

Improvements of the efficient construction and operation of donation-accepting public buildings

Bae, Sunhye¹ and Kim, Sangho¹

1 Architecture & Urban Research Institute

Abstract

The scope of public facilities funded by donations has gradually expanded, and the provision of buildings for welfare, culture, and economic revitalization has also begun to be recognized as public contributions. As a result, the number of buildings constructed by local governments through donations is increasing. However, buildings provided to the public through donations are excluded from the minimum level of procedures for quality control, such as building planning and public building deliberation, that are necessary to ensure publicness during the planning and design process. As a result, frequent changes in the operation and management plans of facilities and programs housed in Donation Accepting Public Buildings cause various problems, such as idle space and wasted budget due to interior changes.

Based on this background, this study identifies the supply system and current status of buildings provided to the public through donations, and identifies problems that occur during the construction process of Donation Accepting Public Buildings. Based on this, the main objective of this study is to propose measures to strengthen quality control and improve policies to improve the quality of Donation Accepting Public Buildings. As measures to solve the problems of Donation Accepting Public Buildings, this study suggests strengthening the preliminary planning stage to a level comparable to that of general public buildings, establishing a quality control system for Donation Accepting Public Buildings after the facility is decided, and preparing measures for the facility operation and maintenance of Donation Accepting Public Buildings.

Keywords: Public Contribution, Donation Accepting Public Buildings, System Improvement, Publicness

1. Introduction

According to the Act on the Promotion of Building Service Industry, public buildings are defined as buildings or spatial environments built or created by public organizations. However, the scope of public architecture is gradually expanding. Since the Enforcement Decree of the National Land Planning And Utilization Act and the amendment to the local government's Land Planning Ordinance in 2020 allowed donations for buildings, donations have also become an important method for creating public buildings.

The scope of buildings eligible for donation is also expanding. As of December 2020, the Seoul Metropolitan Government has expanded the scope of buildings eligible for donation to include not only public buildings, cultural facilities, sports facilities (excluding playing fields), research facilities, social welfare facilities, public vocational training facilities, youth training facilities, general medical facilities, waste treatment and recycling facilities, but also public rental housing, dormitories, public rental industrial facilities, and public rental properties that are recognized as public necessities and specified in the Urban Planning Ordinance.

However, buildings provided to the public through donations do not provide a suitable environment for users and are excluded from the minimum level of quality control procedures, such as building planning and public building deliberation, that are required to ensure publicness in the planning and design process. As a result, frequent changes in the operation and management plans of facilities and programs housed in Donation Accepting Public Buildings cause various problems, such as idle space and wasted budget due to interior changes.

Therefore, this study aims to identify the supply system and current status of buildings provided to the public through donations, diagnose issues and problems in the construction process of Donation Accepting Public Buildings, and propose measures to strengthen quality control and direction of institutional improvement to improve the quality of Donation Accepting Public Buildings.

2. Research background

Literature review

Previous studies on Donation Accepting Public Buildings can be categorized into design and institutional levels. Previous studies at the design level include a study that examined an indicator model to derive the optimal location of public facilities related to the public contribution method (Song, et al. 2010), a study that analyzed the current status of donation accepting public facilities created through urban improvement projects and proposed an efficient operation measure through utilization and satisfaction surveys (Min, et al. 2014), and a study that identified the management and operation status of donated facility sites and proposed a measure to promote publicness (Choo, et al. 2017). Previous studies at the institutional level include a study that proposed a legal system by analyzing the precedents of donation and the legal system related to urban planning (Kang, 2013), and a study that proposed guidelines for infrastructure donation from the perspective of sustainable development and urban management (Baek, 2013). However, the previous studies mainly understood donation as a method of public contribution in urban renewal projects in Korea, and there is no previous research on donation of buildings. Therefore, this study differs from previous studies that focus on problem recognition and improvement measures for the donation policy as a whole in that it identifies the construction status and problems of Donation Accepting Public Buildings and discusses the institutional limitations of Donation Accepting Public Buildings that are excluded from quality control procedures for public architecture, such as preliminary planning and public building deliberation, and institutional improvement measures to strengthen quality control.

How are Donation Accepting Public Buildings constructed?

Donations of public facilities, including public buildings, are made in the course of development projects through facility plans, district unit plans, urban development plans, and renewal plans, among other urban management plans prescribed by the National Land Planning And Utilization Act. The process of creating a Donation Accepting Public Building can be understood through Seoul Metropolitan Government's procedures. These procedures have well-defined standards.

