The Seoul Institute Research Abstracts 2018

Chang Yi



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Editor's Note

As the editor of this book, I present "The Seoul Institute Research Abstracts 2018", a collection of English summaries for all the research studies published in 2018. As the Seoul Institute covers a variety of urban planning disciplines, this book includes brief explanations of our policy solutions on many types of urban problems.

The Seoul Institute (SI) was established in 1992 (as the Seoul Development Institute) to formulate long-term growth plans and provide policy solutions for various problems in Seoul. For more than 20 years, the institute has provided guidance and pointed towards a sustainable future. The SI, as a prominent think tank with about 80 PhDs on staff, has conducted comprehensive policy research in a range of different areas.

For each study, this book provides a short background so that international readers can understand the research context. Its purpose is to bring your attention to the research we have conducted here at the SI. I believe that our expertise on urban planning can help city governments around the world resolve problems common to many cities. If any part of this book intrigues you and your colleagues, we have achieved the aim of this publication.

I appreciate the opportunity to share our research outcomes with you, and sincerely hope that our knowledge will assist cities all over the world as we all strive for a sustainable future. This book will also provide potential opportunities for collaborative research with you and your institution. For further information, please do not hesitate to contact me at changyi@si.re.kr.

Best regards,

Chang Yi Research Fellow The Seoul Institute

01 Urban Planning

Identifying the Main Issues in Urban Regeneration in Seoul and a New Direction

Korea's economic growth has been stuck in low gear for decades now, making it difficult to carry out large-scale urban redevelopment projects. The central government began implementing urban regeneration projects in the early 2010s, a considerable number of which were judged as successful through an assessment process. **Identifying the Main Issues in Urban Regeneration in Seoul and a New Direction** provides direction for the city's urban regeneration.

Nam-Jong Jang \cdot Sang-Il Kim \cdot Hyun-Jung Lee \cdot Ce-Na Baik

Urban regeneration in Seoul began with the New Town Exit Strategy in 2012, and is now expanding throughout the city in accordance with enactment of the Special Act on Promotion of and Support for Urban Regeneration. Since the central government recently introduced the Urban Regeneration New Deal, the Seoul Metropolitan Government (SMG) has responded with Urban Regeneration 4.0. This study draws out the main issues in urban regeneration in Seoul from literature studies on previous urban regeneration projects and expert evaluations and opinions. Furthermore, it makes suggestions for successful implementation of the SMG's urban regeneration policy, to strengthen the city's potential and improve quality of life.

First, there should be visible outcomes of the New Town Exit Strategy, the origin of Seoul's residential regeneration policy. To achieve this, the SMG will have to provide support for housing improvements that is substantial enough for citizens to feel the benefits

Redevelopment projects should be complementary with local conditions. Moreover, public investment should be increased in regions with poor basic residential infrastructure. Systematic management plans are also called for in areas where redevelopment project approval has been revoked.

Second, the following new strategies are needed to implement the SMG's urban regeneration projects. A field-based urban regeneration promotion system should be built by the SMG. The budget execution system should be improved to promote stability in these projects. To actualize field-based work, a collaborative system that includes an adjustment of organizational roles is needed. The SMG should serve as a mediator when conflicts arise among main players in urban planning and related systems. By enhancing connectivity among them, it will be able to strengthen the public character of the urban regeneration projects.

A customized governance scheme for urban regeneration projects should be developed, which will expand citizen participation and diversify the ways to participate. To bring sustainability to the projects, the SMG will need to set up a post-management system. There should be ways to differentiate the project content by category.

Third, to push forward with the SMG's Urban Regeneration 4.0 projects, the following aspects should be considered: 1) The SMG should develop a new system to effectively execute public funds; 2) The SMG should create its own model to apply the New Deal policy; 3) Towards job creation, the city should find new regeneration strategies and ways to induce private sector participation; 4) The SMG should seek countermeasures against unwanted side effects of gentrification.

A Study on Implementation of the Conservation District Program in Seoul's Historic Downtown

Seoul has been the capital of Korea for more than 600 years. A variety of historic buildings and districts in the city are valuable assets in terms of tourism and history, and their preservation is critical. Such preservation should be done within the existing legal framework. However, the first Building Act was only recently enacted, and there is yet no separate act for preservation of historical assets. A Study on Implementation of the Conservation District Program in Seoul's Historic Downtown explores diverse issues that have arisen during the process of formulating district improvement plans and lays the groundwork for enhanced management of Conservation Districts.

Hee Ji Lim \cdot Bokyung Lee

Seoul Historic Downtown, a Conservation District in Seoul, is an important area that has preservation value as the roots of today's Seoul. Therefore, it requires management and support for keeping the historicity of Seoul.

It is impossible to manage these Conservation Districts under the legal systems that apply to ordinary buildings. Analysis of the Conservation District plans reveal that financial support is necessary to preserve these historical assets and improve the deteriorating environments.

Furthermore, there are a lot of buildings which had been built before 1962 when the first Building Act was enacted in Seoul, which do not comply with current regulations. Institutional strategies ensuring permission of such exceptions should be formulated

Korea's historic conservation policy has changed from a building-orientation to a district-orientation. The ACT on Value Enhancement of Hanok and Other Architectural Assets was recently enacted, and the Architectural Asset Conservation District policy was introduced.

Financial support has expanded to modern historic buildings etc., and district unit improvement has become possible through public funding. The limitations on remodeling architectural assets were further facilitated by adding deregulation-related clauses to the Act on Value Enhancement of Hanok and Other Architectural

Assets.

However, the restrictions on building coverage ratio of residential areas need to be eased, and measures to reduce landowners' backlash against expansion of the limits on building heights must be secured. Specific plans for use of buildings will also need to be executed by introducing a new Act. In addition, the Architectural Asset Conservation District policy should be improved to have district improvement projects applied to Conservation Districts.



A Study on Implementation and Operation of Seoul's Community Plan

The 2030 Seoul Plan, the city's highest level plan, outlines the vision and important issues for the future of Seoul. The 2030 Seoul Plan is general in nature, whereas the Urban Management Plan is region-specific, and there have been difficulties in bridging the gap between the two. The Seoul Community Plan was designed by the Seoul Metropolitan Government (SMG) to fill that gap. It covers region-specific issues, direction of development, and guidance on spatial management for five regions and 116 regional communities. A Study on Implementation and Operation of Seoul's Community Plan covers various issues and preconditions for execution of the Seoul Community Plan. It also proposes follow-up measures for effective implementation.

Jae-Seob Yang · Su-Youn Seong

Seoul's Community Plan will be finalized at the end of 2017 through resident workshops and public hearings. The Seoul Community Plan was introduced as an intermediate plan to link the 2030 Seoul Plan (Comprehensive Plan) and the Urban Management Plan. The Seoul Community Plan is a comprehensive plan that integrates and coordinates various projects and plans. Also, it is meaningful as a 'community-based resident-participation plan' that the Seoul Metropolitan Government (SMG), the local government and residents have established together.

The aim of this study is to identify deficiencies in the Plan, and look at follow-up actions for implementation so as to lead to successful execution. Several follow-up measures are needed to utilize and operate the Seoul Community Plan.

First, the content of the Plan and spatial guidelines need to be more specific. It is necessary to avoid duplication, and to link plans to specific means of realization.

Second, conditions for Plan implementation should be improved for autonomous *gu*-districts. Increased involvement of urban planning experts is needed and administrative and financial support for the local community should be strengthened.

Third, it is necessary to establish an operating system for the SMG, and clarify its roles and the roles of local communities in establishing plans for implementation and operation of the Seoul Community Plan.

Fourth, there needs to be a stronger legal basis under the Community Plan. This would include clarifying the status and the purpose of the plans through revision of

relevant laws and regulations.

Above all, towards systematic execution of the Seoul Community Plan, it is essential to decide how to utilize it, both as an urban planning review and as guidelines for urban management planning. In addition, the SMG needs to set up guidelines for its operation of the Plan, and autonomous *gu*-districts need to set up related action plans. Both need to ensure that the Regional Council for Local Government meets regularly. Also, a legal framework and operating system for Seoul have to be established.

Concerning long-term considerations, reorganization of the plan requires the following: the content of the plan needs to be clarified and guidelines strengthened on items such as land use, central area management, and new developments. Finally, the Community Plan will need to be implemented by autonomous gu-districts, whose roles will need to be increased in its implementation.

Policies of Systems in Urban Centers and Case Studies in New York, London, and Tokyo

Designing urban centers is fundamental to urban planning. During the planning process, ways to connect these urban centers and distribute urban functions are determined. It is therefore pivotal for Seoul to properly devise an urban center plan. The Seoul Metropolitan Government (SMG) has implemented a plan for three major urban centers: the region inside the Seoul City Wall, the southern part of Seoul, and Yeongdeungpo and Yeouido. A master plan has been drawn up that is based on this plan. Policies of Systems in Urban Centers and Case Studies in New York, London, and Tokyo examines the urban center plans of the most advanced cities as reference for the SMG.

Sun-Wung Kim \cdot Jae-Seob Yang \cdot Hee-Jin Kim \cdot Su-Youn Seong

This study aims to identify changes in urban conditions, strategies for spatial development, and promotion of urban centers in association with deducting the implications for the urban center policies of Seoul. These implications can be derived as strategies related to the metropolitan transportation system and revitalization of urban centers, methods to promote urban centers, and policies related to public and private partnerships, through case studies on the existing special urban centers of each city.

The studied policies are related to the system of urban centers in New York, London, and Tokyo. Each center published its own urban master plan: OneNYC (2015) for New York City, the London Plan (2016) for London, and First Tokyo (2016) and the Interim Version of Grand Design (2017) for Tokyo.

In New York, one or two centers in each of 5 boroughs were selected (seven overall). New York positions importance on the balanced growth of its boroughs. However, London seems to be similar to the system of urban centers in Seoul, with five development axes in the metropolitan area and CAZ and 200 urban centers divided among a hierarchy of four urban center systems: international, metropolitan, major, and district centers. Tokyo has a major center, seven subcenters, and three new centers, calling these urban centers "core nodal points" and approaches development of the "core nodal points" in a new way.

The centers are not limited to a business function but focus on original region functions, such as culture and history, and their potential.

In this study, case studies are also presented, with a focus on two urban centers in each city. These centers were downtown Brooklyn and Long Island in New York, King's Cross and Stratford in London, and the Major Urban center of Daimaruyu and Shinagawa in Tokyo. Four aspects in each city were then analyzed: the mixed development of functions introduced towards activating the urban centers, the connection between urban centers and the metropolitan transportation network, various promotional policies that consider regional characteristics and potential, and public-private participation from planning to management.

The present study concludes that these cities activate their urban centers by connecting them with several other metropolitan centers, other cities, and airports through major transportation networks. Secondly, each urban center continuously encourages mixed development with business, retail, culture, arts, and even housing. Thirdly, each city we studied has a variety of tools to promote the activation of their urban centers. For example, Tokyo handles urban redevelopment by transferring floor-area ratio and uses, and by applying sequential developments in several different lots, and three-dimensional development of an urban planning system in related urban law. Furthermore, the city is supported by the comprehensive design system, height-use districts, special block areas, urban redevelopment promotion districts, urban regeneration special districts, and national strategic special districts.

Therefore, firstly, mixed development with housing and cultural functions should be allowed in business and commercial districts. Secondly, major urban centers in Seoul should be well-connected by metropolitan rapid transit. Thirdly, the city should have appropriate tools for urban development in its planning-related laws. Finally, private institutes should be encouraged to play an important role by working with the public sector in various developmental processes.

Suggested Amendment to Laws and Systems for Effective Utilization of National Land in Urban Regeneration Zones

Some or all of a piece of land owned by a civilian is occasionally designated as part of a redevelopment area. In such cases, the Seoul Metropolitan Government (SMG) has to compensate in a way that is acceptable to both the city and the private owners of the land. It is easier and more effective for the SMG to carry out urban regeneration projects on city land - or in some cases, national land - as it has the discretion to use city land for any purpose. However, there are legal constraints on use of most national land. Suggested Amendment to Laws and Systems for Effective Utilization of National Land in Urban Regeneration Zones identifies major obstacles hampering effective utilization of national land and offers suggestions on how to make better use of it.

Seung-Hyun Min · Sang-Il Kim · Ji-Hye Yang · Jun-Young Jang

Currently, urban regeneration projects are in progress to improve residential environments throughout the country, including Seoul. For successful implementation of these projects, it is urgent to establish a base facility that plays a significant role in public support of the region. Project areas contain not only municipal land but also significant size of national land. Therefore, there is a growing need for and discussion on the efficient use of national land. To improve utilization of this land, this study focuses on amendment of laws and provision of new systems.

National land is classified as general property and administrative property. While general property can be freely utilized, administrative property can only be exchanged with other property.

General property and administrative property account for approximately 4% and 96%, respectively, of national land. Revising the laws on utilization of administrative property is inevitable if national land is to be effectively utilized.

Therefore, this study suggests the revision of administrative restraints in urban regeneration areas.

Since the current Urban Regeneration Act provides for the sale of national land only, adding detailed provisions is suggested for all terms of use as well as sales. In addition, the law should be amended to set a deadline to prevent delays in application and review the use of national land.

Finally, it was revised to apply flexible rent and lease periods in urban regeneration areas.

General property can be used freely compared to administrative property. Idle administrative property which has lost its administrative purpose can become general property. However, administrative property managers tend to be reluctant to let go of the land, in the interest of its future availability. In addition, the central government plans to carry out a survey of all idle administrative property, but this takes a lot of time. Therefore, we propose a system where the local governor can report idle administrative property directly to the central government.

For administrative property with a high potential for utilization, introducing direct utilization is suggested for urban regeneration through utilization of high density.

We also propose creation of an administrative property utilization body to facilitate direct consultation between an entity seeking to use administrative property in an urban regeneration area and the administrative property manager.

We also conducted a survey on the status of national land in 27 urban regeneration areas and 77 residential environment management areas as designated by the Seoul Metropolitan Government (SMG). Of this land, we selected specific national property suitable for establishing base facilities, and presented facility development examples considering the public character and profitability.

To promote urban regeneration, the related departments in the SMG and the whole country need to review in depth the proposals in this study and propose to the central government that these proposals be carried out. In addition, it is necessary to induce acceptance of the system for utilization of national land for urban regeneration through constant revision and supplementation of related laws and procedures.

Improvement of the Remodeling Activation Area System for the Regeneration of Low-rise Residential Areas

In the past, it was common to replace dilapidated housing with apartment buildings, as the economy and population were growing at a fast pace, unlike the case today. These days, economic growth is tepid. In addition, there is a need to revitalize residential areas with high concentrations of deteriorated housing. One urban regeneration method employed by the Seoul Metropolitan Government (SMG) is to support the remodeling of this old housing. Improvement of the Remodeling Activation Area System for the Regeneration of Low-rise Residential Areas presents several recommendations for the SMG on ways to facilitate regeneration of low-rise residential areas.

Nam-Jong Jang · Hyun-Jung Lee · Ce-Na Baik

The Remodeling Activation Area system, based on the Building Act, is designed to promote and induce remodeling by identifying special cases for relaxing building regulations. Since 2011, the Seoul Metropolitan Government (SMG) has designated several areas as the Remodeling Activation Areas. It also plans to designate other areas included in the Residential Environment Management Project Areas or the Urban Regeneration Project Areas for the purpose of promoting existing urban areas and preserving the existing alleys.

There were 24 Remodeling Activation Areas as of the end of March 2018. This study presents a new direction for policies and systemic improvement of plans so that the Remodeling Activation Area system can be utilized as a practical means of regenerating old low-rise residential areas.

