of Public Data

Seoul is working not only to open up its existing datasets but also to increase the value of data utilization by integrating public and private sector data.

While Seoul has long used data analysis to support department-level policy development, there were limitations when relying solely on city-owned datasets. To address this, since 2018, Seoul has been producing integrated datasets by combining city-held data with private-sector data obtained from diverse industries.

The development process includes identifying relevant integrated datasets through advisory meetings and demand surveys, then working with private data holders to collect, analyze, integrate, and validate the data. These integrated datasets are now being applied across various municipal fields and are available for the public on Open Data Plaza.



Open, Contain, Gather, **Expand**

<Status of Public-Private Integrated Data on Open Data Plaza>

Data Name	Details	Participating Organizations
Seoul Living Population (2018)	Data on all people present in Seoul at a specific time, including Korean nationals, long-term and short-term foreign residents, and non-Seoul residents active in the city.	KT
Seoul Daily Mobility (2021)	Data on populations moving between “specific areas” at “specific times,” covering all people traveling within Seoul or between Seoul and surrounding areas.	Korea Transport Institute, KT
Seoul Citizen Life (Single-Person Households) Data (2022)	Development of single-person household data using Statistics Korea’s registry and telecommunications data, including characteristic analysis and customized policy development.	Statistics Korea, University of Seoul, SKT
Seoul Real-Time Urban Data (2022)	Development and release of real-time integrated urban data providing key information (population density, parking, Ttareungi bikes, weather, etc.) at major locations like tourist sites, Hangang parks, and commercial districts.	KT, SKT
Seoul Urban Logistics (2023)	Development of parcel logistics volume data by product category (11 large categories, 129 mid-level categories) for shipments to/from Seoul, supporting logistics policies.	CJ OliveNetworks
Capital Region Commuter/Student Population Data (2024)	Data measuring all people moving between “specific areas” at “specific times” across the capital region, including commuting and school-related movements.	Statistics Korea, Gyeonggi Province, Incheon, KT

※ Depending on technological advancements and changes in data demand, the available datasets may be further developed, integrated with similar datasets, or discontinued.

Enhancing Utilization through Public-Private Data Integration

Seoul is developing new public-private integrated datasets and conducting policy research through partnerships not only with private companies in telecommunications, finance, credit, and distribution, but also with public and academic institutions like Gyeonggi Province, Incheon City, Statistics Korea, the Korea Transport Institute, and the University of Seoul.

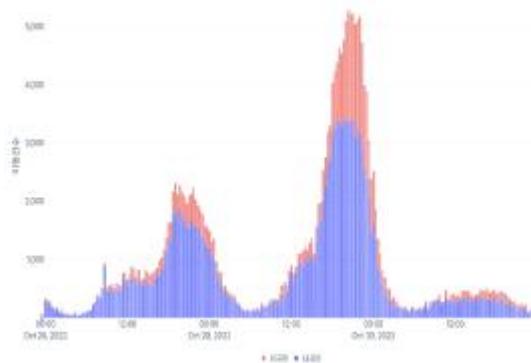
Seoul will continue collaborating across public, private, academic, and research sectors to develop and open high-value datasets capable of generating diverse revenue models, prioritizing the creation of new value.

<Examples of Key Analyses Using Public-Private Integrated Data>

[Analysis of Daily Mobility on Itaewon Halloween Festival Day]

Analyzed visitor numbers and population characteristics by time, compared across years

→ Used as foundational data for developing crowd management strategies in high-congestion areas



[Developing Strategies to Promote Hangang Park Waterfront Spaces]

Analyzed usage patterns and identified environmental variables to categorize functional areas

→ Used to establish promotion strategies for specific zones during waterfront planning



[Verifying the Effectiveness of the Red Road Project]

Quantitatively assessed the impact of the Red Road created in April 2023 (e.g., local sales)

→ Used in planning the expansion of the Hongdae Special Tourist Zone and drafting the 2025 tourism revitalization plan



[Analyzing Mobility Blind Spots for Night Bus Route Selection]

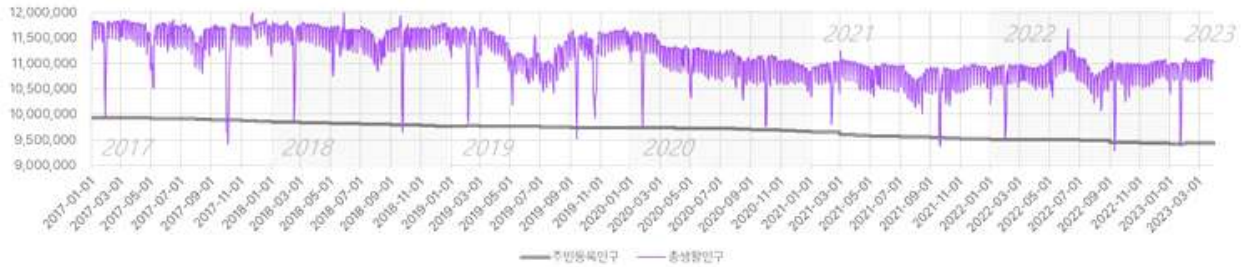
Compared late-night mobility patterns and night bus coverage areas to identify blind spots