According to the "District Unit Plan Establishment Standards" operated by local governments such as Seoul Metropolitan Government, the process of establishing a Donation Accepting Public Building consists of a design review stage to determine the

feasibility and appropriateness of the donation, a design drafting stage to agree on the contents of the donation and incentives, a stage to decide on a district unit plan that includes the donation of facilities such as buildings, and a building permit stage to finalize the donation plan and confirm that the public contribution criteria are met. Then, in accordance with the Public Property and Commodity Management Act, donation applications are accepted and reviewed for appropriateness by the Public Property Council. If the reference price is more than KRW 2 billion, the City Council must approve the Public Property Management Plan before the donation can be finalized and ownership transferred to the property manager.

Figure 1. Determining what to contribute to the public

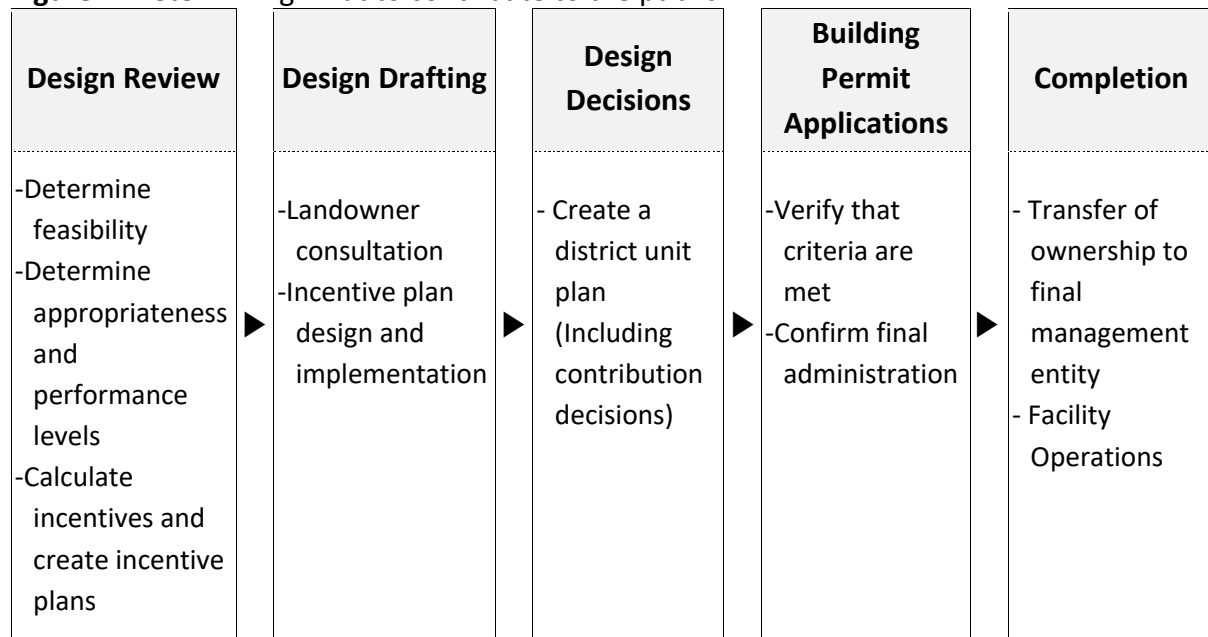
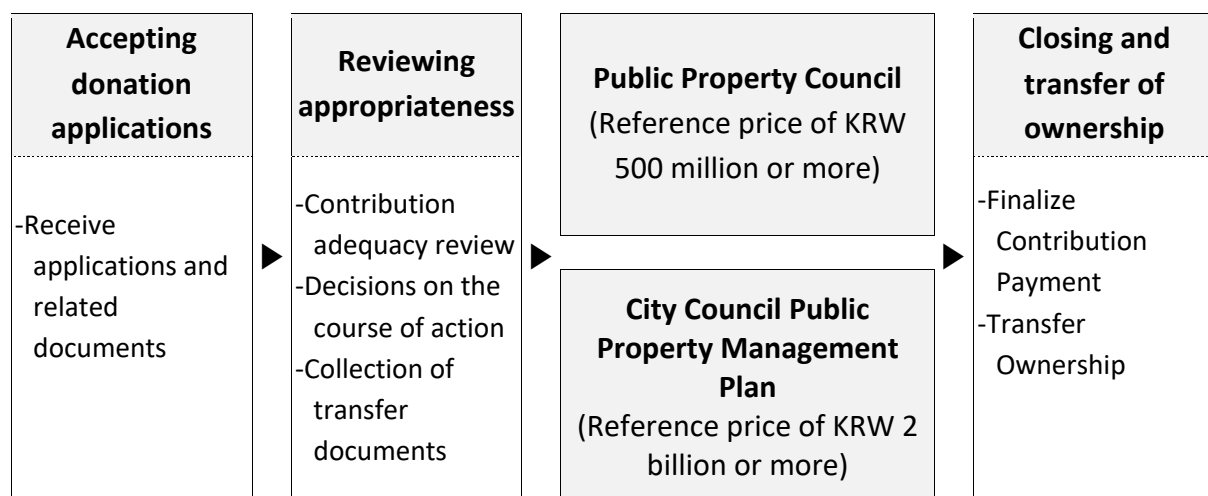


