

2021 GYRI
Annual Report

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About GYRI
2021 GYRI Research Abstracts



About GYRI



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.

Core Values



Think Tank

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



Solution Bank

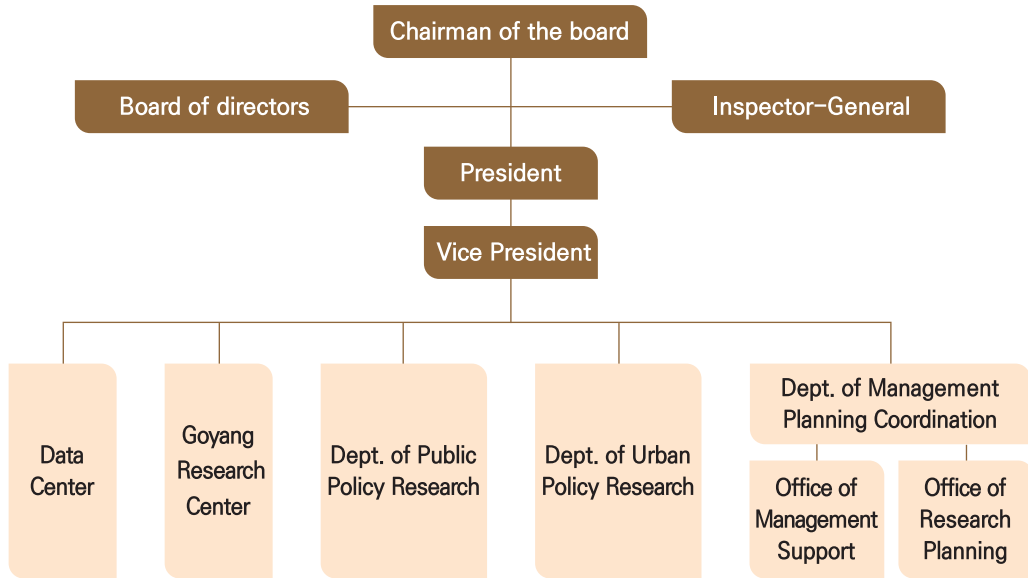
- Local-based creative policy proposal
- Empirical-positive approach for citizens
- Policy recommendations based on citizen participation



Data Bank

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

Organization



Dept. of Public Policy Research	<ul style="list-style-type: none"> * Local Administration and Decentralization * Inter-Korea Exchange and Cooperation * Local Public Finance * Policy Development on Economy, Welfare * Culture, Education, * Safety and Disaster Management
Dept. of Urban Policy Research	<ul style="list-style-type: none"> * Urban Development and Regeneration * Urban Planning and Design * Regional and Local Traffic Policy * Tourism, MICE Industry * Sustainable and Eco-Friendly City
Office of Research Planning	<ul style="list-style-type: none"> * Research Project Management * Management Assessment * Academic Events Management * Cooperation with Research Networks
Office of Management Support	<ul style="list-style-type: none"> * Administrative Support * Rules and Regulations * Human Resources and Budget * Building Management
Data Center	<ul style="list-style-type: none"> * Regional Statistics Production and Construction * Data Archiving * Survey and Big Data Analysis * Establishment of Education and Network Council
Goyang Research Center	<ul style="list-style-type: none"> * Research and Compilation of Historical and Spiritual Culture * Creation of a City of Culture and Humanities * Academic Seminar and Publication of Materials

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- 2021**
 - Goyang Support Startups Consultative Group
 - Korea Research Institute for Local Administration
 - Goyang Chamber of Commerce & Industry
- 2020**
 - National Cancer Center
 - Kyonggi University
- 2019**
 - Korea Local Tax Research Institute
 - Dongguk University
 - Korea Research Institute for Human Settlements
- 2018**
 - Gyeonggi Research Institute
- 2017**
 - Jungbu University
 - Changwon Research Institute
 - Korea Aerospace University
 - Suwon Research Institute





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A Study on the Types of Proactive Public Administration and Motivation Methods

Hyongsung Kim / Jaihyung Kim

Classification of proactive management types.

The types of proactive administration vary widely from scholar to scholar. In addition, 10 types are presented in practice. The central government, local governments, and public institutions are reviewing and selecting 10 types proposed by the Ministry of Personnel Management.

In this study, the types of proactive administration were classified as a process-oriented approach rather than a performance or outcome-based approach faithfully to the concept of proactive administration. As a result of literature analysis, the types of proactive administration were classified into three major categories, six middle categories, and eight sub-categories regardless of the current regulations. Based on the results of the literature analysis, additional types of proactive administration were derived by analyzing the government's best practices of proactive administration. As a result, it was expanded from 8 types to 9 types.

Analysis of types of proactive administrative awareness.

By analyzing the government's best practices of proactive administration, 2-6 questions were derived for each type. In addition, 54 people were sampled in consideration of departments, positions, and positions. As a result of the Q survey, 31 people responded, centering on the survey subjects. This was analyzed and the types were classified. Type 1 is a work procedure improvement type, Type 2 is a field problem improvement type, Type 3 is a leading solution type, and Type 4 is a future prediction preparation type.

Motivating factors that influence the perception type of proactive administration.

First, job-related motivational factors (internal compensation and external compensation), second, fairness perception (procedural fairness, distribution fairness), and third, organizational citizenship behavior (submissive behavior, loyal behavior, encouraging participation, social functional participation, and community service behavior) were selected. A regression analysis was conducted to see if the motivational factor influenced the type of proactive administrative perception. The results are as follows. First, it was found that internal and external compensation had a positive effect on each type of proactive administrative awareness in job-related motivational factors. However, it was found that the four-line compensation did not affect the field problem improvement type and the external compensation did not affect the leading solution type. Second, it was found that fairness did not affect the type of proactive administrative awareness. Third, organizational citizenship behavior was found to have an effect on field problem improvement type, leading solution type, and future prediction preparation type, and loyal behavior was found to have an effect on work procedure improvement type.

Analysis of the Characteristics of Public Transportation Use in Goyang City using Transport Card Data

Joohyun Baek / Hwansung Kim

The introduction of an integrated public transportation fare system has accelerated the transition of the Seoul, Incheon, and Gyeonggi-do metropolitan areas into a “one-day living zone”. In terms of public transportation policy, the greatest advantage of the integrated public transportation fare system is that transport card data can be accumulated and used to identify the characteristics of public transportation use in metropolitan areas. Transport card data is based on trip chains; thus, it can be used to identify which public transportation methods citizens use from departure to destination, providing the most accurate data that reflects the characteristics of actual public transportation use. Furthermore, transport card data is highly valuable as public transportation policy data and its advantage lays in its potential use as fundamental data to formulate policy. Consequently, this study attempts to objectively and intuitively present the characteristics of Goyang City citizens’ use of public transportation based on transport card data.

In this study, the characteristics of Goyang City citizens’ public transportation use were analyzed using two weeks of transport card data from March 4–9, 2019 and from March 2–7, 2020. The period to conduct the analysis was scheduled as such to analyze the changes in public transportation use after the end of February 2020, when the first outbreak of COVID-19 began. To compare and analyze public transportation transit volumes during the same period of the previous year, data from the first week of March 2019, before the COVID-19 outbreak had occurred, was simultaneously analyzed.

In this study, journeys in 2019 and 2020 were also analyzed and compared using various indicators including the distribution of journeys; average transit time; late night transit volumes; total transit volume comparison between major cities; frequency of boarding and alighting by administrative district; ratio of used transport modes; number of bus routes; number of people boarding and alighting by routes; frequency of boarding and alighting by bus stop; number of routes and stops by bus stop; number of transferring passengers by bus stop; and number of people boarding and alighting by subway station. It is anticipated that the results of this study will help policymakers clearly understand the characteristics of public transportation users in Goyang City and formulate and determine public transportation policies that suit the identified characteristics.

A Basic Study for Goyang Walking-Friendly City

Shinhee Yun / Saehoon Lee / Jihoon Kim

The present study examines the relationship between cities and walking and aims to disseminate the discourse on pedestrian-friendly cities. The study also takes a close look at areas of Goyang where pedestrians are at disadvantage by conducting a survey. Based on the results, policy implications are discussed with regard to Goyang's potential for growth as a pedestrian-friendly city.

There is a growing awareness that healthy urban development cannot be accomplished through the conventional vehicle-oriented transportation system. However, case studies suggest that unlike in many other countries, Korean policies are mostly focused on improving the environment for pedestrian walking, paying relatively little attention to coordination with public transportation and land use, or road design focused on citizens (roads as a community space).

The city of Goyang is also promoting pedestrian policies with independent projects. However, a pedestrian-friendly city cannot be achieved by implementing independent projects for pedestrian walking. Building a pedestrian-friendly city should be closely coordinated with public transportation and promote pedestrian walking through various measures such as parking demand management, coordination with land use plans, and pedestrian road design with citizens' participation.

A pedestrian-friendly city cannot be created by simply improving the pedestrian environment. It requires designing the city with coordination between public transportation and pedestrians, along with cultural elements that facilitate use of roads as community space for residents. In addition, various efforts must be continued, such as a road diet to yield lanes to pedestrians and designation of car-free streets.

More importantly, priority should be given to the spread of discourse on why a pedestrian-oriented city is necessary and what a pedestrian-friendly city means. In this respect, this study intends to spark a discussion on how Goyang can grow into a pedestrian-friendly city.

The following policies are suggested for Goyang to begin to build a more pedestrian-friendly city:

- Designation of zero carbon streets
- Development of standard design for pedestrian guide maps
- Coordination between pedestrian policy and green mobility
- Integration of cultural strategies by designating key pedestrian zones
- Development of a framework plan for Goyang's pedestrian-friendly city
- Urban planning and enactment of ordinances focused on pedestrians

A Study on the Status and Improvement of the Support System for Disaster Victims in Goyang City

Jungchul Lee / Dongik Jo

Recently, as the scale of disasters, such as natural and social disasters, around the world has become larger and more uncertain, our society has been exposed to various catastrophes. Korea's disaster management-related system has developed around the preparation of countermeasures for disaster accidents, and interest in the disaster damage support system provided by the central and local governments to victims continues to increase.

Therefore, policy suggestions to recover from disaster damage and improve support from Goyang citizens are requested based on the overall institutional operation status inspection and diagnosis of disaster damage at the city level. In this respect, the purpose of this study is to analyze the operation status of disaster damage support and disaster insurance to comprehensively organize and evaluate the operation status of disaster damage and recovery in Goyang city. This study theoretically discussed the significance of the disaster and disaster management system and disaster recovery stage. In addition, the current status of disaster occurrence and support and management in Goyang city were analyzed.

This study made policy suggestions in four main aspects through the analysis results. First, developing disaster damage support services for small business owners and housing fire insurance for vulnerable groups was proposed to improve the policy effectiveness and satisfaction of victims. Second, in terms of improving the operation of disaster insurance policies, the need to strengthen the promotion of storm and flood damage and disaster safety insurances and investigate effective insurance item design was discussed. Third, to strengthen recovery capacity through cooperative governance, measures to improve material and human resources were reviewed. Additionally, methods to recover from disaster damage based on community participation and resources, such as residents' associations, were proposed. Finally, discussions were conducted at the mid-term to long-term task level on the need to strengthen authority at the local government level as it has the primary responsibility and authority to respond to and deal with disaster sites and establish disaster safety management plans.