There are some issues with the Remodeling Activation Area system in low-rise residential areas in Seoul. First, the relaxation of building regulations in these areas does not allow for remodeling the physical structure and other real conditions in home improvement. The criteria for relaxation and support of building regulations applicable to low-rise residential areas is restricted to building extensions. In reality, there are few such extensions in these areas due to existing physical and financial conditions, while home repairs are far more common. The relaxation of floor area ratios is applicable only to some buildings. There is concern that excessive extension may ruin the residential environment.

The second issue is a matter of management and operation of the Remodeling

Activation Area system. The regulations concerning relaxation of restrictions on construction of buildings cannot be uniformly applied to the Remodeling Activation Areas. Because the procedures for deliberation and permission for remodeling are more complex than for a general construction permit.

In addition, the municipal government is managing and operating the Remodeling Activation Area poorly.

The third issue is that the system lacks the driving force which is needed to promote projects and associated business or systems as it is managed only by the Building Act.

Finally, public support for the Remodeling Activation Area system which is urgently needed to improve low-rise residential environments is weak.

The deterioration of housing is a serious matter. However, in plots where road frontage conditions are poor, it is hard to construct new buildings. There is a need to repair or remodel houses located in these areas.

It is difficult to push ahead with housing improvement projects because the homeowners are aging and have low incomes. Additionally, it is feared that rising housing rental costs will increase housing instability for low-income tenants.

The plans for improvement of the Remodeling Activation Area system for low-rise residential areas are as follows: First, the role of the Remodeling Activation Area system for low-rise residential areas should be redefined. A system for institutional and policy support should be established to activate housing repairs, substantial repairs and remodeling rather than extensions.

Second, the driving force for the Remodeling Activation Area system should be increased, so that it becomes easier to package with other viable projects and supporting policies and to effectively aid group projects.

Third, it will be effective to create an institutional basis for the Remodeling Activation Area system. In addition, administrative and field support systems must be prepared to promote and run the system and follow-up management.

Finally, it is necessary to classify the Remodeling Activation Areas by characteristic in order to design customized plans for each area.

Analysis and Development of Planning Agendas for the Seoul Metropolitan Regional Plan

The administrative boundaries between Seoul and its adjacent cities are clearly defined. However, economic activities are conducted across these boundaries at the metropolitan level, which is why it is essential to create an environment that fosters cooperation between the cities within the Seoul Metropolitan Region - which consists of the cities of Seoul and Incheon, and Gyeonggi Province - in developing urban policies. Such a cooperative atmosphere is critical to making the metropolitan region sustainable. Researchers from the Seoul Institute, the Gyeonggi Research Institute (formulating policies for Gyeonggi Province), and the Incheon Institute (working to tackle problems in relation to Incheon) have carried out a joint Analysis and Development of Planning Agendas for the Seoul Metropolitan Regional Plan. The authors propose issues that should be included in the policy agenda towards giving the Seoul Metropolitan Region a more competitive edge.

Joo-Il Lee · Hye-Rim Yoon

In recent years, major cities around the world have gained greater economic independence, thereby shifting competition to the city level rather than national. The physical boundaries of cities are also expanding into metropolitan regions, giving these cities global influence. The boundaries of labor and capital markets are no longer rigid, while major cities must compete to improve quality of life for their inhabitants and attract higher-quality human capital.

Cities face hazards in these endeavors and therefore must set clear visions with specific strategies and anticipated scenarios. Contemporary urban issues are so complex that they cannot be solved in isolation; solutions need to collaborative efforts with the authorities of surrounding towns and cities. Through this type of collaboration, the physical boundaries of a city expand, and the city then becomes known as a 'mega-region'. In mega-regions such as the Metropole in France, the City Deal in the UK, Jingjinji in China, and the Seoul Metropolitan Region in Korea, the cities work together to render themselves economically viable entities and administer multiple population centers as larger regions.

The Seoul Metropolitan Region, which encompasses the cities of Seoul and Incheon, and Gyeonggi Province, constitutes a mega-region in South Korea, competing with other mega-regions globally. The Seoul Metropolitan Region also

competes with other Asian metropolitan regions for the top spot as the global hub for the continent.

The city of Seoul is the spatial and functional center of the Seoul Metropolitan Region. As people are able to commute from regions far from Seoul through an increasingly expansive and efficient rail system, the boundaries of Seoul's economic activity and culture have expanded. Urban features such as adequate transportation, open space, and housing, as well as those related to land use, the environment, and industry are dealt with not only at the city level but also on a larger metropolitan and regional level. In fact, administrators can deal with issues within these urban features more effectively across a larger region. Numerous stakeholders, including academics and individuals in both the private and public sectors, need to share a single vision and strategy to ensure the Seoul Metropolitan Region becomes a better place in which to live.

The Seoul Metropolitan Region is planned and managed through the Seoul Metropolitan Area Readjustment Plan and the Seoul Metropolitan Regional Plan. The primary goal of the Seoul Metropolitan Area Readjustment Plan, developed and administered by the central government, is to restrict further growth of the region to encourage the sharing of resources with rural provinces. While the separate Seoul Metropolitan Regional Plan was nominally established through collaboration between the central and local governments, in reality the central government's objectives take precedence and the local government's interests are difficult to discern. The Seoul Metropolitan Regional Plan has the potential to assist in development of the metropolitan region in a variety of ways. The plan has nonetheless primarily become a tool for reducing greenbelts and developing the development-restricted zones. The Seoul Metropolitan Region requires a new framework and a paradigm shift towards better metropolitan planning and management, with greater consideration of recent global social and economic changes.

This research was conducted by a variety of researchers from three research institutes from the Seoul Metropolitan Region - the Seoul Institute, the Incheon

Institute, and the Gyeonggi Research Institute - prior to the updates made to the 2040 Seoul Metropolitan Regional Plan. The goals of this study is to establish a new framework for the Seoul Metropolitan Regional Plan, identify the key issues for the Seoul Metropolitan Region and provide an action plan for each issue. Researchers analyzed the specific characteristics of the Seoul Metropolitan Region in both global and local contexts and developed visions, objectives, and strategies for metropolitan planning. The researchers also intended to encourage local authorities to play a leading role in implementation of regional plans to ensure local needs are addressed.

As hazards increase in metropolitan regions, this research is crucial for the future sustainability of Seoul, Incheon, and Gyeonggi Province. It is thus important that the relevant personnel in these three primary areas of the Seoul Metropolitan Region continue to collaborate in providing solutions and a shared vision for the region's future. From this opportunity, we expect that better ties will form between the three local authorities to achieve a shared vision, increasing global and local competitiveness and improving the lives of the 25 million inhabitants of the Seoul Metropolitan Region. We intend the key issues and action plans of the Seoul Metropolitan Region to be applied to the updated version of the 2040 Seoul Metropolitan Regional Plan.

Analysis of Conditions of the Areas Where New Town or Redevelopment Projects Were Cancelled and Direction of Housing Regeneration

The Seoul Metropolitan Government (SMG) has been seeking to improve the northern part of Seoul, with its concentration of deteriorating homes and inadequate infrastructure. It aims to balance regional development between its southern and northern halves. However, in the wake of the 2008 financial crisis which began in the US, a number of urban redevelopment projects had to be canceled. Consequently, residents owning land in the designated redevelopment areas, known as "New Towns", were not able to exercise their property rights. In 2012, the SMG came up with a New Town Exit Strategy, an urban regeneration policy. The objective of urban regeneration policies is to reinvigorate targeted areas through renovation and investment, rather than large-scale redevelopment. Analysis of Conditions of the Areas Where New Town or Redevelopment Projects Were Cancelled and Direction of Housing Regeneration evaluates the outcome of the policy and provides policy recommendations.

Nam-Jong Jang · Sang-Il Kim · Hyun-Jung Lee · Ce-Na Baik

Park Won-Soon, mayor of Seoul, announced the exit plan for Seoul's New Town and Redevelopment Projects in 2012.

This has allowed residents to decide whether or not to cancel the redevelopment projects in their area by assessing residential conditions and listening to the opinions of all residents. Alternative regeneration projects have been carried out in areas where the redevelopment projects have been cancelled.

So far, 393 of 683 planned project areas have been lifted ("cancelled areas"), but many have not been able to set the direction for residential regeneration.

In this study, we analyze the actual situation of these cancelled. We also review the direction of residential regeneration reflecting changes in conditions.

The main details of our study focused on the following four main research questions:

- 1. What are the achievements and challenges in the exit plan for Seoul's New Town and Redevelopment Project?
- 2. What are the major issues in the areas that have cancelled New Town and Redevelopment Projects?
 - 3. What is the applicability of the New Deal Policy of the central government?

4. What is the direction of residential regeneration in cancelled?

In this study, major strategies were prepared for the regeneration of these 393 cancelled areas in Seoul and detailed strategies developed.

- Strategy 1. Set priorities for policies and provision of support to regenerate the areas through strategic support for priority areas.
- Strategy 2. Seek ways to maximize the effects of urban regeneration by bolstering support for housing improvement, elaborating related policies, and focusing on provision of customized support aimed at resolution of issues in cancelled areas.
- Strategy 3. Implement urban regeneration in Seoul in cooperation with the central government. It is necessary to develop an urban regeneration model customized to Seoul and prepare to apply it to Seoul.
- Strategy 4. Establish a comprehensive plan for residential regeneration in cancelled areas.

02 Transportation Planning

Ways to Strengthen the Role of Autonomous *Gu*-Districts in Securing Pedestrian Space along Community Roads

The Seoul Metropolitan Government (SMG) is composed of 25 local district governments, known as autonomous *gu*-districts in Korea. Each local district government fulfills a variety of administrative functions including road management. Roads which are 12 meters wide and over are managed by the SMG. Autonomous *gu*-districts are responsible for managing roads narrower than 12 meters, otherwise known as community roads. There are numerous areas of concern that autonomous *gu*-districts should deal with related to community roads such as illegal parking and safety for walking children and adults. Ways to Strengthen the Role of Autonomous *Gu*-Districts in Securing Pedestrian Space along Community Roads offers recommendations for these areas.

Shin-Hae Lee · Jee Eun Jang

In Seoul, many policies have appeared as campaigns to create a more pedestrian-friendly environment, including 'Seoul - a walking city'. However, the complaint continues that Seoul policy is divorced from actual life, when considering that most of the available walk space is on community roads. This is mainly because a higher priority is given to vehicles under existing policy, Autonomous *gu*-districts manage their own roads and the sidewalk so they should play their parts in making residents' walk space. The problem is they aren't very successful with the related administration.

In this study, we review the role of autonomous *gu*-districts in securing walk space of community road from the institutional aspect and propose ways to increase such role.

Ommunity road is a term used in the traffic domain, and is undefined by law. In this research, the spatial extent of community roads is set as the narrow alleyways in dense residential areas of existing urban districts where it is hard to secure walk space due to existing regulations.

[Table 1] Definition	of a	community	road	in	existing	research
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	Details
Characteristics of the Area it is located	Existing urban area (excluding land for development of new housing and reconstruction) Dense residential area
Classification of the Road	Roads less than 12m wide (narrow road)

Narrow alleyways of less than 12 meters in width make up 77.2% of all roads in Seoul, and these include community roads. Pedestrians and vehicles should coexist on community roads by their nature. For provision of space and access is regarded more important than enhancement of mobility on the roads, conflicts between pedestrians and vehicle drivers occur more often than other types of roads.

Accordingly, both pedestrians and parking space need to be considered when securing walk space and operating community roads.



[Figure 1] Problems on community roads

Understanding how community roads are being used is essential to securing walk space and resolving parking issues in residential areas. A community road database is needed to immediately respond to walking condition-related issues. In fact, autonomous *gu*-districts fail to fully grasp how community roads are being operated. The purpose for a community road database is to understand the current situation of roads and secure walk space. Spatial information about roads must include width, type (one-way, two-way), footpath locations and type, and footpath

width. It is necessary to subdivide areas by building units when collecting information on walk space. Existence or nonexistence of footpaths, width, type, and status must be included in the information.

Autonomous gu-districts conduct field surveys to identify parking supply and demand within their jurisdiction. It is possible to build a community road database with existing human resources and administrative procedures if the necessary information is added. Also, the database can be used to resolve parking violations in autonomous districts and secure parking space for residents.

[Table 2] Details of spatial information about roads

Section	Road width	Road type	Parking spaces on road	Walk space	Footpath location	Footpath type	Footpath width	Parking violations?
Road space	Meters	One-way Two-way	No Yes	No / Yes_One side / Yes_Two sides	In the road/ Beside the road	Precast paver/Bollard/Setback of the building line	Meters	Yes No

[Table 3] Details of information about walk space

Section	Foot path	Footpath type	Walk space conditions	Width of walk space	Etc.
Walk space	Yes	Precast paver/Bollard/Fence/Setback of a building line	objects piled up on a road /Parkingspace /Etc.	Meters	Buildings blocked by a wall standing between them/Difficulty in distinguishing a boundary line of a building/Etc.

Existing road space is designed for vehicles, but community roads are in the area where people live. Therefore, community roads need to prioritize walk space and parking space for residents. Only then should planning include space for other vehicles, so the community road management project is designed mainly to secure walk space.

Currently, a building setback is included in the walk space of urban districts.

Existing road space plan:

Road - Carriage way - Parking space = Walk space



Community road space plan:

Road - Walk space - Parking space for residents = Carriage way

[Figure 2] Community road space plan

[Table 4] Road space that needs better management

Section	Type of 1	oad space	Example
Type 1	*	riage ways and walk ace	
	Walk space location	On the road	-0/1/
Type 2	Type of walk space	Precast pavers	
	Walk space conditions	Parking	
	Walk space location	Beside the road	
Type 3	Type of walk space	Setback of the building line	
	Walk space conditions	Parking	

[Table 5] Improvement operation plan for Community Roads

Order of priority in the plan	Improvement operation plan
Securing walk space Securing parking space for residents Passing vehicles Other parking	 Parking violation → Parking enforcement (Resident vehicle → Using community road database, provide legal residents' parking area of priority) Operate '30 Area' Decide mixed traffic street or devise carriage way management plan as the road width Road more than 7 meters wide: Consider parking space for visiting vehicles

Autonomous districts are now responsible for managing community roads and prioritizing walk space thereon. To understand how community roads are being operated and address any issues concerning them, there is a need to improve the operation system of community roads, using the community road database. Continuous efforts to maintain the construction database and smoothen road operation is required. In addition, prompt response to any change in road conditions is necessary. If the data about community roads are reflected in autonomous *gu*-districts' walk space-related plans, they can be managed on an integrated basis.

Each autonomous *gu*-district should carry out self-directed projects serving the needs of its jurisdiction. In reality, there are not many projects aimed at amelioration of walking conditions-except for Seoul Metropolitan Government (SMG)'s idea competitions. Even they are mainly about walking-friendly streets and improvement of walking conditions, lacking differentiation from those of other autonomous *gu*-districts. It is mandatory for them to develop their own projects meeting the needs of the areas they govern. Since issues relating to walk space on community roads are linked to safety of pedestrians, autonomous *gu*-districts should perform a primary role. They will be able to design self-directed projects, including measures for parking-related issues and securing walk space which are customized to their districts by understanding unique characteristics and operation conditions of community roads through utilizing a community road database. In terms of projects targeted at improving walking conditions, the focus should be on community roads and residents' needs.

In order to create a community road database for securing walk space and resolving parking issues through road management, funding is essential. There is a special parking space account under the Parking Lot Act that autonomous districts can use for traffic-related purposes. A community road database can be considered as part of a preliminary study for securing walk space and parking space for residents in an autonomous *gu*-district. It also can contribute to improving the parking environment directly and indirectly. With expansion of expenditures, it is possible to push ahead with numerous projects and cope with parking-related issues.

Moreover, every autonomous gu-district needs to define the scope of expenditure where characteristics of the area it governs are reflected for efficient use of the expenditure.