Figure 2. Transferring ownership of buildings



3. Analysis of the operation of the Donation Accepting Public Buildings Methodology

The types of buildings for the Donation Accepting Public Buildings and recent trends were synthesized to derive representative cases. For the operation status of Donation Accepting Public Buildings, we examined the initial urban planning decisions and changes in the final facility operation program, and investigated the facility decision process, donation promotion process, and problems in the operation process through site visits and interviews with staff.

Table 1. Overviews

Subdivision	Items
Construction Status	Summary <ul style="list-style-type: none"> - Location, Land Area, Gross Floor Area - Main use, type of facility - Method of operation
	Promotion history <ul style="list-style-type: none"> - Facility decision-making process - Donation Accepting Public Buildings promotion process
	Contents <ul style="list-style-type: none"> - Initial urban planning decisions and changes to the final operational facility program
Related personnel interviews	Target audience <ul style="list-style-type: none"> - Person in charge of needs assessment and preliminary consultation for Donation Accepting Public Buildings - Person in charge of the local government's integrated consultation system for Donation Accepting Public Buildings - Person in charge of building operation
	Contents of the interview <ul style="list-style-type: none"> - The process of selecting and donating a building - Problems encountered during operation
Types of facilities	<ul style="list-style-type: none"> - Acquiring separate land to build a building and donating it - Donating some facilities within the building


Results

The survey found that it was common practice to budget for additional space after construction to accommodate operational programs. In some cases, idle space was created due to inadequate space planning at the initial stage or constant changes in operating departments. In the case of cultural facilities, citizens were constantly complaining about the lack of convenience facilities.

In cases where donations were collected for some facilities in the building, most of the facilities were located underground, making it difficult to access and recognize the location of the facilities.

Table 2. The findings

Facility	Main use	Types	Current status and problems
<p>Community Cultural Center</p> 	<p>Cultural facilities /Public Sports Facilities</p>	<p>Offsite buildings</p>	<p>[Missing preliminary review procedures for the construction]</p> <ul style="list-style-type: none"> - Incorrectly calculated the size of the English village that was promoted nationwide as a fundraising project* <p>[Lack of quality control procedures]</p> <ul style="list-style-type: none"> - Construction of a building of lower quality than the initial consultation - After being left in a non-operational state for a long period of time, additional budget was invested through the 2019 Living Culture Center Competition Project.
<p>Library</p> 	<p>Library</p>	<p>Offsite buildings</p>	<p>[Lack of quality control procedures]</p> <ul style="list-style-type: none"> -Lack of guidelines for verifying construction costs of buildings, leading to controversial overestimation of construction costs -Lack of public control over developers and contractors, leading to construction disruptions and longer project durations <p>[Creation of a space unsuitable for public buildings]</p> <ul style="list-style-type: none"> -Local governments provide additional budget after completion due to non-compliance with standards such as accessibility
<p>Museum Village</p> 	<p>Cultural facilities</p>	<p>Offsite buildings</p>	<p>[Continuous changes in the operation plan]</p> <ul style="list-style-type: none"> - Changing operational departments and changing operational programs, resulting in idle space <p>[Creation of a space unsuitable for public buildings]</p> <ul style="list-style-type: none"> - Creating widths or ramps that are difficult for people with disabilities to access - Lack of civic amenities such as parking and concessions
<p>Cultural Center</p> 	<p>Cultural facilities</p>	<p>Part of the building</p>	<p>[Continuous changes to the operation plan]</p> <ul style="list-style-type: none"> - Continuously changing the decided use of the business - Conflicts with private theater operators arose at the beginning of the opening because the original operating plan did not go through the process of gathering opinions from residents and merchants

			through public hearings, etc [Creation of a space unsuitable for public buildings] -Difficulty in recognizing the underground donation collection facility from the outside
Public Sports Facilities		Public Sports Facilities /Government buildings	Part of the building

