

2019 Annual Report

Goyang Research Institute

ABOUT GYRI

1) Introduction

GYRI is committed to researching practical solutions for sustainable Goyang City and promoting citizens' happiness. The Goyang Research Institute is the first local government-affiliated institute in the northern region of Gyeonggi Province to promote sustainable regional development based on the metropolitan Goyang City.

2) Vision

- **Think Tank** – The first think-tank in the northern Gyeonggi Province
- **Solution Bank** – Creative researches and suggestions of policy alternatives for Goyang City
- **Data Bank** – Local-based data construction and synthetic data analysis



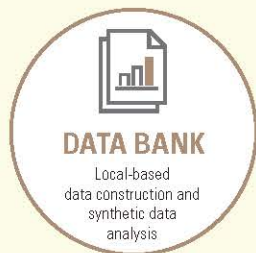
Think-Tank of Goyang City

- Innovation research focused on Goyang City
- In-depth analysis of local environment in Goyang City
- Strengthen the metropolitan research network



Solution-Bank for Goyang City

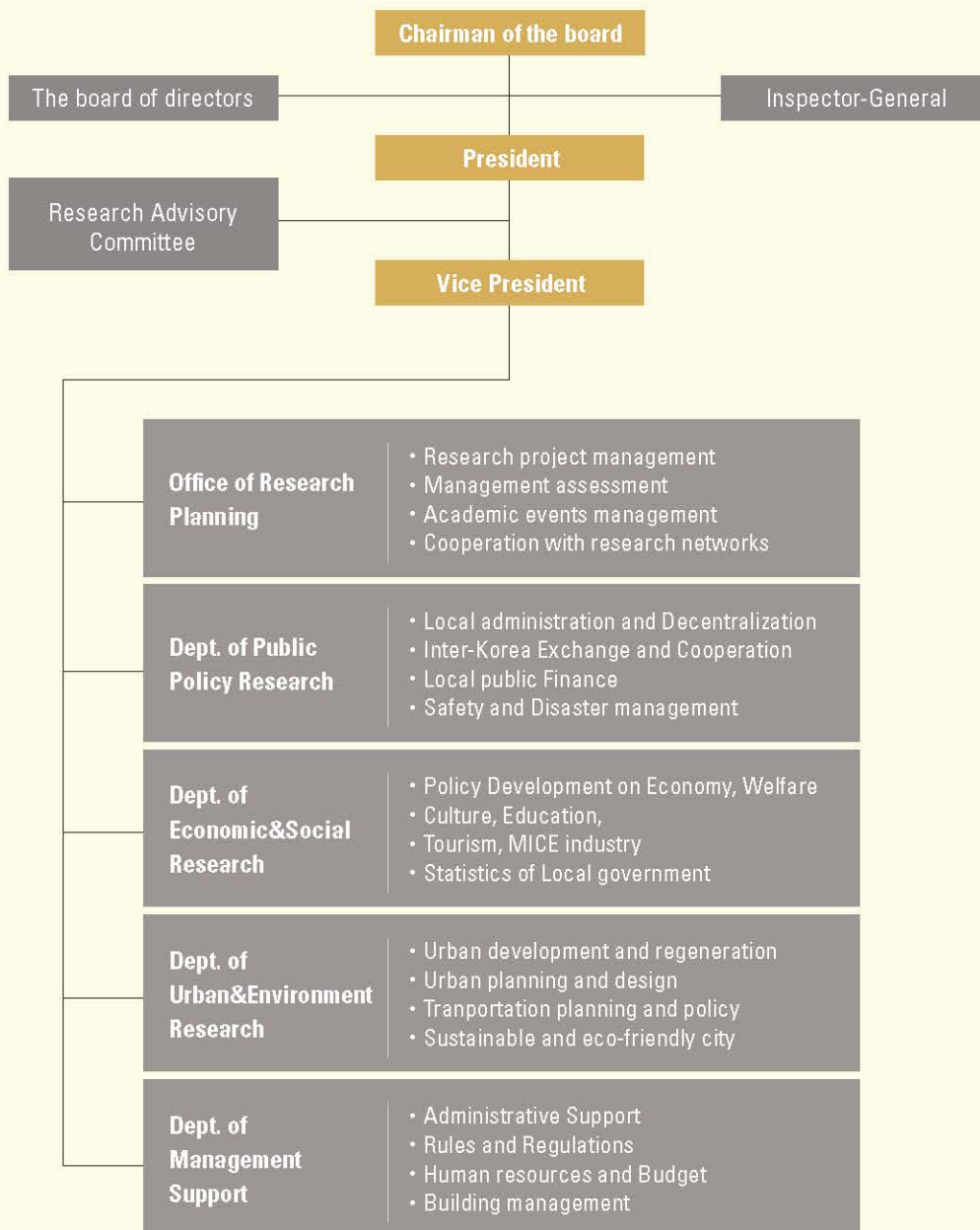
- Local-based creative policy proposal
- Empirical-positive approach for citizens
- Policy recommendations based on citizen participation



Data-Bank on Goyang City

- Proactive research based on data analysis
- Systematic implementation of local information
- Continuous information construction and analysis

3) Organization



4) HISTORY

2017

Research Cooperation MOU

- Jungbu University
- Changwon Research Institute
- Korea Aerospace University
- Suwon Research Institute

2018

Research Cooperation MOU

- Gyeonggi Research Institute

2019

Research Cooperation

- Korea Local Tax Research Institute
- Dongguk University
- Korea Research Institute for Human Settlements



Research exchange

Research Cooperation MOU

Collaborating bodies of research institute (Smart City related)

- | | | |
|---|--------------------------------------|-------------------------------|
| • National Field Research Institute | • Goyang Research Institute | • Ulsan Development Institute |
| • Gangwon Research Institute | • Gwangju Jeonnam Research Institute | • Jeonbuk Research Institute |
| • Gyeonggi Research Institute | • Daegu-Gyeongbuk Research Institute | • Jeju Research Institute |
| • Gyeonggi-do Economic Sciences Promotion Institute | • Daejeon Sejong Research Institute | • Changwon Research Institute |
| • Gyeongnam Development Institute | • Seoul Research Institute | • Chungnam Research Institute |
| | • Suwon Research Institute | • Chungbuk Research Institute |

5) 2019 Research Activities

2019 Research Division

NO.	Total	Dept. of Public Policy Research	Dept. of Economic & Social Research	Dept. of Urban & Environment Research
Total	42	16	16	10
Basic Research	13	4	5	4
Policy Research	22	9	8	5
Current issues Research	5	2	2	1
Contracted Research	1	1	0	0
Consigned Research	1	0	1	0

Basic research

Reinforcement of researcher's research ability and long-term vision research

Policy research

Study on applicable policy directions and recommendations in Goyang City

Current issues research

Practical short-term study on current issues in Goyang City

Contracted research

Research service upon request from an external institution

Consigned research

Research conducted and managed by consignment to other research institutes

Basic Research(13)

NO.	Division	Title	Author
1	Dept. of Public Policy Research	A Study on the Effective Operation System of Disaster Management in Goyang City	Lee, Jungchul
2		Asymmetrical impacts of local revenue variation on local government expenditure sectors	Suk, Howon
3		A Study on Promoting Goyang City As the Standard South-North City	Ahn, Jiho
4		A Study on the Characteristics of National Subsidies in Goyang City	Park, Jonghyok
5	Dept. of Economic& Social Research	A Study on the Local Government's Big Data Utilization Strategies	Yun, Shinhee
6		A Study on the Structural Characteristics of Tourism industry in Goyang City	Song, Sooyeop
7		Policy Development Research to Foster Goyang Digital Contents Industry	Lee, Hyunjung
8		Active Aging Study A Study on the Living Conditions of Middle-aged in Goyang City	Moon, Junghwa
9		An Analysis on the Status and Characteristics of Cultural Resources in Goyang City	Kwon, Sunyoung
10	Dept. of Urban& Environment	A Study on the Procedures and Countermeasures for Railway Project in Goyang City	Baek, Joohyun
11		An Analysis of the Spatial Characteristics of Migration in Goyang City	Kim, Leeyoung
12		An Analysis of the Goyang Apartment City (1) - Ilsan Newtown	Kim, Joanwoo
13		Research on Introduction strategy of low Impact development (LID) in Goyang city [1]	Im, Jiyeol

Policy Research(22)

NO.	Division	Title	Author
1	Dept. of Public Policy Research	Goyang Vision 2030	Park, Jonghyok
2		A Study on the Actual Working Condition and Support Plan for Emotional Labor Employees in Public Sector in Goyang City	Lee, Jungchul
3		A Study on Measures to Support of Inter-Korean Economic Cooperation for Goyang City	Ahn, Jiho
4		A study on finding measures to increase local tax revenue in Goyang City	Suk, Howon
5		A Study on actual conditions and needs for Multicultural Family support policy in Goyang City	Jean, Sunghun
6		A Study on the present states and Activation of the Community Autonomy in Goyang City	Jean, Sunghun
7		A Study on the Current Status of Safety Awareness and Improvement of Safety Culture in Goyang City	Lee, Jungchul
8		A Study on the Improvement of Budget Performance in Goyang City	Park, Jonghyok
9		Comparative Study on the Financial Status of Metropolises and Goyang City	Lee, Chang kyun
10		A Study on the Survey of Cultural Diversity in Goyang City	Kwon, Sunyoung
11		A Study on the Systematization of Social Statistics in Goyang City	Yun, Shinhee

12	Dept. of Economic & Social Research	A Study on Measures to Improve Perception on Disabilities in Goyang City	Moon, Junghwa
13		A Study on the Welfare Infrastructure Strategy for the Elderly in Goyang City	Moon, Junghwa
14		An Analysis of Economic Impacts of Large Scale Developments in Goyang City	Song, Sooyeop
15		A Study on Formulating of Basic Plan for Youth(2020-2022) in Goyang City	Kwon, Sunyoung
16		A Study on the Customization of Jobs for the Young and SMEs (Small and Medium Enterprise) in Goyang City	Lee, Hyunjung
17		A Study on the Development of Craft Industry in Goyang City	Lee, Hyunjung
18	Dept. of Urban & Environment	A Study on the Policy Direction of Public Bicycle in Goyang City	Baek, Joohyun
19		A Study on the renovation plan for Lake Park, Goyang City	Kim, Joonwoo
20		A Preliminary Study on the Public Land Use Platform for Efficient Use of Goyang City Owned Land	Kim, Leeyoung
21		Research on improvement of recyclable waste collection system in Goyang City: case research of detached and multiplex house area	Im, Jiyeol
22		A Research on the design criteria of green building and housing in Goyang City	Im, Jiyeol

Current issues Research(5)

NO.	Division	Title	Author
1	Dept. of Public Policy Research	A Study on the Consensus of peaceful Reunification in Goyang City	Ahn, Jiho
2		A Study on the Current Status and Improvement of the Support System for the Victims of Social Disasters in Goyang City	Lee, Jungchul
3	Dept. of Economic & Social Research	A Case Study of Local Government 50+ Center	Moon, Junghwa
4		A Case Study on Community Use of School Sports Facilities	Kwon, Sunyoung
5	Dept. of Urban & Environment	Research on Result Report and Improvement plans of Goyang International City forum	Im, Jiyeol

Contracted Research(1)

NO.	Division	Title	Author
1	Dept. of Public Policy Research	The Concept and Model of the Special Zone for Peace and Economy in Goyang City	Ahn, Jiho

Consigned Research(1)

NO.	Division	Title	Author
1	Dept. of Economic & Social Research	A Study of the Establishment of Criteria for Evaluation of Regulatory damage in Border region of the Metropolitan Area	Lee, Hyunjung

6) 2019 Research summary

Basic Research(13)

NO.	Division	Title	Author
1	Dept. of Public Policy Research	A Study on the Effective Operation System of Disaster Management in Goyang City	Lee, Jungchul
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>> Basic Research



A Study on the Effective Operation System of Disaster Management in Goyang City

Lee, Jungchul / Hwang, Huiuk

The purpose of this study is to analyze the current status of disaster management in Goyang City and to present effective management measures for the disaster management system in Goyang City so that the government can mobilize its management capabilities timely and efficiently in the event of large scale and unexpected disasters. To achieve these research goals, this study first defines the concept of disaster and safety through literature review and analyzes the current status of the disaster management system. And this study presents implications for the improvement of the disaster management system in Goyang City by comparing the best practices of American, Japanese and Korean disaster safety management systems. Finally, this study aims to analyze the strengths and weaknesses of the disaster management capabilities of Goyang City and proposes measures to improve the disaster safety management system by utilizing quantitative assessment results related to disaster safety diagnosis, such as regional safety index assessment and disaster management assessment.

First of all, the results of the regional safety index indicate that Goyang City is ranked 2nd in the evaluation of most safety areas, such as crime prevention, fire and traffic accidents. In the field of life safety policy, it was the only one with the best quality out of the seven sectors, and it has been shown that it has maintained the first grade for the past three years. Meanwhile, in the case of natural disaster management, it has been trending downward for the past three consecutive years, from the first to the fourth grade.

Second, in the disaster management assessment, Goyang City was diagnosed as 'Below Average' in 2018 and 'Average' in 2019. These results suggest that Goyang City needs to make significant improvements to reach the 'Excellent' level in terms of disaster management capabilities. In fact, Goyang City has been diagnosed as limited in safety management, safety culture establishment efforts, and disaster recovery cooperative activities.

Lastly, in the annual regional safety assessment conducted in accordance with the "Countermeasures against Natural Disasters Act", Goyang City showed a recent drop from Grade 4 to Grade 7 in relation to the maintenance of natural disaster facilities.

Through these diagnoses, this study suggests measures to enhance the disaster safety management capabilities of Goyang City in terms of safety education, training and campaign: First, specifically, this study raise the need to

establish mid and long-term plans and strategies for disaster safety management from a sustainable perspective; second, Goyang City needs to increase cooperation and civic participation with local residents in order to prevent disaster safety accidents, and can consider providing legal, institutional and financial support for this; third, we propose to expand CPTED (Crime Prevention Through Environmental Design) projects that can be expected to prevent crimes against security while reducing budget, and to upgrade CCTV operations, one of the major ways to prevent crimes through environmental design; fourth, the need for public safety apps is emphasized because they have the advantage of high accessibility and convenience of using smartphones to get information in real time; fifth, the need to prepare measures to strengthen safety management and safety education for the disabled, the elderly, and children; finally, this study suggests ways to expand hands-on education and safety education by life cycle perspective in order to diversify and internalize safety education.



Asymmetrical impacts of local revenue variation on local government expenditure sectors

Suk, Howon / Lee, Juhyun

The aim of this study is to discover policy sectors that face the risk of drastic forced reductions in expenditures due to the reduction in unconditional grants and local government's own revenues (the sum of local tax and non-tax revenue) in advance and to explore countermeasures to mitigate expenditure volatility in those sectors.

This study proposes to analyze the city government's functional expenditure in 4 policy areas (13 fields in total): general administration, social development, social welfare and economic development. The change in expenditures in each sector is analyzed with panel data analysis using data of city government's settlement of accounts for 2011 to 2017. Then, in addition, the expenditure changes of four sectors in Goyang city are analyzed as well.