Moreover, Scope of expenditure should be defined upon consideration of regional characteristics for an efficient use of expenditure. Tasks such as creating sufficient public parking space are needed in the old housing areas which lack parking facilities. The problem here is that it costs a lot of money to build public parking lots. Therefore, it is desirable to variously make expenditure for improving a parking environment.

Community road is a term used in the traffic domain, and is undefined by law. In this research, the spatial extent of community roads is set as the narrow alleyways in dense residential areas of existing urban districts where it is hard to secure walk space due to existing regulations.

Recent Trends in Environmentally-Friendly Vehicles and Direction of Seoul Policy

The Seoul Metropolitan Government (SMG) has employed a range of measures to reduce Greenhouse Gas Emissions (GHGs) including promoting the use of electric vehicles (EVs). Diverse factors should be understood in designing EV policies, with the travel distance of gasoline cars one of them. Moreover, there is a need to forecast electricity demand with the increasing use of EVs. Recent Trends in Environmentally-Friendly Vehicles and Direction of Seoul Policy analyzes these and other factors to offer direction for the SMG as it aims to encourage its residents to use EVs.

Joonho Ko · Hyeongyun Ki · Sangmi Jeon

Transportation significantly contributes to air pollution as mobile source emissions are responsible for 47.4% of air pollutants emitted in Seoul, Korea as of 2013. To reduce greenhouse gases and other emissions, active policy actions are required to promote the wide use of environmentally-friendly vehicles such as electric vehicles (EVs).

Widening the use of EVs is dependent on cost of batteries and driving range. Fortunately, batteries have been falling in price and increasing in capacity, which is expected to boost the use of EVs. Analysis of travel distances for passenger cars has shown that internal combustion engines can be replaced by EVs even at the current level of EV performance. With their long travel distances, conventional taxis may be replaceable by 3rd generation EVs. Advances in EV technology will also contribute to electric buses making up 93% of all city buses in Seoul.

Based on an active EV delivery plan targeting 2050, EVs may replace 2.43 million conventional passenger cars, 7,200 buses, and 70,000 taxis, accounting for a total of 84.7% of all vehicles registered in Seoul. By then, EVs are expected to account for 6.4% of electricity demand in Seoul. During summer and winter peak hour electricity demand, they would account for 4.1% and 4.3%, respectively. This peak demand needs to be managed through variable electricity pricing. Considering that there are few EVs in Seoul, various EV-friendly policies may be required together with a sufficient number of accessible charging facilities.

Establishment of a Road Hierarchy Considering the Complex Traffic Functions of Arterial Roads

In the current road hierarchy, the key criterion for road classification is traffic volume. The road hierarchy being used nowadays was developed with the purpose of constructing a systematic and efficient road network. However, considerable changes have taken place in recent years. New elements of transport infrastructure have been set up, including exclusive median bus lanes and bicycle lanes. It is difficult to clearly classify arterial roads within this hierarchy. A new road hierarchy is needed that reflects the numerous changes that have occurred recently. The authors of Establishment of a Road Hierarchy Considering the Complex Traffic Functions of Arterial Roads present an improved arterial road hierarchy that considers daily traffic volume, number of bus routes, and pedestrian volume on 170 arterial roads in Seoul.

Wonho Kim · Gyeong-Sang Yoo · Kwang-Hoon Lee · Tea-Heon Lee

The current road hierarchy was established in the 1990s to facilitate smooth traffic flow. However, since then, new traffic infrastructure has been introduced, such as exclusive median bus lanes, curbside bus lanes, and bicycle lanes. Also, the importance of functions of roads in relation to public transportation and pedestrians has been gradually highlighted.

A new road hierarchy is needed. To examine the appropriateness of such a hierarchy based on traffic function, traffic volume, V/C², travel distance, and frequency of shortest route selection were analyzed for 170 arterial roads in Seoul. The average traffic volume and V/C of the major and minor arterial roads varied significantly from each other, indicating that the overall functional classification was appropriate. However, two major and eight minor arterial roads have functions different from other roads in the same hierarchy.

Due to the high density of roadside land use, public transportation and pedestrian traffic are concentrated on arterial roads, and a hierarchical system should consider

² V/C is an abbreviation of Volume-to-Capacity Ratio. It is a measure of the opening capacity of a roadway or intersection, in terms of the number of vehicles passing through, divided by the number of vehicles that theoretically could pass through when the roadway or intersection is operating at its designed capacity.

the complex road functions. For this purpose, the daily traffic volume of the road, the number of bus routes, and pedestrian volume should be considered in an improved arterial road hierarchy. In our study, e, each function was classified based on the diagnostic indicators of vehicles (V), public transportation (P), and walking (W). If it was higher than an average value, it fell into category high (1). Meanwhile, it fell into category low (2) if it was lower than an average value.

A total of 41 of 107 arterial roads were classified into V2-P2-W2, which include sub-mean values. On the other hand, the smallest type was V2-P1-W1, the vehicle function was below the average value, while the public transportation and walking functions were above average.

In the existing road hierarchy, design standards and operational strategies were determined on the basis of traffic functions of major and minor arterial roads. However, classification by complex functions of roads suggested in this study requires specific road design standards and operational strategies for each road category. The roads where vehicles, public transportation, and pedestrian functions should be emphasized at the same time should adequately balance public transportation and other traffic, and should restrict entry and exit from the sidewalk.

In the future, the emergence of autonomous vehicles and growing presence of personal mobility devices is expected to require more complex road functions. The proposed road hierarchy system will be used as a frame to accommodate changes in the roads to be developed in the future, and various operational strategies suitable for each road function should continue to be developed.

Strategies to Handle the Spread of Personal Mobility Devices

It is a common occurrence to see people using electric-motored personal mobility devices (PMDs) on the streets. PMDs are a last-minute connection for transit users, with tangible benefits. However, the Seoul Metropolitan Government (SMG) has neither the infrastructure nor the legal framework for this new means of transportation. In this context, **Strategies to Handle the Spread of Personal Mobility Devices** identifies ways to create a more PMD-friendly environment through partnership with the central government.

Gyeongsang Yoo \cdot Sangyeon Hong \cdot Oksun Kim \cdot Sehyun Park

The market for electric-motored personal mobility devices (PMDs) has grown rapidly in Korea. This study analyzes related problems and introduces strategies to manage PMDs in Seoul.

To decide whether to promote or regulate the use of PMDs in Seoul, this paper first examines their function as a means of transport.

It turns out that PMDs are not useful as transportation for the first and last miles of a subway trip in most regions. However, for those who have to walk long distances to access subway stations because of the poor bus service in their area, PMDs can be useful. They can also be useful in regions where public bikes are not available due to geographical barriers.

Meanwhile, in regions where private cars travel short distances, PMDs could be used instead. Private car usage in such areas are expected to decrease if the use of PMDs are promoted.

This study suggests the following strategies to manage PMDs in Seoul.

First, they should be regulated while the central government sets the relevant legal framework. Without such a framework, PMDs may compromise the safety of pedestrians and other users of the road.

Second, despite such regulation, the Seoul Metropolitan Government (SMG) should be able to cope with their increasing use. PMDs need to be tested for safety and guidelines set up for the city.

Third, after national legislation on PMDs is enacted, the SMG could support these devices as transportation modes for the first & last miles of subway trips and as an alternative to private cars for short distances.

Fourth, in an area that needs support for the use of PMDs in the mid- and long-term, roads should be maintained for continuous utilization of them.

To ensure this, the SMG needs to establish more bike lanes, reduce speed limits, and introduce low-speed lanes in areas where PMDs will be supported.

Lastly, the SMG will need to actively participate in legal discussions on PMDs. Through this, PMD-related legislation can include the necessary safety standards for all types of PMDs and that consider Seoul's road and traffic conditions.



Analysis of Time-Dependent Degree of Crowding on Urban Railway Platforms Using Smart Card Data

The average number of passengers using the urban rail system amounts to approximately 8 million each day in the capital area. The Seoul Metropolitan Government (SMG) has been improving physical facilities to better manage congestion and address safety issues. The problem is that expanding facilities is not a cost-effective solution. It is more effective to disperse massive passenger demand during peak hours. To continue service quality for passengers, it is essential to assess current crowding levels. Analysis of Time-Dependent Degree of Crowding on Urban Railway Platforms Using Smart Card Data proposes a method to estimate time-dependent crowding levels on urban railway platforms using smart card data. The authors present ways to reduce overcrowding in consideration of the characteristics of individual stations.

Seongil Shin · Minho Lee

Crowding management on urban rail platforms is important to improving levels of service, such as preventing train delays, and passenger safety. Measuring accurate crowding levels should precede effective crowding improvement policies. However, existing crowding levels are measured only every year or two and only at specific locations, resulting in poor accuracy. In recent years, smart card data has been effectively collected thanks to development of the AFC (Automated Fare Collection) technology and ICT (Information Communication Technology). This data is collected in real time every day and can be used to measure platform crowding by year, month, day and time.

This study suggests a method to estimate the time-dependent crowding level on urban railway platforms using smart card data. It analyzes crowding levels at the urban railway network level, since crowding levels reflect the concentration of passengers moving through the network. Crowding is measured in two stages. First, the trajectory is identified of all urban railway passengers recorded through smart card data, and the concentration and dispersed demand on the platform is estimated at one-minute intervals. For this, an optimal passenger route choice model is constructed to calculate the passengers who are boarding, alighting and on the trains at individual stations. The model was validated using information on transfers at

private lines recorded for fare settlement. Second, crowding levels are estimated by dividing the practical waiting area at each station platform by platform demand. Practical waiting area varies by platform structure. For example, in island-type platforms, all passengers traveling either way use the same platform, while on side-type platforms, passengers use separate platforms for each direction.

This study also proposes a strategy to mitigate crowding that would suit the characteristics of individual stations by utilizing estimated real-time crowding data. In addition, the effectiveness of the Early Bird policy, which is a representative example of demand management policy, was also assessed.

From this study, firstly, it is possible to solve the temporal and spatial constraints of crowding estimation and perform long-term time-dependent analysis. In other words, it is possible to conduct crowding analysis at all times from the time operations begin and end across the railway network. Second, the method for estimation of the time-dependent crowding level on urban railway platforms provides real-time and future crowding information to passengers. Third, it also can be used to design and change the platform structure and to adjust the train schedule.

03 Environmental Planning

Improvement of the River Water Usage Fee Scheme

The decentralization of administrative authority has been a continuing project in Korea. For years, the central government has possessed enormous authority in a variety of administrative functions and financial resources for public services. Discussions have been ongoing about the transfer of some of this authority from the central to local governments, a process which influences every sector of society. However, the river water usage fee scheme has been operated in an opposite manner, with each local government running its own program. In 2016, the central government announced that it would unify these systems. **Improvement of the River Water Usage Fee Scheme** identifies several problematic areas in this age of decentralization and proposes ways to resolve them.

Young-Ran Kim · Jung-Kyu Jin

The Ministry of Land, Infrastructure and Transport in Korea announced the third-revision of its comprehensive long-term plan for water resources in 2016. The revised plan aims to convert the river water usage system from a local government-management system to one which is state-led, for efficient use of river water.

Under the revised plan, a river water fee management scheme, which is made up of multiple local government programs, will become a unified, countrywide program.

The main content of the plan is as follows:

- 1) transferring the authority to collect water fees to the nation
- 2) raising a question about the exemption of water fees granted to waterworks businesses
- 3) adjusting local water rights (prescriptive water rights)
- 4) adjusting observed flow-based river water permissions

However, due to the state-led management method of the river water usage system, changes in the system directly affect local governments and local residents.

In addition, there is a suggestion that it could be difficult for local residents to secure stability due to the imposition of river water fees, which is not in line with the stated policy of strengthening local autonomy.

After comparing research results in related fields, it becomes apparent that it is necessary to unify the scheme under one agent in order to prevent conflict and to create efficiency in administration. In addition, it is necessary to adjust the prescriptive water rights to mitigate the occurrence of regional conflicts that could arise during the process of distributing the right to river water usage. There is also a need to cope with climate and environmental change. In addition, a common opinion was that river water fee exemption is contrary to the delegated legislative discretion.

On the other hand, there are divergent opinions as to whether river management should be integrated into the central government or local government. In addition, since the non-profit nature of the water supply business is not clear, there are mixed opinions as to whether the river water fee exemption regulations should apply equally in all cases. There are also conflicting opinions as to whether, in adjusting the prescriptive water right, compensation should be made for losses due to infringement of rights.

A survey was conducted to analyze the perception of 1,500 citizens residing in Seoul who directly manage household expenses and 100 persons who are experts in related fields on the river water fee scheme by.

The survey showed that 52% of the citizens and 55% of the experts believe that 'guaranteeing lives of citizens' is the institutional value ³that should be preferentially reflected in the river water fee system.

Regarding the question about how well the institutional values are reflected in current river water fee scheme, they answered the least considered institutional value is 'guaranteeing local autonomy' (citizens: 22%, experts: 15%).

³ Institutional values presented to them were a) guaranteeing lives of citizens, b) preservation of water resources at a national level, and c) guaranteeing local autonomy.

Therefore, it is necessary to secure the basic rights of local residents and improve the level of local autonomy. 60% of the experts said that the administrative bodies engaged in the river water system should be integrated into local governments. In addition, 72% of the experts agreed that prescriptive water rights should be adjusted or abolished

The reasons behind such answers were 'the practice of giving prescriptive water rights to local governments is against fairness' (32%) and 'such practice can spark disputes over water distribution among local governments' (32%).

79 percent of Seoul residents and 90% of the experts replied that the waterworks business is non-profit.

The reasons were 'waterworks business is of a public nature' (citizens: 62%, experts 91%) and 'business entities involved in the waterworks business are of a public nature' (citizens: 25%, experts: 4%).

49% of the citizens and 44% of the experts answered that there is a need to revise the relevant regulations so that the criteria for reduction or exemption of water fees can be applied to waterworks business.

Based on the above analysis, we propose a method to improve the river water usage fee scheme so that the basic right and local autonomy of citizens are guaranteed. At the same time, we propose measures and a rationale for system improvement to address the original function of improving the public interest.

In addition, we suggest five ways to improve the system:

- ① Unification of local governments on river water usage fee administration
- ② Application of the current river water use distribution method as a permissible flow rate method considering the local stream flow regime
- 3 Adjustment of prescriptive water rights for a limited time in the drought season
- (4) Amendment of river water usage fee ordinances to reflect local conditions
- (5) Amendment of the relevant regulations so that the criteria for reduction or exemption of water fees can be applied to waterworks business

A Study on Improving Utilization of Underground Water Leakage in Seoul

The Organisation for Economic Cooperation and Development (OECD) has classified Korea as a country with a severe water shortage. Therefore, it is pressing for Seoul to improve its water-use efficiency. The issue here is that the city has a serious underground water leakage problem. A Study on Improving Utilization of Underground Water Leakage in Seoul examines the scale and present status of the problem facing the Seoul Metropolitan Government (SMG). The authors suggest several ways to prevent underground water leakage and more efficiently utilize water resources.

Suk-Min Lee · Hyung-Mi Yoon

The amount of underground water leakage in Seoul has increased with the development of underground spaces. As of 2016, about 178,000 metric tons/day of leakage has occurred, which could be used as domestic water for about 800,000 citizens.

Considering various issues such as the environment and disasters resulting from the leakage of underground water, it is necessary to recognize this as a public resource that should actively be utilized, and reduce the leakage as much as possible. Most of it occurs from subways, underground utilities and buildings. The volume of sewage discharged (unused leaked underground water) accounts for about 27% of the total volume of underground water generated. Buildings have the most prolific sewage system but their utilization rate is very low, at around 25%.

It is therefore preferable to reduce leakage in private buildings rather than in public facilities such as subways and underground utilities. Currently, the sewer system of leaked underground water is used at a single fee, but an incentive system should be considered in order to reduce or waive water supply and sewage costs from the system and increase the utilization rate of this water.