A Study on the Development of Contents-based Converged Industry in Goyang, Especially in the XR Industry Including AI

Hyunjung Lee / Sunhyoung Kim

This research focused on the activation of the digital content industry in Goyang-si, especially in immersive media, including Virtual Reality (VR), Augmented Reality (AR), Merged Reality (MR), and eXtended Reality (XR).

Thus, Goyang has focused on the development of the knowledge-based industry, especially in the media, broadcasting, movie, and other industries. Additionally, the growth rate of the content-based industry has been tremendously increased in both the domestic and global markets and expanded to the digital content industry.

Goyang has been interested in the development of the content industry for a long time. Recently, several broadcasting resources in Goyang have been integrated, like the JTBC, EBS, MBC, and other broadcasting stations. Studios, like the Goyang Aqua Studio, have also been located in Goyang. In addition, broadcasting support centers, such as Bitmaru Broadcasting Support Center, have been constructed and started to provide services to support broadcasting and other activities. Goyang has also planned to construct the Broadcasting and Movie Valley in 2024.

Given the emergence of the non-face-to-face environment due to the COVID-19 pandemic, the necessity of digital-based content and devices has increased dramatically. Therefore, the XR, VR, AR, and MR industries have been rising recently, and the related industries are developing and attracting interest.

XR has two functions as media, a kind of device and digital content, to implement the virtual world. The developed XR-based content applied to many areas using digital content (broadcasting, movies, healthcare, national defense, gaming industry, theme parks, etc.) is consumed by XR devices like the Head-mounted Display (HMD). In the virtual world, XR as a kind of technology has been applied to implement the metaverse as a virtual world platform.

Goyang must develop the digital content industry related to HW with devices, AI, and SW including content-based systems and applications and services for the value proposition. Furthermore, it is necessary to improve the competitiveness through the transformation from an offline content industry to an online digital content-based industry using XR.

In this report, we first reviewed the overall status of the XR industry. Second, we proposed the developed appropriate policies for the development of the XR industry as a key industry in Goyang. Finally, we introduced the applicable and likely to develop civil services using XR.

An Analysis on the Reason of Population Movement by Age in Goyang City

Howon Suk / Sodam Kim

This study empirically analyzed Goyang-City, which is the most active population movement in Korea, what are the reasons for population movement by age and how these reasons have changed over time.

Considering that social and economic factors affecting population movement and personal preferences are likely to be closely related to the age of potential movers, the focus was on analyzing changes in movement reasons by age.

The analysis results show that with regard to the reasons for moving in, educational factors, family factors are important in the school-age population under the age of 20, and occupational factors are relatively critical in the age of 20~ 50. Housing reasons are emerging as the most important factor after the 50s. In addition, as age increases, interest in natural environmental reasons increases.

In the case of the reason for moving out, family and educational reasons are relatively high in under teens, and educational reasons in the age of teens. In their 20s, occupational factors are highest, and family and housing factors are next. In their 30s, housing and family factors occupy a high proportion following occupational factors, and in the case of people in their 40s, housing factors gradually decrease and the proportion of occupational factors increases. In the case of 50s, Housing factors begin to appear the highest, and the gap with occupational factors widens as the age increase. In their 60s, housing reasons are the highest, and family and occupational factors are next. and in their 70s, housing factors account for the highest proportion, in their over 80s, family factors are very high.

The analysis results of the moving-in and moving-out cases by age in this study suggest the following points. First, the main reasons of moving in and out of each age are very similar. Second, the priorities of the reasons for moving in and out by age are somewhat different. Third, the time series of changes in occupation, family, and housing factors, which are the main reasons for movement by age, are similar, and the proportion of residential environment factors is gradually increasing.

According to the analysis results, the main reasons for movement by age are distributed in different patterns, and the overall trend of change in moving in and out according to age shows similarity, so it is thought that Goyang-City's policy demand by age can be identified. Also, family factors, occupational factors, and residential environment factors are on the rise among all age groups in their 20s and older, and housing factors are gradually decreasing, so it is necessary to properly consider the trend of changes in these factors when establishing population-related policies in Goyang-City.

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A Basic Framework for the City of Peace Economy Located in the Northwest Border Network of Gyeonggi-do 3

Jiho Ahn / Eungyoung Kim

This study corresponds to a second-year study planned for a total of three years. Last year, we sought the theoretical possibility of a peaceful economy network city in northwestern Gyeonggi Province, focusing on the concept of a network city and the case of Landstart of the Netherlands and Line-Luer of Germany, which are representative examples of Europe. This year, focusing on the concepts of peace, peaceology, and peace city, we tried to analyze the theoretical possibility of the city of the peace economy network in northwest Gyeonggi-do.

In addition, with the funds of Goyang-si, public officials related to Goyang-si, Gimpo-si, and Paju-si participated in the Peace Medical Center of the National Cancer Center and held a peace medical network meeting. Through this peace and medical network meeting, first of all, we tried to specifically describe the possibility of cooperation between the three cities centered on health care.

Finally, the possibility of expansion of the peaceful economy network city in northwest Gyeonggi-do was described through a resource survey on the representative cities of North Korea adjacent to the northwestern region of Gyeonggi-do, Gaeseong-si, Haji-si, and Sariwon-si.

A Research on Introduction Strategy of Low Impact Development (LID) in Goyang City [3]

Jiyeol Im / Garam So

In this research, we propose the Goyang-type LID project that fits into the Goyang-si. Due to the increase in the impermeable area, many problems such as urban floods, ground cracks, subsidence, and depression, depletion of surface water and groundwater, and deterioration of water quality are causing. In this regard, we try to derive an environment that can restore natural functions in urban areas with damaged natural functions by applying Low Impact Development (LID) technology to improve the impermeable area.

We investigated some types of LID elements that utilized in other countries and LID cases in the South Korea. Specifically, cases of vegetative retention, rooftop, tree filter box, vegetation filter box, grassed swale, vegetable filter Strip, infiltration trench, infiltration box, porous pavement, sand filter, and rain bucket are examined in the study. In South Korea, 'Green Rainwater Infrastructure Creation Project', The pilot project to 'zero rainwater spills', and 'Leading city in water circulation' projects were examined in the chapter.

Based on the case study, we propose how to apply relevant LID technologies in the context of Goyang-si.

- Storage-type LID technology - vegetable storage, underground rainwater reservoir, and low-current pitcher block
- Penetrating LID technology - penetration measurement, penetrating rain trap, and tree filter box
- Multi-use LID technology - rooftop recording.

Moreover, we argued how to apply LID technology to build a small ecosystem in the city center and to vulnerable areas in face of climate change. The Ministry of Environment tries to develop rooftop greening of Ilsanseo-gu Office by creating a small urban ecosystem. Through the Ministry of Environment's climate change support project, the Climate Response Green Zone is formed in Jugyo-dong, Deokyang-gu, to form a space with various low-impact development (LID) technologies so that vulnerable groups can adapt to climate change and live.

A Study on the Characteristics of Residential Differentiation of Goyang City

Leeyoung Kim / Yeongdon Choi

Goyang City's growth into a "special cities" with a population of more than 1 million contributes greatly to residential development, including new town. However, it was insufficient to determine how residential development have contributed to the lives of Goyang citizens and how they have affected the housing problem of the vulnerable. In addition, living areas are gradually becoming wider, and population movement between adjacent areas is increasing. Considering these points, it is necessary to examine the housing problems of Goyang, including areas adjacent to Goyang City. Therefore, this study attempted to examine the impact of the development project in terms of housing for the vulnerable and seek implications. In particular, the characteristics of residential differentiation were examined, including Gyeonggi-do, which includes Goyang City, and living areas in Seoul. Summarizing the research results, it was analyzed that vulnerable groups were concentrated in the outskirts of Seoul and Goyang City adjacent to Seoul. In particular, there was a tendency to focus on the surrounding areas where development projects were carried out, areas with strong land use regulations, areas with a high proportion of non-apartments such as multi-family houses, and areas with relatively low housing prices. In addition, access to medical institutions, government offices, and convenience facilities was also low. This result suggests that policy considerations are needed to increase the housing stability and accessibility of the vulnerable to convenience facilities. Since this study has limitations in not considering the detailed types and characteristics of development projects, follow-up studies are needed to examine the types and characteristics effective for housing separation and housing stability of vulnerable groups by characteristics of development projects.

Active Ageing Study III - A Study on Active Ageing Policy for the Elderly in Need of Care in Goyang City

Junghwa Moon / Seunga Sun / Ahra Ko

This study is the third study on the “Active Aging” policy created to proactively respond to the rapid population ageing in Goyang City. It seeks to identify the living conditions of the elderly in need of care and suggest measures to support active ageing policies.

The measures for active ageing of the elderly in need of care are as follows.

First, a foundation for comprehensive active ageing should be laid. Second, social participation policies for the elderly in need of care should be created. Third, health support policies for the elderly in need of care are also necessary. Fourth, safety support policies for the elderly in need of care should be strengthened.

The measures to activate Customized Care Services for Older Adults are as follows.

First, in finding and selection of beneficiaries, it is necessary to: (1) strengthen promotions for Customized Care Services for Older Adults, (2) reinforce education for civil servants in charge of community service centers, (3) include elderly with a history of long-term care decision as service beneficiaries, (4) expand the target as a universal service based on needs, etc.

Second, concerning the service providing Customized Care Services for Older Adults, (1) active local resource development for service affiliation, (2) flexibility in service provision time, (3) ICT safety support reinforcement are required.

Third, about self-care, (1) strengthening education to understand the concept of self-care, (2) specifying the content of self-care in the mutual cooperation agreement provided by the Customized Care Services for Older Adults, and (3) preparing common policies and detailed guidelines about the service are needed.

Fourth, in service quality management and evaluation, (1) avoidance of overlapping and frequent evaluations, and (2) changes to user services and systemization of complaint processing and others are necessary.

Fifth, with the operation of the delivery system, it is necessary to (1) extend the entrustment period to 2-3 years, (2) integrate with the integrated network area when setting up the service area of the Customized Care Services for Older Adults, (3) stabilize and integrate the computer system, and (4) improve the treatment of performing personnel.

A Study on Goyang City Urban Growth Stage Evaluation

Kwangjin Jung / Haesong Jo

In many cities around the world, various social changes have ensued from declining populations. However, the existing urban infrastructure cannot be scaled down abruptly even if the population declines rapidly. This subsequently runs the risk of increasing the per capita expenditure as well as deteriorating infrastructure due to a lack of resources for maintenance. This in turn lowers the quality of housing and leads to additional population outflow, forming a vicious cycle. Therefore, the growth-oriented land-use policy in urban planning must be replaced by a new paradigm, and an objective evaluation of the city and a clear assessment of the growth level of the city are required. In addition, cities have a characteristic of growing in connection with their surrounding areas. As cities began to be modernized, they started interacting with their surrounding areas to obtain goods and services that cannot be acquired within their own areas. However, most of the previous studies so far limited their spatial scope to a single city, making it difficult to reflect its connectivity with its surrounding areas. For this reason, even if an index shows a decline, it is inadequate to conclude it as a sign that the city is in decline. To properly evaluate a city's growth stage, it is necessary to focus on its relative increase or decrease compared to its surrounding cities.