→ Used to select six new Night Bus routes



Open, Contain, Gather, **Expand**

[Seoul's Registered Population vs. Living Population]

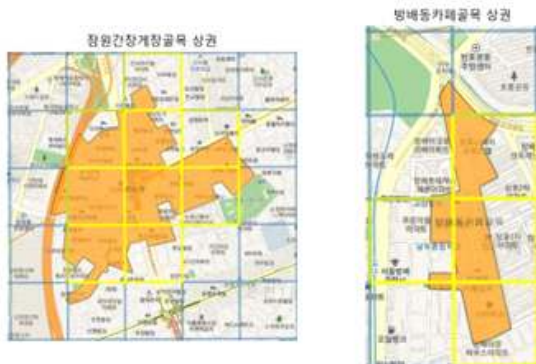


[Analyzing Changes in Citizen Mobility during COVID-19]



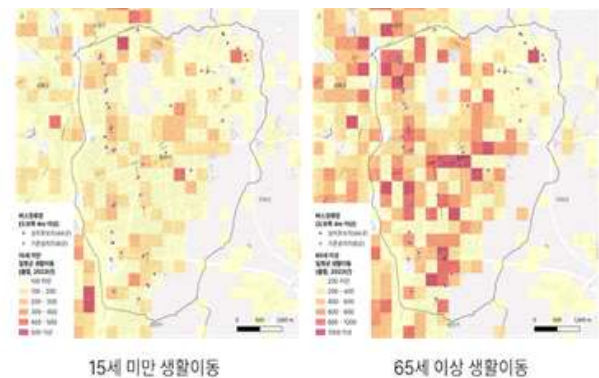
[Commercial Zone Analysis for Boosting Neighborhood Small Business Zones]

Analysis of sales status and living population characteristics across neighborhood small business zones in Seocho District
→ Used as foundational data for developing policies tailored to boost each zone's unique characteristics



[Determining Priority Locations for Smart Shelter Installation]
Selected optimal bus stop locations for smart shelters to cope with heatwaves and cold snaps

→ Used in planning next year's smart shelter installations



Flagship Public-Private Integrated Data 1: Seoul Metropolitan Daily Mobility Data

Seoul, in collaboration with Gyeonggi Province, Incheon, Statistics Korea, three metropolitan research institutes, and telecom providers, has successfully developed the world's first real-time daily mobility dataset that crosses city and provincial boundaries. This data is designed to precisely analyze movement patterns and commuting times across Seoul, Gyeonggi, and Incheon, with the goal of improving residents' quality of life.

The dataset is designed for fine-grained measurement at a 250-meter grid level and includes movement information in 20-minute intervals throughout the day, enabling a wide range of analyses by time, gender, and age. The Seoul Metropolitan Daily Mobility Data is expected to be applied not only in Seoul but also across the broader metropolitan area, including Gyeonggi and Incheon, supporting improvements in large-scale transportation systems, housing policy development, disaster response planning, and other public policies for meaningful, practical impact.



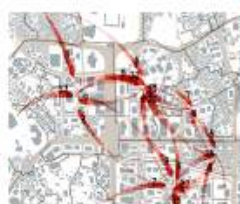
Seoul Night Bus (2013)
Enhanced citizen convenience through optimized night bus routes, marking an early success case of data-driven administrative innovation

최적의 버스노선 구축으로 시민 편의의 증대
데이터 기반 행정혁신 초기 성공 사례



Seoul Living Population (2018)
Supported decision-making for optimal allocation of public services by estimating administrative demand

서울시 행정수요 측정으로
공공서비스의 최적배분을 위한 의사결정 지원



Seoul Daily Mobility (2021)
Used as policy data for citizen movement, including public transportation, transport networks, and selecting locations for youth housing.