Utilization in the public sector should be actively promoted. Currently, most of the leakage simply ends up in the river. However, since underground water leakage has the characteristics of a public resource, it is necessary to find a variety of potential sources of water, especially in order to secure emergency feedwater sources for disasters such as droughts.

Lastly, legal and institutional changes should be carried out to actively utilize leaked underground water.

Diagnosis and Improvement of Water Cycle Policy in Seoul

The Seoul Metropolitan Government (SMG) needs to properly manage rainwater in the interest of providing tap water for its residents, with a vision of sustainability. So far, the SMG has run a variety of programs based on its own master plans for rainwater management with a focus on establishing rainwater management facilities. However, a diversity of other factors should be considered in rainwater management, besides physical facilities. **Diagnosis and Improvement of Water Cycle Policy in Seoul** identifies the factors affecting rainwater management and offers policy directions.

Young-Ran Kim · Jung-Kyu Jin

The Seoul Metropolitan Government (SMG) has made a variety of efforts over 15 years to improve the water cycle of the city. Beginning with the "Study on the Master Plan for the Water Cycle in Seoul" in 2004, the "Master Plan for Rainwater Management in Seoul" was established in 2007, and the amount of rainwater to be controlled by the city was calculated. The Master Plan was revised in 2013, and a basis for imposing a rainwater management amount per standard facility was prepared. In addition, the SMG established a "Comprehensive Plan for Creating a Healthy Water Cycle City" and launched 46 policy projects to restore the water cycle.

However, the water cycle policy promoted by the SMG focused on the construction of rainwater management facilities, and many functions required for water cycle restoration, such as improvement of the urban environment, were not taken into consideration. In addition, water cycle policies are not connected with the plans in related fields. They do not reflect local conditions when constructing rainwater management facilities, and monitoring of maintenance and effectiveness is not carried out, meaning that policy sustainability is not ensured.

Therefore, the purpose of this study is to propose various objectives, directions, and strategies to introduce into the water cycle restoration policy, considering the environmental and institutional conditions that are changing in Seoul.

After comparing the water cycle policies in Seoul with those in the US, Germany, the UK, and Japan, it was determined that water cycle policies were performing

various functions overseas. In addition to constructing rainwater management facilities, they were linked with urban spatial planning to promote various unstructured measures.

A comprehensive evaluation of water cycle policies in Seoul revealed that the purpose of the policy was limited to rainwater management, did not include the existing urban district, and lacked connection with water management and urban spatial planning. In addition, local physical and environmental conditions were not considered in the construction standards for rainwater management facilities; nor was economic efficiency. Furthermore, facilities management and monitoring are not established, and policy feedback is not provided.

Therefore, this study proposes five improvement strategies to overcome the existing limitations while policy plays a pivotal role in urban environment and water cycle restoration.

- (i) Ensure the consistency of the water cycle restoration policy by integrating the "Master Plan for Rainwater Management in Seoul" and the 46 water cycle improvement projects into the "Master Plan for Water Cycle Restoration Policy";
- (ii) The objective of the water-cycle restoration policy is to include rainwater management, reinforcement of water reuse, creation of an ecological environment with a water cycle function, and impervious-surface management for comprehensive control of the urban water cycle environment;
- (iii) Include the urban planning method for impervious-surface management and the conversion of rainwater share to the local quota system in order to create a reasonable means of achieving a goal that will reflect the various conditions within the city. In addition, existing incentive support should be maintained to reduce the burden on the private sector;
- (iv) The water cycle restoration policy secures policy sustainability by linking with the water quality management plan, including urban spatial planning such as development management, green spaces, and traffic;
- (V) The physical, climatic, and municipal conditions of the area should be reflected when rainwater management facilities are constructed. In addition,

construction of rainwater management facilities should consider the various roles and functionalities of the construction, review its effectiveness and economics, and devise plans for low cost and high efficiency. Also, a monitoring plan should be prepared to enable policy feedback, and a management plan prepared to facilitate operation and management.



A Study on Improvement of Noise Reduction Measures in Seoul's Highway Noise Management Areas

The number of registered vehicles in Seoul exceeds 3 million. Among a number of issues, this number raises concerns over the amount of noise pollution for its residents. The conventional method of reducing such noise from roadways is to erect sound barriers, such as soundproof walls. The problem is that these barriers cannot be built everywhere and, in many cases, are not effective. A Study on Improvement of Noise Reduction Measures in Seoul's Highway Noise Management Areas explores ways to reduce noise pollution and the specific measures needed from the Seoul Metropolitan Government (SMG).

Yoon Shin Bae · Han-Na Park

With the increase in automobiles and the expansion of roads and of houses built adjacent to the road, the amount of traffic noise damage is increasing every year, along with an increase in civil complaints. Road noise is perceived as the most serious noise problem by Seoulites (citizens living in Seoul), and the number of complaints regarding problems such as sleep disorders and psychological stress is increasing steadily.

Noise insulation facilities designed for noise reduction measures, include low-noise pavements and soundproof barriers, forests, earth mounds, and tunnels. Forests and earth mounds are designed to ease the visual and psychological pressures rather than reducing actual noise. The problem here is that it is difficult to find space for planting forests in Seoul. In terms of soundproof tunnels, the soundproof effect is extraordinary. However, it is likely that neighboring residents can file complaints about noise and dust mainly coming from entrance of tunnels, safety accidents can take place due to rear-enders or outbreaks of fire inside the tunnel, and they can spoil the beauty of a city. These concerns should be considered,

Soundproof barriers are erected at the side of the road to reduce noise by reflecting, absorbing, and damping vehicular noise. However, installing soundproof walls causes problems such as visual degradation and there is little noise reduction effect for skyscrapers. While low noise pavements are effective in reducing explosive sounds ringing out on pavement surface of roads, air gaps on the surface

can be blocked because of dust generated from tyre abrasion and dust floating in the air as time goes by. What's more, the sound-reduction effect can be diminished and durability is lower than other soundproofing methods. For these reasons, the Seoul Metropolitan Government (SMG) has not been actively utilizing the method.

In order to prepare proper noise measures in public areas, the government should pre-determine the installation location of sound-restricting measures based on the SMG's criteria and refer to traffic factors such as noise and speed.

The study selected sound-restrictive measures by classifying surrounding conditions and traffic factors for 30 noise-intensive management areas. A noise prediction 3D program was used to simulate the reduction effects of each noise countermeasure. Although there are various and complex factors affecting road noise in urban areas, noise reduction measures which meet noise standards can be converted into noise insulation facilities that are environmentally friendly and safe for citizens. To this end, improvement of the urban landscape and expansion of the application of low-to-quiet packaging to reflect the surrounding environment are crucial, while continuous research is needed for durability and quality improvement.

Development and Application of Biodiversity Indicators in Parks and Green Spaces in Seoul

Creating an eco-friendly urban environment that preserves biodiversity is a pressing issue for the Seoul Metropolitan Government (SMG). While the SMG has spared no effort in promoting it, no indicator exists that can accurately measure the outcomes of its biodiversity conservation policies. **Development and Application of Biodiversity Indicators in Parks and Green Spaces in Seoul** aims to establish such indicators for biodiversity that can be used by the SMG.

In-Ju Song \cdot Cho-rong Yoon

Citizens are increasingly demanding a pleasant and biodiverse city environment, especially because of environmental deterioration resulting from urbanization. The environmental, ecological, economic and cultural values of biodiversity have grown recently and there is more emphasis on its role as a response to climate change. The Seoul Metropolitan Government (SMG) has prepared a strategy to implement the Biodiversity Convention at the city level and added a related project that delves deeper, called "Seoul's Biodiversity Strategy and Implementation Plan (2017 ~ 2021)". This study comprises the following phases: planning, design, remodeling, and maintenance. The overall aim is to develop an indicator that could be used to easily and objectively assess biodiversity everywhere and also specific habitats. This would enable the creation of more parks and green spaces. The primary aims of the study can be categorized as the 1) examination of domestic and overseas levels of development; 2) the status of application of the biodiversity indicators; 3) the status of parks and green spaces in Seoul and an analysis of the management system; and 4) the development of biodiversity indicators for Seoul and their application and utilization.

First, regarding examination of the development of biodiversity indicators and their application, existing domestic and overseas indicators and their applications were examined. Although the assessment related to biodiversity of diverse areas such as rural, urban, individual green spaces, etc., in this study, considering the spatial characteristics of the parks and green spaces in Seoul, studies on the unit scale of

cities, parks and green space were examined. In addition, both positive and negative implications were identified by analyzing the existing biodiversity indicators of Seoul for the building of sustainable urban parks and green spaces (2017).

Second, the parks and green space management system was analyzed to reinforce field-response capability as a way of contributing to the substantial promotion of biodiversity. Most of the parks in Seoul are managed and operated directly by the SMG and autonomous *gu*-districts; the maintenance-related decision-making and administrative affairs are performed by the worker in charge, and site maintenance and management tasks such as of facilities within the parks and green spaces are performed mainly by technical civic employees and non-regular workers. The data utilized for parks building and maintenance include the review criteria from the Seoul Urban Public Parks Committee, Special Specifications of the SMG - Section Landscaping, Parks and Green Spaces, the Consultation Manual for Parks and Green Spaces, etc., but there is no specific content on biodiversity.

Third, biodiversity indicators, which can be applied to the parks and green spaces in Seoul were developed. To achieve that, the existing indicators already developed were categorized and analyzed in detail through a review of both domestic and overseas literature, the laws and management system related to parks and green spaces were examined, and field investigations, field consulting and expert and working staff interviews were conducted. First, through classification and analysis of the indicators already developed in prior research, the major items of indication were classified and the assessment system examined, and from the detailed sub-level indicator analysis, an inventory for biodiversity assessment was built.

The results from analysis of existing indicators and field investigation conducted in several parks located in Seoul were used in design an indicator which can be applicable to Seoul. In addition, we examined the laws related to parks and green spaces in Seoul and the relevant maintenance system to make the indicators, currently used, reflect the reality more.

Subsequently, biodiversity indicators were determined through field investigation by area experts and interviews. The assessment area was categorized into habitat, bio-species and maintenance areas. The habitat area had 6 indicators: the number of water bodies such as wetlands, ponds, etc., the vegetation structure, plant layer structure, size of green space, food supply and green space connectivity. The bio-species area had 4 indicators: naturalized species ratio, vulnerability to climate change, emergence of ecosystem-disturbing species, and number of avian species. The maintenance area also had 4 indicators: management of ecosystem-disturbing species, monitoring and management, resident participation and partnership, and the parks and green space program.

Fourth, we performed a biodiversity assessment by applying the indicator developed for some parks in Seoul and presented ways to utilize the indicator. Considering the distribution and scale of the parks and green spaces in Seoul, a total of 6 parks (3 in residential areas and 3 in urban areas) were selected and the data secured through field investigation, analysis of existing data, working staff interviews, etc., and a biodiversity assessment was performed. Along with that, a biodiversity assessment was performed on the 3 ecology and landscape conservation areas in Seoul as contrast districts having high biodiversity and the results compared and analyzed. In the assessment results, the parks in residential areas all showed low scores in habitat, bio-species and maintenance areas, while the urban parks showed relatively low scores in maintenance. The ecology and landscape conservation area, which was the contrast district, showed good scores in habitat and bio-species.

Based on these findings, management direction was suggested in order to consider the enhancement of biodiversity during parks and green space planning and design process, as well as maintenance after construction, and utilization measures were suggested as basic data for parks and green space-related projects and data for review of the parks in Seoul Metropolitan City. In addition, as an assessment indicator was required to secure data through field investigation (such as the number of avian species, emergence of ecology-disturbing plants, etc.), a citizen-participation model was suggested in order to contribute to the securing of data for assessment while at the same time improving public awareness.

04 Economy

Analysis of Non-profit Startups and Youth Employment in Seoul

The Seoul Metropolitan Government (SMG) places a priority on youth employment when designing policies on the economy or welfare. It has also introduced a number of measures to boost employment among youth, implementing several policies to create jobs and reduce the unemployment rate. At the same time, employment opportunities have opened up in the context of the social economy. Non-profit startups provide such opportunities. They have the characteristics of both social ventures and non-profit organizations - similar to the former in that they come with new ideas and technologies, and similar to the latter as they work for the common good. In this study, the authors look in-depth at non-profit startups in Seoul to identify ways to improve the business environment for them. **Analysis of Non-profit Startups and Youth Employment in Seoul** offers policy directions aimed at stimulating business activities for non-profit startups.

Heeseok Park · Hyun-chul Jung

Due to an increase in internal and external uncertainties, Seoul's economy continues to grow at a slow pace from a resulting decline in investment and contraction in consumer sentiment. As a result of restructuring of the employment market and the preference for experienced workers, new jobs have been reduced and the number of unemployed youth has increased. Recently, an expansion of new industries and diversification within the social economy has increased the number of young entrepreneurs in Seoul. 'Non-profit startups', a concept which originated in the U.S., are beginning to emerge. These startups are not a perfect solution to youth unemployment, because of the limited number of staff that can be hired by such companies. However, considering the socio-economic trends mentioned above, non-profit startups can be presented as an alternative type of youth employment.

This study focuses on non-profit startups, established in various forms, as an alternate venue for youth employment in Seoul. Non-profit startups adopt a new form of business that has not previously existed, and are generally considered to be social contributors rather than for-profit entities; they are also perceived as

emerging new advanced-technology entrepreneurial businesses.

This study consists of four components: an analysis of the current status of non-profit startups, in-depth interviews with CEOs, surveys of employed youth, and a consideration of support policies and policy implications.

Firstly, we analyze the current status of non-profit startups, the concept of non-profit startups, spatial distribution of non-profit organizations and non-profit startups, and the impact on youth employment. Recently, several non-profit startups have emerged within the framework of non-profit organizations and social economies. We introduce major overseas cases to facilitate an understanding of the concept.

Using the concept of non-profit startups as defined above, we first select major startups in Seoul and analyze their current status and characteristics. Secondly, we conduct in-depth interviews with the CEOs of several startups and conduct a survey of youth employed in non-profits in Seoul. In-depth interviews were conducted with 5 major non-profit startups, during which we looked at general information concerning each company, the start-up process and experiences, main business thrust, their opinions on non-profits and youth employment therein, and their opinion of policies regarding the non-profit sector and startups. In addition, we surveyed youth working in non-profit startups in order to gain a true perspective of youth employment. The survey consisted of job status, job satisfaction, vision for the future, and any desirable changes regarding institutional support and public perception towards non-profit startups.

Thirdly, we discuss support policies for non-profits, including non-profit startups, and for youth employment. Support for non-profit organizations can be summarized as the support of NGOs as implemented by the Ministry of Government Administration and Home Affairs. The youth employment support program examines policies relating to non-profit startups among the youth employment policies currently carried out by the Seoul Metropolitan Government (SMG). Finally, we detail the implications and recommend policy direction.

A Study of Private Investment Projects in Korea and Japan: Policy Implications and Case Study

Korea experienced a surge in major infrastructure development projects between the 1970s and 1990s. At the time, such projects were financed with public funds. Nowadays, only a few such projects can be completed in this way. Infrastructure projects are generally carried out with funds collected through private-public partnership (PPP). A Study of Private Investment Projects in Korea and Japan: Policy Implications and Case Study pinpoints problems with PPP projects in Korea and offers policy suggestions through detailed analysis of case studies of Japan's infrastructure projects.

Dong-Geun Kim et al.