Therefore, this study examined the related previous studies and selected 12 indicators in the areas of population/society, economy/industry, and physical/environment to analyze the urban growth stage of a 1st-Phase New Town. The stages of the urban development model was also applied to analyze the relative increase or decrease compared to the surrounding cities. The surrounding cities were selected by the interaction index and the attractiveness index based on the data for moving in and out. The urban growth stage for each indicator was examined afterward based on the 1st-Phase New Town and surrounding cities, and according to the results, the characteristics of each indicator were analyzed and implications were derived.

A Study on Strategy for Goyang International Horticulture Exhibition's Legacy Creation

Eunjin Kim / Seoyeon Ban

For over 20 years, Goyang International Horticulture Exhibition has developed into one of the most representative flower exhibitions in Korea. However, it has shown a poor performance with a decrease in overall profit since 2016. Several reasons resulted in rapid industrial environment changes including covid-19, reduction of cultivated area due to urbanization of Goyang-si, construction plans for flower distribution centers, and others.

Considering the internal and external environmental changes, it is definitely demanded to secure self-sustainability for the competitive advantage of Goyang International Horticulture Exhibition. Thus, the purpose of this study is to identify the performance of Goyang International Horticulture Exhibition and suggest building legacy plans from MICE legacy perspective to propose a strategic plan for Goyang International Horticulture Exhibition. More importantly, the need for strategic planning and policy setting is necessary.

On this account, the vision of Goyang International Horticulture Exhibition is proposed as "Platform of Flower Culture and Industry, Goyang International Horticulture Exhibition." Accordingly, the main purpose of this investigation is to assess a new value for Goyang International Horticulture Exhibition and leadership in flower industry, as well as to establish cooperative network between stakeholders, and to secure professionalism, internationalism, and popularity by spreading the enjoyment of flower culture. As a result, six items of the legacy that Goyang International Horticulture Exhibition need to pursue were observed: (1) holding a successful Goyang International Horticulture Exhibition, (2) strengthening professional competency in region, (3) creating a business for stakeholders, (4) providing benefits for the community, (5) spreading the enjoyment of flower culture through participation and awareness, and (6) strengthening the brand of Goyang-si and Goyang International Horticulture Exhibition.

In a rapidly changing internal and external environment of flower industry and exhibition industry, maintaining the brand of Goyang International Horticulture Exhibition could be challenging. Therefore, it is necessary to strengthen the expertise of members of organization who can plan specialized programs by reflecting the paradigm changes. Furthermore, it is crucial to extend the awareness of flower culture along with Goyang International Horticulture Exhibition and to provide a digital platform economy service by utilizing smart-digital convergence technologies in preparation for the era of post-corona.

A Study on the Current Status of Domestic Regional Studies and the Development Plan of Goyang Regional Studies

Junghwa Moon / Eunjin Kim

This study aims to analyze the research trend related to regional studies and Goyang studies, and to derive a development plan of Goyang studies by analyzing the current status of major regional center management.

The results of the study drawn from this research are as follows.

(1) If we look at the regional studies research trends, in most regions, regional studies research is increasing as years go by, and while there is a lot of research done in the areas of humanities or social sciences. Moreover, there is a tendency that there are many microscopic studies and few complicated and comprehensive macroscopic studies. (2) The necessity of Goyang regional studies is to secure local identity, increase local attachment (settlement), improve the quality of life of local people, strengthen local community networking, perform the central function of history compilation (passing down to the next generation), promote local communities, respond to the era of globalization, and to create future values. (3) Analyzing the research trend of Goyang regional studies provides that it increased rapidly with the promotion of Goyang City in the 1990s, and while maintaining the increase in the 2000s, it increased rapidly with the opening of the Goyang research institute. As for research fields, social sciences account for 53.2% of the total. This shows that the studies related to Goyang regional studies are somewhat unequally distributed towards a specific area. Also, it gives too much importance toward the study of Ilsan compared to Deogyang.

Based on the results of this study, the following policies have been proposed.

First, as a development plan for the research of Goyang regional studies, (1) the improvement of research field and research area concentration and (2) the school system that reveals the totality of the region were suggested for the invigoration of research.

Second, as a plan for the development of Goyang regional studies, (1) the documentation and archive construction of Goyang regional studies, (2) multidisciplinary research, (3) Goyang local history and future-oriented research, (4) the expansion of Goyang regional studies research base and network establishment, (5) the spread of Goyang regional studies to people and popularization were suggested.

Third, as for the operation plan of the Goyang research center, detailed contents according to 4 goals of the Goyang regional studies development plan were presented under the vision of establishing Goyang's identity and creating future values.

Estimation of Efficiency Index of Start-up Ecosystem and Major Implications in Goyang City

Yongdeok Kim / Eunji Kim

Entrepreneurship is recognized as an important policy task as it promotes national economic growth, innovation, and highly contributes to job creation. The Moon Jae-in administration classified the creation of a startup ecosystem as one of the five major national tasks for encouraging economic growth. Goyang City, in order to lead itself to become an economically self-sufficient city, recognizes the creation of a startup ecosystem as a vital project and currently promotes various startup-related policies. However, the analysis of the specific status of each province is insufficient, and basic data pertaining to the startup ecosystem is scarce. There is a lack of research on whether different regional infrastructures for establishing a startup ecosystem contribute to the growth of start-ups and the founding of new corporations, and if not, what kind of infrastructure is necessary to establish a startup ecosystem.

Therefore, in this study, the level of the startup ecosystem by major cities was comparatively analyzed and the efficiency index was measured from the microeconomic point of view of input and output to suggest the direction for the creation of the startup ecosystem in Goyang.

In this study, the efficiency index related to the startup ecosystem was estimated with the selected input and output variables to identify the influencing factors on the efficiency index. In the case of Goyang City, it recorded 15th out of 33 cities. Further, in the comparative analysis, metropolitan cities showed higher efficiency indices than non-metropolitan cities. The significance of this study is that the results found will provide basic data related to the startup ecosystem and it stands as the first research to estimate the efficiency index for each city. The index will allow for further research on case cities for benchmarking, and the results will provide basis for discerning the effect of startup-related policies.

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A Study on the Future Vision for the New Goyang City Hall Through the Best Cases for Public Office Building

Kwangjin Jung / Haesong Jo

Goyang City is using the government building of Goyang-gun, which had a population of less than 250,000, as a city hall until now, and the deterioration is serious. Since the area is less than the legal standard area, it is scattered in nine nearby external offices, causing a decrease in work efficiency and inconvenience to civilians. Currently, Goyang City has grown into a large city with a population exceeding 1.08 million. In addition, the construction of a new government building is urgently due to the designation of a special city in 2022. Accordingly, Goyang City is planning to hold an international design competition in September 2021, starting with the establishment of the basic plan for the construction of the applicant in 2018, securing the construction fund for the construction of the applicant, selecting the site for construction, feasibility study, and establishment of the basic plan. Therefore, it is intended to seek a successful construction plan for public Office Building by establishing a vision for the construction of the public Office Building, deriving resident participation plans, and presenting guidelines for international design competitions.

Through a case study on the construction of public Office Building, implications were drawn on the functions and roles of public offices by case, construction vision and purpose, scale and project cost, design competition method, and consolidation. In public projects, through the analysis of conflict types and causes of conflict, a public debate plan for conflict mitigation was derived. In order to establish the vision for the construction of the new building in Goyang City, the role of the metropolitan community, the role of the local community, and the role as a building were set and proposed. In addition, the procedure analysis of public architecture and design competition was performed, and general guidelines and design guidelines were proposed. To this end, the composition of the Steering Committee and the Judging Committee, the collection of residents' opinions and review of facilities subject to complexation, consideration of the connection plan between the existing urban organization and the applicant company, and the creation of appropriate design competition guidelines were proposed.

Research on Industrial Direction for the Future Industry of Changneung 3rd New Town in Goyang-city

Hyunjung Lee / Kwangjin Jung / Haesong Jo

In this research, we proposed attracting industries under consideration of regulations for the construction of Changneung 3rd New Town in Goyang-city. This study embeds two areas which are regulations and proposition of industries for the planning of Changneung.

We review the upper urban plan, regulations, and systems related to industrial complexes and developing large-scale projects in Goyang-city. The large-scale projects are comprised of Goyang techno-valley for technology-based industries related to the 4th industrial revolution technology, Broadcasting&Video driven Media-Valley, CJ LiveCity as a theme park, and construction of the third KINTEX as a MICE resource. So, it is an appropriate time to discuss the kinds of industries developed according to the future industry trends, especially in Changneung 3rd New Town.

Eventually, we proposed four industries are BM(Bio-Medical application industry), XR(eXtended Reality including contents industry), AI(Data-driven Citizen-friendly applied industry) and DX(Digital Transformation for the 4th industrial revolution and the transition to a non-face-to-face environment).

For the prosperity of these kinds of industries, we should consider the regional issues and special regulations such as the construction of innovation clusters and so on. If it is possible, we can imagine giving tenant companies some benefits like tax benefits, land supply at the cost of construction or less, and so on.

The improvements to regulations and systems are as follows. With the revision of the Seoul Metropolitan Area Readjustment Planning Act and the Industrial Location Act, efforts should be made to designate industrial complexes by securing industrial areas in Gyeonggi-do. In addition, efforts to designate special zones are needed through review of free economic zones that are possible under current laws, peace economic zone act enactment and revision, and securing designation requirements of special zones in the region. Finally, it is necessary to attract the current industry along with the revision of the site supply guidelines and to make efforts to attract companies through the complex of functions.

To succeed as a self-sufficient city, it is necessary to attract the companies in Changneung 3rd New Town. To do this, Goyang-city needs to determine the possible benefits that can be given in the areas of industry and land. However, it is not easy to create these kinds of conditions, so it needs to make efforts to find out the possible conditions to develop the industries under regional issues. Finally, the proposed industries are Bio-Medical(BM), eXtended Reality(XR), Data-driven AI(AI), and Digital Transformation(DX) under consideration of industrial environment and resources in Goyang-city.

A Study on Investigating Current Status of 'Streets of Culture' in Goyang City for Those Promotion

Sunyoung Kwon / Kwangjin Jung / Haesong Jo / Seolhwa Hwang

The Goyang city enacted the <GOYANG CITY ORDINANCE ON ESTABLISHMENT AND OPERATION OF STREETS OF CULTURE> in 2003 and began officially designating the LAFESTA in 2004, the Deogi-dong Fashion outlet in 2011, and the Hwajeong Station's commercial district in 2015 as a street of culture. However, as all three streets have built to be commercial areas, they are gradually losing their function and role as a 'street culture'. In addition, as large shopping malls of major companies and a famous foreign furniture company(like an IKEA) have recently opened in Goyang city, all three streets faced a situation in which it was more difficult to escape from the continuing slowdown.

We suggest a political plan to solve and overcome the current situation by analyzing three streets that need improvement and development. This can be done by identifying the present condition and reality of the three streets of culture. Therefore, we began with literature review to understand the basic concepts and related regulations for streets of culture. We reached our final implication through case analysis on streets of culture. In addition, we found major findings through conducting a survey(for visitor, residents and merchants on each street), FGI, and collecting expert advice.