The results of panel data and comparative analyses are as follows:

In the analysis of total expenditure changes, the unconditional grants and own revenue suggest almost the same inducement effect. However, the total expenditure reduction is very large when the conditional grants decrease. In the general administrative sector, only the symmetric effect exists when the unconditional grants, own revenues and conditional grants decrease, which indicate a relatively low risk of asymmetric expenditure reduction.

When it comes to the social development sector, there is a symmetric effect according to the reduction of own revenues and unconditional grants, while a replacement effect happens with the reduction of unconditional grants. So, the social development sector is estimated to be the area where local government could take policy actions to ease spending volatility.

Considering that only the symmetric effect happens, the social welfare sector is estimated to be low in spending variability. However, these results could come from continuous growth in subsidy programs from the central government, so there is a need to keep an eye on future trends. In the economic development sector, the symmetric effect results when own revenues and unconditional grants decrease, but the reduction in conditional grants has an inducement effect, which is likely to result in significant expenditure changes when the subsidy programs of the central government decrease.

Based on these findings, this study suggests the following measures for mitigating spending volatility:

- 1) The recent financial distress of local governments are largely attributable to the central government's policy

changes, such as the central government's tax cut policy, the child care program, and the basic pension system. Therefore, it is necessary to examine the possibility of fiscal variability for local governments due to the changes in central government policies;

- 2) As possible alternatives for easing fiscal fluctuations to the local government, there is a need to enhance the utilization of "fiscal stabilization fund" for the rainy day;
- 3) Unexpected changes of local government expenditures could be mitigated by improving accuracy of estimating the fiscal local revenue, minimizing predictive errors and by identifying patterns of expenditure changes in various situations through scenario analysis;
- 4) If the ratio of the local government burden in subsidy programs is high, local government expenditures may fluctuate considerably due to changes in conditional grants. Therefore, there is a need to adjustment the ratio of local government burden in subsidy programs in order to improve the stability of local government expenditures.



A Study on Promoting Goyang City As the Standard South-North City

Ahn, Jiho / Oh, Yoonjung

The study seeks to expand the concept of an inter-Korean standard (pilot) city, which the mayor presented as a vision for inter-Korean exchanges, through theoretical and sociological expertise. Through this, the researchers want to broaden their understanding of the concept of an inter-Korean standard pilot city while drawing up policy logic to derive specific projects. Specifically, the researchers want to redefine inter-Korean standard (pilot) cities from the perspective of innovation policies and Policy Entrepreneur. Through these concepts and theories, the researchers wanted to understand the context of the North-South standard (pilot city) presented by the Mayor. The researchers have so far reviewed the standardization process of East and West Germany and South and North Korea to describe and analyze the standardization work carried out at the central government level.

In addition, it wanted to emphasize the meaning of social integration in the standardization work by looking at the process of change in German society after unification. Specifically, the discussion of standardization was extended to the social level by carefully examining social integration, a problem that emerged in the German unification process.

In particular, the theory of French sociologist Durkheim in extending standardization discussions to social implications has helped much in this study.

The researchers used the concept of solidarity, mechanical solidarity and organic solidarity, which Durkheim emphasized, to draw up specific projects for the North-South standard (pilot) cities.

Finally, the researchers presented areas of health care, broadcasting and construction technology, areas in which Goyang City has strengths, for the effective project of the South-North Standard Demonstration City in Goyang City.



A Study on the Characteristics of National Subsidies in Goyang City

Park, Jonghyok / Park, Jisung

In general, subsidies are an important policy instrument for the central government to transfer funds to local governments and are an important issue in the area of local finance. In particular, the emphasis on decentralization and financial decentralization is increasing the need for research on subsidies.

Most of the research in the past have been conducted on the adjustment of subsidy rates, management and operation of subsidies, and illegal receipts of subsidies. However, for local governments, subsidies are both financially beneficial but undermine financial independence at the same time.

Therefore, Goyang City needs to clearly recognize the characteristics of subsidies and to secure financial independence. For this purpose, a detailed analysis has been conducted on the details of subsidies implementation in Goyang City for the past three years. As a result, it was found that the subsidies in Goyang City were concentrated in a small number of ministries and were carried out in similar specific tasks. In-depth analysis of the execution of detailed projects was conducted on three ministries with highest subsidies and amounts. It was found that they spent a lot on subsidies, mandatory operating costs of social welfare facilities, and social welfare projects.

Goyang City proposed the following measures to efficiently manage the subsidy project: First, in order to make subsidies more efficient, it is necessary to focus on a small number of projects and a small number of expenses; second, it is proposed that similar or overlapping subsidies projects should be integrated; third, in the subsidy project, a method should be prepared to minimize the financial burden on Goyang City; fourth, it is necessary to correct and maintain consistency in the subsidy management.



A Study on the Local Government's Big Data Utilization Strategies

Yun, Shinhee / Lim, Jeongjae

Big data is so pervasive these days that almost everything in our lives is affected by it. Why is it 'big' data all of a sudden and how is it different from mere 'data'? The reason for the surge in the use of the term big data is that data, which was not previously thought to be data perhaps because there was no discernible value to be found, has been gradually piled up in vast quantities as the development of information and communication technology has created a system that can accumulate so much 'usable' data that there clearly is a qualitative leap here. Big data has become a focus of attention since experts are poring into vast amounts of data sets systematically and coming up with significant results. This is not just in the private sector, but also the public sector is also paying keen attention to the possible use of big data for administrative purposes. We argue that it is time about time to think about how to efficiently open and utilize huge troves of data that exist within the walls of our local government buildings.

Against this backdrop, this study aims to identify the current utilization of big data in the public sector and select areas and categories applicable at the local government level in terms of the importance of utilizing big data in the coming smart era and improving administrative efficiency through implementing data-based science administration.

The details of the study are as follows:

First, the big data concept is explored and major policies at home and abroad are investigated;

Second, cases of utilizing big data in the public sector at home and abroad are investigated. The results of the analysis are categorized in terms according to areas as specifically as possible. Exemplar cases, which could be studied and emulated if possible, from home and abroad would be introduced;

Third, the organization and infrastructure dedicated to big data within the local government structure is explored;

Fourth, the study aims to discover projects that utilize big data in Goyang City based on the detailed analysis, and they would be rank-ordered in terms of importance after closely consulting experts;

Fifth, this study utilizes scenario planning, which is one of the most popular strategic planning tool these days. Scenarios for selected projects are written toward that end;

Sixth, based on the research results, measure and policies aimed to utilize big data in Goyang City more

effectively are suggested.

A review of successful cases of utilizing big data abroad has revealed the following characteristics. They are: First, interest in data-based policies through 'big' data analysis has increased dramatically these days among institutions that engage in analysis work; second, actors utilizing big data analysis are found to be actively engaged in it in many different fields at various levels—e.g., public institutions, local governments as well the central government level. (However, in Korea, attempts to utilize big data at the ministry level or at the national level are still inadequate.) In terms of application, it is not just confined to health, medical care, welfare, security, etc. but many more diverse areas—e.g., finance, tourism, economic areas such as employment, and convenience issues at the local level. In terms of utilization data, it is not just structured data analysis that is performed utilizing existing public data that is already structured (probably at great cost), but unstructured data is also used for analysis. In short, there is no question that data is being more widely used and in greater depth.

These are the results of the review of domestic cases of big data use among public institutions: The first such project for a metropolitan government is "Seoul Metropolitan City 'Night Owl' Bus Services" in 2013. It was a project to establish late night bus routes using big data on late-night floating population in Seoul. In 2014, the "Big Data-Based Seoul Alley Commercial Area Analysis" project, which provides various big data in Seoul or in cooperation with external organizations, provided a variety of information on 43 types of life-sustaining businesses that most business owners start. The project was carried out. Looking at the number of big data analysis projects at the metropolitan government level, the number is increasing continuously every year, from 2 in 2013, 12 in 2014, 27 in 2015, and 31 in 2016.

The number of local governments utilizing big data is rapidly rising as well: from 6 cases in 2013, 9 in 2014, 28 in 2015, 38 in 2016 and 882 in 2017. Osan-si, Gyeonggi-do was the highest with 15 cases, followed by 14 in Seongnam-si, Gyeonggi-do, 14 in Gwangju-si, Gyeonggi-do, 12 in Eunpyeong-gu, 12 in Haeundae-gu, Busan, 11 in Namyangju-si, Gyeonggi-do, and 11 in Gunpo-si, Gyeonggi-do. In Goyang, there has been 8 cases from 2016 to 2019:

a survey of foreign tourists visiting Goyang (2016); online user response analysis (2017); on development of scientific tourism products using big data (2017); image of Goyang city survey (2017); review of the state of job-linkages (2017); data analysis of responses to complaint calls made (2017), construction of Goyang Sin (New) Hallyu cultural and tourism belt (2018).

The best examples of using big data by domestic public institutions are as follows:

- Realization of smart city through collection and utilization of data based on public transportation (Jeju Self-Governing Province);
- Prevention of possible safety issues in the city through convergent and multi-layered analyses based on data on power use and available public data (Gwangju Metropolitan City);
- Establishment of policies to activate customized regional economy analysis of business and consumption patterns (Seoul);
- Exploring the development of administrative services through the analysis of the current status of economy, life and environment (Pyeongtaek-si, Gyeonggi-do)
- Reducing inconveniences experienced by residents and improving user-friendliness by accurately forecasting demand for administrative services (Cheongju-si, Chungcheongbuk-do);
- Public big data activation policy (Jeju-do Special Self-Governing Province);
- An analysis of urban polarization case (Busan Metropolitan City);
- A case analysis to secure golden time for emergency patients (Gyeongsangnam-do);
- A case of administrative use public health indices (Namyangju-si, Gyeonggi-do);
- A case analysis of on complaints received by employees on night duty (Gwangju-si, Gyeonggi-do);
- A case of basic population analysis (Namyangju-si, Gyeonggi-do);
- An analysis of CCTV blind spots (Gyeonggi-do)

The analysis results on organizations to dedicated big data analysis are as follows. The number of metropolitan

cities and provinces that had enacted an ordinance of big data and operating organization dedicated just to big data analysis was 8 in 2017, 8 in 2018, and 6 in 2019). The number of local governments operating such an organization was 11 in 2017, 13 in 2018 and 7 in the first half of 2019. As of 2019, these are Eunpyeong-gu in Seoul; Gwangsan-gu in Gwangju-si Metropolitan City, Ansan-si, Suwon-si, Goyang-si and Pyeongtaek-si in Gyeonggi-do, Changwon-si in Gyeongsangnam-do and Damyang-gun in Jeollabuk-do.

Next, the Expert Advisory Council, which held 2 consultation sessions and wrote an in-depth report aided by the review of big data analysis cases, selected 6 major data projects for Goyang City.

Based on research so far, the following are policy suggestions for maximizing big data use in Goyang City:

1. Improving perception on big data
 - The ability to lead rational and logical policies through data analysis rather than simple analysis is necessary.
2. Readjust of relevant legislations on big data
 - The need to enact an ordinance for the utilization of public data and the activation of big data
 - It consists of the installation, composition, function, and operation of the Big Data Committee, the status survey of big data, support for installation and operation of big data centers, education, and training of professionals
3. Establishing a public-private partnership data sharing policy
 - Establishing a public-private partnership data sharing policy for the need to prevent misuse through the reckless use of personal information
4. Organizational needs of data professionals
 - We need experts who can collaborate with the statistics team and spatial information team in Goyang City and actively utilize big data analysis.
5. Exploration of big data transmission projects
 - Exploring policy areas based on effectiveness and timeliness through the use of big data

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- Promoting priority projects in areas where underlying public data is accumulated through existing systems, such as transportation, administration, housing and real estate in the short term
 - Invigorate utilization of information on traffic speed, CCTVs, bus operation information transmitted to the Transportation Information Service Center, traffic card related information on public transportation, real-time traffic history of city buses and taxis, transit problems in public transportation, activation of public bicycles, etc.
 - Utilize to set policies and to assess policy outcomes based on data such as real estate transaction price, public price, rental transaction information, population status, and various development levels in Goyang city.
6. Building a big data platform in Goyang city
- Initial: Leverage a private activation platform
 - Mid-term: Build a data portal that links public and private data
 - Long-term: Share current issues with residents in Goyang City and explore ways to utilize data analysis by directly participating residents



A Study on the Structural Characteristics of Tourism Industry in Goyang City

Song, Sooyeop / Goh, Yungyung

The tourism industry is a group of businesses that are directly or indirectly related to tourist activities and, and they are not divorced from other industries related to our daily lives. After the implementation of local autonomy system in 1995, the trend toward decentralization became inexorable and tourism—which is intrinsically ‘local’—began to be promoted for the purpose of revitalizing the local economy. It meant that many local governments turned to the tourism industry as a linchpin of their regional strategic industrial plans that could expect to yield many positive results related to the actual living conditions—such as job creation, income growth, etc.

In order to induce regional revitalization and regional growth through the tourism industry, it is necessary to analyze the economic characteristics of the local tourism industry, establish and implement policies based on the results. As the increasing level of decentralization leads to ever greater regional autonomous operations, the tourism resources and public assistance capacities of the basic local unit need to be flexible to meet the challenges of the changes in the external environment and to be ready for the future both systematically and strategically.

This study analyzes the status of the tourism industry in Goyang City, provides basic research results for understanding the tourism policy effects of Goyang City through the trends and changes in the tourism industry and analyzes the growth characteristics of the tourism industry. It also suggests further directions that Goyang-driven promotion policies on the tourism industry should take.

In addition, we provide tourism industry growth analysis tools for each metropolitan/provincial and local organizations (e.g., Gyeonggi Province represents the wider classification while Goyang City the basic unit) in order to study the transition from the provincial level to basic local level (that the decentralization movement is inevitably causing) to foster regional-driven tourism industry. The purpose of this study was to propose a tool for measuring the growth characteristics of the regional/local government tourism industry.

The special tourism industry classification was used to analyze the status of the tourism industry in Goyang City. The study investigates tourism shopping, tourism transportation, tourism lodging, restaurants and bars, travel agencies and travel assistance services, international conferences, culture, entertainment and leisure sports.

From 2007 to 2016, the analysis was carried out using data from the business survey of Goyang City. According to the analysis of variance allocation for the number of tourism businesses in Goyang City, the international conference industry showed more than 9% competitive effect (which represents the growth in the industry that is unique to the area), leading the growth of the industry in the country and Gyeonggi Province.

The tourism shopping business, the transportation industry, the restaurants, and the bars have maintained their growth potential, but they are lagging behind and need to seem to need to make efforts to secure growth levels as it has not reached the growth rate of Gyeonggi Province. Travel agency and travel assistance service, culture, entertainment and leisure sports industries are areas that Goyang City has been specializing and thus competitive, but its industrial growth has been low and trails both the national and Gyeonggi provincial rates.

Employment growth in the international conference industry shows specialized growth in the low growth environment of the industry. The travel agency, travel assistant service industry, culture, entertainment and leisure sports industry also had a high possibility of specialization, and the tourism shopping industry, restaurant and tavern industry had a low competitive effect in the overall growing environment, which may lead to lower growth rates in those industries.

Since 2008, efforts have been made to strengthen the national tourism. While it may sound tautological, we would argue that requires a quantum leap in the competitiveness of national tourism industries. Regionalization of the tourism industry is very much part of the equation: Policies designed to foster specialized regional industries such as Meetings, Incentives, Conventions and Exhibitions (MICE) tourism industry, shopping tourism, and transit tourism are well underway. In this context, Goyang City needs to maintain continuous links with national tourism and Gyeonggi Province tourism policies, but it also needs to develop a tourism industry policy that is uniquely its own.