The concept of public-private partnership to construct and operate infrastructure began with the Europe waterworks of the early 1930s and expanded from there to roads and railways. Private investment projects in Korea are declining, whereas Japan is increasing its business growth due to diversification of its PFI (Private Finance Initiative). Korea and Japan have several legal and institutional differences, such as the manner of selecting private investment projects, public sector investment, mandatory disclosure of information, status of public assistance and public funding assistance. Japan actively pursues policies promoting private investment projects through the adoption of a consulting scheme and the establishing of infrastructure funds. However, Korea is relatively passive when it comes to private investment projects. As our analysis of PFI in Japan shows, Korea and Japan differ in both project types and ancillary complex facilities.

This study recommends that Korea disclose information about public investment projects as Japan does, to diminish public distrust by vitalizing private participation. Korea must also support the private investment projects of local governments by supporting labor and operating platforms, and apply private investment projects to various facilities, as Japan does. Lastly, Korea must modernize its outdated facilities with private investment projects.

The Fourth Industrial Revolution and Industrial Policy in Seoul

Currently, the Fourth Industrial Revolution (4IR) is in nearly every conversation in Korea. The 4IR is characterized by emerging technological breakthroughs in numerous fields such as artificial intelligence (AI), the Internet of Things (IoT), big data, and quantum computing. It is set to drastically transform the way products are manufactured and services are delivered. Since 4IR will tremendously impact all industries, the Seoul Metropolitan Government (SMG) has also directed its attention in this area. In fact, 4IR has brought about more changes in Seoul than anywhere else in Korea. The Fourth Industrial Revolution and Industrial Policy in Seoul predicts further changes 4IR will trigger in the city.

Jae-uk Ju · Jie-yeoun Lee

The goal of this research is to make recommendations for Seoul's industrial policies when responding to the fourth industrial revolution. In search of this goal, representative domestic and foreign policies concerning the fourth industrial revolution have been reviewed, and a technological development path has been forecast based on an understanding of the city's industrial structure.

Various discussions concerning the fourth industrial revolution are introduced here. A group of authors including Eric Brinjolfsson, Andrew McAfee, Don Tapscott, Eric Schumidt and Jared Cohen are optimistic about the future as technology develops, while others differ, such as Nicholas Carr, who warns of the risks of highly-developed information technology, and Robert Solow, who suggests his 'productivity paradox'. Despite this divergence, most experts agree that current changes in global society are driven by technological innovation.

The Seoul Metropolitan Government (SMG) has a service industry-oriented industrial structure. The fact that recently-developed information technology such as artificial intelligence (AI) and the Internet of Things (IoT) are likely to be used initially in the service industry suggests that we can expect Seoul will experience the impact of the fourth industrial revolution sooner rather than later.

Our survey result indicates that the fourth industrial revolution may bring about positive change in our society. Examples of such change are as follows: (1) improving convenience; (2) boosting the quality and quantity of jobs; and (3)

offering growth opportunities to small companies. However, polarization due to data and technology gaps and the possibility of social and ethical problems are considered negative aspects.

In conclusion, this study recommends the following policy directions for Seoul. First, it is necessary to reform education policy including vocational education, talent education and new technology utilization education to prepare for this industrial revolution. Second, a new technology utilization policy is needed in the public sector. Third, it is necessary to revamp the legal system to cope with the fourth industrial revolution. Fourth, it is necessary to create a corporate ecosystem in harmony with a competition policy that can restrict the market dominance of large corporations, along with support for the promotion of various start-up operations.

The IoT Industry in Seoul: Potential and Strategies

The Internet of Things (IoT) industry is in the spotlight. The term "Internet of Things" is defined as the network connecting objects in the physical world to the Internet, allowing them to connect, interact, and exchange data. Diverse IoT businesses are being established in Seoul, and the Seoul Metropolitan Government (SMG) has been considering policy measures to support them. **The IoT Industry in Seoul: Potential and Strategies** analyzes the characteristics and problems of enterprises located in Seoul and presents policy recommendations for the SMG to effectively support these IoT firms.

Dalho Cho \cdot Jae-uk Ju \cdot In Hye Yu

The Seoul Metropolitan Government (SMG) recently has tried to promote businesses in the Internet of Things (IoT) industry which look promising. Among the whole Korean IoT industry, 40% of all firms and workers are concentrated in Seoul. Most of these firms are small, with 69% in Seoul employing fewer than 10 people and 61% being startups. Their sales are relatively small and their profits are around the break-even point. They are heavily concentrated in two areas of Seoul, Teheran Valley and G-Valley. An IoT ecosystem is composed of IoT devices, platforms, on-line services running on the cloud, and the network infrastructure connecting them. On-line services and platforms are provided using devices and the network infrastructure. In this context, IoT industry can be categorized into devices, platforms, on-line services and the network infrastructure. More than 60% of Korean on-line services providers are located in Seoul, whereas the city has the least number of device manufacturing companies.

IoT firms in Seoul provide new products and services by integrating IoT-specific technology with existing technologies, producing a very wide variety of businesses for which cooperation is essential for success. Cooperation is crucial among software and hardware producers, the four different fields of IoT, as well as IoT itself and other industries.

This research provides the statistical facts and characteristics of IoT businesses in Seoul and provides several policy suggestions for the SMG. For example, through in-depth interviews with IoT workers in Seoul, we found that they are

satisfied that the SMG presents startups and small-and medium-sized enterprises with opportunities to participate in IoT pilot programs. Meanwhile, they consider it necessary to improve current practices surrounding investment where institutional and individual investors demand collateral or prototype products from companies like them before making investment.

In this research paper, we suggest viable policy directions and measures from the viewpoint of the IoT startups in Seoul.



05 Urban Administration

Reasonable Improvement of the Committee System for Collaborative Governance in Seoul

The political framework of South Korea is one of a representative democracy with its advantages and disadvantages. There is increasing need for collaborative governance that can remedy the shortcomings. In collaborative governance, social consensus, formed through consultation with stakeholders, is required prior to any decisions, and is in the spotlight as an alternative to classical representative democracy. The Seoul Metropolitan Government (SMG) has implemented a committee system towards properly implementing such a framework. Reasonable Improvement of the Committee System for Collaborative Governance in Seoul aims to understand the current status of the system and lays out a variety of policy recommendations on how to improve it.

Byeongsun Jeong · Hyunhye Cho

As an alternative, participatory democracy and deliberative democracy are becoming widespread in society as the limits of representative democracy are becoming better understood. In accordance with these political and social changes, there are efforts to switch the administrative system to an idea of 'government as an open platform'. Different approaches and policy values also need to be considered for the committee system - a traditional channel for civilian participation in administration - in this new environment. Therefore, in this study, we seek an 'integrated multiple value-based approach', that involves openness, representation, and autonomy through participation and cooperation, in addition to the traditional values of expertise and efficiency. The purpose of this study is to elucidate the qualitative leap forward of a committee system that is collaborative governance-friendly, and leads to government as an open platform.

We look at the current situation of the Seoul Metropolitan Government's committee system, evaluating it according to ten administrative values. Four pending issues with the current systems are identified:

- 1. There is a need for reasonable improvement of the committee management and operating systems;
- 2. There is a lack of diversity in committees that does not allow effective transition to an open platform;
- 3. There is a need to improve and strengthen autonomy and effectiveness of the private sector in the process of committee operations;
- 4. There is a need to revitalize committee operations.

When addressing these pending issues, the committee system of the Seoul Metropolitan Government (SMG) should actively progress toward being more collaborative governance-friendly. We propose four strategies for this transition to reconstruct the government as an open platform:

- 1. Committee management that is mission- and agenda-oriented
- 2. Reasonable improvement of existing committee operating systems
- 3. Introduction and expansion of innovative committee operating models
- 4. Establishment of supportive institutional environments to strengthen committee effectiveness and vitality

Improving the Management Evaluation System in Seoul

A range of functions are performed by a variety of public institutions under the umbrella of the Seoul Metropolitan Government (SMG). Their performance is evaluated by the SMG on a yearly basis and each must submit reports on their plans for management improvement. As affiliates of the local district government, public institutions are required to implement the values it espouses. However, it is questionable whether the SMG can properly assess them under the current management evaluation system. Improving the Management Evaluation System in Seoul examines the criteria for evaluation of the SMG's affiliated organizations. The authors also spotlight flaws in the system and suggest ways to enhance it.

Gui Young Kim \cdot Min Chul Shin \cdot Min Sup Hwang \cdot Jung Yong Lee

This study examines the functions and management of public institutions in Seoul. A policy proposal is made for comprehensively improving the management evaluation system and the management system itself.

The core research content is as follows. First, we will understand the concepts and types of public institutions in local government through a review of existing literature. Then we review management and problems through a multi-dimensional analysis of the management evaluation system. Finally, this study suggests ways to improve the management evaluation system for public institutions in Seoul and makes detailed policy recommendations.

The problems with the management evaluation system of public institutions in Seoul can be summarized as follows. First, the current system is designed to foster competition between individual public institutions. Second, Under the current evaluation system, the public character of public institutions is not adequately reflected for it is based on efficiency.

Third, evaluation is designed to control the institution without ensuring its autonomy. Fourth, the current evaluation system is based on short-term performance rather than long-term.

In its conclusion, this study suggests four policy directions and detailed policy proposals to improve the management evaluation system. First, it is necessary to convert the core policy of the local government's public institutions into a system capable of competing and to transfer authority over evaluation of public institutions' management to local governments. Second, the system needs to reflect the public character and efficiency at the same time.

Third, institutional improvement is needed to strengthen institutional autonomy and accountability. Fourth, it is necessary to transition to an evaluation system that looks at the long term and varies according to the specific characteristics of each public institution.



Financial Outlook and Effective Expenditure Strategy in Seoul

The level of financial independence of the Seoul Metropolitan Government (SMG) is higher than other cities. In spite of its healthy finances, a long-term financial analysis is needed for the SMG, which should focus on whether the SMG can implement a variety of systems and policies while struggling with low economic growth and low birth rates. **Financial Outlook and Effective Expenditure Strategy in Seoul** offers the long-term financial prospects of the SMG, along with policy recommendations.

Jun-Sik Bae · Bum-Sik Kim · Seung-Yun Kim · Jin Kim · Seok-Hwan Lee · Seong-Moon Park

The purpose of this study is to develop an efficient spending strategy through a long-term fiscal outlook for Seoul. Seoul faces many problems that must be addressed as it enters a low-growth era of low birth rate, fast aging, declining growth engines, and polarization of income. It is necessary to resolve anxiety about the coming future and make efforts to increase the equity of the generational burden. The long-term outlook for Seoul's future financial needs provides an important starting point for this endeavor and an important basis for discussing the future situation. Of special importance is to prepare for an increased financial burden due to the low birth rate and fast aging, which is accompanied by a "population cliff" - it is time to make efforts to expand the tax base in addition to ensuring efficient expenditure in the social welfare sector. Long-term financial prospects can be a driving force for policies that can reasonably and effectively promote policies to prepare for the future. These long-term prospects are critical as a starting point to establishing financial conditions that can guarantee a minimum quality of life for people as human beings.

As a result of our long-term financial analysis, the total revenues of the city of Seoul in 2040 are estimated to be KRW 40~49 trillion, and total expenditures KRW 46~52 trillion. Social welfare spending will be approximately KRW 21.4 trillion in 2040, with approximately KRW 1 trillion spent on employment and KRW 3 trillion on SOC (Social Overhead Capital)⁴.

Policy directions and strategies related to social welfare, jobs, and SOC spending are as follows. The main goals in the social welfare sector are: 1) Virtuous welfare

investment in growth and distribution; 2) Design and expansion of welfare policy based on income; and 3) Reorganization of expenditure strategies for financial efficiency. For this, it is necessary to revise the income guarantee system to cope with poverty, construct an income floor through income-led growth, systematically reduce fraud concerning reception of welfare benefits, and review and adjust the standard subsidy rate. The main policy directions for employment are: 1) Expanding and restructuring expenditure on employment projects; 2) Enhancing the effectiveness of expenditure on the employment projects; and 3) Strengthening vocational training in preparation for the Fourth Industrial Revolution. To this end, it is necessary to restructure financial expenditures from direct job-creation to indirect support for employment, to allocate funds for jobs based on demand and performance of the employment projects, and to provide vocational training and start-up support considering the interface and cooperation between people and machines. The major policy directions in SOC are as follows: 1) Upgrade the SOC system in Seoul; and 2) clearly prioritize infrastructure projects. To this end, it is necessary to replace aged facilities, install infrastructure supporting future industries, invest in infrastructure in a systematic way, and expand the scope of that investment.

⁴ A Social Overhead Capital (SOC) is the social capital mainly owned by the government that is the basic facilities and services needed for the functioning of a community or society, such as transportation (roads), education and health (schools, public libraries, and hospitals), communications and utilities (telephones, water, electricity), etc.

Strategies to Improve the Autonomy of the Seoul Metropolitan Government (SMG) through Comparison with Advanced Mega-Cities in Other Countries

There have been ongoing discussions on decentralization of administrative authority in South Korea and the Seoul Metropolitan Government (SMG) has been the focus of them, largely because Seoul is the capital city and has the largest population. The major issue here is that administrative, legal and financial responsibilities have not been fully devolved to local governments in South Korea. Under these circumstances, it is worth assessing the SMG's capability to handle greater local autonomy. Nonetheless, there is no local government comparable to the capital city in South Korea that could prove helpful in assessing the local autonomy of Seoul. Therefore, Strategies to Improve the Autonomy of the Seoul Metropolitan Government (SMG) through Comparison with Advanced Mega-Cities in Other Countries measures the level of local autonomy of 4 big cities overseas:

New York, Tokyo, London and Paris. The authors appraise the SMG's ability to handle greater local autonomy by comparing it to the capabilities of global cities. Policy recommendations are also provided.

Hee-Yun Jung · Jung-Min Shin

Seoul is in a very different situation from other local governments in Korea. It plays a leading role as a capital city with a dominant socioeconomic position in Korea. It is the hub for business and government agencies. It is also a mega-city with over 10 million residents. Thus, it is inevitable that Seoul is preparing its own decentralization strategies, in keeping with its mega-city peers abroad. The purpose of this study is to lay out a logical basis to strengthen the local autonomy of Seoul through comparison with other mega-cities around the world and suggest strategies and policy measures for decentralization that will benefit the city itself. We then proceed with a comparative analysis of advanced mega-cities abroad, focusing on specific issues in five domains of local autonomy: legislative power, organizational authority, financial rights, redistribution of government affairs, and government relations. Although many comparative studies concerning local autonomy are available, most confine themselves to the national level. While some comparative studies of local autonomy at the city level do exist, they do not properly address the specific issues Seoul faces in terms of these five domains of local autonomy. In this study, Tokyo (Japan), New York (USA), London (the UK), and Paris (France) were selected as comparable mega-cities to Seoul. Our comparative analysis of Seoul and these other four advanced mega-cities focuses on specific issues in the five domains of local authority that serve as the main obstacles or limits to local autonomy facing the Seoul Metropolitan Government (SMG) so far. Major findings of this comparative analysis are as follows.

The most important policy implication from this comparative analysis is that the four advanced mega-cities abroad have institutional frameworks for local autonomy that appropriately reflect their particular local characteristics in each mega-city's context. London and New York have their own individual local authority law reflecting their particular local conditions such as the Greater London Authority Act and the New York City Charter. France and Japan also grant significant local autonomy through clear statements in their Constitutions, such as the principle of subsidiarity. Of course, their achievements in terms of local autonomy are also outcomes of fierce rivalry between many related stakeholders over a lengthy period of time rather than through voluntary actions from the central government.