* yunhap news(2016), <https://www.yna.co.kr/view/AKR20160603136500061>

** Photo credit: Daegu Location DB Website

4. Discussion

Poor early building planning

The main focus of this study is the lack of building planning process at the beginning of the project. Donation Accepting Public Buildings are susceptible to the local governor's pledge projects because there is no separate preliminary procedure such as the feasibility study for the installation of facilities that must be carried out for the public building project in order for the local government budget to be used for the project. In the case of facilities that fall under the political projects of the head of the basic local government, they are strongly influenced by social and political changes, and the detailed use and spatial configuration are changed by political decisions. In addition, in cases where the operator is decided after the construction is completed, separate interior construction is carried out to create a space suitable for the operation program, and some spaces that are not suitable for the operation program are left unused due to continuous changes in the operation plan.

According to Article 22-2 (Implementation of Public Building Planning) of the Act on the Promotion of Building Service Industry, when a public institution intends to carry out a public construction project, it is required to carry out separate building planning, and the content of the building planning must be reviewed in advance and deliberated by the Public Building Deliberation Committee before the design service tender is announced. However, in the case of Donation Accepting Public Buildings, they are registered as public buildings

after the ownership is transferred to the management agency through a building permit, and the private sector performs related work at the initial facility planning stage, so they go through a different procedure from general public building projects and are excluded from separate building planning, preliminary review and deliberation by the Public Building Deliberation Committee.

Lack of a quality control measure for Donation Accepting Public Buildings

Some buildings are inaccessible and difficult to identify because they are located on the first basement level or away from main pedestrian routes and main entrances and exits, even though they are used by many people. In particular, there is a lack of accessibility and consideration for the disabled because some of the facilities in the building are located in the basement levels.

Under the current legal system, quality control measures for public buildings cannot be applied. Article 22-2 (Implementation of Public Building Planning) of the Act on the Promotion of Building Service Industry stipulates that when a public institution intends to carry out a public building project, it must carry out a separate building planning, and the contents of the building planning must be reviewed in advance and deliberated by the Public Building Deliberation Committee before the design service tender is announced. On the other hand, the procedure for establishing a management plan for Donation Accepting Public Buildings is a system in which ownership is transferred directly to the management agency after the demand survey of the donation accepting public facility, the establishment of the facility operation plan, and the confirmation of the construction contents. This makes it difficult to check whether the contents of the agreement are actually fulfilled.

Lack of measures for post-construction maintenance

There is no established measure for the maintenance of Donation Accepting Public Buildings once they are completed. As a result, the management agency that receives the facility changes the operating program at its discretion, and the subsequent changes are not reflected in the shared property management system. This can make it difficult to plan supply and demand for future facilities by region. In addition, the initial facility operation plan does not include a post-construction maintenance plan, so each local government must prepare a separate budget for maintenance costs.

5. Conclusion: How to increase the publicness of Donation Accepting Public Buildings

Strengthen preliminary planning in advance

In order to improve the efficiency of construction projects and enhance the public value and design quality of buildings, it is necessary to prepare measures to strengthen the preliminary planning of project needs, space configuration, and operation programs at the pre-design stage after the facility is decided. If the needs of the actual operators can be reflected from the beginning of the project, the habit of creating idle spaces after completion or creating additional budgets for separate construction can be reduced. The operator of the Seoul Arts Education Center, which opened in 2021, is very satisfied with the current operation of the facility, but since the drawing development stage after the facility decision was made, the facility operator, the Seoul Arts Foundation, together with the Seoul Cultural Facilities Division, directly presented a detailed space program and proposed space

requirements, so that no budget was invested in separate interiors for program operation after the facility was completed, and the exhibition space was also designed separately to create the space desired by the users.