The core in tourism policy of Gyeonggi Province is to revitalize the regional tourism industry with emphasis on those who tend to say longer and strengthened marketing efforts. As a result of the expansion of specialized tourism areas such as peace tourism and ecotourism which start from the northern part of Gyeonggi Province, Goyang City is

expected to serve as a tourism base.

Goyang has a strong growth potential in the MICE and leisure industries. However, the tourism-based industry maintains growth potential, but falls short of the national and regional growth potential and implies the possibility of stagnation.

Therefore, continuous policy support is needed to maintain the characteristics of the tourism industry, such as building the MICE industry and the tourism infrastructure and strengthening the support system, which Goyang City has a strong competitive advantage.

Lastly, it is necessary to induce employment growth and to revitalize that the infrastructure development centering on the regional tourism industry by setting the overall direction of tourism industry policy.



Policy Development Research to Foster Goyang Digital Contents Industry

Lee, Hyunjung / Jo, Dongik

Many cities are keenly interested in developing the digital contents industry as a knowledge industry, but it is especially true in Goyang because it is not allowed to develop manufacturing industry.

Currently, in the global market, the digital contents market is rapidly expanding and developing and becoming popular along with the development of new technologies which have revolutionized the creation of contents—e.g., virtual reality (VR), augmented reality (AR), mixed reality (MR), digital twin, etc. In this research, we first overview the definitions of contents, which could be digital or smart, and review the trends in the growing digital contents global market. Then we analyze the industrial and environmental resources that Goyang possesses as assets—e.g., broadcast stations, digital advertisements, exhibition, publishing and printing complexes, and digital technology. Next, 5 sectors where the assets are put to use to accelerate the development of digital contents industry in Goyang identified. They are: over-the-top (OTT) digital contents platform, webtoon industry, e-Book and edutech, and XR (i.e., VR, AR, and MR)-based sensory-overload media industries. Finally, it is necessary for Goyang to manage the digital contents-based education and training programs to produce qualified technicians. We propose specific 14 policies in the 5 sectors above prosperous digital contents industry in Goyang City.



Active Aging Study 1 A Study on the Living Conditions of Middle-aged in Goyang City

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Moon, Junghwa / Yoo, Sunchi

This study is the first in a series of studies on ‘Active Aging’ policy to cope with the rapidly aging population in Goyang City—preemptively and actively. This research aims to identify the living conditions of middle-aged people and to seek policies to support them.

This study proceeds as follows: First, the background, concept and components of the active aging policy paradigm, which is the theoretical foundation of this study, is reviewed; second, the middle-aged population changes and trends in Goyang City are analyzed; third, different domestic and foreign policy cases for the middle-aged are reviewed, and policies for the middle-aged in Goyang City are analyzed; fourth, the living conditions of the middle-aged in Goyang city are analyzed using the active aging policy paradigm framework; fifth, a Focus Group Interview (FGI), where the middle-aged is the focused group, is conducted; then, their views on living conditions and policies needed are analyzed.

The followings are the results and suggestive implications from the study: First, the foundation for establishing an administrative system, constructing support centers and promoting policies targeting the middle-aged be should be laid; these all need to be created, as soon as possible, for the active aging of the middle-aged; second, jobs for the middle-aged should be expanded. That would require a job model that is needed in order to make accurate predictions has to be developed; third, a database should be established for more effective and efficient management of the middle-aged talents and to promote them; third, it is required to establish a data base for middle-aged talent management and promote social contribution programs; fourth, policies are needed to support middle-aged families and improve family relations, especially marital relations; fifth, sporting facilities to be used by citizens to enjoy sports and mental health programs for middle-aged, as a part of the health care system, should be expanded; finally, policies on systematic life planning, comprehensive counseling, etc. need to be established in order to help the middle-aged to prepare for retirement.



An Analysis on the Status and Characteristics of Cultural Resources in Goyang City

Kwon, Sunyoung / Hwang, Seolhwa

The world is now transforming cities through culture. There are a growing number of cases around the world that transform old waste facilities or idle spaces into cultural places to revitalize local vitality and create local image and brand. And even in Korea, more people are recognizing the importance of culture as to its contribution to the regional growth and development. “Cultural Impact Assessment” and “Cultural Urban Regeneration” are the proof of those. Goyang city also needs to accommodate these cultural view on establishing the policies and its execution for sustainable growth of the region.

Cultural policies of Goyang city seems to be focused on quantitative growth of cultural infrastructures from the late 1980s(the period of developing the first Ilsan New Town) to the mid 2000s. This would be effective in the developing period, but would it work for the next decade as well? To answer this question, it is necessary to examine the cultural policies of Goyang-si and analyze the current status of cultural resources so that a basic research is needed to clearly diagnose the current state. Therefore, this research implements the policy analysis, cultural resource investigation to suggest new approaches of cultural policies that will allow to culturalize the region and the citizens’s lifestyle.

In order to analyze the current status of cultural resources in Goyang, we divided ‘cultural resources’ into four areas: historical resource, art resource, broadcasting and visual resource, life-living resource. In addition, to analyze the characteristics of cultural resources by region of Goyang, it was analyzed by the living zones in the east, west, south, and north of the city.

The research results are as follows. First, Goyang City has abundant historical and cultural resources mainly in Deokyang-gu, where is in the south and north of the city. The Plan to utilize and promote the historic resources, as well as the system and policies for preserving and protecting them, are needed. In addition, it is necessary to establish a history museum where the city manages its own relics excavated, and to support archeology research for the transmission and inheritance of historical resources.

Second, as a new cultural resource, broadcasting and visual resources are found to be an important part of Goyang city. Not only companies related to broadcasting and video (production and distribution companies) but also

movie theaters that the citizens can enjoy are mainly established in the eastern area(Ilsandong-gu). It is expected that these characteristics will be used to develop new tourism resources and foster brand products in Goyang.

Third, public libraries are mainly located in the eastern and western parts, which are the urban area of Goyang, and there are many 'Small Libraries' in the south and north, which are old or undeveloped areas of the city. In Goyang city, the number of library visitors is steadily decreasing (which is similar to the national trend), so it is necessary to find a policy to increase citizens' visit rate to libraries rather than building more libraries. For example, it may be possible to combine the existing spaces in the library and diversify the functions so that citizens can recognize and visit the library as a living and cultural space as well as a place to borrow or study books.

Based on the results of the research, the following directions and tasks of cultural policy are suggested. ①Growth centered on space, not expansion of facilities, ②Support for new cultural resources (e.g. broadcasting and visual resources), ③Systematic archiving and utilization of existing cultural resources (historical and cultural resources), ④Support for research on cultural resources, etc.



A Study on the Procedures and Countermeasures for Railway Project in Goyang City

Baek, Joohyun / Cha, Yunchul

The nation's transportation policy paradigm is paradigm from road transportation to rail transportation. Rail transport is also being divided into KTX-oriented mainline railways, general and wide-area railways for inter-regional transport, and metropolitan railroads centered on metropolitan areas such as the Seoul metropolitan area. In particular, the construction of metropolitan railroads is drawing attention as a measure to solve the problem of metropolitan transport, including the Seoul metropolitan area.

Goyang City is a key city in the northwestern part of the capital and one of the top 10 cities in the country with a population of over 1.05 million, and has achieved steady growth both in terms of quantity and quality over the past 20 years since the construction of a new city in Ilsan, Goyang. In line with the government's policy stance centered on railway transport, Goyang City a pursuing an array of railway projects. In addition to Seoul Subway Line 3 and, Gyeongui Central Line, which are in operation already—to is planning to open the GTX-A line scheduled to open in 2023, Daegok-Sosa Line (including Ilsan extension) scheduled to open in 2021, the northwestern extension of the Sin-Bundang Line whose feasibility study is ongoing, Incheon Metropolitan Railway Line 2 scheduled to open 2028 with the Goyang extension and then there is Goyang Line that is promoted aftermath the announce of the third new city plan. If these various railwayd projects that are ongoing or scheduled to be successfully implemented, there is need for a systematic and logical response to the central government's policy stance. To this end, major national plans (including guidelines) related to railway projects should be reviewed first; they include the National Railroad Network Establishment Plan, the Framework Plan for Metropolitan Area Transportation, and the Urban Railway Network Establishment Plan. In addition, various railway project guidelines and ordinances should be reviewed to present effective countermeasures for the promotion of the railway projects in Goyang City. However, Goyang City lacks know-how in promoting the railway projects due to the lack of professionals with expertise in the area, inadequate enough personnel compared to other local governments and the lack of continuity of work due to the practice of revolving assignments.

Therefore, based on the aforementioned background, this study aims to carry out research for the establishment of an effective response system for the promotion of railway projects in Goyang City. In order to carry out the current

research program, the status and plan of railroad projects in Goyang City are reviewed and the plans related to the railroad projects that are on higher planes, which thus would consider factors other than the railway issue, are also reviewed. Based on the results of these reviews, this study presents procedures for the promotion of railway projects in Goyang, plans for sharing financial burden, rank orders different projects and organizational composition measures.

As mentioned earlier, Goyang City is planning various railway projects to solve the wide-area traffic problem. It is true that much more effort is needed to promote the railway projects but excessive project promotion, which could put a strain on Goyang City's finances, should be avoided.

In addition, it will be important to firmly establish Goyang City's position through the formation of an expert group network that is capable of creating an environment with the capacity to make useful suggestions to the central government.



An Analysis of the Spatial Characteristics of Migration in Goyang City

Kim, Leeyoung

The purpose of the study is to look at the spatial characteristics of population migration in Goyang and Seongnam and compare them. Both Goyang City and Seongnam City are situated next to Seoul, and the two cities are often compared; Ilsan (in Goyang City) and Bundang (in Seongnam City) are so-called 'new towns' that were built with much fanfare around the same time. Their similarities make the ideal for a comparative study. Thus, the characteristics of population movement in the two regions are reviewed and the policy direction for Goyang City is proposed in study. The characteristics of population migration in Goyang are as follows: First, the migration trend in Goyang is shifting to net out-migration, unlike in the past. It is especially true for those in their 20s;

Second, only 85% of the population over 20 years old in Goyang City was born are native-born. This trend is not unique to Goyang City as most other cities exhibit the same trend, but Goyang City is different in that rapid urbanization was carried out due to large-scale developments such as the construction of new towns, and many external inflows in the process were found to be slightly higher than the average figure for Gyeonggi Province; Third, a look at the spatial characteristics of migration patterns show that the moving areas of Seongnam are more concentrated than those of Goyang City. And migration in Seongnam City is active in areas more adjacent than the city than the case in Goyang City;

Fourth, the causes of population migration are changing from the past. In the past, the main cause of population migration was housing. The impact of factors such as transportation, jobs as well as housing are also decreasing.

Based on the results of the research, the following policy implications were derived. Goyang City should pay more attention to policies directed at the young people to reduce their out-migration. They also suggest that continuous research and monitoring is necessary since factors affecting population migration differ from those in the past.



An Analysis of the Goyang Apartment City (1) - Ilsan Newtown

Kim, Joonwoo

Goyang City as one million population city has been started with Ilsan Newtown development since 1990. Total number of housing is 340,000 units and 240,000 units is consisted by apartment, which is over 70% of total housing in Goyang City. Apartment as major type of housing unit has been developed from Ilsan Newtown and it would be continued on 3rd Newtown project in Goyang City, which is announced in 2019 by the central government. Apartment is one of important element which constitutes built environment, Goyang City. This research is for understanding Goyang City as 'Apartment City' through multiyear research based on spatial analysis and documentation work.

Ilsan Newtown has been started in 1990, and it is 30th year anniversary in 2020. This newtown is a good case researching 'Apartment City' and structuring research frame for multiyear comparative study. This research is the first research to collect documents of apartment and choose important element to compare. Second research is for analysis additional apartment development from 1990 to 2000. Third research investigates contemporary apartment development since 2000. This multiyear research is based on documentation work on apartment development and find characteristics of Goyang City as 'Apartment City' through comparative analysis. After this research, it is possible to link with 3rd Newtown project, Changneung Newtown to draw a development process of apartment. This would help to understand urban contexts and local identity of Goyang City.

An analysis of Ilsan Newtown works on two parts, urban planning and urban design. This process is based on three masterplan reports; Ilsan Newtown Masterplan(1990), Ilsan Newtown Landscape Plan(1991), and Ilsan Newtown Urban Design(1993). These reports include urban vision, goals, indexes and detailed plans to realize built environment. This chapter is comparing original plan and realization under various indexes and spatial concepts such as population, housing supply, density, and urban structure. It also examines divisional plans and realization such as neighborhood unit plan, green structure, housing supply, apartment arrangement, and public facilities.

Urban design of Ilsan Newtown proposed detailed plans and guidelines on individual plots under land use and building programs. Ilsan Newtown is developed under this urban design plan including density, building height, open space, car path and pedestrian way. This chapter examines urban design guidelines under housing types and detailed plans to control various elements of housing. In addition, apartment block is compared with plans and

realization in detail to materialize characteristics of apartment complex. Urban design guideline of apartment is also described under application and management of apartment complex.

This research also preforms documentation work to collect urban planning and design of Ilsan Newtown. It analyzes spatial elements of Ilsan Newtown as 'Apartment City' on different scales from neighborhood unit to housing unit. On neighborhood unit scale, the documentation work focuses urban structure of community and composition of urban program in village scale. The documentation of apartment block is analyzed land use and public-private space in apartment block. Housing scale documentation is for collecting visual documents on various housing types, which were supplied in Ilsan Newtown.

This research aims to analyze urban characteristics of Ilsan Newtown as 'Apartment City' that is based on urban planning and urban design of Newtown. The plans of urban planning and urban design helps to understand spatial structure and materialize spatial features of Newtown. It is based on analysis by comparing process between original plans and applications, which was supported by documentation work and mapping of spatial elements. As multiyear research, this research methodology would continue to analyze another cases of apartment development to materialize urban characteristics of Goyang City as 'Apartment City'.



Research on Introduction strategy of low Impact development (LID) in Goyang city [1]

Im, Jiyeol / Son, Deokjoo / So, Garam

Goyang City has achieved quantitative growth since it was designated as the first new city in 1989. This has led to the expansion of various urban infrastructures and the expansion of urban areas. However, such urban expansion has caused a number of environmental problems. Increasing impervious surfaces is one of these environmental issues, which, to date, are not prominent in the realm of life, but can lead to problems such as urban flooding, subsidence, reduced evaporation of the surface and groundwater depletion. It also causes an increase in non-point pollutant source.

The rise of sustainable development and climate change also affected urban design. In the water management paradigm, there is a shift from the concept of dimension and completion to the enhancement of multi-functional GI and water sensitive values and the introduction of natural water management system. Recently, the Korean government has been actively implementing non-point pollution management policies. In the UN keynote speech in September 2019, President Moon Jae-in mentioned the value of the Han River estuary, and the importance of LID and non-point pollutant source management is increasing.

Meanwhile, in Goyang, the cities near Han-river downstream have high emission of pollutants but lack of pollution reduction facilities. The purpose of this study is to suggest the LID related facilities, management, and operation plan applicable to Goyang-si based on the regulations on the water management by each local government and the pollutant source investigation and the problem analysis of the current system.