The major policy steps, from our comparison with other advanced mega-cities abroad, the SMG can take to improve its local autonomy can be summarized as follows. First, significant adjustments in state-commissioned work and strengthening the city's integrated administrative functions are needed. Second, the SMG needs to prepare practical programs and institutional frameworks concerning central-local governance. Third, Seoul needs to establish ties with other local governments and lead in revising the Constitution in the interest of a more decentralized national governance system. Specific policy proposals to improve the capacity of local autonomy of Seoul ties with other local governments are as follows. First, it is important for local governments to allow creative policy initiatives through an application of exceptions, with some conditions, beyond the existing legal system if in the public interest. This is especially important for Seoul, which is often at the forefront of the nation's first attempts at policy. For this purpose, institutional experiment clauses in the French Constitution are worth

reviewing as a good example. Second, appropriate adjustments of the affairs delegated by the central government and strengthening the city's integrated administrative functions can push ahead the goal of decentralization. Third, a local government-led policy evaluation committee is needed to identify the needs of local governments in relation to reallocation of tasks including budget, manpower, and organization. Fourth, an institutional framework for local autonomy impact assessments that require the participation of and consultation with related local governments needs to be set up in the National Assembly for legislation or revision of laws related to local autonomy.

The SMG itself also needs to transfer administrative tasks related to daily life to its *gu*-districts while strengthening its integrated administrative functions. A horizontal financial transfer system also needs to be considered, such as expansion of the Balanced Regional Development Fund to form social consensus for greater independence in local public finance. Ground-breaking institutional formation of a regional consultative body for the capital region are also required to reinforce the integrated administrative functions of the Seoul metropolitan area.

As a mega-city, Seoul needs to implement its own decentralization strategy by carrying out the following tasks.

The administrative organizations, self-directed tasks, and government affairs of a mega-city like Seoul, which is both the capital city and home to over 10 million residents, are drastically different from their counterparts in other local governments by nature. Thus, Seoul must consider its particular conditions when considering its own decentralization strategy. Expansion and reorganization the Act on Special Cases Concerning the Administration of Seoul Special Metropolitan City which has no meaning today, can be considered as one policy tool.

However, related clauses in Acts related to local autonomy need to be revised in advance in the current legal system.

At the same time, Seoul needs to prepare its own clear policy measures concerning organizations, civil servants, and administrative affairs, and find ways to put its policy measures into local ordinances. Seoul also needs to seek ways to

strengthen its responsibilities concerning autonomy. in order to persuade the central government and form solidarity with other local governments.

Expanding the right of residents to make choices, such as through opinion polls and active participation in public policymaking, need to be seriously considered. Last but not the least, it is worth seeking to grant the right to the mayor of Seoul to introduce legislative bills to the National Assembly. In-depth review is needed to find out how the mayor of London received the right to submit bills to the UK Parliament.



Plans for Reorganization of the Education and Training System for Future Change in Seoul

It is mandatory for civil servants in Seoul to receive education and training on a regular basis. The Seoul Human Resource Development Center, established by the Seoul Metropolitan Government (SMG), provides a system of training programs as education plays a central role in preparation for society of the future. Plans for Reorganization of the Education and Training System for Future Change in Seoul predicts a paradigm shift in the future, exploring ways to improve the training programs with an aim to helping civil servants better cope with those changes.

Min-Chul Shin · Gui-Young Kim · Hyesook Lee · Seong-Moon Park

The purpose of this study is to examine the limitations in the existing system of education and training of civil servants in Seoul and to suggest a blueprint for a better replacement in the long term.

The main skills needed by civil servants who must cope with the rapidly-changing times is management of communication and adjustment. Education in the future should first focus on improving communication skills, critical judgment, and creativity, in addition to professional knowledge and skills directly related to their specific jobs. Second, it is necessary to reinforce an attitude of listening to the opinions of others and development of logic and critical thinking as a dominant and active learning ability. Connected to this is the basic ability to learn and actively accept new information and work methods. Third, empathy with citizens is also necessary, as are other forms of relational skills. In recent years, administrative services have been transformed into a variety of preemptive solutions to the problems citizens want resolved. A deeper understanding of policy targets is needed to provide such preemptive administrative services to citizens.

The most significant feature of changes at the Seoul Human Resource Development Center is the expansion of organizational tasks and functions as a result of task subdivision. Diversification in educational programs has emerged. The number of people attending training sessions has continued to expand - with a focus on online courses - and collective education programs have become more diverse. Although such diversity is in place and the organization subdivided, there

are still not enough manpower or facilities.

As a result of the diagnosis of external demands for education and training in Seoul, most participants are aware of the need for education on information that is helpful for self-development or one's specific job.

The trend in education seems to be focused on improving individual abilities to work. However, the ratio of participation and experiential courses need to be increased so as to encourage the development of a diverse and better curriculum. The number of courses which can help trainees to broaden their outlook on lives and relieve stress such as humanities or healing should be increased.

Analysis using the CIPP evaluation model⁵ shows that the situation surrounding education and training is closely related to civil servant workload. Although participants feel the need for education, there are no actual provisions in place. In terms of input, some goals of the training cannot be achieved due to diversity of content it covers. Process-wise, it is necessary to expand facilities in order to offer various types of training.

Finally, when it comes to output evaluation, parts where deviations are greater should be adjusted. In addition, there is a need to switch to an evaluation method so that training programs can be of help to developing policies

The basic principles for reorganization of the education and training system in Seoul can be divided into three categories: (1) Reflecting future skills and trends in training of the future civil service; (2) Linking and supporting the plans for basic education and training in Seoul to increase effectiveness of that education and training; (3) Providing only for the future educational needs and securing discriminatory expertise. Under these basic principles, the following directions for

⁵ CIPP evaluation model is a Program evaluation model which was developed by Daniel Stufflebeam and colleagues in the 1960s. CIPP is an acronym for Context, Input, Process and Product. CIPP is an evaluation model that requires the evaluation of context, input, process and product in judging a programme's value. CIPP is a decision-focused approach to evaluation and emphasises the systematic provision of information for programme management and operation.

reform are proposed: (1) Strengthen competency management in accordance with the civil service life cycle; (2) Build a learning support platform for education and training; (3) Create a learning support infrastructure for the future.



Operational Assessment and Improvement Schemes for the Landscape Deliberation System in Seoul

The Seoul Metropolitan Government (SMG) carried out a great number of development projects in the midst of considerable economic growth after the Korean War. In doing so, it neglected the landscape, as we can see from the numerous apartment buildings along the Han River. Currently, there is no separate committee to conduct landscape impact assessments for urban development projects. One committee reviews architectural design and carries out landscape impact assessments at the same time. This is quite problematic. Landscape impact is a critical issue that should be evaluated independently. **Operational Assessment and Improvement Schemes for the Landscape Deliberation System in Seoul** identifies problems within the current assessment process, and the authors present ways to make the assessment of landscape impact more effective for urban development projects.

Sang-hyeok Jeong · Ji-yeon Oh

Revision of the Landscape Act in 2013 has obligated landscape planning for new developments. The Seoul Metropolitan Government (SMG) does not establish a landscape committee but integrates the related functions into other relevant committees. Accordingly, specific issues about the effectiveness of the landscape review are addressed herein.

The purpose of this study is to analyze the actual situation of the landscape review system, identify the bottlenecks and suggest plans for improvement. To this end, recommendations based on an analysis of landscape review documents, interviews with landscape commissioners, and case studies of related review systems in Shinjuku (Tokyo), Incheon City and Incheon Free Economic Zone (IFEZ) are provided.

The results of evaluation of the current landscape review system are as follows. First, the inadequate number of landscape commissioners to look at landscape development projects is a cause for concern. Second, there is no regulatory authority to supervise landscape reviews and their implementation, or general landscape plans and policy. Third, the guidelines for landscape review are no different from the guidelines for deliberation by other committees. Fourth, the percentage of policy documents that meet the guidelines is generally low and major

items are often omitted. A landscape checklist is not submitted, or merely indicated as applicable/non-applicable. The conditions of the surrounding landscape are not analyzed and planning details that consider the surrounding area are not prepared.

In order to improve the landscape review system, the following basic directions are proposed.

First, it is necessary to strengthen the role of the landscape review. The SMG needs to strengthen the authority given to commissioners dedicated to landscape reviews and pool the efforts and services of landscape committee members to discuss the principles and standards for landscape management in Seoul.

Second, it is necessary to improve the process of deliberation by delving into the debate on landscape. The process of reviewing the landscape can be reviewed by introducing a pre-consultation method when the situations in Shinjuku ward and Incheon city are considered.

Third, enforcement of the authority of the administrative organization supporting the landscape review and system maintenance should be carried out collectively. To this end, it is necessary to strengthen the landscape management function of the landscape department, strengthen the professional manpower, and standardize the documents for landscape review.

Finally, comprehensive guidelines are needed for each region which utilize the comprehensive landscape plan of each district unit, and the plans of autonomous regions activated.

A Development Strategy for Intermediary Organizations Leading Governance in Seoul

The city of Seoul has a population of about 10 million and is 234 square miles (605 square kilometers) in area. There is a diverse array of policy demands, and it is difficult for the Seoul Metropolitan Government (SMG) to accommodate all of them - made by a staggering number of residents - with its limited resources. Therefore, it seeks to do so through intermediary organizations. A **Development Strategy for Intermediary Organizations Leading Governance in Seoul** explores the current status of these organizations. It also suggests several measures to support their sustainable operation.

Byeongsun Jeoun · Wonsill Hwang

The Seoul Metropolitan Government (SMG) has set collaborative governance and innovation as key policies. It operates intermediary organizations to implement the core policies over six years, beginning in 2018. Nevertheless, there is no clear concept or legal basis for these intermediary organizations and their roles and functions are also unclear. These institutional limitations are causing a variety of problems in their operation. The purpose of this study is to diagnose the situation of these organizations and offer guidance on preparing better plans for future development of Seoul.

This study identified five main ways to support sustainable development of the organizations. First, an institutional infrastructure for intermediary organizations is needed. The Act on the Promotion and Support of Intermediate Support Organizations in Seoul is in effect, and clarifies the definition of an intermediate support organization, its relationship to administration, and various methods for institutional support. Second, the government needs to introduce a civil agreement based on a horizontal partnership between administration and the intermediary organizations. Third, the intermediary organizations need to have stronger financial independence to secure autonomy in operation. This includes guaranteed autonomous use of their own revenues, donations and funds. Fourth, the intermediary organizations themselves need to operate more openly and democratically. Committees need to be formed and activated. Fifth, the government

needs to establish a consortium of intermediary organizations to strengthen their connection. In the long term, this will lead to establishment and operation of a merged intermediary organization.



06 Social Policy

Plans for Development of Labor Rights Agencies in Seoul

When flexibility increases in the labor market, firms can quickly adjust to fluctuations in the economy by adjusting their workforces. The issue here is that the number irregular workers among women and other vulnerable groups also increases. In addition, without institutional protection, labor rights can easily be trampled. The Seoul Metropolitan Government (SMG) has carried out a range of policies in this area, including the creation of agencies aimed at protecting the rights and interests of vulnerable workers. Plans for Development of Labor Rights Agencies in Seoul examines SMG policies on protecting vulnerable workers' rights. It analyzes the current status of these agencies run by the SMG and proposes ways to improve them.

Jin-Woo Joo · Kyung-Hee Shin · Hye-Young Kwon

The Seoul Metropolitan Government (SMG) has implemented various policies to protect the rights and interests of vulnerable workers under the vision of 'Special City Respecting Workers' Rights' since Mayor Park Won-soon took office in 2011. Labor policies such as making temporary employees permanent in the public sector, instituting a new living wage system, implementing the labor board system (Workers Participation in Management) etc. have produced good results in a short period of time. However, protection policies for workers' rights in private enterprise are still in the beginning stages. The 'Master Plan on Labor Policy', published in 2015, includes policies for reinforcing the exemplary model for employers in the public sector, protecting the rights and interests of vulnerable workers and guaranteeing labor rights in private enterprise.

Seoul established and operates several agencies for labor rights of workers in private enterprises. The Seoul Labor Center is a metropolitan agency for rights protection and welfare promotion for workers; the Workfare Center is an on-site support agency set up in 4 districts; and the Working Mother Support Center and Senior Helpers Support Center, each with a specific target, are also operated by the city.

These agencies became activated in a short period of time, but their user satisfaction has been comparatively high. However, the necessity of raising the effectiveness of the protection of labor rights needs to be reinforced by reestablishing the status and roles of the metropolitan labor center, the District Workfare Center and targeted labor rights agencies, because they do not operate based on a master plan.

With this in mind, we suggest comprehensive and systematic measures for development of the agencies working for labor rights.

First, the Seoul Labor Center should receive status as a metropolitan hub agency and the District Workfare Center as an on-site support agency. For this, legal counseling services regarding simple issues need to be provided by the District Workfare Center and the Seoul Labor Center should focus on protecting rights and offering legal aid to groups. The Seoul Labor Center needs to reinforce strategic planning and policy research, not only to protect individual workers' rights but also to enhance the rights of other workers in the same field. Support policies for vulnerable workers such as the Labor Rights Protector and the Honorary Citizenship Labor Ombudsman, which operate separately, need to be systematically managed by agencies for labor rights.

Second, the District Workfare Center, which is set up in only 4 districts at the present time, needs to be established in all districts to raise its effectiveness as an on-site support agency. At the same time, it needs to reinforce its basic labor counseling function by expanding its employment of certified labor consultants and support workers, who need focused support based on the characteristics of the labor market. It also needs to support the vulnerable workers' autonomous community to help create an environment that guarantees the right to organize.

Third, support of the labor administration needs to be reinforced for systematic development of appropriate agencies. For this, strategic projects for protecting rights of vulnerable workers need to be carried out, cooperation with districts needs to be arranged, communication and cooperation between the labor policy department and other departments needs to be reinforced, and a joint effort, with

cooperation from the Seoul Ministry of Employment and Labor, the Seoul Metropolitan Office of Education, and employer associations within Seoul, is a necessity.

In addition, plans for the stable and continuous operation of agencies for labor rights need to be prepared to encourage their activities concerning protection of labor rights. To that end, it is crucial to prolong the three-year consignment period regarding operation of the agencies working for labor rights. In addition, there is a need for the SMG to consider turning the status of the Seoul Labor Center into a foundation.



Analysis and Implications of the Community Support Program in Seoul

In 2012, the Seoul Metropolitan Government (SMG) initiated the Community Support Program (CSP) as part of its Community Empowerment Policy (CEP). The CSP aims to provide support in restoring a sense of community. **Analysis and Implications of the Community Support Program in Seoul** evaluates the outcomes of the CSP through analysis of a database of approximately 5,000 CSP projects, as well as policy strategies and goals, and offers recommendations for further development of the CSP. Of particular note is that this study delivers detailed analysis of key issues - the participants, the projects and related budgets.

Hyun-Chan Ahn · Ayoung Gu

The Community Support Program (CSP) has been a major platform in the Community Empowerment Policy (CEP) of the Seoul Metropolitan Government (SMG) since 2012. The CSP is a package of 56 sub-programs operated by 11 divisions of the SMG and 25 Local District Governments (LDG). However, due to the lack of data management, the SMG has not comprehensively examined the output of the program. This research analyzes a database of 4,937 projects in the CSP, along with their policy strategies and goals.

The analysis consists of three parts: participation, program and infrastructure, and program operating model.

In the participation part, the analysis results present both a quantitative increase and qualitative growth. The minimum number of participants was 128,743 over 4 years. As participation increased, the more the participants tended to take part as representatives and become involved at higher levels of CSP. The participatory groups were mainly composed of female, middle class, and between their 30s and 40s. On the bright side, the major participatory groups whose demand for and responsiveness to policies are high played a leading role in the program. However, more methods for expanding and diversifying the participant base are needed.

In the program and infrastructure part, the CSP operation was based on gradual support strategies. The 56 sub-programs were separated into five support levels: 1) seed formation, 2) activity, 3) space, 4) community network, and 5) community planning, with the first level receiving the most participation. Participation

decreased with the progression of levels. It is therefore necessary to reinforce support strategies for the higher-level programs, as well as enhancing connectivity between levels.