대중교통, 교통망, 청년주택 입지 선정 등
시민 이동 관련 정책 자료 활용

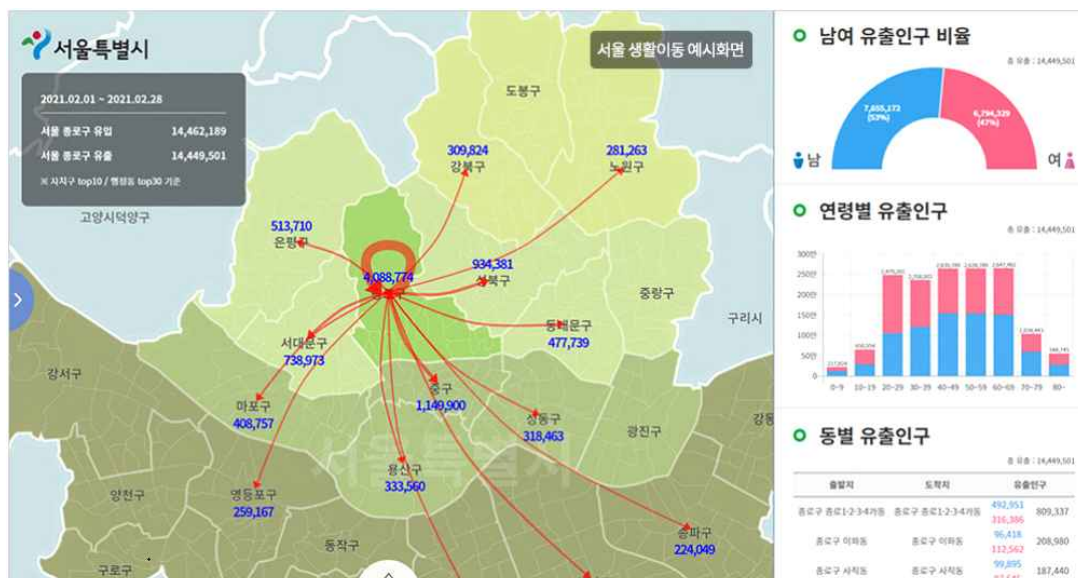


Seoul Metropolitan Daily Mobility (2023)
Utilized in developing innovative policies to improve urban quality of life, including large-scale transportation systems, housing, and urban space restructuring.

도시민의 삶의 질을 높이기 위한 광역교통,
주거·도시공간 재구조화 등 혁신정책 수립 활용

(MOIS)
Introduction of the "living population" concept;
Enactment of the *Special Act on Support for Depopulation Regions* (effective Jan. 1, 2023)

(MOLIT)
There is an ongoing effort (as of 2024) to incorporate time-based, real-world living population data into national land planning, which has traditionally been based on settled populations (such as census and resident registration data).