This study estimates pollutant emissions in Goyang-based based on source unit survey based on BOD, TP, TN, SS, etc. of Korea, and sets LID's priority introduction area reflecting the characteristics of pollutant sources. Presented. In addition, ease of management was considered based on the introduction of IoT.

The limitation of this study is that it does not provide more accurate management and operation methods because there is no accurate data on the setting of accurate pollutant emission or nonpoint source in Goyang. This problem can be said to suggest the direction of future research, and the subsequent research will look for other solutions and suggest better direction.

Policy Research(22)

NO.	Division	Title	Author
1	Dept. of Public Policy Research	Goyang Vision 2030	Park, Jonghyok
2		A Study on the Actual Working Condition and Support Plan for Emotional Labor Employees in Public Sector in Goyang City	Lee, Jungchul
3		A Study on Measures to Support of Inter-Korean Economic Cooperation for Goyang City	Ahn, Jiho
4		A study on finding measures to increase local tax revenue in Goyang City	Suk, Howon
5		A Study on actual conditions and needs for Multicultural Family support policy in Goyang City	Jeon, Sunghun
6		A Study on the present states and Activation of the Community Autonomy in Goyang City	Jeon, Sunghun
7		A Study on the Current Status of Safety Awareness and Improvement of Safety Culture in Goyang City	Lee, Jungchul
8		A Study on the Improvement of Budget Performance in Goyang City	Park, Jonghyok
9		Comparative Study on the Financial Status of Metropolises and Goyang City	Lee, Chang kyun
10	Dept. of Economic& Social Research	A Study on the Survey of Cultural Diversity in Goyang City	Kwon, Sunyoung
11		A Study on the Systematization of Social Statistics in Goyang City	Yun, Shinhee
12		A Study on Measures to Improve Perception on Disabilities in Goyang City	Moon, Junghwa
13		A Study on the Welfare Infrastructure Strategy for the Elderly in Goyang City	Moon, Junghwa
14		An Analysis of Economic Impacts of Large Scale Developments in Goyang City	Song, Sooyeop
15		A Study on Formulating of Basic Plan for Youth(2020-2022) in Goyang City	Kwon, Sunyoung
16		A Study on the Customization of Jobs for the Young and SMEs (Small and Medium Enterprise) in Goyang City	Lee, Hyunjung
17		A Study on the Development of Craft Industry in Goyang City	Lee, Hyunjung
18	Dept. of Urban& Environment	A Study on the Policy Direction of Public Bicycle in Goyang City	Baek, Joahyun
19		A Study on the renovation plan for Lake Park, Goyang City	Kim, Joonwoo
20		A Preliminary Study on the Public Land Use Platform for Efficient Use of Goyang City Owned Land	Kim, Leeyoung
21		Research on improvement of recyclable waste collection system in Goyang City: case research of detached and multiplex house area	Im, Jiyeol
22		A Research on the design criteria of green building and housing in Goyang City	Im, Jiyeol

>> Policy Research



Goyang Vision 2030

Park, Jonghyok / Park, Jisung

This research suggests the vision that reflects the necessity for a comprehensive “long-term development plan” following the new goal and demand of administration.

First of all, this study redefines the role of Goyang city as a hub in northern Gyeonggi-do. In addition, this research describes specific strategies and practical tasks for the long-term development of Goyang City. Lastly, we propose the policies that can improve the quality of life and the satisfaction on culture, tourism, education, and welfare, focusing on self-sufficient city. This study shows the comprehensive plan for the various areas based on practicability.

This study includes fourfold:

1) Analysis of the current situation 2) Predict of future 3) Conducting public opinion survey 4) Strategy establishment.

To establish policy tasks, we analyzed the economic, transportation, environment, welfare, culture, and autonomous sectors in Goyang City with the criteria such as strength, weakness, opportunity, and threat(SWOT). We also found the importance of Goyang citizens' discussion by public opinion surveys and suggested this discussion in the comprehensive "long-term development plan."

This study proposes seven key strategies and 28 initiatives. The seven key strategies include ①Pursuing a city of self-sufficient (Industry and Economy sector), ②Preparing for balanced regional development and exchange between south and north Korea(Urban and Inter-Korean sector), ③Developing environmental plan(Environment and Climate sector), ④Building an inclusive social safety net(Social welfare sector), ⑤Promoting culture and tourism using tourism resources and creating a lifelong learning city(Culture, Tourism, and Education sector), ⑥Building intelligent transportation systems(Transportation sector), ⑦Establishing administrative innovation and implementing autonomous cities(Administrative and autonomous sector).

The conclusion of this study is as follows(briefly);

First, Goyang city needs to push ahead with urban development suitable for local conditions, improve the accessibility of roads and diversify public transportations. second, we suggest that the factors causing the citizens'

health problems in Goyang City should be managed. Goyang city also, must reorganize social welfare services to enhance accessibility. Finally, it is necessary to solve the regional problems autonomously by inducing citizens' interest and participation.



A Study on the Actual Working Condition and Support Plan for Emotional Labor Employees in Public Sector in Goyang City

Lee, Jungchul / Hwang, Huiuk

The purpose of this study is to identify the current situation of public sector employees engaged in emotional labor in Goyang City and to suggest the policies required to support them. Regardless of the type of organization, employees encounter emotional reactions (often ‘outbursts’ that emotionally drain them) when they perform their duties. How employees feel in these situations greatly affect how they perform their duties and react. In particular, when the nature of one’s job forces him/her to deal with people directly, he/she would be faced with the intrinsic nature of such a job—the so-called ‘emotional labor’-that is subject to many informal and irregular situations. In this case, employees experience a feeling of emotional dissonance, which is the difference between their actual feelings and the emotions they have to show as officials, and this could be very stressful indeed. Incompatibility between these feelings will affect job satisfaction and organizational commitment.

Emotional labor, the term first coined by Hochschild, refers to the confusion that arises from a mismatch between a formal expression of feelings and the actual emotions inside them. Then, an attempt is made to reevaluate the role of emotion in a variety of fields, and identify the relationship between various variables such as job satisfaction, organizational commitment, organizational citizenship behavior, organizational performance, and so on. However, the mainstream of research on emotional labor targets private service sector jobs such as flight attendants, restaurant workers, hotel workers, casino workers, tourism professionals, financial professionals, etc. Because service workers are routinely performing emotional labor and control their emotions, the emotion management of employees is associated with their ability to provide customers with quality services and is directly related to corporate profits and organizational success.

However, the study of emotional labor has spread to the public sector in recent years. This was caused by the emphasis of the new public management reform and the concept of New Public Service. Through the introduction of new public service reform, each government department has repeatedly stressed that the Service Charter must respond to citizens with smile and friendly service. However, despite the fact they are engaged in what would be ‘classic’ emotional labor when public servants their civil service, but the recognition of this fact is now widely shared. In addition, it is not easy for civil servants to always be warm coordinators or facilitators of the

administrative services. It becomes more difficult if they are expected to behave like that even to those people who vent frustrations they feel at them rudely and sometimes hysterically. This could lead to a dilemma where it is impossible to hide your feelings no matter how well how trained you are or how you are expected to behave.

This issue also applies to public sector workers in Goyang city, especially public officials who have to contact with citizens directly. They may be mentally stressed and sometimes even exposed to physical risks in the course of placing regulatory obligations on their citizens or providing public services. In order to protect public sector civil servants who have to perform emotional labor, Goyang City has enacted an ordinance to protect emotional them in February of this year. The ordinance is to conduct a survey, establish a committee, and establish a long-term support plan to protect and support the public sector workers performing emotional labor in Goyang City. Therefore, this study conducted the survey for employees of Goyang City Hall, district offices, village offices, affiliated organizations and private consignment agencies to investigate the working environment of emotional workers in the public sector of Goyang City. One thousand thirty-four people participated in the survey. Among them, workers who had high proportion of emotional labor and public affairs were selected, and statistical analysis as well as focused group interviews were conducted. The results showed that there is a great need for improvement in working conditions—e.g., working environment, health conditions, etc. for those who perform emotional labor in Goyang City; they also need a lot of policy support as well.

The implications that can be seen through these results are:

First, the work environment of those who constantly interact with citizens could deteriorate when they find the work taxing and emotionally draining and would experience emotional dissonance—the dilemma situation mentioned above. Considering these contexts, it is not possible change the fundamental characteristics of these jobs; There would always be jobs with emotional labor content so what needs to done is to help those who have to perform these very difficult work. Perhaps with a relevant educational program to motivate those who perform emotional labor that they are providing valuable services for their fellow citizens and for public good. The public, on the other hand, should become enlightened about the good these workers provide for society and that they do

not deserve to be on the receiving end of any emotional abuse. Be that as it may, emotional labor and the attendant emotional dissonance is here to stay;

Additionally, emotional dissonance is also a factor that influences organizational effectiveness. Therefore, employee assistance programs such as psychological healing programs and stress management programs are needed for those in working in emotional labor situations to reduce their level of emotional dissonance. In addition to the normative aspects of emotional labor, emotional support is needed in the workplace from supervisors and colleagues to increase level of satisfaction felt by those who engage in emotional labors and their sense of self-fulfillment. To maximize the positive effect of social support, as described, it is necessary to establish an organized social support system. Also, because it is common for those who perform emotional labor to communicate about their work to cope with the emotional stress they have to deal with, the support of colleagues and superiors is very much required.



A Study on Measures to Support of Inter-Korean Economic Cooperation for Goyang City

Ahn, Jiho / Oh, Yoonjung

The study is about how Goyang City can effectively support inter-Korean economic cooperation projects.

First, the researchers describe and analyze the inter-Korean exchange cooperation project of pursued by Goyang City to diagnose if there are any issues with Goyang City's inter-Korean economic cooperation project. Consultations with representatives of companies that had invested in Gaesong Industrial Complex located in Goyang City allowed the researchers recognize what kind of issues that these companies have with their investment decisions in Gaesong Industrial Complex.

In addition, during the course of the research, the researchers carried out a basic concept study on the model of Special Zone for Peace and Economy in Goyang City. Therefore, this study has the characteristics of a short-term strategic plan to promote the idea of Special Zone for Peace and Economy in Goyang city.

In this study, the researchers suggest that Goyang City should be a City of Peace that focuses on the medical biotechnology sector and the broadcast industry—both of which are sectors that Goyang City excel in.

In particular, the researchers propose the construction of a peace medical center centered on the National Cancer Center, a key actor for the construction of the inter-Korean medical bio cluster in Goyang city. The peace medical center will serve as a key administrative government agency in charge of policy planning and coordination to build inter-Korean bio-cluster in Goyang City by connecting not only the National Cancer Center, but also six large hospitals in Goyang City as well as Dongguk Bio-Medical Campus.

Finally, the researchers study the case of Incheon's Unification plus Center to benchmark the function of Peace Medical Center in Goyang City. This case study would aid the researchers in deriving an effective management plan of the peace medical center.



A study on finding measures to increase local tax revenue in Goyang City

Suk, Howon / Lee, Juhyun

This study aims to explore ways to increase local tax revenue in Goyang City based on the panel data analysis that examines how different influence factors affect local tax revenue, and the comparative analysis that reviews the current status and characteristics of local tax revenue in five large cities (Goyang, Suwon, Seongnam, Yongin, and Changwon)

The analysis period is from 2011 to 2017. The targets of panel data analysis are Si (city) which are divided according to population size (0.5 million, 1 million) and Gun. The comparative analysis is for the status of revenue of 5 large cities' local tax items including Goyang city for each year.

The results of panel data and comparative analysis are as follows:

When it comes to the cities that have over one million in population, the influence of GRDP is very large compared to small and medium-sized cities; it is thus necessary to be strategic to attract and nurture high-value-added industrial sectors special to the area. Unlike medium and small cities, it is significant for large cities to enhance the inflow of people with the ability to pay taxes, not just population growth. Also, the aged population, unlike in smaller cities, positively influence local tax revenue;

The results of comparative analysis of 5 large cities' tax items show that the local tax revenue of Goyang City is significantly smaller compare to other cities. The difference in resident tax revenue between Goyang City and four other metropolitan cities is mainly due to the gap between the corporate portion per capita and the employee portion. The reasons for low income tax revenue in Goyang are attributed to low revenues from local corporate taxes and special collection.

Also, the property tax revenue in Goyang City fell below the average of the 4 other cities, which resulted from the comparatively low revenues from housing and land portion to Yongin and Seongnam city.

Based on these findings, this study suggests the following measures:

First, as Goyang City is a part of the so-called 'over-concentration control region' under the Seoul Metropolitan Area Readjustment Planning Act. it is difficult to relocate and attract companies due to heavy acquisition taxes in controlled regions. Accordingly, it is necessary to seek measures to ease regulations in Goyang City based on

the provisions of tax exemption in the "Special Act on Support for border area". Additionally, the government can consider reducing corporate local income tax burden of corporations through flexible tax rates;

Second, get the status of locations by checking where sales, regional and main offices, or perhaps headquarters in Goyang City are. For the purpose of paying corporate local income taxes, if the head or principal office of a corporation is located in Goyang City, it is necessary to suggest the utilization of the withholding system, and if sales or branch offices or just a place of business, it is necessary to make efforts to change (or maintain if it is) Goyang to a place to pay taxes;

Third, there needs to actively promote the utilization of the collection reward system and devise measures to promote citizens' access to reporting for the enhancement of the local tax collection rate in Goyang, and to examine whether the reference land and housing prices in Goyang truly reflect the rapidly changing regional values of Goyang City;

Finally, many large-scale investment projects are under way and outstanding tourism resources are in place in Goyang. Greater efforts should be made to increase non-tax revenues by making better use of these resources.



A Study on actual conditions and needs for Multicultural Family support policy in Goyang City

Jeon, Sunghun / Oh, Eunji

The purpose of this study is to secure data to establish a mid to long term master plan through the needs survey for multicultural families in Goyang City. The results of the study suggest:

First, clear function coordination and cooperation systems among government ministries should be established. A virtuous cycle system that is formed by a triad of ministries—the Ministry of Foreign Affairs (MFA), the Ministry of Gender Equality and Family (MGEF), the Ministry of Health and Welfare (MHW)—is a system categorized by subject, adaptation level and assimilation level;

Second, it is necessary to reestablish intergovernmental relations of support policies for foreigners, including multicultural families. The government should attract human resources, restore diverse family communities, enhance the acceptance of multiculturalism and the equity of support services. Local governments should implement language and cultural experience education in different levels, diversifying opportunities for participation in local communities, spreading awareness of cultural diversity, inducing them into local economic players, and providing opportunities for social integration between locals and foreigners;

Third, the balance of hardware and software support policies is important. The physical integration of facilities at the Multicultural Family and Foreign Residents Support Center is necessary. Software support policies should provide recovery of the family community, clearing blind-spots of information, job training and recruitment, customized services for children of multicultural families, and psychological counseling;

Fourth, it is necessary to link roles and establish a cooperative network between related organizations such as Goyang City and the Multicultural Family Support Center(MFSC). Goyang City should carry out comprehensive and macro policies such as enhance the multiculturalism acceptance, clearing blind spots of information, in the local community. MFSC should provide customized support services based on the actual of needs of multicultural families. The District Office and the Community Center should establish data on multicultural families in the course of administrative work, such as marriage registration, transfer of resident registration, change of name, birth registration; Finally, it is important to establish and implement a mid to long term master plan. To this end, it is necessary to regularly review the actual conditions and needs of multicultural families. In addition, multicultural acceptability surveys are required for Goyang citizens.