More than anything, it is essential that the city administration set a definite goal for the streets of culture in Goyang city. We need to actively discuss on the ordinance whether to enhance the cultural characteristics of the street by embodying the current ordinance, or to promote commercial aspects of the streets, rather than cultural aspects, by enacting a new ordinance like as <SEONGNAM CITY ORDINANCE ON DESIGNATION AND SUPPORT OF SPECIALIZED STREETS FOR COMMERCIAL PROMOTION>. Furthermore, we emphasize the need to revive the publicity of street for promoting the current streets. It is important to secure a clear symbolic identity for each streets. Streets should be broke away from commercial dominance so that the publicity in street is restored and people recognize as areas not only for merchants, but also for all visitors and residents. Finally, an elaborate cultural plan for promoting the street is essential. It is important to be equipped with a long-term plan on the premise that the city administration, merchants, residents, and experts participate. We must actively prolong cultural activities in/around the streets with the support of professional experts in the field of cultrual policy. Also it is needed to connect ties with nearby cultural resource for the revival of not only the streets, but also the entire region as a whole.

A Study of the Improvement of the Program Assessment in Goyang City

Changkyun Lee / Howon Suk / Sodam Kim

The purpose of this study is to seek improvement measure through systematic diagnosis of problems revealed during the 2020 Goyang City Major Program Assessment. The 2020 major assessment of fiscal project was conducted by Goyang Research Institute and external experts, which is meaningful in that it increased the reliability and validity of the evaluation, but various problems were revealed in the evaluation process. First, Goyang City's self-assessment results and external assessment results are very different, so a reasonable coordination and consultation system is required. Second, Goyang City's self-assessment report was very insufficient, which made it difficult for external experts to conduct the assessment, and evidence was generally insufficient and not provided in a timely manner, so clarification work is required. Third, the establishment of performance indicators set by the operational division itself is often not appropriate, making it difficult to measure the achievement of performance goals, which raised the demand for inspection and education on the establishment of performance indicators. In addition, it is difficult to quantify performance measurement or execution rate depending on the type of project, so the need to adjust the allocation of assessment index was raised depending on the type of project. Fourth, a review of the assessment schedule and the size of the assessment team was also required to internalize the assessment and feed-back the appropriate assessment results.

In order to increase the efficiency and objectivity of the assessment, the assessment system, assessment method by assessment index, and the Goyang City Program Assessment manual, which summarizes the preparation methods, were presented. The assessment manual summarized the subjects, main subjects, and assessment schedule of fiscal projects, and adjusted the assessment index items and allocation points according to the characteristics of the project to enhance the feasibility of assessment. Furthermore, in order to secure reliability and objectivity of evaluation, the measurement methods and criteria of assessment index were described in detail and the contents to be written in the self-evaluation form were systematically organized. Besides, this research presented a feed-back assessment form to secure the effectiveness of the Program Assessment and proposed the formation of a review committee as a result of the Program Assessment. the local body's Program Assessment is end goal to increase fiscal soundness and fiscal efficiency by enhancing the effectiveness of fiscal projects and the rationality of budget allocation. Therefore, in order to enhance the institutional purpose intended by Program Assessment, the results of the business assessment need to be provided feed-back as a measure to improve fiscal efficiency.

A Study on the Basic Plan for Education and Training of Local Public Officials in Goyang-City (2022-2026)

Hyongsung Kim / Jaihyung Kim

The implications of the analysis results are as follows:

First of all, as a result of external environmental analysis, public officials in Goyang-City suggested that education should foster convergent human resources with creative thinking, cooperative communication, problem definition and resolution. Next, as a result of internal environmental analysis, it was found that Goyang-City Government Employees Award, Vision and Strategic System were insufficient, education and training system, and infrastructure to support them were insufficient. In particular, the linkage system of education and training by rank was found to be insufficient. Finally, as a result of analyzing the education and training system of other local governments, trust, empathy, communication, creativity, innovation, and expertise were presented as keywords for talent, and future-type, customized, vital talent, and field-centered education.

Based on the results of the analysis, the education and training plan for local public officials in Goyang-City was presented as follows. First, as a vision of education and training for civil servants in Goyang-City, "Fostering Goyang-type talent that opens the future based on peace" was presented. Second, "public officials who are trusted by dedication and integrity, communicate with citizens and organizations, and prepare for a creative and innovative future" was derived from the talent award. Third, three strategic goals and nine strategic tasks were derived to achieve the vision of education and training for local public officials in Goyang-City by combining the results of environmental analysis and case analysis. In addition, a master plan for education and training for local public officials in Goyang-si was established and presented.

First, in order to achieve the strategic goal of "building a platform for fostering Goyang-type human resources," a competency education system for each position, a job education system, and an education system for each life cycle shall be established. Next, in order to achieve the strategic goal of "Fostering Creative and Innovative Future Talent," education on responding to the Fourth Industrial Revolution, courses for convergence and cooperation, civic-linked subjects, etc. shall be established, and programs for communication shall be operated. Finally, in order to achieve the strategic goal of "establishment of a human resource development system," educational training capabilities shall be strengthened, a self-directed learning system shall be established, and an educational network shall be established.

A Study of Consumption Trends: Applying Big Data Analysis to Goyang City's Stimulus Prepaid Card¹⁾

Shinhee Yun / Jihoon Kim / Saehoon Lee

The Using time-stamped data and information related to Goyang City's stimulus prepaid cards, this study analyzes changes in consumption patterns by sector and region to develop practical support policies. Additionally, this study seeks to promote such policies in the future based on citizen feedback regarding the emergency relief funds.

Goyang City provided two types of stimulus prepaid cards; it distributed prepaid cards issued by KB Kookmin Bank starting on April 14, 2020 and prepaid cards issued by NH Bank starting on April 16, 2020. To analyze overall consumption patterns, the study employs integrated matching of the two cards. The results of the analysis are as follows. The time series analysis of consumption trends shows that Goyang citizens started to use both cards immediately after receiving them, with their card usage reaching a peak within 2–3 weeks. In the case of the KB Kookmin Bank cards, citizens spent a total of ₩34,534,830,930, while they spent a total of ₩14,559,349,591 using the NH Bank cards. During the April–June period, 51% of the total usage of the KB Kookmin Bank cards occurred in May, whereas 66% of the total usage of the NH Bank cards occurred in April.

By sector, food (41%) and distribution (38%) accounted for the overwhelming portion (79%) of card usage, followed by medical treatment and beauty (9%), clothing (3%), leisure & sports/cultural life/hobbies (3%), education (2%), cars (2%), service (1%), and durables (1%).

By delving into citizens' consumption trends after the distribution of Goyang City's first round of emergency relief funds, this study can provide benchmarks for more refined and sophisticated provision of additional stimulus checks down the road. In addition, this study is significant because it provides underlying data that researchers can utilize in future analyses comparing the relief funds-related spending patterns in Goyang City with those of Gyeonggi-Do and the central government. The fundamental data this study furnishes can also be used for comparative analyses involving other data (other cards' spending records and other surveys conducted in different cities and regions). In short, this study establishes a foundation upon which Goyang City can draft substantive policies to more effectively manage future relief funds and provide timely and practical assistance to its citizens.

1) Emergency relief funds: In the form of Goyang City-initiated prepaid card worth ₩50,000 to boost consumption and spur local economy in the COVID-19 pandemic era.

A Study on Fostering Representative Festivals and Festival Industry in Goyang City

Eunjin Kim / Seoyeon Ban

The identity of 'Goyang Haenju Cultural Festival' and 'Goyang Street Arts Festival' are somewhat vague. It is necessary to secure and strengthen the competitive identity of both festivals to be recognized as the city's representative festivals to potential tourists. At the same time, it is crucial to establish the effective strategies for festivals of Goyang city in the era of COVID-19 pandemic.

Thus, the aim of this study is to 1) examine operational problems and challenges of both festivals and to develop strategic directions for them, 2) develop Goyang city's representative festivals policy making, 3) build a festival ecosystem by systematically supporting and fostering the festivals held in Goyang city.

The results of this study provide the strategic objectives to invigorating Goyang city's representative festivals and fostering the festival industry. The findings reveal that it is necessary to differentiate the festivals('Goyang Haenju Cultural Festival' and 'Goyang Lake Arts Festival') and set the direction of invigoration through the process of formulating a strategy that incorporates the value of both festivals. In particular, 'Goyang Lake Arts Festival', a place for new challenges and trials of cultural arts, needs to build a strategy as a 'new artist performance platform,' whereas 'Goyang Haenju Cultural Festival', a festival that reflects the historical placeness and identity of Haengjusanseong, needs to position as a 'local culture platform with citizens.'

The findings suggest that a long-term plan should be formulated by creating dual strategies for the development of Goyang city's representative festivals. First, 'Goyang city festival foundation construction' includes the strategic development of the festivals in Goyang city, and four detailed assignments are suggested: 1) systematic construction for stable festival managing 2) festival cooperation network construction and empowerment 3) establishing festival application system 4) strengthening festival crisis response capabilities. Furthermore, four strategies were suggested in 'strengthening representative festivals' as follows: 1) strengthening strategies for representative festival contents, 2) branding enhancement for representative festivals, 3) securing finance for representative festivals, and 4) improving festival and tourism preparedness. Lastly, this study highlights the importance of succeeding representative festivals by suggesting the followings: 1) establish a festival evaluation system to improve the quality of Goyang city's representative festivals, 2) build strategic cooperation and a support system to support festivals in Goyang city, and 3) provide an education to strengthen festival recognition and cooperative governance awareness in Goyang city.

A Study of Development of 3D Digital Twins-based Services and Applications for Implementation of Smart City Especially in Goyang Techno-valley

Hyunjung Lee / Sunhyoung Kim

In this research, we introduce the Digital Twins to Goyang-si, as one of 10 key tasks in the Korean New Deal Policy. A digital twin is a virtual representation to serve as the real-time digital counterpart of a physical object or process. Nowadays, Digital twins are applied to city planning and administration to solve city problems. So, many global countries are interested in to develop applications of digital twins as solutions of the city problems. For instance, Singapore implemented 'Virtual Singapore' as a kind of virtual space for city planning as a twin of the physical world. EU is focusing on the representation of city administration to solve citizens' problems and developed living lab programs to lead citizens' participations. Domestically, in Seoul, Jeonju, Sejong and Busan, Digital Twins have been developed and implemented as a kind of a testbed project to solve the facing city problems in the field of City-infra and City-administration at the Smart City.

Nowadays, Goyang-si has been developed as one of the big cities in a short time. In other words, it can be faced a variety of city problems and has also processed the urban development project in GoyangTechnoValley project and housing site development project in Goyang Changleung 3rd new city project. It is possible to improve the effectiveness and efficiency of development and operations of the City using Digital Twins to be applied in the projects.

First, we overview the policy and regulation related to digital twins and should establish a basic plan to implement Digital Twins in Smart City. Second, we propose a control tower to organize the administrative departments. Third, it needs to organize public and private partnerships comprised of experts, engineers, researchers, companies and citizens. Forth, it needs to organize Special Purpose Corporation for the construction of the Digital Twins projects because of a large budget, well-skilled engineers, 3D Spatial data manipulation, AI and so on. Fifth, it needs to construct the 3D database systems for the collection, storage and utilization and Digital Twins modeling to provide services like forecasting, simulations, decision support systems, etc. to solve urban problems. Finally, in the long term, we should consider the construction of an Open data-hub and a Digital Twins Platform which can provide a virtual world to provide developed services by linking 3D data and the real world.