The self-supporting rate was 18% of the budget amount. The budget execution of the CSP has shortcomings regarding its self-supporting and customized-support principles. It is therefore necessary to consider expanding the self-support categories and diversifying the ways and means.

There are 240 community spaces in Seoul, and the distribution of community space shows that the more the LDG selects projects, the more community space it acquires, proving that the local infrastructure is properly placed. However, most of these communities suffer from financial difficulties in meeting rent and personnel expenses, meaning that a proper support plan to rectify these issues is needed.

In the program operating model part, in 2016 the SMG made an important decision that it would transform the local community support system from Seoul-led to district-led. When it comes to results of the 1st administrative district-led projects, there was a broad difference among administrative districts. The number of selected projects and participants differed by as much as 4.5 times and 9 times in different districts in terms of participation in the program, respectively.

This implies that it is necessary to differentiate between the size of an intermediate workforce group and its expertise.

This research has significance for database construction for projects in the First Community Empowerment Policy Plan, providing a quantitative analysis of the results, and interpreting policy goals and the likelihood of strategy realization.

What is special about our study is that it provides more detailed results about participants, projects, and budget by using microdata, compared to previous research.

Database construction and application systems are required for regular policy evaluation and improvement. This analysis leans towards a quantitative assessment, which is needed to provide more comprehensive evaluation results on the change in perception of participants, community networks, and satisfaction surveys.

Improvement of Community Space Support Programs in Seoul

Community cafes and other community spaces are physical bases where community members form bonds with one another and common values are shared. Realizing the importance of this, the Seoul Metropolitan Government (SMG) has supported the creation of community spaces since 2012. However, a considerable number of such spaces run into operational difficulties due to the lack of professional assistance and unstable earnings. Improvement of Community Space Support Programs in Seoul reviews the current operational status of these community spaces. It discovers community members' willingness to make operational improvements and meet policy demands through face-to-face interviews with space managers and a survey of 289 users. The authors provide directions to ensure both operational stability and self-sufficiency.

Hyun-Chan Ahn · Yun-Jung Cho

Over the past five years, the Seoul Metropolitan Government (SMG) has supported 331 local community spaces, but most of them have operational difficulties. This report proposes how to improve public support programs based on 74 space-manager interviews and a survey of 293 users.

The analysis consists of three parts. The first part is the basic condition of local community spaces, which covers the type of operating organization, operating periods, number of members and users, and the purpose and frequency of visits. The second part evaluates the outcomes of public support programs and issues of the spaces regarding autonomy, publicity, and self-reliance. The third part deals with policy demands, especially the priority of specific policy means and a willingness to pay on the part of the community. The results of the analyses show that local community spaces need to strengthen their profit structure based on community businesses, because they have high autonomy and publicity, with low self-reliance.

For improving the three existing Community Space Support Programs (CSSP), this report proposes four general directions and seven detailed suggestions, according to the requirements, resources, and collaborative system of the programs. This report hopes to contribute to the expansion of the scope of CSSPs, from beginning to growth stage.

It is a challenge for the SMG to execute other community space support plans

which are not suggested in this research which is needed to make local community spaces more sustainable. They can settle this issue by linking it to the research on community capitalization.

A Report on Seoul's Future Generation

Seoul has undergone major demographic, social and economic changes, including population aging and low birth rate. These changes have been dramatic, making it essential to conduct research that can broaden understanding of future policy demands of the younger generations. A Report on Seoul's Future Generation aims to provide an in-depth view of the current status of Seoul's next generation through social and cultural lenses.

Miree Byun · Minjin Park · Jinah Kim

Summary

Generational problems in Seoul have emerged along with demographic, social, and economic problems.

Why do we need to examine the future generation?

Seoul, the national capital of Korea, has been experiencing unprecedentedly rapid and unpredictable changes in demographics, society, and economics. Population aging and low fertility are no longer potential threats but an unavoidable reality. In the midst of such turbulence, generational conflicts have arisen. In the future, when Korea enters a super-aged society, who will support the older generation? Is the future generation, our children and the youth of today, prepared to support their parents' and grandparents' generations despite growing uncertainties? As the city's vigor weakens, the distribution of society's limited resources has become a contentious issue. It is inevitable that generational conflict and discord will be displayed through our political and social systems. In the face of growing uncertainty about the future of Seoul, it is extremely important to examine our future generation in an effort to broaden our understanding of potential policy demands. Rapid transition to an aged society with limited resources will require unrivalled efforts to harmonize the varying interests of the generations. To respond better to these social changes, we need to envisage where our future generation

stands, both from subjective and objective perspectives.

There are mixed opinions concerning research and sociocultural theories on generation

The research on generations was conducted through general discussions and sociocultural theories, including that of Karl Mannheim's. There are two different opinions concerning generation: one is that homogeneity and heterogeneity of generations is a social phenomenon, which will replace class conflict. The other is that a generation is a phenomenon where an original culture is established based on a population cohort. But a culture of a generation is flexible and variable. Generational problems emerge, as we witnessed in the distinct generation gap in preference for presidential candidates in the recent election. Some experts suggest that generational differences rather than class difference now lie at the heart of political dynamics. Others focus on the generational gap in technological literacy, communication methods and culture.

Significantly, there are a multitude of opinions about the idea of generation and how it was formed, with varying perspectives of research. Some believe that research on generation plays an important role in understanding generational differences and laying the groundwork for resolving conflict. Others state that such research blurs the essence of social conflict. In this study, we contend that it is important to grasp the political and social aspects of generational differences, and find that the future generation of Seoul shares a similar culture and generational sentiment, as well as internal heterogeneity.

The future generation accounts for 31.3% of the total population of Seoul and has socioeconomic homogeneity and heterogeneity

Fertility rates have decreased since the 1990s and the child population of Korea has plunged since the 2000s. By 2015, the number of those in their 40s and 50s amounted to 16.49 million - 33.2% of the total population. On the other hand, the number of people in their 20s was 6,413,832 and those in their 30s was 7,394,623, accounting for 12.9% and 14.9% of the population respectively, meaning that people aged between 20 and 39 accounted for 27.8% of the total population. Seoul's population structure was similar to the national one. The future generation in Seoul accounted for 31.3% of the city's population, with 1,403,549 in their 20s (14.7%) and 1,591,560 in their 30s (16.6%), a total which was 3.7% higher than the national numbers. To look at the marital status of the future generation in Seoul, 98.9% of those aged 20 to 24 and 89.1% of those aged 25 to 29 were unmarried as of 2015. For those in their thirties, 56.1% of the people aged 30 to 34 were unmarried, while 63.4% of those aged 35 to 39 were married, almost doubling the number of unmarried people in the same age group (33.7%). In terms of the form of household, single-person households were most common among the 25 to 29 group, but two-person households were the norm in the other future generation age groups.

The future generation in Seoul has optimistic dreams as well as concerns about their current status

We asked the future generation in Seoul to rate how happy they felt, with four out of ten responding they were neither happy nor unhappy. About 38.5% said they were happy, while 20.6% stated that they were unhappy. Their subjective level of happiness was not low, but they were dissatisfied with their current status. Nevertheless, this generation had dreams they wanted to achieve in their lives and they were optimistic about their future. About 68% of the respondents believed they

would achieve their dreams. In addition to achieving their dreams, they also believed that it is significant to have good personal connections, which belief can be analyzed from both a positive and negative perspective. They also considered support by the government as second-most important for their dreams, which could be a reflection on our society's attention to youth. To be more specific, women rather than men, married people rather than unmarrieds, and those with higher education and between the ages of 35 and 39 tended to expect more support from the public sector.

According to our survey, the future generation in Seoul is more concerned with having more romantic relationships, a spouse, and children, than having their own house or a decent job. To be sure, there were differences according to social class. Moreover, 51.3% of the respondents said they were not sure about what they really wanted. About 60% of them were confident about their capabilities and 59% of them said they had a fear of failure. Nine out of ten young people (88.5%) responded that they were stressed out. This is significant because in 2015 the primary cause of death for Koreans in their teens to 30s was suicide.

The most distinctive trait of the future generation regarding their attitude and sentiment: hybridity

More than six out of ten young people described themselves as "sympathetic and kind" (63.4%) and "trustworthy and self-disciplined" (60.1%). On the other hand, about half of them said they were "anxious and easily upset" (52.3%). Those with a higher income (above KRW 6 million per month) and more than five family members tended to describe themselves positively (about 70%), while more than half of those who were unemployed or had a higher education level perceived themselves as "critical and contentious".

Seven out of ten people (69.4%) asserted that they trust their friends and acquaintances. On the other hand, six out of ten people (64.4%) stated that "If a friend has a negative influence on my studies and job-hunting, it would be difficult

to maintain the relationship". About half (49.8%) believed that "cooperation would bring about a better result". However, another half (47.7%) said they preferred being alone to being with other people.

The future generation of Seoul tended to turn to different sources of help when they were in trouble. They asked for help from family members living with them when they had financial problems (51.6%), a health issue (48.8%), housekeeping and childcare difficulties (45.6%), and in cases of emergency or disaster (38.4%). On the other hand, when they had psychological or emotional problems, 44.5% of the respondents turned to their friends. On the question of their idea of a successful life, 40.7% chose "having a happy family", while 20.1% preferred "financial success". This clearly indicates that there is a duality in the dreams of the future generation.

Seoul's future generation is still under the influence of their family, but has a progressive political orientation

What does family mean to the future generation? When asked whether they shared their troubles with their parents, 31.8% said yes, but 38.8% said no, which suggests that this generation is at a period of transition into independent adulthood. However, it is not possible to conclude that the future generation has weak family relationships. According to our survey, the future generation is still influenced by their parents in decision-making. About four out of ten (40.9%) said their parents had an influence on their decisions, which is 16.4% higher than those who said the opposite (24.5%).

We also asked what might affect important decisions in Korean society. The highest scores (on a scale of five) were given to "personal connections from school ties, kinship and hometown" (4.15 points) and "external pressure or personal ties" (4.15 points), followed by "biases and emotions of decision makers" (4.07 points), "volatile criteria" (3.87 points), "no consideration of the opinions of those who are influenced by a certain decision" (3.57 points), and "lack of information" (3.35

points). To conclude, the future generation in Seoul thinks that external factors such as personal connections and background have a great influence on decision-making in Korean society.

In terms of political orientation, less than half (45.5%) regarded themselves as "progressive" - a combination of 4% responded "very progressive" and 41.5% "rather progressive". Four out of ten young people (39%) stated that they were "centrist", whereas two out of ten (15.5%) said they were "conservative" (rather conservative - 14.1%; very conservative - 1.4%). Compared to the political orientation of the general population, the future generation seems to be more progressive in general, with some ambiguity. According to the Seoul Survey of 2016, 38.2% of the Seoul population was progressive, 32.1% were conservative and 29.7% centrist. On the question of the responsibilities of good citizens, the future generation gave the highest score of 4.52 points to "participate in elections", followed by "pay the taxes" (4.37 points), "observe law and order" (4.29 points), "keep a watch on the government" (4.00 points), and "try to embrace different opinions" (3.96 points).

A Study on Issues and Policies Regarding a Basic Income

Korea has undergone low economic growth for many years. This phenomenon, coupled with the arrival of the 4th Industrial Revolution, threatens job opportunities. In this context, discussion on universal basic income has gained momentum in social policy circles. A Study on Issues and Policies Regarding a Basic Income investigates the feasibility of implementing a basic income policy in Seoul.

Kwonjoong Choh \cdot Sangmi Choi \cdot Dongyeol Jang

The issues around a basic income have been widely discussed in the academic and policy study arenas since late 2016. This study attempts to explain the concept of a basic income within the social security system. The need for research on a basic income accompanies an examination of the basic concepts, theoretical discussions, policy issues, characteristics of cases, and applicability.

Basic income is premised on the basic right of a citizen to live a happy life. In its strictest interpretation, it is defined as "a regular income paid in cash to every individual member of a society, irrespective of income from other sources, and with no strings attached". Basic income has become an important dimension of universal citizenship and needs to be examined in relation to the existing social security system. It can be applied as a cash benefit for young people and middle-aged people, who are poorly supported or guaranteed in the current social security system composed of public assistance programs and social insurance.

The principle of selectivity, which a public support program must consider for those who need welfare support, conflicts with the universality principle of a basic income. If the policy is to be introduced, social experimentation is needed to verify the expected effect, and it will be necessary to consider the practical applicability compared to the existing system. The financial burden of adopting a basic income tends to diminish the fundamental meaning of basic income when applied on a limited scale. While realization of an unconditional basic income is difficult under the present welfare system, its purpose can be positively reviewed.

The Structure of Welfare Spending in Seoul

With increasing needs for welfare among the residents of Seoul, the Seoul Metropolitan Government (SMG) sets aside a large portion of its annual budget for social programs every year. The amount of funds needed for welfare has been increasing since the current Mayor entered office in 2011. **The Structure of Welfare Spending in Seoul** looks at the changes in welfare spending between 2011 and 2016 in terms of the size of budget and types of programs it financed.

Seung-Yun Kim · Hye-Rim Lee

The total amount of welfare spending by the city of Seoul has increased significantly over the past years. In 2016, it reached roughly KRW 8.4 trillion, more than 34% of the total municipal budget. This study examines the structure of welfare spending in Seoul. We have categorized each of the welfare policies by its objective, life cycle stages of the target, purpose behind the policy and the type of benefit, and then cross-analyzed these to determine the distribution of the welfare budget. This study analyzed 3 years of annual budget data (2011, 2013, 2016) to observe the changes in welfare spending trends after the inauguration of Mayor Park Won-soon in 2011.

In 2016, welfare spending in Seoul concentrated on social welfare services for low-income people of all age groups, to support their living standards by way of providing services or expanding public facilities.

From 2011 to 2016 the welfare budget was highly concentrated on a housing policy for residents in general and low-income groups, care-giving for the disabled, child-care services and family support for infants, and education programs for students. This trend reflects the recent political efforts of the city under Mayor Park: dealing with housing problems by supplying affordable housing; increasing child-care benefits to escape the vicious cycle of low fertility; and expanding the free lunch program for healthy growth in children. In particular, since Seoul has led the work-life balance project from the front, the spending on employment policies for women was increased relatively highly after 2013, through the expansion of job training centers for women and support for the reemployment of mothers. Spending

on community welfare policies for all citizens has also increased since the Home Visiting Welfare project was launched in 2015, and the employment budget for all ages was newly designed after 2016 when the 50+ project for baby-boomers started.



Reality of Healthcare Utilization and Health-related Behavior of Medical Aid Beneficiaries in Seoul

There is no doubt that everyday habits, such as drinking or smoking, affect one's health. In the wake of increasing spending on health care services, it is in the interest of the Seoul Metropolitan Government (SMG) to enact policies to encourage healthier behavior. In that respect, it is particularly important to understand the behavior of people who have received medical aid. Reality of Healthcare Utilization and Health-related Behavior of Medical Aid Beneficiaries in Seoul examines the connection between medical aid beneficiaries and their behavior. The authors propose policy solutions that the city government can pursue.