A Study on the present states and Activation of the Community Autonomy in Goyang City

Jeon, Sunghun / Oh, Eunji

The purpose of this study is to secure data to establish a mid to long term master plan through a status analysis of the local community in Goyang City. The results of the study suggest:

First, Goyang City needs to unify its policies and organizations to enhance the effectiveness of its dual policy to activate the community participation. That is, the current dual structure of participation-autonomy team and village-community team should be considered obsolete; we argue that the two teams should be integrated within the community department;

Second, it is necessary to strengthen the role and diversify the functions of the Local Communities Support Center (LCSC) supporting the local community, and secure its autonomy in project implementation. Therefore, LCSC should establish and implement a basic operation plan based on a mid to long term master plan. In addition, LCSC's project should be expanded to the essentials (locality, interaction, common bonds) and ancillary (public interest, business), strengthening (citizen autonomy) elements of the local community;

Third, the Residents' Association needs to change its perception of being a voluntary organization rather than representing citizens. Community activists should recognize the Residents' Association as a partner, not as a competitor. Residents' Association and community activists pursue the common goal of revitalizing the local community; both groups should form a bond and cooperate as they share common goals and values;

Fourth, the role of a professional research institute is to strengthen the community competencies of Residents' Association, community activists and citizens. It could be divided into passive and active roles. The passive role is to send experts to LCSC, and the active role is to take full charge of educational functions;

Finally, the mid to long term master plan should be established focus on the characteristics of the region and the role of the Residents' Association, community activists and LCSC. In addition, the Performance Evaluation System should be used to evaluate the support policy every year and reinforce the feedback mechanism so that the annual action plan and evaluation results can be linked.



A Study on the Current Status of Safety Awareness and Improvement of Safety Culture in Goyang City

Lee, Jungchul / Hwang, Huiuk

The purpose of this study is to measure the degree of safety awareness of Goyang City citizens, including the awareness of safety culture and the degree of risk by disaster type and to propose measures to promote the safety culture movement, a policy tool to enhance the safety culture. Recently, the importance of the safety culture in the region has been emphasized to effectively prepare for various disasters and accidents that are becoming more diverse and complex in our society. Accordingly, the Korean central government is also implementing various policies to spread safety culture more widely. Despite these efforts, about 20 years have passed since the safety culture movement was introduced, criticism continues that these policies are not effective.

Starting from this recognition, this study aims to discover safety issues that need to be improved to enhance safety culture in Goyang City through a safety awareness analysis and to draw up policy alternatives to promoting safety culture movements more effectively in the future. To achieve this goal, this study first analyzed the concept of safety culture by reviewing previous research. In addition, this study analyzed the current status of safety education activities centering on safety culture movement in Goyang City and analyzed domestic and foreign cases to find implications for improvement of safety culture in Goyang City. A survey was conducted to investigate safety awareness of Goyang City citizens, and 1,161 citizens participated in this survey.

As a result of analyzing the survey, the safety awareness and safety perception of Goyang citizens can be summarized as follows:

First, the safety awareness of Goyang citizens and Goyang city can be diagnosed as the average level of around 3.0. These can be interpreted as the result of the need to make efforts to improve safety awareness to a more positive level;

Second, with regard to safety awareness in each region, it was found to be relatively negative in order of Ilsandong-gu, Deokyang-gu, and Ilsanseo-gu;

Third, as a result of investigating the risk perception of each type of risk factor such as social disasters, natural disasters, traffic safety, security crimes, new types of risks, the following issues were found to be most disconcerting: micro dust problems (61.8%), motorcycle accidents (44.6%), sinkhole and ground subsidence issues

(43.4%), environmental pollution (38.4%), car accidents (37.0%), pedestrian accidents (35.1%), and obsolete building safety (32.5%)—in that order. When comparing the perceptions of risk factors in each region, the order of the perception is as follows: traffic accidents> social disasters, new disasters and hazards> crimes and security problems> natural disasters. It was also found was a difference in perception by gender;

Fourth, in order to prevent such disasters and accidents, Goyang citizens were positive about participation in safety education and training;

Lastly, the need for safety inspection and capacity building were emphasized to enhance facility safety in terms of safety infrastructure, and the importance of long-term policy goals, strategies, and collaboration between departments and organizations were emphasized as a basis for establishing a safety culture. Based on these results, this study suggests countermeasures for disaster issues and policies for activating a safety culture movement.



A Study on the Improvement of Budget Performance in Goyang City

Park, Jonghyok / Park, Jisung

In accordance with the revision of the Local Finance Act, local governments are required to prepare a budget performance plan and submit it to the local council each year as an appendix to the budget. In addition, the Local Accounting Act mandates that a local government submit a performance report to local council each year. However, in most local governments, budget performance plan and budget performance reports are prepared not seriously and often as a mere formality.

This study finds that there is a low correlation between the core strategies of the vision system, and the strategies in the [budget] performance plan and [budget] performance report, and there is no performance goal management system was drawn up. In the year-to-year comparison, some discrepancies are found with regard to performance indicators' targets and performance results, and some actually yielded negative results. In addition, confusion arises in the practice of balance management based on balance score cards and the newly introduced budget performance management because they operated differently. In some cases, performance goals have been set differently. This is because the scope and content of setting performance are different between the two systems. Therefore, in order to properly operate budget performance management, Goyang City must first provide training to recognize the necessity to create a performance goal management system and to improve current performance indicators. Further, it is necessary to reduce and focus on the core projects of Goyang City rather than performance plans that are rigid and formulaic; rather, it is recommended that they become more compact and focused to prepare performance reports for core projects of the city with an eye toward the future.



Comparative Study on the Financial Status of Metropolises and Goyang City

Lee, Changkyun

The introduction of a "special city system" is expected for metropolises (big city) with a population of more than 1 million. The purpose of this study is to compare and analyze the financial status and characteristics of big cities in preparation for the introduction of the system.

A comparative analysis of the financial status of big cities was divided into Metropolitan Cities (kwangyeok-si), cities with a population of more than 1 million, cities with a population of more than 500,000, and Goyang City.

The results of the research can be summarized as follows:

First, big cities with a population of more than 1 million, including Goyang-city, are relatively disadvantaged and face unfairness in terms of revenue and expenditure compared to cities with a population of more than 500,000 and metropolitan cities (kwangyeok-si). Metropolitan cities (kwangyeok-si) are able to collect a local tax called the metropolitan city tax and are also legally recognized to reflect its population and administrative levels. However, big cities with more than 1 million people (but are not metropolitan cities) have the same local tax structure as cities with more than 500,000 people, which is not adequate to support the rapid increase in population;

Second, in the case of big cities, the local financial system does not reflect the financial needs of those cities face although they face special needs of that are unique to them;

Third, Goyang City has a weak tax base that mainly relies on property taxes which naturally limits its revenue. In order to 'fix' these shortcomings, this study suggests that the following improvements be made:

First, the system for big cities should be improved to reflect the special administrative and financial needs of big cities; Second, the introduction of an efficient "special city system" is necessary to solve the problems of big cities fundamentally; Third, the adjustment of national and local taxes and the improvement of the general grants system are necessary; Fourth, Goyang City needs to expand its diverse tax revenue base including attracting new businesses to the city.



A Study on the Survey of Cultural Diversity in Goyang City

Kwon, Sunyoung / Hwang, Seolhwa

Cultural diversity, an essential factor for the peaceful co-existence of the human races, implies various ways of expressing the culture of communities and societies. After the ratification of the agreement with UNESCO in 2010, Korea established the law pertaining to 'the protection and enhancement of cultural diversity', stating the legal rights of Korean citizens to practice the ideology of cultural diversity. Afterwards, cultural diversity policies have been practiced at the pan-governmental level. However, since a local community is where cultural diversity is manifested and citizens can communicate and relate amongst one another, it is necessary to provide action plans and policy tasks that underline the specifics of each individual locale.

Recently, major cities including Seoul started establishing the cultural diversity as an essential value. Goyang City with a population of more than a million, like any metropolitan area, is faced with highly probable exposure to the influx of diverse cultures. Goyang City must be prepared to promote full-fledged discussions regarding cultural diversity and carry out policy tasks. In particular, there is always a chance that the introduction of a new culture may elicit conflict and collision with the pre-existing culture, demanding a local society capable of preventing and addressing this concern. Sufficient support and sympathy from the residing citizens are key factors for reinforcing the competence of the local society, which is why the City of Goyang must work hard to enhance the cultural acceptance and tolerance of the residents of this region.

The city of Goyang must understand the current status accurately in order to seek public undertakings. A reliable tool for analyzing the current status is needed for its sake, and the foremost part, to utilize a survey on the current state of cultural diversity as the part of the index research. Rather than developing a new index, however, this research paper is mainly concerned with investigating existing survey indices of cultural diversity developed at the country or metropolitan levels and then applying and adapting them to our research. The study has found that the established index of cultural diversity primarily concerns a special class of minorities such as married immigrants, North Korean refugees, and foreign workers. Although there were also other surveys on the public perception on cultural diversity aside from cultural minority groups, the focus of the surveys was primarily on promoting social

awareness for those who belong to such minority groups so that they can express their cultural heritage without any public 'discrimination' and 'exclusion'.

Who would you consider a minority in our society? What is the definition of a minority? Do minorities include everyone not part of a majority? Are there any minorities that are not married immigrants, North Korean refugees, and foreign workers? This paper likewise puts out these questions for discussion, focusing on not the minorities itself, but the characteristics of the 'minoritiness' innate to all individuals. In other words, we proposed an index for the survey on the current status of cultural diversity that ultimately includes amendments and addition of the questionnaire applicable to the social and cultural conditions in Goyang, especially putting emphasis not on a specific minority class, but the 'minoritiness' in every individual while still making use of the original index (previously developed in preceding research).

Through the results of this investigation, we were able to come to a few conclusions. First, there is a lack of foundation to promote policies pertaining to cultural diversity in Goyang. Although there are departments and organizations that carry out unit projects associated with cultural diversity, none of them manage and systematically plan or implement these types of unit projects. In addition, amidst the lack of these local enactments, we need to begin preparations first before institutionally promoting policies regarding cultural diversity.

Secondly, the concept of cultural diversity is not contained within a specific domain, but is a lifelong demanded concept that should be understood by the entire city of Goyang as well as implemented in policy projects. Despite the presence of various departments and organizations that have launched policy projects related to cultural diversity, these associations still need to organize a networking system amongst each other. Furthermore, in order to continue to make clear analysis of the current situation, we must make arrangements to share the collected administrative data through the connections between these organizations.

Thirdly, we need to enhance awareness among civilians and the local community about the value and importance of cultural diversity. According to the survey results, respondents generally showed relatively low awareness

of cultural diversity compared to the extent to which people agreed to its importance. We must take priority in spreading the publicity about the value of cultural diversity by increasing the awareness of how this value influences ourselves, families, and local communities.

Fourthly, we must recognize and deal with the issues regarding conflict within a specific region or among different age groups. According to the survey results, among the different social issues, most responded that the conflict within a region (conflict within developing cities and underdeveloped cities) and the different generations was the most problematic. However, despite the significance of this issue, the countermeasures in comparison were deemed insufficient. Therefore, the city of Goyang must continue to contemplate from a cultural perspective on how to resolve and overcome these relevant problems.

Fifth, we must put in political effort to allow the residents of Goyang to experience a more diversified cultural and arts experience. Even though, it is true that the residents of Goyang participated in cultural arts experiences at a higher prevalence compared to the other cities, most of the viewing activity centered around movies, local fairs, and historical and cultural sites. This means we must politically strive to diversify the context of these activities.

Sixth, we drew a conclusion implying that we must consider the importance of specific regions and age groups when enforcing political actions associated with cultural diversity. Respondents with expenditures in cultural and arts compared to the respondents with absolutely no expenditures in these areas showed a larger interest and acceptance of social, cultural phenomenon. Therefore, as respondents are more aware of the concept of cultural diversity or have more experience in related education and activity, they tend to show higher interest and acceptance of social and cultural phenomenon. Meanwhile, less people exhibited concern for the crisis of traditional culture, especially those in their 20s as well as residents of Ilsanseo-gu and Ilsandong-gu. Therefore, this aspect must be contemplated when pushing ahead with political plans.

After reviewing these research results, we proposed a political plan that is introduced in the following paragraph.

Our policy objectives include 'Engagement of the formation of civil culture', 'Co-existence of disparity and

dissimilarity', 'Enjoyment and diversification of cultural expression' and in order to strategically achieve these goals, we proposed the 'Enhancement of the awareness of cultural diversity', 'Reinforcement of the capability of cultural diversity', and 'construction of the foundation for cultural diversity policies'. More concretely, we proposed political tasks that consists of belows: ①Enhancing educational programs related to cultural diversity, ②Increasing exposure to boost comprehension of cultural diversity in everyday life, ③Supporting the development and running of cultural arts programs affiliated with cultural diversity, ④Supporting the enrichment of expertise in mediating consultation rather than evaluation, ⑤Improving the competence of cultural diversity within a community, ⑥ Enacting the ordinance of cultural diversity, ⑦Forming a committee responsible for promoting cultural diversity policies, ⑧Developing an index and constructing a monitoring system and investigation analyzing the current status of cultural diversity, ⑨Promoting a networking system to enforce cultural diversity.



A Study on the Systematization of Social Statistics in Goyang City

Yun, Shinhee / Lim, Jeongjae

The demand for social statistics for establishing social policies has rapidly increased, but, unfortunately, social statistics in Korea have been produced and managed in a relatively unsystematic manner. Social statistics are utilized more at a regional level than at a government level, but most of the social statistics produced by Statistics Korea are municipal- or provincial-level data only. The representativeness of samples is also low, which results in a low utilization of social statistics in local governments.

The importance of regional-level social statistics has gradually increased due to the increasing role of local governments and decentralization, and the demand for social statistics has been expanded into regional statistics. Against this backdrop, Goyang City needs to establish regional-level social statistics and measures to actively utilize them.

It is also necessary to observe overall social statistics that serve as a base for various social indicators used to monitor changes in citizens' life and cities, and to comprehensively analyze and systematize social statistics of Goyang City based on them.

Against this backdrop, this study examined and analyzed statistical data compiled by Statistics Korea and Goyang City (approved statistics of Statistics Korea; approved statistics of the Gyeonggi provincial government; approved statistics of Goyang City; opinion polls of Goyang City; social surveys of the Gyeonggi provincial government and Goyang municipal government; municipal research and services of Goyang City; research projects of the Goyang Research Institute), and structured the system for social statistics. Strategies for promoting social statistics were also suggested. This study discussed the necessity of social statistics, analyzed the sections and structure of social statistics, and selected the social statistics required to be produced by Goyang City itself. The process of producing and managing statistics used in Goyang City was also reviewed, and measures to systematize the social statistics of Goyang City were established based on the results. To do so, literature review and status analysis were conducted, and experts in this field were also interviewed to hear their opinions.

First, the sections of social statistics of Goyang City were constituted, and social statistics were extracted by

section and were prioritized. After that, key approved and unapproved statistics were extracted by section, and the production cycle, targets and utilization status of statistics were suggested.