The applications of Digital Twins can be implemented and applied to improve the effectiveness and efficiency in city administration and to effectively and efficiently develop the new city like GoyangTechnoValley in city planning and building infra. Furthermore, to be applied in advanced new tasks in Goyang-si, a multifaceted effort is required to improve the environment of regulations, discover a variety of policies for citizens, living lab operations and so on.

A Study on Strategies to Promote the Self-Support Programs in Goyang City

Junghwa Moon / Ahra Ko

The purpose of this study is to examine the trend of the policies on the self-support programs for low-income groups and the current state of the programs in Goyang City, thus providing basic data for self-support policies in Goyang City and presenting ways to promote the self-support programs.

We suggest the following ways to promote the self-support programs in Goyang City.

First, we need to ensure the diversification and sustainability of the self-support organizations. To that end, we should develop new initiatives, and the self-support organizations should be expanded to spearhead a specialized program for Goyang City. In addition, sustainable public jobs such as through active public resource utilization and community care should be expanded.

Second, the capacity of the participants in the self-support programs should be strengthened. To this end, it is necessary to enhance their emotional self-support, promote case management support, and strengthen the participants' social relationships.

Third, it is imperative to improve the treatment of the employees in the self-support programs and strengthen their capabilities. To this end, the treatment of the employees at the local self-support centers should be improved, and there should be active utilization of human resources such as by recruiting experts with the provided funds or hiring "self-support assistant." It is also necessary to develop and establish programs to strengthen the capabilities of the employees.

Fourth, the governance for the self-support project must be improved. To that end, a system should be put in place to facilitate civilian-government cooperation between the City Hall of Goyang City and the local self-support centers, as well as expanding the role of the City's Department of Self-support Support. Moreover, efforts should be made to strengthen the local community network and raise awareness of the local self-support center.

Fifth, the self-support funds should be actively utilized. It is necessary to consider amending the municipal legislation.

Sixth, in order to foster self-support companies, it is required to actively utilize the self-support funds and financial support for local self-support programs and to establish and operate a consultative body for self-support companies.

Lastly, it is essential to specifically review the transition to social cooperatives in the operation of self-support programs, and the infrastructure should also be expanded, such as by installing additional local self-support centers.

A Study on Improvement of Gender Budgeting in Goyang City

Howon Suk / Sodam Kim

The gender budgeting system has raised a variety of issues, including ambiguity of the criteria for selecting the target project, insufficient budget changes, and lack of assessment system. Also, information about project targets, project recipients, budget allocation ratio, etc. of each project unit that forms gender impact analysis is not only unclear, but it also lacks reliability, making it difficult to determine how the budget and policy actually affected gender. In addition, interest in gender mainstreaming in various fields of Korean society, such as social, culture, politics and economy, is increasing significantly, but interest in the gender budgeting system is relatively low. Based on the previous literature review, status of Goyang City's gender budgeting, and the results of the survey conducted on the perceptions of public officials who are in charge of preparing Goyang City's gender budgeting, the suggested improvement planning is as follows. First, when selecting the target project, the gender equality goal that Goyang City is focusing on can be fully considered.

Second, the establishment of gender equality goals by local governments needs to take place in comprehensive consideration of the government's basic gender equality plan, group leader's pledge, and need of regional gender equality.

Third, before decisions and selection of projects for gender budgeting, aspects such as Goyang City's gender equality demand, future Goyang City gender budgeting policies, local government leaders' pledges, and environmental changes should be considered when establishing detailed goals on gender equal goals.

Fourth, based on the survey on gender budgeting conducted with public officials that had experience in preparing gender budgeting in Goyang City shows that awareness of policy efficacy in gender budgeting, interest in gender budgeting and the need to expand target projects, and connection with performance management do not meet expectations. Therefore, it is necessary to actively educate and consult public officials in Goyang on gender sensitivity and gender budgeting.

Fifth, preparation of gender budgeting documents is still a redundant task that public officials want to avoid, although it does show important aspects in order to increase efficiency. Therefore, it is necessary to reflect the performance of the gender budgeting, departmental performance evaluation, etc. or actively review the operation of the reward system based on performance so that public officials can perform it with motivation.

Lastly, as part of the institutional foundation for enhancing the effectiveness of gender budgeting, it is necessary to consider enacting the "Ordinance for Improving the Effectiveness of the Gender Budgeting System."

A Research on Resident-friendly Design of Waterfront System in Changneung River area

Jiyeol Im / Kwangjin Jung / Garam So / Haesong Jo

This study was conducted as basic work to solve the odor problem of Changneungcheon. In this study, Changneungcheon was classified into 4 sections according to the current status and characteristics of the surrounding land, and 2 sections were selected and carried out with many citizens living in the vicinity of the Samsong and Wonheung areas.

From an environmental point of view, the Changneungcheon Stream is characterized by an extremely high estuary coefficient even taking into account the characteristics of the rivers in Korea with a high estuary coefficient, and almost no water flows during the dry season. In addition, although the water quality is within grades 1 to 3 as a major environmental indicator, many coliforms were detected, and it was confirmed that the proportion of fecal coliforms was high among them. It would be reasonable to assume that this flowed downstream from the upstream section, section 1, rather than occurring in section 2 due to the characteristics of the urbanized section 2. On the other hand, it was confirmed that rainwater and sewage were flowing into Changneungcheon from the rainwater pipe located on the side of the Changneungcheon Stream as it went downstream through Section 2.

In terms of functionality, the utilization plan was proposed based on four concepts: landmark creation, rest space creation, experience space creation, and activity space creation. In the short term, it is possible to use the open space along the Changneungcheon Stream without installing any facilities to create a space for residents to use, create an outdoor space, and develop an ecological experience program.

For the progress of the study, in order to make Changneungcheon a citizen-friendly, water-friendly space, we approached it from the environmental and functional aspects. First of all, from the environmental point of view, in the short term, there was the establishment of a buffer zone for the inflow of pollutants and the introduction of an odor management system. This is to allow contaminants to be naturally purified to some extent before they enter Changneungcheon and to directly solve the odor. In the mid-to-long-term aspect, there is the establishment of a water circulation system in the basin, management of stormwater, and the use of effluent groundwater, heavy water, and effluent from a sewage treatment plant to maintain rivers. It helps to maintain water quality and controls the inflow of non-point pollutants.

Assessing Management of Outsourced Public Services in Goyang City

Jungchul Lee / Sunghun Jeon / Dongik Jo / Minji Yoo

The purpose of this study is to develop performance evaluation indicators for outsourced public services in Goyang City. The focus of this study is on suggesting developmental measures for evaluation indicators to inform the management guidelines that are necessary to optimize the supervision and monitoring of outsourced services, which are currently entrusted to each respective department. Although public services as private entrustments are increasingly common, oversight of professional and efficient operation and performance evaluation are often insufficient, including in Goyang City.

Therefore this study proposed the following five policies for implementation of the constructed evaluation indicator plan.

First, there is a need for processing guidelines for outsourced public services and continual improvement in indicator management. Annual advancement of the management system should be facilitated through the continuous collection of opinion data and supplementary work performance.

Second, it is necessary to evaluate exceptional cases and measures aimed at strengthening the connection between evaluation systems. Some central administration agencies, such as social welfare facilities, perform evaluations according to individual statutes.

Third, it is necessary to consider establishing organizations that manage outsourced public services and devise specific operation measures accordingly. Evaluation agencies should also consider the professionalism and sustainability of evaluations before allowing professional institutions to execute dedicated tasks each year.

Fourth, audit functions should be strengthened.

Lastly, efforts are needed to improve the use, transparency, and openness of results. To secure transparency regarding the management and evaluation feedback of outsourced public services, it is necessary to implement a minimum transparency mechanism that would publicize deliberation results of the trustee selection process on their website. Management departments should also disclose both meeting and selection results generated by their private entrustment qualification deliberation committees.

Establishing a 5-Year Plan for Bicycle Use Activation in Goyang City

Joohyun Baek / Hwansung Kim

In this study, a recurring 5-year bicycle use activation plan was established for Goyang City as a statutory plan under the Bicycle Use Activation Act. The study presented plans for constructing and maintaining bicycle infrastructure and established measures for activating bicycle use to be implemented for five years by Goyang City in 2022–2026. Accordingly, the status and problems of Goyang City were analyzed and policies that apply to Goyang City were benchmarked by reviewing domestic and foreign best practices. In addition, construction and maintenance plans for bicycle infrastructure, measures for activating bicycle use, and an annual investment plan were established based on the goals and directions set for implementing the plan.

As Goyang City is now a major city with a population of 1.09 million, creating a practical environment for bicycles by improving the quality of bicycle environments rather than expanding the physical externals of bicycle lanes is timely. In this regard, establishing a data-based policy for bicycle use activation is necessary, and measures to improve bicycle lanes must be considered seriously in preparation for future new cities and stimulating shared PM. In terms of bicycle infrastructure, bicycle facilities must be maintained systematically by stage and region. In addition, maintaining bicycle use facilities and locating additional routes according to travel purpose and road segments is required.

To activate bicycle use, a landmark-level plan is needed that links bicycles with Goyang City's Ilsan Lake Park. In this regard, the determinations of policy makers and the continued interest and participation of citizens are critical. In addition, efforts are required to create synergy between increasing bicycle use, promoting tourism, and revitalizing local business districts by activating bicycle use in conjunction with Goyang City's tourism resources such as Haengju Fortress, Janghang Wetland, and the royal tombs of Seorung. Other essential factors for activating bicycle use include expanding and strengthening the authority of bicycle policy organizations, implementing bicycle priority signals, and providing incentives to purchase and register electric bicycles. Examining various statistics published on carbon emissions in the transport sector of climate-crisis-affected Europe reveals that the most desirable means of transport to realize a carbon neutral Goyang City is bicycles.

Finally, for Goyang City to develop as a bicycle-friendly city, creating an environment where citizens can safely use bicycles is fundamental, and citizens must be able to move quickly and easily. Ultimately, Goyang City can only become an attractive city for bicycle riding when it can provide a convenient and appealing environment.

A Study on the 2020 Evaluation of Civil Operating Cost Grants in Goyang City

Sunghun Jeon / Howon Suk

The purpose of this study is to secure fairness in the evaluation of local grants, provide deliberation data for local grants, and reflect the evaluation results in the 2022 budget. The results of the study suggest:

First, as a result of the evaluation of civil operating cost grants in 2020, out of a total of 193 projects, 99 were 'very good' or higher, 84 were 'medium' and 10 were 'bad' or less.

Second, as a result of the evaluation of civil event grants in 2020, out of a total 13 projects, 6 were 'excellent' or higher, 7 were 'medium.'

Third, it is necessary to change the form to secure concreteness, clarity, and systemicity of the plan and report.

Fourth, it is necessary to set performance goals and indicators at the time of the plan so that performance can be clearly derived.

Fifth, limited on-site evaluation is needed depending on the COVID-19 and the type of local subsidies.