Second, procedures should be in place to ensure the publicness of the building after the decision to donate the facility has been made. After the decision to donate is made and before the committee deliberates and approves the management disposition plan, it will be possible to ensure the publicness and quality of the building through procedures such as Implementation of Public Building Planning and preliminary reviews.

Rethinking the definition of a public building

However, this is a short-term improvement measure, and ultimately, a change in the perception of the scope of public buildings is needed. At present, public buildings are defined as buildings built or constructed by public institutions according to Article 2 (Definition) of the Act on the Promotion of Building Service Industry, so buildings built by the private sector and donated to the public are excluded from the scope of public buildings defined by the law. In order to maintain consistency in the ordering process of public building projects aimed at ensuring publicness and improving quality, the scope of public buildings, including Donation Accepting Public Buildings, should be redefined.

Establish quality control procedures for Donation Accepting Public Buildings

The regulations on the donation of infrastructure for housing construction projects focus on the process of deciding on facilities at the initial stage of the project, and do not specify the basis or procedures for managing the quality of facilities involving the public during the construction and maintenance stages after the decision is made. In order to respond to the major issues raised by Donation Accepting Public Buildings, it is necessary to add steps and criteria for verifying the appropriateness of the cost of building installation, establishing costing standards, and quality control measures for each stage of Donation Accepting Public Buildings. For example, if special structures or functions such as sports and cultural facilities are required or added, the calculation method, costing standards, quality standards, and the method and timing for verifying the appropriateness of the installation cost for items such as interior costs and installation fixtures are specified in detail, it will be possible to negotiate with the client to include them in the initial donation payment calculation cost, and the management agency will be able to operate the facility without additional budget investment or improvement work.

Finding sustainable ways to operate and manage

Various measures should also be taken to ensure the sustainable operation and management of Donation Accepting Public Buildings. In the early stages of the project, it should be encouraged to establish a facility operation plan that includes not only an operation program but also a measure to secure the necessary costs for operation, and to explore various measures for operating and utilizing Donation Accepting Public Buildings, such as using parts of the facility as leased shops and offices, rather than having the management agency take over responsibility for the operation and maintenance of Donation Accepting Public Buildings.

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References

- Chu, Hyun-Soo, & Jang, Jae-Young (2017). The Contribution Land-based Donation Facilities Publicity and Promotion Plan of the Site in Seoul. SH Urban Research & Insight , 7(1), 79-100, 10.26700/shuri.2017.04.7.1.79
- Kang, Woo-Won (2013). A Study on the Contributed Acceptance as Urban Planning Laws focused on Legal Principles. Journal of the Korean Urban Management Association, 26(3), 195-218.
- Kim, Jee-Yeop, Nam, Jin, & Hong, mi-young (2016). The Definition and Legal Issues of the Public Contributions as Exactions in Return for Rezoning in Seoul. Journal of the Urban Design Institute of Korea Urban Design, 17(2), 119-129.
- Kim, Sangho, & Bae, Sunhye.(2021). The Study on the Improvement of Policies for Strengthening the Publicness of Donation Accepting Public Buildings. Architecture & Urban Research Institute.
- Korea Planning Association. (2013), Research for development of appropriate donation payment policies, Ministry of Land, Infrastructure, and Transport.
- Min, Bi Ra, Yin, Myung No, Yoo, Shin Ho, & Kang, Jun Mo (2012). A Study on the Utilization Level of Public Facilities Obtained through Contributed Acceptance on Urban Regeneration Planning. JOURNAL OF THE KOREAN SOCIETY OF CIVIL ENGINEERS D, 32(4D), 397-406.
- Ryu, Kyung-Soo, & Yoon, Yong-Suk (2020). A Comparative study on the application of incentives according to the Method of maintenance in City - Focused on Housing Construction Projects and Housing Reconstruction Projects in Daejeon -. Journal of the Korean Housing Association, 31(5), 25-35, 10.6107/JKHA.2020.31.5.025
- Song, Jae-Sun, Kim, Cheol-Hong, & Jang, Jae-Young (2010). A Method to Optimize the Location of Public Facilities made by Donations of Private Development. Journal of the Urban Design Institute of Korea Urban Design, 11(2), 137-150.
- Korean Law Information Center, <https://www.law.go.kr/LSW/main.html>
- Daegu Location DB, <http://dgdb.or.kr/>
- Local Laws and Regulations Information System, <https://www.elis.go.kr/>