The social statistics released by Statistics Korea were analyzed, and 97 out of 1,169 types of statistics approved by the central government were selected based on the framework of social statistics of Statistics Korea, and they were systematized by categorizing social statistics. The selected social statistics were categorized by section as follows: crime and legal justice (5); community, civic participation and governance (2); family and household (4); education and training (9); leisure and communication (18); population (4); health (12); living environment (5); labor (16); consumption and assets (12); housing (2); and comprehensive sections (8).

Next, the social statistics released by local governments within Gyeonggi Province were analyzed, and it was found that a total of 91 types of statistics were produced by 31 local governments within Gyeonggi Province including Goyang City and were approved by Statistics Korea. Both basic statistics and social surveys are commonly conducted by all the local governments, and 9 other surveys of economic indicators; elderly welfare statistics; perceived job conditions; housing conditions; staying and employment conditions of foreign workers; traditional markets and shopping districts; welfare conditions; social environment for young population; and traditional markets are selectively conducted by local governments.

In the case of social surveys conducted in Gyeonggi Province and Goyang City, specific items, other than common items, were found to be additionally surveyed to reflect their interests. The frequency of the use of the following items were found to be commonly high: satisfaction/dissatisfaction with civil services; routes to acquire information on municipal affairs; and policies required for each class.

Statistics obtained through municipal research services outsourced by Goyang City were analyzed. A total of 279 cases of municipal research services were found to be outsourced by Goyang City between 2010 and 2018, and 106 cases (approximately 38%) of them produced social statistics. They were categorized by area as follows: city (32), economy (20), society (17), cultural tourism (15), environment (8), transport (7), and administration (7). They were

divided again based on the sections of social statistics as follows: labor (27), culture and leisure (24), housing and mobility (20), living environment (10), education (7), health (5), household and family (4), income and consumption (3), social integration (2), comprehensive sections (2), safety (1), and population (1). In addition, procedures to compile raw data were suggested through task statements on how to submit the outcomes of social statistics related to services.

The statistics of the opinion polls conducted by Goyang City were analyzed, and a total of 105 cases were found to be conducted between 2012 and 2018. During the period, a total of 15 types of opinion polls on the satisfaction of internal customers, the kindness of call center counselors, the satisfaction of users of Goyang Urban Management Corporation, the satisfaction of users of dong community centers and gu offices, etc. were found to be conducted more than twice. In addition, those that had been continuously produced were selected among the statistics of the opinion polls, and the connectivity of items with social surveys were reviewed.

Based on the results of the analyses above, this study suggested a systematized structure of social statistics for Goyang City. First, for the approved statistics of Statistics Korea, a total of 15 types of statistical surveys that need to be produced by Goyang City were selected as follows: housing conditions; public transport conditions and mobility behaviors; perceived conditions of tourist facilities and festivals; the utilization of and satisfaction with community facilities; childcare conditions; the status of single-parent families; community health; regional employment; perceived job conditions; the status of persons with disabilities; the status of the elderly; multi-cultural families; lifelong learning for individual learners; private education expenditure; and social surveys. Out of them, this study categorized and suggested as social statistics of high importance 6 types of surveys of housing conditions; childcare conditions, comprehensive job status; public transport conditions and mobility behaviors; perceived conditions of tourist facilities and festivals; and the utilization of and satisfaction with community facilities.

In addition, the approved statistics of local governments in Gyeonggi-do were analyzed, and this study suggested to add to the list of statistics that need to be produced by Goyang City surveys of perceived job conditions; staying

and employment conditions of foreign workers; traditional markets and shopping districts; and housing conditions. In terms of unapproved statistics, 45 types of social statistics related to the municipal research services of Goyang City, 11 types of social statistics of the Goyang Research Institute, and 12 types of opinion polls conducted by Goyang City were selected to form the structure of social statistics of Goyang City.

However, to systematically produce and manage social statistics, it is necessary to establish a data environment and a dedicated organization that is composed of statistical experts. The status of staff members in charge of statistics, and ordinances related to the supply and utilization of data in major local governments were reviewed in order to suggest measures to efficiently manage social statistics of Goyang City. It was found that a dedicated statistical team was formed or that those in charge of statistics managed data under a (big) data team in cities similar to Goyang City (cities with over 1 million population: Suwon, Changwon, Yongin), and cities with over 500,000 population (Ansan, Jeonju, Cheonan, Pohang), Seoul Metropolitan City and Incheon Metropolitan City. Among cities with over 1 million population, Suwon and Changwon enacted an ordinance for promoting statistics and big data, and formed a team dedicated to statistics and big data within the same department in order to improve the efficiency of work.

Goyang City, however, seems to show a limitation to systematically manage social statistics due to the absence of teams dedicated to statistics and a lack of trained workers. Even cities with over 500,000 population (Ansan, Jeonju, Cheonan, Pohang) revised related laws and systems and have operated a dedicated team. Therefore, Goyang City also needs to broaden the understanding of promotion of statistics.

Currently, routes and procedures for acquiring statistics used in Goyang City are complicated and inefficient, and procedures for collecting raw data and managing metadata have not been properly managed. Statistics also have not been actively utilized in services for the people. In order to address these problems, it is necessary to enact an ordinance on the use and promotion of statistics in Goyang City, and to assign trained workers to a team dedicated to statistics. It is also important to segment statistics by class and region, to enhance the capability of individual

departments to manage and utilize statistics, and to expand the number of trained workers with abilities to produce, interpret and raise awareness of statistics by utilizing administrative data based on this.

In addition, it is essential to ultimately establish a platform for statistical database in order to establish a database for social statistics, increase the utilization of statistics, share data and promote the use of networks in Goyang City. Lastly, indicators used in various areas and topics that are produced based on social statistics need to be produced within a standardized framework by systematizing regional social indicators and to be continuously monitored by establishing a database.

We are living in a flood of data that are pouring out everyday, and not only individuals but also central and local governments have paid attention to how to utilize this huge amount and various types of data in administrative services. From this perspective, Goyang City also needs to deliver data-based scientific administration.

By doing so, Goyang City will be able to take the lead in promoting the importance of the role of local governments in the data sharing economy.



A Study on Measures to Improve Perception on Disabilities in Goyang City

Moon, Junghwa / Yoo, Sunchi / Cho, Soomin

This research aims to suggest effective policies for improve of perception on disabilities that could be applied to Goyang City. It is done by reviewing successful domestic and foreign cases that led to improvements in perception on disabilities and investigating perception on disabilities of citizens, disabled people and families in Goyang City.

This study is conducted as follows: First, various resources related to improving perception on disabilities—such as laws, the government plans, policy directives, domestic research trends, etc. are surveyed; second, the status of the disabled population and policies in Goyang City are reviewed; third, outstanding domestic and foreign cases that resulted improvements in the perception on disabilities are reviewed; fourth, a comparative analysis of the perception on disabilities is conducted by looking at the results of surveys of 560 students—at every level—and 620 adults living in Goyang city; fifth, a survey was conducted on social awareness among 232 people with mild developmental disabilities and 231 family members of those with developmental disabilities; sixth, the FGI (Focus Group Interview) with practitioners, who are implementing projects improve the perception on disabilities in Goyang City, is conducted and analyzed.

The following are the results and suggestive implications from the study: First, it was found that there is a need to establish policies to improve the perception on disabilities; second, there should be a control tower installed to oversee the efforts to improve the perception on disabilities in the city; third, it was found to be necessary to train professional educational instructors who are disabled themselves, who are bound to be more empathetic, and that is expected to lead to improvements in the quality of instructions given; fourth, it was found that educational efforts should be strengthened by making them both detailed and custom-designed to suit the needs of those who are instructed; fifth, it is recommended that positive social perception on disabilities is to be encouraged; finally, Goyang City-specific projects where the city could play the leadership role should be developed and carried out to improve the perception on disabilities.



A Study on the Welfare Infrastructure Strategy for the Elderly in Goyang City

Moon, Junghwa / Yoo, Sunchi / Lim, Yeonok

This research aims to analyze the status of the welfare infrastructure for the elderly in Goyang City and to find ways to manage the integrated and efficient infrastructure centered in order to cope with the rapidly aging population preemptively and actively. This study is conducted as follows: First, the status and trend of elderly population in Goyang city are analyzed, and the size of the elderly in need of care in Goyang city is estimated; second, in order to satisfy the need to get the accurate sense of the status of the elderly welfare infrastructure in Goyang city, GIS analyses are conducted to investigate the elderly population in the City and its density, the ratio between demand and supply for elderly welfare facilities and the gap between them and the coefficient of inequity for elderly welfare facilities; third, the demand for elderly welfare centers in Goyang City is analyzed and additional establishment plans are reviewed utilizing the results of the analyses above; fourth, the network of elderly welfare facilities in Goyang City is analyzed. In addition, the field experts' FGI and case studies from other regions are reviewed to put forward measures to heighten the efficiency of elderly-centered infrastructure in Goyang City. The results and suggestive implications from the study were found to be as follows:

First, it was found that there is an urgent need to prepare policy responses to the aging population trend because the number of elderly people who need care is growing rapidly in Goyang City; second, long-term care facilities in the elderly welfare infrastructure of Goyang city were found to be excessive compared to other regions. In the future, rather than expanding the infrastructure merely quantitatively, it would be better to move toward improving the quality of service quality by utilizing the designation system;

Second, the number of elderly welfare centers in Goyang city, on the other, is very low compared to the similar-size cities in terms of the elderly population. It is recommended that additional welfare centers be built. A variety of means could be utilized to achieve that goal: the idle lots in the city, public bidding process projects such as social overhead capital (SOC) needed for everyday living, etc. It is recommended that elderly welfare centers also need to plan outsourcing projects and utilize social cooperatives;

Third, it was found that networking between elderly welfare institutions is lacking and their businesses fragmented. In conclusion, it was found that is necessary to provide the elderly-oriented customized services by activating the network of the elderly welfare resources in the region, which could be done more effectively utilizing regional divisions.



An Analysis of Economic Impacts of Large Scale Developments in Goyang City

Song, Sooyeop / Kim, Leeyoung / Goh, Yungyung

In order to promote a new growth city model in northern Gyeonggi Province, Goyang City is making efforts to strengthen the balanced regional economic development and urban self-sufficiency function by executing large-scale projects in Ilsan area.

This study analyzed the economic ripple effect of 'Goyang Ilsan Techno Valley', 'Goyang Broadcasting Video Valley', 'CJ LiveCity', and 'Kintex Third Exhibition Hall' projects to estimate the economic effects on Goyang City which were generated by large-scale projects.

As a result of the analysis, the production-induced effect was found to be about KRW 4.6441 trillion won, the employment-induced effect of 19,855 people, and the value added-induced effect of about 1.53 trillion won.

After the completion of the construction, it was analyzed that the production inducing effect was about 12.88 trillion won, the employment inducing effect was 12,247 people, and the value added inducing effect was about 5.75 trillion won.

On the other hand, as a result of identifying the change in productivity over the 10 years after the creation according to the mid- to long-term prospects of the domestic economy, it is analyzed that the economic effect (production amount) will exceed 10 trillion won over the 10 years after the completion of the composition.

In order to maintain the economic effects of these large-scale projects with with a high level of stability, it is necessary to provide policy support to form a virtuous cycle among the major industries. Major industries that are flowing into large-scale businesses are high-tech, broadcast video, tourism, and MICE industries, which foster local industrial ecosystems through systematic development plans and mid- to long-term strategies (roadmaps), and support companies and markets. In short, what is needed is a strategic plan to lay the foundation for industrial growth—such as a manpower policy that is able to supply enough professional power to sustain continued industrial needs.

Lastly, the integrated industrial development strategy of Goyang City is required to secure diversity in resource utilization of Goyang City and to establish a technology cooperation system for mutual growth between industries.



A Study on Formulating of Basic Plan for Youth(2020-2022) in Goyang City

Kwon, Sunyoung / Hwang, Seolhwa

The youth population in Korea overall is decreasing due to low birth rates and aging of the society. Although the youth population has consistently decreased, Goyang has the second largest number of youth in Gyeonggi-do, after Suwon, and the ratio of youth to total population also appears to be high. This suggests that the high political interest and effect put forth by Goyang City contributed to creating a happy environment for the youth generation.

The youth policy projects in Goyang City has been carried out by many departments and organizations, but mainly by the Youth Policy Division and Goyang City Youth Foundation. However, these policies to a certain extent have been promoted in a disintegrated form, which means we need a more comprehensive plan and promotional system for the development of the future youth policy.

According to the Act on Youth, Korea's central government, the Ministry of Gender Equality and Family formulate master plans for youth policy every 5 years. The central and local governments shall formulate and implement annual implementation plans based on the master plan. Goyang, also must take time to contemplate on how to execute these plans to be compatible with the regional environment and characteristics of the young generation. Therefore, based on the 6th Youth Master Plan of the central government and Gyeonggi-do, this paper aims at disclosing how the city of Goyang should set direction and objectives and propose essential policy tasks related to how to desirably execute these youth policies, corresponding to the 3-year period from 2020 to 2022.

This research implements the analysis of the youth environment in Goyang city, current policy analysis, questionnaire and open forum about the youth life in Goyang, and a conference held by specialties in order to provide a suitable concrete policy tasks pertinent to Goyang for the support, foster, and protection of the youth community.

The analytical data is summarized as followed. First, through analysis of the current state and environment, the proportion of late youths is higher than that of early and mid youth. As the percentage of adolescents who have stopped studying has increased every year, it is analyzed that this should be taken into account in policy making. In addition, departments and organizations responsible for youth policies need to maintain close ties with one another as well as recruit a labor force for the needed facilities.

Secondly, through analysis of projects associated with youth policies, we deduced implications for the necessity

of expanding the space for youth and policies for youth employment, and revitalizing a joint cooperation between the people and the government.

Thirdly, the youth has expressed demand for the expansion of paths for the youth to participate in policy making plans through an open forum, increased protection of youth labor rights, and discount benefits for the youth to enjoy cultural experiences. Furthermore, the youth believe in the necessity of the augmentation of international exchange, persistent opportunity for career exploration, and a safe environment.

Lastly, the following implications were derived from the youth survey results: promoting youth sports activities that target youth in Deogyang-gu, or in mid, or in low-income groups, or female youth, more opportunities for the participation of the youth and the collection of their opinions, promoting agreements related to human rights and youth establishments in community, and a Committee for Youth Participation composed of youth. In addition, the youths of Goyang city perceived that they have a lot of stress on learning, so Goyang city should make the following policy efforts: supporting for a variety of youth activities and creating a safe environment for youth especially whom are female or in Deogyang-gu. Based on these findings, the vision and goals of Youth Master Plan(2020-2022) in Goyang city are as follows. The vision is to be 'A city that respects youth', 'A city where youth are happy', and 'A city that grows with youth'. The goals are promoting youth's rights and participation, enhancing the support for the initiative of youth activities, reinforcing the independence of the youth while providing protection, and establishing the promotion system for youth policies.

There are 12 top priorities to be fulfilled. They consist of ①Revitalizing participation of the youth in society and policies, ②Enhancing youth rights, ③Strengthening the abilities of democratic citizens of youth, ④Arranging institutional foundation for supporting youth activities, ⑤Revitalizing youth activities, ⑥Enhancing career education, ⑦Extending the youth social safety net, ⑧Providing a target-specific customized protection support, ⑨Improving harmful environment surrounding the youth and enhancing the level of protection, ⑩Enhancing the overall control and revision of youth policies, ⑪Enriching the promotion system for youth policies centering on local scene, ⑫ Improving the competence of youth educators.