Sixth, considering the continuity of local grants, the evaluation history management system(EHMS) for individual projects should be applied.

Seventh, it is necessary to apply cross-evaluation to secure the objectivity and rationality of evaluation.

Eighth, the role and function of the 'Local Grants Management Committee(LGMC)' should be strengthened to enhance transparency and efficiency of local grants that have been politically and customarily implemented.

Finally, it is required to form a consensus on the purpose and necessity of evaluation and improve the evaluation culture.

A Study on Vitalization Youth's Activities by Diagnosing the Key Competencies of Youth's Activities in Goyang-City

Hyongsung Kim / Jaihyung Kim

The Goyang City Youth Foundation participates in the government's competency-based youth activities and strives to provide competency services for youth in Goyang City to cultivate in adolescence through youth activities. The purpose of this study is to provide basic data necessary for youth policy establishment and youth activity development in Goyang by analyzing the Key competency performance of youth cultivated through the youth activity program conducted by the Goyang City Youth Foundation.

First of all, it was difficult to accurately observe the subject's behavior because the youth Key competency measurement tool has been measured on a graphic rating scale. Therefore, by converting the measurement tool into BARS (Behavenly Finished Rating Scales), competency was clearly defined as an important behavior or event and applied to pre- and post-Key competency measurements. Second, as a result of measuring the Key competencies in the pre- and post-measurement results, it was improved from the pre-stage 3.2 to the pre-stage 3.8 as a result of post-measurement. However, it was investigated that individual competency differences occurred. In addition, there was a difference between target and improvement capabilities in youth activities. As a result of the cause analysis, participation factors were found to be the largest, and program factors such as program content and composition were found to have the next effect. Leadership again. In was analyzed as an important factor. On the other hand, the need for qualitative transformation and support was first raised for young instructors to switch to competency-oriented programs due to the burden of quantitative evaluation and overload.

Based on the research results, the following improvement directions are needed.

First, in order to strengthen competency-oriented youth activities, ① it is necessary to establish a foundation for competency-based youth activities. To this end, it is necessary to establish a Assessment Center, recruit competency experts, and allow professionals to perform tasks such as operating competency-related remuneration education. ② It is necessary to develop youth instructor competency and improve treatment. To this end, it is necessary to strengthen education and training for the development of job competency as a youth instructor, and to designate and operate an essential curriculum for youth instructor competency. Second, in order to revitalize youth activities, ① it is necessary to improve the youth activity program. It is necessary to develop customized youth activities by region and age, and to study and apply characteristic factors of youth activity programs that match competencies. In addition, it is necessary to apply a cost perspective in consideration of differences in demand for each residence in the development of customized programs. ② It is necessary to strengthen the promotion of youth activities. In order to strengthen the promotion of youth activities, it is necessary to present competency and competency goals in advance when establishing educational programs, and it is necessary to establish and execute PR plans with local residents. ③ From a long-term perspective, it is necessary to expand youth facilities by region.

A Study on Factual Survey of Violence Against Women in Goyang City

Jiho Ahn / Eungyung Kim / Changbae Heo

On the surface, the purpose of this study is to collect and analyze data on the actual condition of gender violence in Goyang-si to derive effective policy models and improvement measures for the prevention and reduction of women's gender violence in Goyang City. The basic contents on gender violence Survey in Goyang city are stipulated in Article 14 of the Goyang City Ordinance on the Prevention and Protection of gender violence(Women's Violence Survey and Statistical Data Management).

It is said that the distribution of gender violence by region, age or occupation, the cause and background of gender violence, the type and characteristics and frequency of gender violence, and the current status and changes in the social environment should be reflected. The researchers go beyond simply describing the reality of gender violence in Goyang city, and when dealing with human behavior in anthropology and other academic fields, Thick description or intermediate technology is a way to explain the context of the gender violence.

A Study on Tourism Revitalization Plan in Goyang Haengjusanseong area

Eunjin Kim / Seoyeon Ban

As the demand for travel in everyday life has increased, tourism is emerging as a part of the revitalization of local tourism, and Goyang Haengjusanseong is one of the local tourist destinations. Haengjusanseong in Goyang city used to be a representative historical and cultural resource and a tourist destination in the past. However, as the area was designated as a cultural heritage projection zone and a green belt, tourism preparedness and infrastructure in the area of Goyang Haengjusanseong gradually aged. Regardless of the above issues in Goyang Haengjusanseong, the number of visitors to Goyang Haengjusanseong has risen since COVID-19 as the demand for natural attractions and outdoor facilities has increased.

Thus, the purpose of this study is to (1) investigate the current status of Goyang Haengjusanseong as a cultural heritage site by identifying tourism resources of its area and surroundings, (2) identify visitor usage status and plan consumer and resident-oriented tourism revitalization by gathering local residents' opinions, and (3) plan to revitalize tourism in Goyang Haengjusanseong and other potential tourism resources around the area.

The following considerations should be taken into account before deriving the tourism revitalization plan for Goyang Haengjusanseong area: (1) to offer visitors a memorable experience, it is necessary to provide contents that are targeted in consideration of visitor characteristics and needs, (2) as Goyang Haengjusanseong area is a cultural heritage projection zone, it is essential to expand areas in Haengjudong, Neunggok station, Daedeok Ecological Park, and Janghang Wetland, (3) in the long term, it is advisable to have a connection between Han River Estuary to KINTEX to access, and lastly, (4) it is necessary to associate with related projects in Goyang Haengjusanseong area.

Considering the above issues and revitalizing tourism in Goyang Haengjusanseong and the surrounded area, this study suggests to improve tourism preparedness, enhance contents and programs, strengthen the tourism brand of Goyang Haengjusanseong area, and build short-term and long-term strategic plans for regional-based tourism ecosystem.

Finally, as responding to rapidly changing tourism demand and improving Goyang Haengjusanseong visitor satisfaction, this study proposes a future research direction on current status of tourists and its capacity to ensure a sustainable tourism in Goyang Haengjusanseong area, establishing TF team among major business entities, and building institutional foundation for the coexistence of life quality of local residents and tourism.

A Research for Establishing a Green Building Construction Plan in Goyang

Jiyeol Im / Garam So

In this study, we intend to derive the basic direction of the “Goyang City Green Building Creation Plan” to revitalize the green building in Goyang City.

According to the carbon-neutral scenario announced in August 2021, the building sector in 2050 decreased by 21.1 to 23.2% compared to 46.9 million TOE in 2018. It's forecasting 37.0 (1 plan) million TOE. As a means of reducing energy efficiency, it is intended to reduce energy by supplying zero energy buildings (new construction) and expanding green remodeling projects (existing). Plans related to green buildings that we suggest are Green architecture certification system, Proof of Zero Energy Building, and Green remodeling.

Currently, Goyang-si's overall housing supply rate has been more than 90% over the past 10 years, and apartments had the highest penetration rate of 71.0% by housing type. Also, Buildings according to the total floor area standard accounted for the highest percentage of buildings with an area of 100 to 200 square meters at 30.4%. This suggest that the application of green remodeling to old buildings is required.

We suggest the method of deriving a green building construction plan in Goyang-si. Specifically, the six strategies for the creation of green architecture in Goyang-si are as follows.

- Establishing an institutional foundation for the spread of green architecture and strengthening its functions.
- Leading supply of green buildings in Goyang-type.
- Create a green building in Goyang through remodeling.
- Strengthening the competitiveness of the green building industry in Goyang-si.
- Optimal support considering the life cycle of a green building.
- Creating a foundation for green architecture with the local community.

A Study on Status of Gender Pay Gap and Cause Analysis/ Improvement Plan at Public Organizations in Goyang City

Junghwa Moon / Seunga Sun / Eunjin Kim / Ahra Ko

This study aims to analyze the current status and characteristics of the gender pay gap for regular and indefinite contract workers. It also identifies the causes of the gender pay gap to outline measures for improving it at the seven public organizations under Goyang City.

The results of this study are as follows:

(1) The gender pay gap for all public organizations in Goyang City is 23.3%, ranging from 7.99% to 27.51% depending on organizations. (2) The female employment rate in all public organizations in Goyang City is 28.5%. (3) The gap between the tenure of men and women is 19%. (4) The employment rate of women and the gender pay gap were generally inversely proportional. (5) Women are promoted faster at lower positions, but as they move up to higher positions, women take a longer period to be promoted than men. (6) There were many differences in the reasons for career interruption depending on gender. (7) Women are more likely to work at home without receiving allowances. (8) Some organizations partially include the period of parental leave in the period required for promotion, and some organizations give lower than the standard in the evaluation of employees who took parental leave. (9) The ratio of women in the personnel-related committees of each organization is 20-30%, etc.

Based on these research results, the following policies were proposed:

(1) Ensuring fairness and transparency in a promotion. (2) Reducing the gender gap in recruitment. (3) Applying fair standards for career recognition. (4) Creating an environment to prevent career interruption. (5) Gender balance when organizing personnel-related committees. (6) Reduction of disadvantages in personnel management due to parental leave such as the inclusion of promotion period and high evaluation of parental leave period. (7) Pay for overtime telework. (8) Improving women's interest in personnel management, evaluation, and pay. (9) Resolving gender differences in perceptions of gender and gender pay gap improvement policies. (10) Establish a system for promoting gender-equal labor policies. (11) Utilization of gender wage gap survey and formation of consulting group (12) Introduction of gender equality pay disclosure system and establishment of guidelines. (13) Expand the survey on the gender pay gap to private commissioned organizations and the private sector. (14) Development and application of guidelines for the practice of gender-equal pay.

A Study on Basic Concept and Action Plan of Democratic Civic Education in Goyang City

Jiho Ahn / Eungyung Kim

For democratic citizenship education research, it is necessary to explain in detail what specific utility is for democratic citizenship life. Therefore, this study attempted to describe the utility of democratic citizenship life through in-depth interviews with civic activists and citizens, breaking away from the existing democratic citizenship education research. Through this process, the goals, programs, and action plans of democratic citizenship education in Goyang city were derived.

Along with these field studies, the researchers conducted case studies in Germany, where political education developed, Gwangmyeong-city and Hwaseong-city. Finally, the implementation plan of democratic citizenship education in Goyang city was derived through the analysis of the ordinance to support democratic citizenship education in Goyang city and the analysis of the democratic citizenship education project in Goyang city.

A Study on the Stabilization of Housing in Old Low-rise Residential Areas in Urban Regeneration District of Goyang

Kwangjin Jung / Haesong Jo

In Goyang City, the aging of the housing is serious, and the low-rise residential areas are relatively poor compared to apartments. To this end, urban regeneration projects are being actively carried out, but the results are low as they are not solely for the purpose of housing maintenance. Under this circumstance, the central government has recently announced policies to combine urban regeneration with residential redevelopment, and laws and regulations have been revised. Therefore, it was attempted to find a housing maintenance plan in connection with the central government's policy for the aging low-rise residential areas in the urban regeneration activation area.

The scope of this study consists of theory and case analysis, analysis of the current state of Goyang, and deduction of housing stabilization measures. Implications were drawn by examining previous studies and cases for the maintenance of old low-rise residential areas, and analyzing the policies of the central government. By analyzing the overall status of Goyang City and the status of the urban regeneration activation area, the necessity of old downtown management and the need for residential maintenance within the urban regeneration project were derived. In addition, a commercialization plan was devised by selecting a target site within the urban regeneration activation area.