Chang-woo Shon · Jung-ah Kim

Institutional changes such as an increase in Medical Aid coverage, expansion of covered stays and minimal out-of-pocket (OOP) spending have resulted in an increase in the use of healthcare services by beneficiaries, resulting in a dramatic increase in costs. Medical Aid's policy has changed significantly due to the expansion of covered services and healthcare costs. There has been little interest or concern regarding health behavior and the quality of healthcare services received by beneficiaries, as studies related to Medical Aid's policies have focused on the moral laxity of Medical Aid beneficiaries. Consideration of the propriety of the utilization of health care resources by Medical Aid beneficiaries is a major concern, as evidenced by healthcare services shopping. Against this backdrop, the aim of this study was to investigate healthcare utilization and usual health behaviors of Medical Aid beneficiaries by evaluating the quality of healthcare services received. Frequency analysis and multi-level analysis were used as research methods, and these analyses were conducted for comparison with Medical Aid beneficiaries, overall National Health Insurance participants and the National Health Insurance participants in the bottom 20 percent of the income bracket, estimated based on health insurance premiums. First, health behaviors such as high-risk drinking⁶,

⁶ High-risk drinking means the percentage of the respondents who answered he/she drinks more than a certain amount of alcohol (male: seven glasses, female: five glasses) more than

walking, perceived health status and mental health status for Medical Aid beneficiaries were worse than for overall National Health Insurance participants. From the aspect of healthcare utilization, especially for Medical Aid outpatients, outpatient visits and total healthcare costs decreased while OOP spending increased. For inpatients, overall healthcare utilization such as length of stay, total healthcare costs and OOP spending increased. Second, for quality of healthcare services, preventable hospitalizations of Medical Aid beneficiaries were statistically higher than 20% of National Health Insurance participants. However, emergency visits by Medical Aid beneficiaries were statistically lower than that of 20% of National Health Insurance participants. In addition, the study found that changes in health behavior and mental health were significantly related to decreases in healthcare costs and outpatient visits.

Based on the study results we present three policy suggestions. First, expansion of the Seoul Citizen Health Point program is needed to improve health behavior. Second, we need to construct and connect the dispersed resources in the community. The third proposed change is to improve the quality of healthcare services from the aspect of healthcare service providers, such as incentive programs to control quality.

Establishment of Seoul Happiness Indicators and Plan for Institutionalization

One can argue that the ultimate goal of urban policies is to make every resident happy. In fact, the city's vision for the future is "Seoul, a Happy City". Although this is a noble objective, policy makers will be puzzled as to whether the city is making any progress. In essence, this study, **Establishment of Seoul Happiness Indicators and Plan for Institutionalization** proposes a set of indicators to measure this happiness among residents of Seoul.

Miree Byun · Bogyeong Min · Minjin Park

Paradigm shift to a happy city rather than quantitative growth focused on Gross Domestic Product

Everyone wants to live a happy life. Happiness generally refers to a high quality of life. Korean society has enjoyed prosperity thanks to its stunning economic growth over the past half century. However, has this growth and development made us feel happier now than we did in the past? Along with this growth and development, there has also been an emergence of problems such as inequality, polarization, amplification of various conflicts, and lack of trust. Today, the suicide rate is the highest it has ever been in Korean society, while the birth rate is the lowest in the world. People are rethinking the meaning of economic growth. There is an increasing awareness that effort at various levels is needed to improve the quality of life and the quality of society. In particular, as Korea has entered a low-growth period, we need to figure out how to solve social problems. In the process of finding survival solutions in this low-growth period, a widely shared awareness has developed of the need for policy intervention to improve the quality of life of citizens in the public domain.

Discussion concerning happiness and how to measure it

Since the United Nations' World Happiness Report in 2012, the concept of social development and public policy aimed to promote civic happiness rather than economic growth has spread around the globe. As a result, happiness indicators have been designed which measure happiness, with a corresponding movement to utilize them. Statistics Korea has developed a framework and index regarding the quality of life. In 2014, it launched a service website focusing on the Korean Quality of Life index. A Korean Quality of Life measurement system was announced in 2017, consisting of 80 indicators in 12 areas which, according to Statistics Korea, utilize a composite index to summarize the results of the full Quality of Life report.

Indicators to measure happiness are being actively discussed worldwide. The UN's Happiness Report and the Organization for Economic Co-operation and Development's (OECD) Better Life Index can be used to measure happiness around the world and make international comparisons. Since Bhutan announced in 1974 that a country could be managed based on gross national happiness (GNH) instead of gross domestic product (GDP), many countries have tried to promote people's happiness. In November 2010, British Prime Minister Cameron said that general wellbeing (GWB) is important because GDP is an incomplete method of measuring national growth. GWB reevaluates the priorities in British life through the happiness index. Since then, the Office of National Statistics (ONS) has begun to develop a new measurement for national welfare and established the Measuring National Wellbeing Program.

As people in the same country have different happiness levels according to their geographical location, discussions are ongoing about happiness at regional and local levels as well as the national level. A regional happiness index is similar to a national happiness index, but is characterized by an active reflection of the characteristics of the area where people reside. The OECD established indicators to measure levels of regional well-being in 2014 and publishes results periodically so that regional comparisons can be made within the same country, in addition to

international comparisons. The United Kingdom established Local Wellbeing Indicators in 2017 to measure local well-being and compare well-being levels in local jurisdictions. In Australia, community well-being is measured to reflect not only the well-being of individuals in a community, but also relationships and interactions within that community. Therefore, Seoul Happiness Indicators should have not only general indicators, which can be compared with other megacities around the world, but also specific indicators detailing regional characteristics and activities.

Seoul Happiness Indicators reconstructed through citizen participation

Korea developed a Seoul Happiness Indicator system in 2014 and updated these indicators using empirical analysis and citizen participation. We first examined 24 indicators in 11 areas from the study "The Quality of Life in Megacities and Seoul-specific Happiness Indicators" in 2014. We also examined factors affecting people's happiness in Seoul, using data from the 2016 Survey. As a result, we determined specific social factors influencing happiness, and added several indicators for social networking and community. Based on results from citizen surveys, it was necessary to replace or remove several indicators such as the unemployment rate, participation in art activities, turnout rate, and parks.

Policy and institutional basis for utilizing Seoul Happiness Indicators

If Seoul Metropolitan Government wants society and the people to be happier, it needs to adopt "A Happy City" as the city's vision for the future and build a systematic framework to realize and reflect this vision in city policies. Seoul Happiness Indicators can be better utilized with institutional support and policy effort. To that end, we need to measure public happiness with these indicators and reflect the results in policies aimed to enhance happiness. This will not be accomplished by one individual department alone, but by a collaborative

governance system involving the local government, the central government, the National Statistical Office, non-governmental/non-profit organizations, research institutions, and the public itself. In order to create a platform for utilizing these happiness indicators, the city should establish a legal framework for a happiness ordinance. It also needs to specify details such as a dedicated organization and system operation methods.



Supporting Strategies for the Participation of Youth in Seoul

Due to the limited number of slots available in the best universities, Korean youth spend huge amounts of time studying. In Korea, participation in social activities is lower than its peers in the Organisation for Economic Cooperation and Development (OECD). International organizations such as the UN and UNESCO recognize youth participation as an important agenda and draft action plans accordingly. Supporting Strategies for the Participation of Youth in Seoul considers the context of Seoul and proposes policies to invigorate the participation of young people in a variety of social activities.

Hyesook Lee · Youngjoo Lee

The importance of youth participation has been highlighted globally over the years. There are many reasons why international organizations and governments emphasize youth policies and works by youth.

The purpose of this research is to help set agendas for improving youth participation in local communities. It also aims to suggest activity programs for youth participation.

To understand the actual conditions and requirements for youth participation, we investigated the current support system for youth participation in Seoul and conducted a focus group interview (FGI). In order to draw agendas for activating youth participation, Delphi research was conducted three times. The main results are as follows.

Based on Delphi and FGI results, this study recommends strategies, policy directions, and 13 tasks for increasing youth participation. We propose three policy directions, which include 'daily participation', 'proactive participation', and 'more adolescent participation in general', to encourage youth participation. To promote youth participation, we suggest the following key policy tasks: (i) reinforce the foundation of youth participation; (ii) expand youth participation in policy-making; and (iii) increase youth participation activities. First, to reinforce the foundation of youth participation, authorities need to establish a legal basis for youth participation, create mid- to long-term plans for youth involvement, and find ways to improve social awareness of youth-participatory programs. Second, to expand policy-

making regarding youth participation, we suggest the extension of suffrage for youth, creation of a youth-participatory budget system, making it mandatory to garner youth opinions in the policy-making process, and improving the system of youth participation.

Third, to increase youth activities, we suggest tasks allocated to youth policy participation committees, such as changing the selection method of committee members and disclosing parliamentary information online.



A Strategic Plan for the Promotion of Volunteering in Seoul

The meaning of volunteering is changing, recently expanding into something with greater potential to be a force for social change. It has become necessary to redefine what volunteering means, upon which policy direction to promote volunteering could naturally follow. A Strategic Plan for the Promotion of Volunteering in Seoul explores a new meaning for volunteering and suggests a range of programs that could encourage such activities in Seoul.

Sangmi Choi · Kyung-Hee Shin · Hye-Rim Lee

Volunteering plays an important role in delivering social services, in cooperation with charity and mutual aid, and its actual domain has expanded with the development of the civil society. From a traditional viewpoint, volunteering focuses on fundamental principles and practices: non-obligatory, unpaid work for the benefit of others, in an organized environment. However, as the domain of volunteering has expanded to similar categories such as civic participation, community service, social enterprise, and even paid volunteering, the traditional concept of volunteerism is being replaced by a more expanded and diverse approach.

It seems that volunteerism is undergoing a radical change, from a traditional program consisting primarily of delivering social services such as caring, to more professional, self-organized and flexible activities. The volunteer participation rate in Seoul has been decreasing since the late 2000s, because participation is only counted in the traditional format of volunteer activities, which takes place mostly in social service agencies or public institutes.

This study proposes an expanded perception of volunteering. By analyzing domestic statistics, reviewing overseas cases, and conducting in-depth interviews with volunteers and volunteer managers in both traditional and newly rising volunteer fields, the study draws policy implications for promoting volunteering in Seoul. It is suggested that volunteerism needs to include broader civic participation areas, especially taking into consideration volunteering at social enterprises and community-building activities. It also recommends that the Seoul Volunteer Center, as the hub of volunteering in Seoul, lead those changes by connecting the diverse areas of civil society and developing a variety of causes and programs.

A Study on the Use of Seoullo 7017 and Its Effect

In 2017, an elevated highway in front of Seoul Station was converted into a pedestrian walkway, known as Seoullo 7017. The name originates from the fact that the highway was built in 1970, but reborn in 2017. Since its inception, this new pedestrian space has drawn great attention from residents of the city and became a go-to place for tourists and residents alike. A Study on the Use of Seoullo 7017 and Its Effect surveyed residents who visited Seoullo 7017 to gauge its impact to see if the project, and its many related programs implemented by the Seoul Metropolitan Government (SMG), can be described as a success. The study also examines urban changes in the surrounding region.

Dosam Na · Jeonghwa Pan · Junghyun Lee

The Seoul Station Overpass, an industrialization heritage site and symbolic structure within Seoul, was reborn as "Seoullo 7017" on May 20, 2017. Seoullo 7017 is a sky garden with a pedestrian road and is promoted as a "road for people". The road is 1,024m in length with a width of 10.3m and a maximum height of 17m. Since its opening, various programs have utilized the site, and many people have visited out of curiosity.

This study examined the types of citizens using Seoullo 7017, the culture formed around its use, and changes occurring in the surrounding areas since its opening. The venue itself and its program management were analyzed as well, using big data analysis. A survey regarding use of the site use was conducted, and an analysis of local changes caused by Seoullo 7017 was performed.

The results of this study revealed that Seoullo 7017 itself is a success. As of December 31, 2017, approximately 7.4 million people had visited the site. Visitors usually spent their time walking, viewing the city, and admiring the vegetation on the pedestrian road. However, few people visited the communities surrounding Seoullo 7017, with most visitors remaining on the road. As a result, little change has resulted in neighboring areas. In other words, regional revitalization through the creation of Seoullo 7017 has not happened.

This study proposes three improvement directions. First, the tourism environment needs to be improved for visitors, which can be done through the

simple expedient of providing more information signs so tourists can better navigate the area. Events related to the road also need to be held in areas surrounding the site rather than being hosted solely on the pedestrian road, which would encourage the spread of visitors throughout the neighboring areas. Second, the relationship with the operating team and stakeholders in surrounding areas must become closer. It is essential to create a governance system that includes individuals in the nearby areas, such as the Urban Regeneration Center of the Seoul Metropolitan Government and Culture Station Seoul 284. Third, it is necessary to carry out continuous monitoring to examine any changes in the type of visitor. Focus currently is on the number of visitors coming to the site. However, to make better use of Seoullo 7017, the usage pattern of visitors should be analyzed. Periodic monitoring of actual use by visitors must be implemented to make improvements beneficial to the surrounding communities.

Model and Strategies of the Seoul Community Autonomy Board

In the Seoul Metropolitan Government (SMG), citizen participation is institutionalized in conducting urban policies or programs. The level of community is most important in terms of citizen participation, with active community participation critical to reaping the benefits for the greater good. What is important in this effort is to have a community organization that works effectively. Model and Strategies of the Seoul Community Autonomy Board looks at the current community participatory system and proposes ways to deal with the issues through the Seoul Community Autonomy Board.

Hyun-Chan Ahn · Ayoung Gu

As the primary administrative unit in Korea, the dong is considered the most suitable level for community autonomy and grassroots governance. The major dong-level community autonomy programs by the Seoul Metropolitan Government (SMG) are Resident Self-Governing Committees (RSGC), Community Planning, Participatory Budget Committees (PBC), and Preparatory Urban Regeneration (PUR).

According to comparative and empirical analyses, these are very similar in composition, function, and community organization procedures, but greatly overlap in participants and agendas. However, due to a lack of inter-departmental cooperation, they are operated separately, with little positive synergy.

Based on a case study of the Community Autonomy board of the central and municipal governments, this research proposes an ideal model and strategies for the Seoul Community Autonomy Board as an institutional design to integrate the segregated programs. The Board could then ensure wider participation, more horizontal partnership with the dong office, and more concrete resources for the community than is the case with the central government's basic model. The phased strategies for realizing the proposed model are the three stages of preparation, execution, and follow-up.

A Study on the Redefinition of Central-Local Welfare Relationships in an Age of Decentralization

Decentralizing power from the national government to locales has been a hot potato in Korea. It has been largely accepted by the Korean public that decentralization is the best way to pursue our agenda in the long run. Among other things, it involves redistributing financial resources for social welfare programs. To further the agenda of decentralization, the roles and responsibilities of the national and local governments need to be redefined accordingly. A Study on the Redefinition of Central-Local Welfare Relationships in an Age of Decentralization proposes how new relations can be forged between the central government and the Seoul Metropolitan Government (SMG) in conducting social welfare programs for the disadvantaged.

Seung-Yun Kim · Dong-yeol Jang

South Korea has been continuing conflict between its central and local government social welf are roles. The reason for this conflict is as follows: First, social welfare expenditures of the central and local governments have increased to such an extent that it is difficult to cope with the current financial situation due to the rapid expansion of social welfare policies. Second, the roles and responsibilities of the central and local governments for social welfare affairs and finance have not been clearly established. Third, the central government unilaterally decides major items such as the details of a subsidy project and financial allocation, with no procedure for local governments to participate in the decision-making process. As a result, local autonomous entities that have taken over the financial burden of the programs determined by the central government continue to express their grievances.

The aim of this study is to determine the degree of local decentralization in Korea and to suggest a new intergovernmental relationship through discussions on the direction of decentralized social welfare. To this end, we analyzed the problem of the distribution of social welfare concerns and financing between the central government and the municipalities; a problem which hinders the decentralization of social welfare. We also suggest policy tasks that need improvement for better role allocation between the central government and the local autonomous entities.

In this study, we propose a way to transfer the administrative authority of the central government to the local government and exercise central power through negotiation with the local government. In addition, we suggest that it is necessary to redistribute social welfare programs in which national subsidies are concentrated in order to strengthen the responsibility of the state for projects where national standards and demand are important, while strengthening the responsibility of local governments for projects where regional characteristics and diversity are important. If the authority and role of social welfare projects are reallocated, the local governments will be responsible for finances and projects. In conclusion, a new intergovernmental relationship should move towards managed decentralization.



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