A Study on the Customization of Jobs for the Young and SMEs (Small and Medium Enterprise) in Goyang City

Lee, Hyunjung / Jo, Dongik

In this research, we focus on the job mismatch between the young and SMEs in Goyang city. To investigate job seeking conditions, we conduct a survey of young job seekers, including those who enter the job market. Then we conduct in-depth interviews of SMEs to investigate job offer conditions and skilled qualified workers they need. Finally, we interview experts who work in the chamber of commerce & industry, job-matching support center, the federation of the Goyang industries as economic organization, and so on. In addition, we review previous research, statistical data of the National Statistical Office and government policies. Further, we have found that there are 2 main mismatches in the labor market in Korea, but especially in Goyang, from the surveys conducted while doing this research. For job seekers, there is a demand-based mismatch due to lack of job vacancies that young job seekers find attractive enough. For job offerers, it is caused by the structural mismatch that is based on the lack of skilled qualified workers. In Goyang, young job seekers prefer SMEs rather than large size companies. According to the survey, young job seekers would like quality job vacancies, but they lack information about them. Young job seekers are interested in broadcast, video and game industries, and they are enthusiastic about opportunities to get training and to learn about new digital technologies. SMEs, however, have more offers for career positions than entry-level jobs. In short, the other side of the coin is that potential employers feel they are unable to find qualified workers; this would be the other mismatch from the supply perspective. While it may not be an immediate solution, it seems undeniable that both sides need job training and education programs. It is true that there are many policies in place for job creation but there are not many custom-designed to suit regional characteristics/needs. Finally, as a result of this research, we propose several policies to solve the mismatch problems between the potential SME employers and young job seekers, such as setting up Goyang City-specific professional capacities development training, cultivating workers for specialized industries, developing job information platform, etc.



A Study on the Development of Craft Industry in Goyang City

Lee, Hyunjung / Jo, Dongik

In this study, we focus on the development of craft industries in Goyang City. First, we conduct a survey to investigate the current status of the craft industry in Goyang City. Second, we conduct an in-depth interview with people who are involved in the craft industries: craftsmen, retailers, market planners, civil servants, members of craft guilds, etc. Fourth, main craft categories chosen for the interviews are: traditional, modern, industrial and life-style. In addition, we seek advice from researchers and experts in craft industries. Also, in order to understand the characteristics of the Goyang City's craft industries, we compare the surveyed data on Goyang City with the national data.

Since 2010, the number of people in the life-style craft industry has increased rapidly and the need to expand the market size naturally increased along with that. There are some possible efforts that might effect precisely that. For example, there are requests for a street devoted to crafts, a craft village, and free markets and flea markets supported by the city. Also, there are demands for a roundtable for craftsmen for them to get together, education and training programs in the industry and so on. To realize these varied policy endeavors it is necessary for Goyang City to consider develop of systematic policies to support the projects. The proposed polices are developed based on the classification of hardware and software: In terms of hardware, there is a need to build the appropriate infrastructure to support the craft industry. Hardware that is not backed up by software would be useless. Well-developed strategies for regional specialization that would make Goyang City unique is the soft power that is required. We also consider the schedule—i.e., planning time horizon—by dividing it into short, mid and long terms. Finally, we propose a diverse set of policies on in-depth interviews with craftsmen and experts as well as surveys: education and training programs for craftsmen, competition projects, holding a craft exhibition, setting aside an area for crafts (village; street), explore ways to converge the craft industry and new technologies, start a certification program for craftsmanship, etc.



A Study on the Policy Direction of Public Bicycle in Goyang City

Baek, Joohyun / Kim, Junwoo / Cha, Yunchul

In 2010, Goyang City built and introduced the “Fifteen” system, the first public bicycle service in South Korea, provided by a private operator. The Fifteen service is in operation under an agreement between Goyang City and the private company Ecobike Co., Ltd. until May 2020. However, the future sustainability of the Goyang City public bicycle system must be considered from various aspects as the expiration of the agreement is approaching.

The Fifteen service has been highly valued by many Goyang citizens for the past 10 years but is suffering from low profitability as the number of users is steadily decreasing every year owing to the lack of active response to system investments to address such problems as system aging and insufficient bicycle rental stations. Goyang City has to provide financial support every year to compensate for the loss of the private operator. Goyang City is also concerned about whether to continue this service.

Concurrent with these internal concerns of Goyang City, a paradigm shift is occurring in the public bicycle market. Station-based public bicycle systems have been introduced and operated by most local governments, including Goyang City, but their progress is slowing down owing to the disadvantages of high cost and the need for physical space. Recently, in conjunction with the sharing economy, the sharing bicycle system model led by Internet-of-things-based private companies is now leading the market expansion. With the worldwide introduction of the concepts of shared mobility and first-/last-mile mobility, shared bicycle services are drawing attention as a means of micro-mobility (currently used in combination with smart mobility and personal mobility in Korea).

Against this background, this study was conducted to establish a policy direction for the sustainable public bicycle system of Goyang City. To this end, we analyzed the operation status of the Goyang City public bicycle system, and investigated and analyzed the operating status of public and shared bicycle systems that have been introduced and are being operated by local governments in South Korea. Based on the results of this analysis, we have drawn policy implications for introducing a suitable public bicycle system for Goyang City. Before establishing alternatives for the public bicycle system for Goyang City, we conducted a survey of Goyang City residents who use the Goyang City public bicycle system and attempted to reflect the results of this survey in establishing alternatives and policy

directions.

The following aspects were considered in this study to suggest possible alternatives. The existing Fifteen service has benefited students and low-income class, but the high maintenance cost for stations and the changing trend of the public bicycle market make it difficult to maintain the satisfaction of citizens or the competitiveness of the Goyang City public bicycle service.

Moreover, it was necessary to reflect on the introduction and expansion of personal mobility in accordance with the recent national legislative trends and the changing global paradigm of transportation. Finally, as shown in the case of Suwon City, we acknowledge that, for the public bicycle system, the provision of high-quality service and sustainability are as important as public interest.

This study introduces a shared electric bicycle system with private operation considering the recent public bicycle system technology trends, Goyang City's financial conditions, and stable service provision. The privately operated shared electric bicycle system can provide a high level of sustainable services and has the advantage of low financial burden for Goyang City because there is no initial investment cost. However, the financial support of Goyang City should be reviewed to solve the relatively expensive rate problem compared with that of shared general bicycles. This should be considered a basic condition in the implementation agreement with a private company to be concluded in the future.

In this study, three alternatives were proposed in consideration of technology trends of public bicycle system, financial conditions of Goyang City, provision of stable services, and the results of citizen survey. The first alternative was a shared electric bicycle system operated by the private sector, the second shared alternative bicycle system was operated by combining general and electric bicycles, and the third alternative was a free bicycle system.

To revive the public bicycle service, the preparation of hardware and software measures is critical. In terms of hardware, bicycle roads must be expanded and maintained so that bicycles can be used with confidence, and efforts to build bicycle-friendly infrastructure such as bicycle priority signals should be promoted through pilot projects.

Goyang City will be able to build the reputation of a leading bicycle city through this process. In terms of software, economic rewards should be provided to bicycle users such as linkage with public transportation, transfer discounts, various bicycle rate programs, and incentives.

Finally, Goyang City has to amend the city regulations as the introduction and expansion of various personal mobility measures (e.g., electric kickboard) are expected in accordance with the revision of laws and systems in the future.



A Study on the renovation plan for Lake Park, Goyang City

Kim, Joonwoo / Seong, Jongsang / Choi, Wonman / Im, Jiyeol

Lake Park is the largest manmade lake in Asia that opened in 1996 in Ilsan Newtown. Lake Park is loved by countless number of Goyang citizens and is recognized as one of the most famous landmarks of Goyang City. This park, however, is facing few new challenges such as new developments in the south area, where the park is located, and decrepit facilities. In addition, the park needs to be connected with adjacent green spaces and the Han River.

This study aims to propose a renovation plan for Lake Park working together with professionals in landscape design and citizens who actively use and take care of the park. Goyang Research Institute is coordinating this research and is in charge of urban design; Seoul National University is proposing vision and strategies for park renovation, and Sinhwa Consulting Co. is designing the landscape plan utilizing the strategies while meeting exacting detailed requirements. This research recommends a citizen advisory group to hear citizens' demands and design preferences.

The first emphasis of the current research is doing a thorough site analysis to discover to hidden layers and contexts. These could be found in microclimate conditions in the park area, in the different behaviors of citizens on weekdays and the weekend, etc.; all these findings would be used to propose practical renovation solutions. The site analysis has unearthed five main problems that need be addressed are as follows: 1) Imbalanced

use (some groups are overrepresented and some underrepresented) and limited number of active programs; 2) disconnected regional water networks; 3) under-utilized ecological potentials; 4) the high density of developments south of the park; 5) the need to rearrange tired old programs and to raise the level of citizen participation.

This research proposes six main strategies to renovate Lake Park as a power station—i.e., a source of power that produces citizens' health, happiness and green environment; those things would raise the energy level of the society to be sure. Each main strategy consists of three practical solutions to renovate and reactivate Lake Park:

The first main strategy is to constitute a healthy water circulation system networking Lake Park with neighborhood water elements. This strategy would increase water quality as well as quantity; the end result is a transformation of the lake from that is enjoyed "viewing" to one that is "experienced";

The second strategy is to connect the lake center with regional green networks to all directions with axes. This plan would the environment more eco-friendly while spiking up the rate of greenery in the park;

The third strategy is to make the park more open and balanced utilizing various renovation schemes. These are recommendations that flow from the strategy: Borders of the park will be permeable so as to be easily accessible from all directions to make it user-friendly; 3 ring roads, each one with a unique function to perform, are recommended to be built to remove any congestion in the park; a bridge that connects the northern and the southern ends is also recommended, and there would be a new development in the south with a skyline facing the lake; The fourth strategy is clustering six different program zones each with a different theme and many new and flexible programs are proposed new to fit each program zone custom-designed for different users;

The fifth strategy is to actively promote Lake Park as a place of 'citizen stewardship', where the public does not just participate actively is involved in public management;

The last strategy is to reinforce the branding of Lake Park that is linked with the flower exhibition in Goyang City, and it is recommended an organic connectivity between the various tourist spots around it be established.

The park renovation plan, which is a master plan to build a new Lake Park, proposes multiple new ideas to improve various space elements in the park under main 'strategies'. There is a catchy phrase, '3.6.5 Daily Park'. It is based on these elements: 3 water bodies, 6 various program zones and 5 bridge connections to build a balanced park with neighborhood parks and specialized programs. It proposes various waterfront spaces, such as water pool plaza, waterfall beach, waterfront deck and water purification wetland. This plan also suggests extending green space from an impermeable area to a lawn plaza and road area to a park zone by eliminating the road entirely to an underground pass. In addition, this plan proposes various space improvement ideas that center around the 6 program zones. There would be special infrastructures and buildings: main bridge that dissect the lake, multi-functional landscape architecture, botanical garden, observatory café, media façade under the bridge, adventure playgrounds and others. This plan would be a guideline for future improvement and management of the park. In short, it is not just a detailed

plan for now, it also present a vision for the future. Future projects to come later would naturally be harmonious with past developments projects. This would in fact would be the main reason to draw this future-oriented park renovation plan.

Finally, this research offers a phased implementation plan from 2020 to 2030 in four phases, which are categorized and ranked—from short-term to medium to long term. Each project would be rolled out according to the pre-planned schedule. The first phase projects that had already secured budget for 2020. The second phase is focused on priority projects to be completed till 2022. The third phase is planned to finished in 2026 and the fourth phase is to finished in 2030. This phased implementation plan considers the financial burden by spreading budget outlays over time. The priority of the projects is not fixed as it is subject to change as citizens' demands and tastes are not constant and administration environment as well. So, this research proposes an advisory board for Lake Park that consists of citizens and professionals to counsel individual projects under the park renovation plan and increase public participation. Finally, this research proposes that the advisory board should be strengthened further and transformed to 'Lake Park Conservancy Group', which includes professionals, civic groups, city council, civic administration and citizens, would work lead sustainable and continuous projects in accordance with the basic plan drawn in this study. Also, the medium to long term operation system for the conservancy that is based up active and voluntary participation by the citizenry is proposed.



A Preliminary Study on the Public Land Use Platform for Efficient Use of Goyang City Owned Land

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Kim, Leeyoung

The government's policy direction on the use of public land used to be passive in the past, but now it is shifting to its active utilization. In the case of Goyang City, the need for better management of public property for future use is also increasing in addition to the current need for an ordinance on designation and management of public property in the future.

However, the current management of city land has limitations in identifying the status of city land in real time. In Goyang City, more than 40 departments are involved with the management of municipal property. However, there is no system or one department has holds the necessary information in one place. There is a dire need for such a comprehensive information management system of to public property.

Based on this perception of the problem, we examine the current status of public land in Goyang City and investigate various cases, both in and outside the country, of systems used to manage public land. After such a comprehensive review of the need for the establishment of a comprehensive information system for public property, the study aims to recommend the direction that the Goyang city government should take.

The current status of public property in Goyang City is as follows. First of all, Goyang City's public property accounts for about 15 percent of the total administrative area: 24.63millionm² in land area, and 1.238millionm² in building space as of the end of 2017. Land area has increased from 15.45millionm² in 2001 to 24.63millionm² at the end of 2017; building space has increased from .222millionm² to 1.238millionm² during the same period. The total valuation of municipal property held by Goyang City amounts to 14trillion won with land valuation amounting to 11.4trillion won and buildings valued at 1.5trillion won. The total valuation of municipal property in Goyang City increased more than eight times from 1.7trillion won in 2001 to 14trillion won in 2017. There are more than 10,000 city-owned lots of land, with 3,549 more than 1,000m² as of 2019. As stated above, they are maintained by more than 40 departments in total.

Based on the current status of the city's landownership in Goyang, these conclusions could be drawn: First, there is a need for systematic and comprehensive management of shared property in Goyang City with a detailed information system; second, with the emphasis on decentralization and the role of local government, the need to

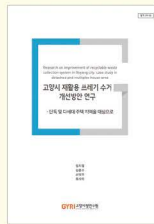
come up with a comprehensive information system that effectively responds to various demands on the shared properties management increasing; third, it flows that just managing shared property well is not enough; we also have to build a new system to increase its value.

The study propose goals and strategies for the establishment of a shared property management system. The promoted goal should be able to contribute to creation of future value of shared property in Goyang City, and it needs to be aimed at establishing an integrated information system with a high level of user convenience.

The implementation strategy needs to be drawn up incrementally. The first order of business is to build an integrated database of all city's assets. Then, an integrated information management system that effectively utilizes it needs to be built. It is recommended that the integrated information system is based on what users needs, and it is proposed that it should be expanded to external customers such as citizens in the second stage.

Considerations regarding the establishment of a comprehensive information system are as follows: First, the shared property information and relevant statistics should be integrated, and there should be a dedicated department needs to be designated that manages the integration process; second, it is necessary to take into account the rapidly changing environment and to have the flexibility to link the relevant information to each other organically; finally, the system needs to be maintained and managed on a regular basis.