Neunggok area and Goyang area were selected as target sites, and in the case of Neunggok area, housing and infrastructure should be provided in conjunction with the central government's policy. In Goyang area, since no urban regeneration revitalization plan has been established yet, it is necessary to establish a business plan that allows the public to intervene in necessary areas.

Given the current situation in which the importance of housing supply in the city is increasingly emphasized, it is necessary to implement a physical housing maintenance project in the urban regeneration project. Renewal of old low-rise residential buildings is not something that only one department can do, and it is necessary to establish governance of related departments and institutions. In future housing reorganization, publicity needs to be prioritized by limiting the areas where profit and publicity mutually support each other and high publicity is required.

Basic Research on the Activation of Drone-Services in Goyang City

Yongdeok Kim / Eunji Kim

The drone industry is attracting attention as one of the industries with great growth potential as well as other industries by converging high-tech technologies. Goyang City is considering ways to create an ecosystem for the drone industry, one of the new industries in the future, to drive drones as a self-sufficient city. However, due to the lack of basic research on how to create and revitalize the ecosystem, including a basic trend survey on the drone industry, it is difficult to find drone services that can be introduced in Goyang City in terms of supply and demand.

In this study, we will study the concept of drones, domestic and international status of drones, create and revitalize the ecosystem of drone industries, and introduce drone services in Goyang through cases of drone service utilization. Afterwards, basic data and basic directions on how to activate drone services in Goyang City will be presented. South Korea's drone industry is one of the top eight leading industries for innovative growth and is a convergence industry of high-tech technologies such as aviation, information and communication, software, and sensors. Currently, it is shifting from low-cost, small-scale filming to high-priced and medium-sized centers that carry out tasks such as agriculture, monitoring, surveying, and delivery, in the future, it is expected to open new markets in transportation and transportation.

Cases of drone service use are organized by domestic and international, public, private, and field. It also conducted in-depth interviews with people working in the drone industry to understand the structure of the actual drone industry. Drone-related services that Goyang City can introduce include home safety help service, infrastructure diagnosis service, patrol, illegal parking management, and missing persons search. In addition, it is possible to list the atmospheric environment survey, knowledge re-examination, and cultural heritage management. It also introduced drone services that can be introduced in the future.

A Research on Establishing Basic Plan for Green New Deal in the Goyang City

Jiyeol Im / Garam So

The global economy and society were shocked by climate crisis and COVID-19. In order to overcome such a situation, rapidly changes are occurring in urban (and social) structures such as economy and society. As a result, our society will overcome COVID-19, but it is expected that a different form of society will emerge from the society before COVID-19. Accordingly, the South Korean government announced “The Korean New Deal” to overcome the economic crisis caused by climate crisis and COVID-19 and to design a new future. The Korean New Deal means a major transition for Korea to become a leading country, and special, metropolitan, and metropolitan governments are actively responding to the successful promotion of the Korean New Deal.

In order to establish a sustainable environmental leading city pursued by Goyang, an active response is required. In this study, basic research was conducted to review the current status of Goyang and establish basic plans for the Green New Deal (establishment of a carbon neutral promotion base, green infrastructure [transformation, urban, spatial, and living], spread of low carbon (eco-friendly) energy system, and establishment of a green industrial innovation ecosystem).

In this research, a draft of the basic plan for the Green New Deal in Goyang was derived based on precedent cases and literature research. After that, the Green New Deal Basic Plan (draft) was finally proposed by consulting related departments and experts. Goyang City’s Green New Deal Basic Plan consists of 4 strategies, 19 tasks, and 69 detailed tasks. And strategies of Goyang City’s Green New Deal Basic Plan are summarized as follows.

- Building a Green New Deal city foundation with citizens.
- Establishment of a nature based urban problem response system.
- Establishment of optimal management and operation system for new-renewable energy.
- Discovery and fostering of green industries for development of Goyang.

A Study on the Development and Utilization Measures for Goyang Lifelong Learning City Indicator

Shinhee Yun / Saehoon Lee

The Goyang Lifelong Learning City performance monitoring system developed in 2020 was designed to be applicable to local governments across Korea as well as Goyang City and to be usable as an international indicator. It is also structured so as to allow users to generate a list of characteristics of Goyang City and to analyze the causal relationships among the factors affecting its development as a lifelong learning city.

Goyang City conducts a survey every year based on this indicator system, assessing and evaluating lifelong learning outcomes through indicator analysis and index estimation. In this context, the present study investigates indicator system-building strategies to generate the results on the indicator and expand the scope of its utilization.

Policy Recommendations

- Continuous monitoring through estimation of indices for individual goals and domains required
- Generation of Goyang Lifelong Learning Representative Index
- Establishment of qualitative evaluation monitoring group implementation plan
- Monitoring changes in indicator results following the introduction of the lifelong learning certification system in Goyang
- Upgrading Goyang Lifelong Learning City Monitoring System
- Disseminating the results of Goyang Lifelong Learning City Performance and Monitoring System through concerted publicity
- Requesting approval statistics for Goyang Lifelong Learning City Indicator Survey from Statistics Korea
- Automatic collection of administrative data for developing the Goyang Lifelong Learning City Indicator system
- Creating an organization dedicated to managing the Goyang Lifelong Learning City Indicator system
- Building a network for sharing the Goyang Lifelong Learning City Performance system domestically and internationally

A Study on Temporary Utilization Plan in Goyang City Future Land(Site C4)

Kwangjin Jung / Haesong Jo

Goyang City's Future Land (Site C4) originally planned to be established as a support site for the international exhibition hall and exhibition projects to foster and revitalize the MICE industry. However, the development direction of the Future Land (Site C4) has not been determined as KINTEX-supporting facilities were sold to the private sector and developed into apartments and residential officetels. Under these circumstances, the Act on the Designation and Management of Future Land in Goyang City was enacted in 2019, designating Site C4 as Future Land and limiting development projects for 30 years. Therefore, in this study, it is intended to seek short-term and mid- to long-term utilization measures following a long-term development freeze caused by the enactment of the ordinance.

In the short-term utilization plan, the lack of parking lots due to the construction of KINTEX's 3rd exhibition hall should be resolved, and symbolism should be given as a representative eco-friendly space in Goyang City to achieve the Green New Deal policy and Goyang Green City. If eco-friendly energy facilities are formed along with parking lots and civic spaces and outdoor spaces are prepared together, citizens' usage behavior and demand will be identified.

In the mid- to long-term, various possibilities of Future Land (Site C4) should be derived through cooperation with related organizations such as Goyang City Management Corporation, Goyang Knowledge Information Industry Promotion Agency, National Cancer Center, Youth Organization, EBS, CJ Live City, etc. As a symbolic space to return to citizens as a future land for the next generation, it basically created a autonomous civic space, an eco-friendly citizen experience space, a parking lot, and proposed three alternatives: healing space, start-up space, and cultural and artistic space. Along with the city-led eco-friendly energy facilities, eco-friendly education, public relations, and experience facilities should be created to symbolize Goyang City's representative eco-friendly space, along with creating an experience space for citizens to share surrounding development projects. As a Future Land for the next generation, it is necessary to create a space where citizens directly utilize and use it to return it to citizens, and to actively reflect the results of short-term use and reflect them in mid-to long-term utilization plan. Through cooperation with related organizations in Goyang City, operational efficiency should be improved and a representative space for successful governance.

A Study on the Automobile Tax on Possession for Local Fiscal Soundness

Howon Suk / Sodam Kim

Korea's automobile tax system is not responding to these environmental changes, and car ownership taxes have chronic delinquency and non-reflection of external costs, and the Automobile Tax on Driving has no status as an independent local tax. Therefore, this study sought to find a reasonable way to improve automobile taxes by paying attention to the environmental changes surrounding these automobiles, the need to strengthen environmental taxation, the identity of local taxes, and the low collection rate and high arrears.

First of all, the driving tax was introduced for the purpose of preserving local governments' tax revenues, but it is difficult to faithfully perform the role of preserving local tax reduction, and there are problems such as distortion of local finance and frequent tax rate volatility. Therefore, in order to secure the identity of Automobile Tax on Driving as local tax, oil subsidies that make up driving tax need to be converted into government subsidies. In addition, the distribution standard of auto tax compensation for driving shall be changed according to regional fuel usage.

This study also proposed a plan to improve the Automobile Tax on Possession 1) by maintaining the current tax system but strengthening the environmental correction characteristics of the Automobile Tax on Possession 2) linking the transportation, energy and environmental tax imposed on oil and the Automobile Tax on Possession. In the former case, major European countries are implementing car taxes based on current emissions by applying additional standards such as carbon emissions, hazardous substance emissions, and fuel economy to enhance environmental correction characteristics. Given the current surge in demand for eco-friendly cars as well as the tightening of regulations on internal combustion engine cars, the tax base for other cars needs to be set preemptively. Next, the method of linking the Automobile Tax on Possession to the transportation, energy, and environmental tax is to jointly tax oil, which is a taxable item of transportation, energy, and environmental taxes, with the central government. This method can be said to be more consistent with the principle of environmental and external costs and user burden resulting from motor vehicle operation, as the tax amount is determined in proportion to the local oil usage. In the case of tax rates, the tax system can be simplified by operating the car tax as one without separating the previously proposed mileage and Automobile Tax on Possession that the total tax revenue of local governments can be maintained based on the tax rate imposed on gasoline and diesel. In addition, the tax administration costs of autonomous governments can be greatly reduced as auto tax arrears do not occur.

A Study on the Direction Setting of Goyang-City Archive

Hyongsung Kim / Jaihyung Kim

As a result of analyzing the current status of public records management in Goyang City, the capacity of the archives is very insufficient compared to permanent and semi-permanent data worth preserving and managing by Goyang City. In addition, there is a very lack of manpower for accurate and close record management. As a result, ① there are concerns about loss of records when transferring documents by department due to reorganization, ② records lack of awareness of the importance of records and lack of expertise, ③ resulting in difficulties in timely management of records.

Contrary to this situation, other local governments recognized the importance of record management and managed and operated the existing record hall as a rule enacted by the head of the organization, but recently, public records, preservation, inheritance, and sharing of private records have been enacted. In addition, these ordinances aim to enjoy the culture of residents through content services related to local identity and records.

In addition to this trend, as a result of a demand survey of Goyang citizens, 79.7% of the 1,004 respondents agreed on the need to establish a record management agency. In addition, records managers of each department of Goyang City Hall are also raising the need for integrated management through lack of space, educational demand, and installation of a record hall.

Therefore, it is judged that Goyang City should provide the following services through the construction of a record hall in the future.

First, through record collection and processing, it is necessary to link with record service planning and education programs, develop content, and service.

Second, it is necessary to change the direction to citizen-led record management. It is necessary to restore citizens' initiative so that citizens can discover and serve records on their own, not in public. To this end, it is necessary to cultivate village records and citizen records.

Third, it is necessary to link it with informatization through systematic processing as well as record preservation.

This requires a step-by-step approach. The first step in the first stage is to strengthen the ability to manage records and to recruit document management books and document management experts, which have been insufficient so far.