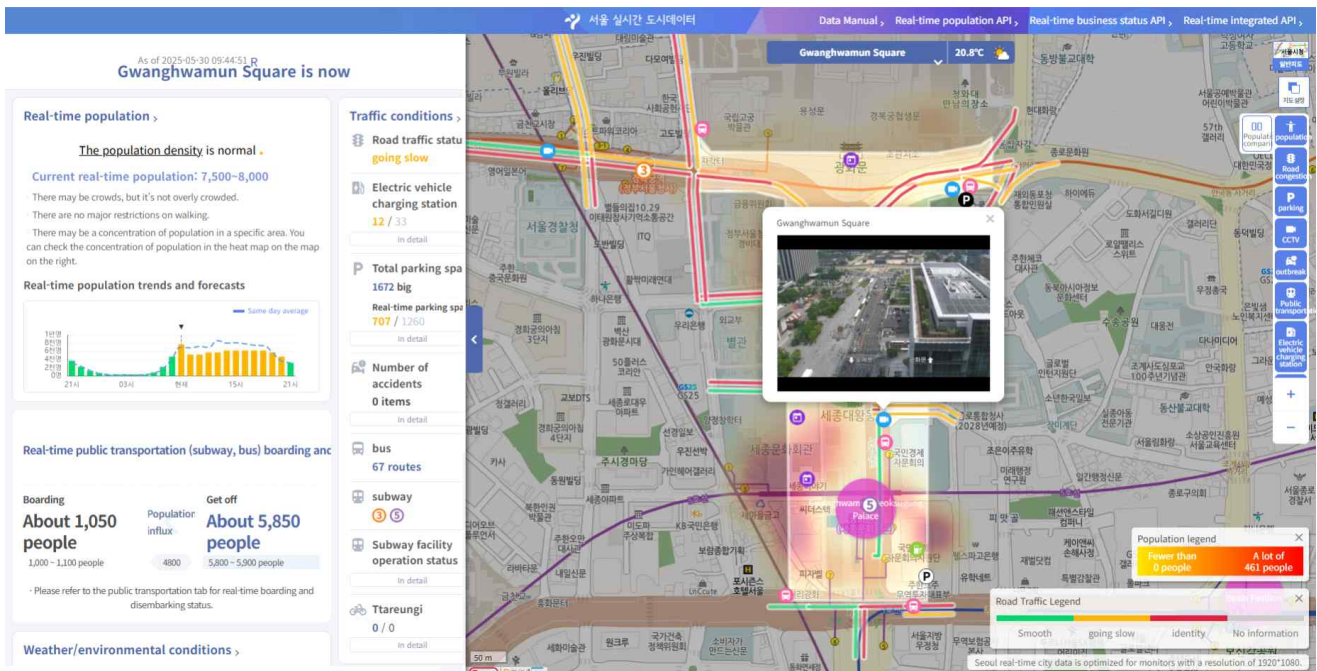


Open, Contain, Gather, Expand

Flagship Public-Private Integrated Data 2. Seoul Real-Time Urban Data

Seoul's Real-Time Urban Data aggregates and provides diverse real-time information, including population congestion, public transportation status, and parking at 116 key locations across the city. Starting in 2022 with the opening of real-time urban data from 50 major commercial areas and tourist attractions, the coverage expanded to 113 locations in 2023 and 116 locations in 2024.

The real-time population data is collected and managed in collaboration with telecom providers KT and SK Telecom, while commercial district data is gathered in partnership with Shinhan Card. This real-time data is being used in various ways, such as big data analysis for predicting and monitoring crowd density at events and providing insights for crowd management.



<Status of Seoul Real-time Urban Data Service Locations (as of February 2025)>

Category	Major Location List	Number
Special Tourist Zones	Dongdaemun Special Tourist Zone, Jamsil Special Tourist Zone, Jongno/Cheonggye Special Tourist Zone, Hongdae Special Tourist Zone, Gangnam MICE Special Tourist Zone, Myeongdong Special Tourist Zone, Itaewon Special Tourist Zone	7
Parks	Gangseo Hangang Park, Gwangnaru Hangang Park, Nanji Hangang Park, Yeouido Hangang Park, Jamwon Hangang Park, Yanghwa Hangang Park, Ttukseom Hangang Park, Mangwon Hangang Park, Namsan Park, Banpo Hangang Park, Ichon Hangang Park, Jamsil Hangang Park, Bukhansan Dream Forest, Seoul Forest Park, World Cup Park, National Museum of Korea and Yongsan Family Park, Seoul Grand Park, Jamsil Sports Complex, Gocheok Sky Dome, Gwanghwamun Square, Nodeluseom, Bulgwangcheon, Seoripul Park and Montmartre Park, Seoul Plaza, Mt. Ahasan, Children's Grand Park, Mt. Eunbongsan, Mt. Cheonggyesan, Cheong Wa Dae	29
Palaces & Cultural Heritage Sites	Gyeongbokgung Palace, Bosingak Belfry, Gwanghwamun and Deoksugung Palace, Changdeokgung Palace and Jongmyo Shrine Area, Seoul Amsa-dong Prehistoric Settlement Site	5
Major Commercial Districts	Garak Market, 4.19 Cafe Street, Gwangjang Market, Gimpo Airport, Deoksugung-gil and Jeongdong-gil, Bangbae Station Food Alley, Seochon, Yeonnam-dong, Oedae-ap (front of Hankuk University of Foreign Studies), Yongsidan-gil, Itaewon Antique Furniture Street, Cheongdam-dong Luxury Street, Cheongnyangni-Jegi-dong Traditional Market Area, Haebangchon-Gyeongnidan-gil, DDP (Dongdaemun Design Plaza), Yeouido, Ssangmun-dong Restaurant Street, DMC (Digital Media City), Changdong New Economic Center, Naksan Park-Ihwa Mural Village, Nagwon Instrument Arcade, Apgujeong Rodeo Street, Garosu-gil, Suyu-dong Food Alley, Seongsu-dong Cafe Street, Bukchon Hanok Village, Insa-dong, Ikseon-dong, Yeongdeungpo Times Square, Namdaemun Market, Bukchang-dong Food Alley	31
High-Density Population Areas (Subway Station Areas)	Seoul Station, Sindorim Station, Express Bus Terminal Station, Gasan Digital Complex Station, Guro Digital Complex Station, Gangnam Station, Yeoksam Station, Konkuk University Station, Sillim Station, Seoul National University of Education Station, Seolleung Station, Sinchon-Ewha Womans University Station, Yongsan Station, Yeonsinnae Station, Wangsimni Station, Seoul Botanic Park-Magoknaru Station, Omokgyo Station-Mokdong Stadium, Chongshin University (Isu) Station, Hongik University Station (Line 2), Godeok Station, Guro Station, Gunja Station, Namguro Station, Daerim Station, Dongdaemun Station, Ttukseom Station, Mia Sageori Station, Balsan Station, Bukhansan Ui Station, Sadang Station, Samgakji Station, Seoul National University Station, Sungshin Women's University Station, Suyu Station, Sinnonhyeon Station-Nonhyeon Station, Yangjae Station, Itaewon Station, Jangji Station, Janghanpyeong Station, Cheonho Station, Chungjeongno Station, Hapjeong Station, Hyehwa Station, Hoegi Station	44
Total		116



Seoul Open Data Plaza