It is expected that such a comprehensive information system will have the following effects: First, we would be able to set-up a rational land policies for commons—up to the national level and contribute to the productivity improvement of land administration; second, it is expected to increase the utilization value of shared assets through the linkage of administrative information; third, it is expected to contribute to the performance of support functions for rational decision making.



Research on improvement of recycleable waste collection system in Goyang city: case research of detached and multiplex house area

Im, Jiyeol / Kim, Junwoo / Son, Deockjoo / Choi, Sara

The population of Goyang City is steadily growing. This population growth is expected to continue due to the Changneung New Town development and housing sites. Population growth could simultaneously create many issues but this study focuses on the problem of mounting garbage, which is bound to get bigger as the population grows—garbage collection and its disposal are natural attendant problems.

In this study, we review the current state of waste discharge in Goyang City and suggest a waste disposal method applicable to Goyang City based on the case of the city and case studies of areas with characteristics similar to Goyang City. In conducting this study, we try to derive a plan to improve the discharge system of recycleable waste and suggest some alternatives by identifying the characteristics of each case.

There are two main categories of waste recycling systems: Discharging at the door and collecting recycleable waste at a specific location. Each method is different in terms of convenience, and in discharging and disposing garbage for residents. Here, we present advantages and disadvantages of each method, and present the detailed features of each method in order to make it easy to make a choice in the policy making process.

This study has a weakness in that the characteristics of the region to be developed and the region to be studied are inconsistent. This will be followed by the study of subdividing the recycling method suitable for each characteristic based on the classification of Goyang City based on differences in regional characteristics.



A Research on the design criteria of green building and housing in Goyang city

Im, Jiyeol / Kim, Junwoo / Son, Deockjoo / Choi, Sara

Global warming is one of the hottest topics these days. This is an issue that is not going to abate because increasingly greater number of people live in cities (the scale has already tipped and more people live in cities already) and more greenhouses are generated by human beings living in cities. Simply, buildings account for a large proportion of greenhouse gas emissions. That means green architecture is not longer an option—i.e., it should be required for all new building to be 'green'. This study aims to suggest the green building and housing criteria of Goyang-city toward that end.

This study introduces and compares variety of green architecture criteria the exist: e.g., Green Standard for Energy and Environmental Design (G-SEED) which is the Korean standard of green architect, Gyeonggi-do (province) green building design standard, Leadership in Energy and Environmental Design (LEED) of the US, Building Research Establishment Environmental Assessment Method (BREEAM) of UK, and many standards of green architect specific to some countries. These criteria were designed in consideration of the policies which the current policies could not reflect or lacked in effectiveness and should inform the policy direction for Goyang City.

As mentioned above, Goyang city's green building standards were classified into four categories. In the early stages, green building standards were first applied to large buildings and public buildings, and gradually expanded to smaller buildings. In addition, the green building standards were set to help achieve the goal of Goyang by matching the ratio of renewable energy applied to buildings with the goal of energy independence of Goyang city.

This study proposes Goyang-city's green building and housing criteria reflecting the lack of existing standards and policy. However, the limitation of this study is the lack of numerical values for the proposed criteria used in the field. This should be supplemented through continuous research and case studies.

Current issues Research(5)

NO.	Division	Title	Author
1	Dept. of Public Policy Research	A Study on the Consensus of peaceful Reunification in Goyang City	Ahn, Jiho
2		A Study on the Current Status and Improvement of the Support System for the Victims of Social Disasters in Goyang City	Lee, Jungchul
3	Dept. of Economic & Social Research	A Case Study of Local Government 50+ Center	Moon, Junghwa
4		A Case Study on Community Use of School Sports Facilities	Kwon, Sunyoung
5	Dept. of Urban & Environment	Research on Result Report and Improvement plans of Goyang International City forum	Im, Jiyeol

Contracted Research(1)

NO.	Division	Title	Author
1	Dept. of Public Policy Research	The Concept and Model of the Special Zone for Peace and Economy in Goyang City	Ahn, Jiho

Consigned Research(1)

NO.	Division	Title	Author
1	Dept. of Economic & Social Research	A Study of the Establishment of Criteria for Evaluation of Regulatory damage in Border region of the Metropolitan Area	Lee, Hyunjung

>> Current issues Research



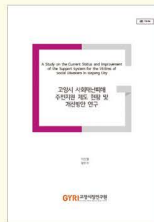
A Study on the Consensus of peaceful Reunification in Goyang City

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An, Jiho / Oh, Yoonjung

This research started from the research question how can promote the unification consensus of Goyang citizens. In order to reinforce the unification consensus of Goyang citizens, the projects of the National Unification Advisory Council, the Ministry of Unification, and Committee for Five northern Korea Provinces, which are representative institutions of central government, were described and analyzed. In addition, The researcher described and analyzed the project of Goyang City. Through this, the researcher attempted to diagnose Goyang City's Unification Consensus Project and draw problems.

General citizens' participation was limited in most of the unification consensus projects promoted by Goyang City. Citizens' participation is limited, and unification consensus events involving certain groups should be avoided. There is a need for a shift from passive and typical unification consensus projects to active and creative projects that seek citizens.

The researcher proposed the 'Peace civil agreement' as an innovative model for strengthening the Unification Consciousness of Goyang citizens. improvement of inter-Korean relations and the development of the city are closely related, the city has good conditions for the introduction of a peace civil agreement. In addition, through the Peace Civil agreement, it will be able to contribute to strengthening the Unification Consciousness of Goyang citizens and establishing tolerance and peace culture, as well as become a driving force for the special peace and economy zones promoted by the city.



A Study on the Current Status and Improvement of the Support System for the Victims of Social Disasters in Goyang City

Lee, Jungchul / Hwang, Huiuk

The purpose of this study is to identify the current status of the support system for the victims of social disasters in Goyang and suggest policies to improve this system. Disaster relief and recovery steps are one of the steps that constitute the disaster management process. Its significance and importance are emphasized in that it is an activity to protect victims and their affected areas and to help them return to their pre-disaster state as quickly as possible. In Korea, the disaster recovery and support system has developed around supporting restoration of damage from natural disasters. On the other hand, the recovery and relief support system for social disasters is limited, even though the extent and scale of damage to social disasters are expanding due to the development of science and technology and urbanization. To supplement these institutional limitations, this study analyzed domestic and foreign cases with a focus on support for social disaster damage and suggested a direction for the improvement of Goyang City. This study analyzed the cases of Gyeonggi, Daegu, Hanam, and Ganghwa counties in relation to supporting social disaster damage and analyzed the support systems of the United States and Japan. The analysis showed that in the U.S., the U.S., the targets and criteria for supporting and recovering from social disasters were detailed, and in Japan, efforts were made to mitigate the damage through various standards, in addition to the methods for calculating the damages.

In comparison with these cases, it was found that despite the high proportion of social disasters in Goyang, including fires and traffic accidents, the system to support the victims was limited. To supplement these institutional limitations, this study first proposed a plan to establish ordinances related to relief from social disasters in Goyang City. In the course of establishing these ordinances, the study proposed setting up detailed standards or scope of support, as in the case of the United States. Second, this study considered a plan for obtaining safety insurance for local residents at the local government level. Third, this study discussed the need for capacity building for field-oriented disaster relief and recovery by establishing a cooperative governance-based network with civil society. In addition to developing support systems and policies to mitigate social disasters, this study also highlighted the need to strengthen campaigns and guidance on these systems so that local residents are fully aware of them. Finally, since the relief and recovery system of these social disasters is centered on the central government in Korea, this study discussed the need to readjust the works and authorities of central and local governments in terms of their authority.



A Case Study of Local Government 50+ Center

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Moon, Junghwa / Yoo, Sunchi

This study aims to analyze cases of local Government 50+ centers and to suggest the strategy to establish a 50+ center in Goyang City

This study proceeds as follows:

First, the population trends and living conditions of 50+(50-64years old) in Goyang City are analyzed; second, policies and programs for 50+re analyzed; third, Case studies of 50+ enters in Seoul and eight other cities analyzed.; fourth, 50+ center managers are interviewed and the contents are analyzed.; fifth, the strategy to establish 50+ centers in Goyang City are reiveiwed.

The followings are the results and suggestive implications from the study: First, the bylaws should be prepared to establish the basis for the establishment and operation of 50+ centers in Goyang City; second, it is important to building the identity of 50+ Center, and related functions and business contents are presented.; third, the main targets of 50+ centers are middle age (ages 50 to 64), and depending on the program, it is necessary to include middle aged 40 and older and aged 65 and older; fourth, it is necessary to designate a department in charge and establish a dedicated team for middle age in Goyang City; fifth, the 50+ center need to consist of at least two departments with 14 staff; finally, Seventh, the operation of 50+ centers can be operated by general private consignment, community college commissioning, or Goyang city management.



A Case Study on Community Use of School Sports Facilities

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Kwon, Sunyoung / Hwang, Seolhwa

The purpose of this study was to provide an opportunity to discuss what difficulties may arise in the using school sports facilities for communities in Goyang city, how they can be solved, and what roles of stakeholders(the local government, schools, the Sports Council, etc.) play. By examining the cases of local governments that have publicly used school sports facilities for communities, this study attempted to suggest a practical way to go to the next step in Goyang City, which is the starting point.

The issue about community use of school sports facilities in local has been highlighted as a key alternative for expanding public sports facilities in the region. In relation to this, the Ministry of Culture, Sports and Tourism has been carrying out ‘the support project for community use of school sports facilities’ through the Korean Sport & Olympic Committee. In this project, a dedicated management manager will be assigned to schools to support the management of sports facilities and sports programs.

Goyang City signed an agreement to use school facilities for community in June, which provided opportunities for expansion of Goyang’s public sports facilities and win-win development between communities and schools (11th, Sep., 2019 released, Goyang City Press).

However, in the case of national schools, the decision-making authority for community use of school sports facilities is delegated to the principals under the ‘Elementary and Secondary Education Act’, and the principals often avoid opening school facilities due to legal responsibility and financial burdens. The principal often avoids consent to the use of school facilities for communities due to legal and financial burdens. For this reason, Goyang City has not yet used a school sports facility for community.

In this study, the case of Bucheon City and Siheung City, which have been using school sports facilities for their communities, was selected and analyzed as best practices. As a result, the success factors in both cases are as follows. First, the efforts of the proactive and active local governments and the local sports councils were the key factors. Second, the projects were operated in a way that both the schools and the communities would benefit.

Third, the emphasis was placed on education and publicity in use of facilities and program development, which minimized and prevented monopolies in a specific sport and clubs. Fourth, the use of school facilities in densely

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populated areas has increased the effect of expanding public sports facilities.

However, the problem of improving the environment for the project managers and practitioners with a severe adverse conditions have still remained a challenge to be solved, which requires the local governments to take initiative actively improve the system not only relying on national support. Based on this, this study suggests the following policy directions: ①Proactive willingness and attention of local governments ②Mutual reciprocity between local and school, ③Establishment of sharing system between related agencies and organizations, ④ Emphasis on the educational and public use and effectiveness, ⑤Promotion of the purpose and expected effect of the projects.



Research on Result Report and Improvement plans of Goyang International City forum

Im, Jiyeol / So, Garam

This report was prepared to organize the results of the Goyang International Urban Forum hosted by Goyang City from October 22 to 23, 2019, and jointly organized by Goyang Research Institute and Goyang Urban Regeneration Center. The Goyang International Urban Forum in 2019 was held in two topics: urban regeneration and the environment, and it was a significant time by domestic and foreign experts to discuss Goyang's sustainability.

However, as Goyang-si was the first urban forum, it left unforeseen problems, such as insufficient contents of forum and immature operation. So the purpose of this report is to examine the aspects of organization and citizen participation in Goyang City in order to prepare the forum and to suggest improvements. And also finding more problems in operations and suggests improvements.

First thing is aspect of organization. In this forum, Goyang city isn't organize control tower to perform General administration. So it caused efficiency issues in recruiting participants, collecting data, and coordinating systems. and This, together with the problem that the budget for this event was not allocated, has resulted in unnecessary waste of administrative.

Second problem is about participation of citizen. In most forums, citizen participation is usually limited in the process of organizing. So attendance rate is lowered if the forum theme or composition is not liked by the citizens. In particular, Goyang city prepares for Sub-metropolitan city, the advancement of resident's autonomy is inevitable. Therefore, it is necessary to prepare a way for citizens to participate in the planning and composition of the forum.

Finally, the operational plan is pointed out. Since the budget for operation was not set separately, but operated by the budget of each department and subsidiary of Goyang City, excessive administrative work occurred due to the absence of the control tower mentioned above, resulting in a waste of administrative power. This should be enhanced if Goyang wants to operate a sustainable forum.

In order for Goyang city to remain a major city of unified Korea beyond the sub-metropolitan city, it is necessary to accumulate knowledge and increase the city's competitiveness and realize future value. In this respect, the city forum is a place for knowledge exchange, a place to present future values and a globally developed system. So it should be taken as the concept of investment that can see the far future, not the shortsighted view from Goyang city.

>> Contracted Research



The Concept and Model of the Special Zone for Peace and Economy in Goyang City

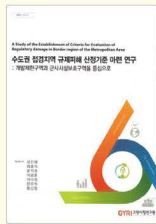
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The “Peace Economy” conceived by the central government can be said to be the globalization strategy of South Korea, which links Southeast Asia and Russia as well as South and North Korea by improving inter-Korean relations and creating new growth engines for the economy. The peace economy is a long-term development strategy or future strategy that enables the city of Goyang to take advantage of opportunities for improving inter-Korean relations, discovering new growth engines for Goyang, and actively supporting them. As such, the creation of a special zone for peace economy is key to the development of Goyang City.

The researcher presented the criteria of the special zone for peace economy as both a link with the existing industrial infrastructure of Goyang City and the possibility of future development of the city. Based on these two criteria, broadcasting contents industry and medical bio industry were selected as the core industries of Goyang Special Economic Zone.

The researcher divided the current situation of sanctions into the first stage, the phase of resumption of sanctions by relieving the level of sanctions, and the stage of reactivation of sanctions. Strategies for creating a special zone according to the stage of inter-Korean relations were suggested. In order to improve inter-Korean relations and create a peaceful economic zone, it is necessary to operate a policy community that prepares for new inter-Korean economic cooperation projects by connecting key actors in the medical bio sector and the broadcasting contents sector. In addition, Goyang City needs to strengthen its international network utilizing key actors in Goyang City, such as the National Cancer Center and Korea Educational Broadcasting System.

>> Consigned Research



A Study of the Establishment of Criteria for Evaluation of Regulatory damage in Border region of the Metropolitan Area

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In this research, we propose to establish the criteria for evaluation of regulatory damage in border region of the Metropolitan Area focusing on both restricted development zone and military facility protection area.

Regulatory cost estimates were made by measuring the subjective costs through the questionnaire for citizens and by measuring the objective cost by multiplying the total regulatory area by the difference between the average land value between the regulated area and the non - regulated area. As a result, the objective cost was estimated to be 121 trillion won and the scenario changed from 12 trillion won to 139 trillion won. The subjective cost felt by residents was 277 trillion won.

Based on the amount of regulatory damage derived, this research provides direct support such as monetary compensation or infrastructure for the central government, and indirect support such as revision of regulatory laws and various tax benefits. In addition, it is necessary to examine ways of mutual growth between the central government and Gyeonggi Province through a long - term investment approach to inter - Korean exchange