The second stage is to establish the foundation for the establishment of the Korea Archives, changing its name from the existing information disclosure team to the information team, hiring content planning experts, and expanding the scope of private records as well as public records. To this end, Goyang City's Archives Management Ordinance should be enacted.

The third stage is the installation and operation of the recording hall, and it is necessary to establish a Goyang recording hall in the form of a business office to recruit facilities and manpower according to the operating system of the recording hall. Through this, complete public services for records and information should be provided.

Issues and Proposed Solutions relating to Shared Mobility Services in Goyang City

Joohyun Baek / Hwansung Kim

Recent times have shown a paradigm shift in traffic policy from cars to more sustainable modes of transportation such as walking, cycling, and public transportation. Furthermore, various modes of transportation that optimize the travel distance depending on the destination are increasingly utilized. Growing demand for public transportation and first-and-last-mile conveyance has accelerated the expansion of personal mobility devices (PMDs). Leveraging this trend, more companies have started providing shared mobility services that rent out convenient and eco-friendly means of transportation such as PMDs and electric bicycles.

However, with the widespread popularity of shared mobility services come a host of corresponding problems. The characteristics of “no designated parking space” and “non-station-based operations” along with the lack of user awareness have caused issues due to reckless parking and stopping. Poor bike lane conditions, despite continued maintenance, discourage people from using these lanes, forcing many to choose sidewalks, obstructing pedestrian traffic, or even threatening pedestrian safety. In addition, frequent changes in the related laws and regulations, such as the ones involving safety helmets and road boundaries, as well as unclear legal bases and standards, contribute to confusion and dissatisfaction.

Shared mobility involving PMDs and electric bicycles will not only encourage citizens to use public transportation but will also bring significant changes in overall travel within populated areas. However, the current conditions of use and the related regulations still leave a lot to be desired and cause a range of problems. This study is significant as it overhauls the current status of shared mobility services and proposes appropriate measures to propel the services to the next level.

For Goyang City to provide safe and attractive conditions for shared mobility, it is imperative that the city, service providers, and users all work together to create proper conditions and a culture that works towards this common goal. The users of shared mobility services should prioritize what is in the best interest of everyone by familiarizing themselves with traffic and parking rules and adhering to safety requirements. For its part, Goyang City should improve safety education regarding PMDs and electric bicycles. The city also needs to intensify its efforts to improve the conditions for users, with a focus on bicycle lanes, electricity charging points, and storage spaces.

A Study on Changes in People's Awareness and Life Patterns due to the COVID-19 Outbreak

Shinhee Yun / Saehoon Lee / Jihoon Kim

This investigation examines changes in people's awareness and life patterns due to the COVID-19 outbreak.

people in Goyang deemed the situation relatively safer at 3.78 points, compared to global (4.43 points) and Korea (4.07 points). In terms of their opinion of respective COVID-19 responses, people scored Goyang City (3.56 points) differently from the government (3.64 points). However, in terms of safety from infections, people gave higher scores to Goyang City (2.96 points) than the government (2.89 points.).

In response to a question about the most significant change caused by COVID-19, people named "restricted travel and movement" as the biggest, followed by "economic challenges."

When it comes to purchasing masks, the most popular method was "online purchases," with an average monthly expenditure of 35,520 Korean won. In addition, people switched to new masks on average every 1.9 days. 45.3% of people responded that they, "always wore masks other than when eating/drinking," and 95.6% answered that they always wear masks on public transportation, such as subways or buses.

Most respondents replied that even after COVID-19, the lifestyle changes caused by the pandemic would become an inevitable part of life. The average time that people deemed for everything to be back to normal was 38.5 months. In terms of degree of fear against COVID-19 pandemic, the average score was 3.74 points, equivalent to "average to a little afraid," and 44.5% of the respondents believe that COVID-19 will be completely over.

When asked about the possible route of infections of COVID-19, people responded "average" for all sources, which were self, family, friends, and workplace. About 70.7% responded that side effects would remain even after recovering from a diagnosis of COVID-19.

The greatest concern about the COVID-19 situation related to the possibility of Korea's economic sluggishness and recession, which registered 4.24 points in the survey. In terms of other categories: "the resurgence of COVID-19 despite a prolonged pandemic or lower chances of infection" scored 3.97 points; "the overcapacity of healthcare workers that leads to the inability to take care of patients" scored 4.02 points; "the fear of being quarantined alone once confirmed to have COVID-19" scored 3.71 points; "being fired or experiencing a reduction in income from getting COVID-19" was 4.06 points; "inability to meet friends" scored 3.62 points; and "a lack of food or necessary goods in marts or retail stores" was 3.31 points.

An Analysis on the Status of Small Businesses in Goyang City since the COVID-19 Outbreak

Shinhee Yun / Saehoon Lee / Jihoon Kim

This study analyzed the general status of the damages to and fear felt by owners of small businesses in Goyang City resulting from the spread of COVID-19.

Regarding the monthly average revenue before the COVID-19 outbreak, 28.3% of the respondents replied that their revenue was “higher than 20 million Korean won”, followed by “5 to 10 million” (19.1%), “10 to 20 million won” (16.3%), “4 to 5 million” (9.7%), “less than 2 to 3 million” (9.7%), and “less than 3 to 4 million won” (8.3%).

However, after the COVID-19 outbreak, 31.9% of the total respondents replied that they had seen a “30–50% reduction” in their monthly average revenue, followed by a “10–30% reduction” (24.6%), “50–70% reduction” (20.6%), “70–100% reduction” (10.4%), “no changes” (6.1%), and “0–10%” (5.2%). Meanwhile, 1.2% saw an increase in their revenue.

The average number of employees hired at a business site was 1.6 persons. In terms of industry, the highest number of employees hired was in the gasoline industry at 4.83 persons, while the lowest number of employees hired was in the clothing/accessories industry with 0.73 persons.

However, in terms of any changes after the COVID-19 outbreak, 76.8% of the respondents answered no changes. Reductions by way of 1 person lost was 14.0%, 2 persons was 5.5%, 3 persons was 5.5%, 4 persons was 1.3%, 5 persons 0.4%, 6 persons 0.5%, and plan to reduce was 1.4%. In terms of industry, the living/interior design/service industry was the highest in responding “no changes,” while travel/lodging/transportation was lowest at 45.8%, which means it was most likely to reduce or had already reduced the number of employees.

Regarding whether respondents perceived there to be support for small businesses, 49.4% of the respondents responded that they believed there had been no policies for supporting small businesses since the outbreak of COVID-19. However, 36.8% of respondents replied that they had heard of the policies but did not know what they were meant to do. Lastly, 11.6% responded that they knew of the policies, and 2.2% responded that they knew the policies very well.

For the most-desired form of government support, 70.3% of the owners said that they wanted cash support, followed by 15.8% who wanted tax reductions, 7.2% preferred financial and guaranteed support, and 3.4% wanted support for small businesses that use Goyang Pay.

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A Survey on Awareness and Satisfaction on Goyang Policy & A Study on Satisfaction Rate Among Goyang Pay Users

Shinhee Yun / Saehoon Lee / Jihoon Kim

The goal of A Survey on Awareness and Satisfaction on Goyang Policy is to promote the advancement of urban policies by examining general satisfaction levels among citizens on the policy affairs of the seventh government of Goyang City and assessing their needs for each policy.

The study on interest level for policies by sector among Goyang residents demonstrated that people have a higher than average interest in policies across all sectors. People in their 20s were most interested in “transportation,” people in their 30s and 40s were most interested in “living and life,” and people from 50s to 80s were most interested in the “environment.” In terms of districts, people living in Ilsandong, Ilsaseo, and Deokyang districts were most interested in “living and life.”

The results on demand for Goyang City policies (Borich, the Locus for Focus) showed that the “Revitalization of Regional Economy” policy of Peace and Economy City, “Regional Railroad,” “Quick Road,” “Good Bus” for Sustainable Development, and “Preemptive Response to COVID-19” of “Safe City from COVID-19” earned high marks for importance and execution. On the other hand, “Ornamental Plant Cluster” from the “City Policies Focused on People” ranked lowly in terms of importance and implementation.

A Study on Satisfaction Rate Among Goyang Pay Users conducts a comprehensive analysis on satisfaction, improvements, and any other demands for Goyang Pay, to help vitalize the policies promoting Goyang Pay. More than half of the entire respondents were aware of regional currencies (“Gift Certificates,” “Separate Pay-as-you-go Prepaid Cards,” and “Pay-as-you-go Cards”). The major channel that people learned about Goyang Pay through was the “application for stimulus checks.

60% of the respondents answered that they have experience using Goyang Pay, while 70% of the respondents who did not have any experience expressed their intent to use it in the future. The biggest reason for using Goyang Pay was “6 to 10% incentives added for recharge.”

The average transaction volume of Goyang Pay was 200,000 Korean won. People in their 40s had the highest average transaction volume of 253,000 Korean won, while people in their 10s were the lowest at 46,000 Korean won.

In terms of policy satisfaction, 57% of the respondents replied that they were happy with the Goyang Pay policy. In addition, 70% believed that Goyang Pay was a significant policy that could vitalize the regional economy.

An Analysis of Goyang Citizens' Demographic Characteristics

Shinhee Yun / Saehoon Lee / Jihoon Kim

The study is intended to make a general assessment of the demographic and social characteristics of Goyang citizens. The study's results will be used to establish city policies and provide clear policy directions by analyzing Goyang citizens' individual and group attributes. The study explores general sociodemographic questions, including household structure (occupation, income, and monthly average income), commute to work/school, hometown attachment, and religion.

The survey period was from July 20, 2020 to August 7, 2020. Goyang residents across 39 administrative regions of Goyang City were the survey's target, categorized into sex, age, and regional samples. The study's total sample size was 2,395, but only 2,281 valid samples were taken into account based on sampling error verification.

For the field study, two field workers were dispatched to every district across 39 sample districts (see the attachment on the Field Worker Dispatch Map). The field workers had to undergo training on the survey and health safety measures before their dispatch to the field. Two investigators were also dispatched to each of the 39 districts, and study's target subjects underwent stratified sampling.

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A Study on the Mobility Behaviors and Travel Satisfaction of Goyang Citizens

Shinhee Yun / Saehoon Lee / Jihoon Kim

We are currently in a pandemic age with the spread of COVID-19. Before COVID-19, people lived in a highly mobile society where movement was an essential and fundamental right. Mobility has much significance, as it involves not only physical movement but also different factors such as social relationships, participation, and exclusion. Therefore, this study observes the mobility of Goyang citizens and how it changed after the COVID-19 outbreak to better understand quality of life through mobility. In addition, by conducting an analysis on citizens' level of satisfaction with the mobility infrastructure in Goyang City, the current study serves as a basis to understand their mobility and movement. The goal of the study is to provide basic information for future projects related to the mobility and movement of the citizens of Goyang.

The survey period was between October 29, 2020 and November 6, 2020. The sample was categorized based on sex, age, and region of Goyang residents. The total number of surveys was 2,887, but only 2,874 were considered valid based on sampling error verification.

For the field study, two field workers were dispatched to every district across 39 sample districts (see the attachment on the Field Worker Dispatch Map). The field workers had to undergo training on the survey and health and safety measures before their dispatch to the field. The study's target subjects in 39 districts underwent stratified sampling by taking factors such as sex, age, and region into account.