

# Methods for Creating High-Quality Public Design in Foreign Countries

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## 1. Introduction

In recent years, various activities in design administration have been implemented by local governments in Japan, while the issues of consideration for the landscape and improvement of design quality still remain in the development of public facilities. With the aim of supporting further activities for high-quality public design, National Institute for Land and Infrastructure Management (NILIM) has been systematically organizing a framework of design administration based on prior examples and preparing technical documents that show the advantages, challenges, and technical considerations of demonstrated methods.

In this context, focused on high-quality overseas public design initiatives, this paper, by investigating the matters that contribute to solving domestic issues, such as framework of design administration and continuous involvement of experts in the design field, has organized the methods for creating high-quality designs in view of the possibility of application of such matters to Japan with a medium- to long-term perspective.

## 2. Perspectives and targets of the investigation

As a result of investigating 22 domestic examples from past years, we found that the issues listed in **Table 1** exist in creating high-quality public spaces. In response to these issues, in domestic cases, high-quality public design has been realized under variety frameworks of design administration according to the characteristics of projects and the situations of local governments, and these can be broadly classified into five types: Committee type, Adviser type, Outsourced supervision type, In-house type, and Collaborative urban development organization type (**See the upper part of Fig. 1**).

In FY2020, based on the results stated above, we organized the methods of problem-solving and the framework of design administration by analyzing overseas examples. Of the 21 examples investigated in cities overseas, we conducted an in-depth study, including interviews, on the six examples shown in **Table 2**. In this paper, we present a comparative analysis between domestic examples and "Water Square" and "Dakpark Rotterdam" in Rotterdam, Netherlands, and "Uptown Normal Roundabout" in

**Table 1: Issues considered common to each example**

No.	Issues
1	Comprehensive design of multiple facilities and projects
2	Clarification of local issues and visions
3	Active involvement of the designer up to the construction stage
4	Adoption of an appropriate ordering system
5	Securing experts who can assure the quality of design
6	Planning and design assuming programs
7	Ensuring an activity system leading up to the operation stage
8	Appropriate operation and management by the community
9	Securing financial resources for project operation and management
10	Transfer of know-how due to transfer of project personnel, etc.
11	Ensuring integration across vertical divisions
12	Follow-up on step-by-step explanations within the agency
13	Follow-up on small-scale projects

Normal, USA. (**Fig. 2** gives an overview of the three examples).

## 3. High-quality public design in overseas examples

As a result of investigating overseas examples, we found that the framework of design administration is greatly different from that of Japan. Overseas, there are two new types of framework: In-house team formation type and In-house director type (**See the lower part of Fig. 1**). What is common to these two types is that an internal team or director of the administration is coordinating the design of public spaces, without relying on outside experts. In addition, in order to ensure design quality, there are few personnel transfers during the course of a project, and once involved in a project, personnel are generally involved until completion. Therefore, it was found that some issues referred to in domestic examples were rarely recognized as issues in overseas examples,

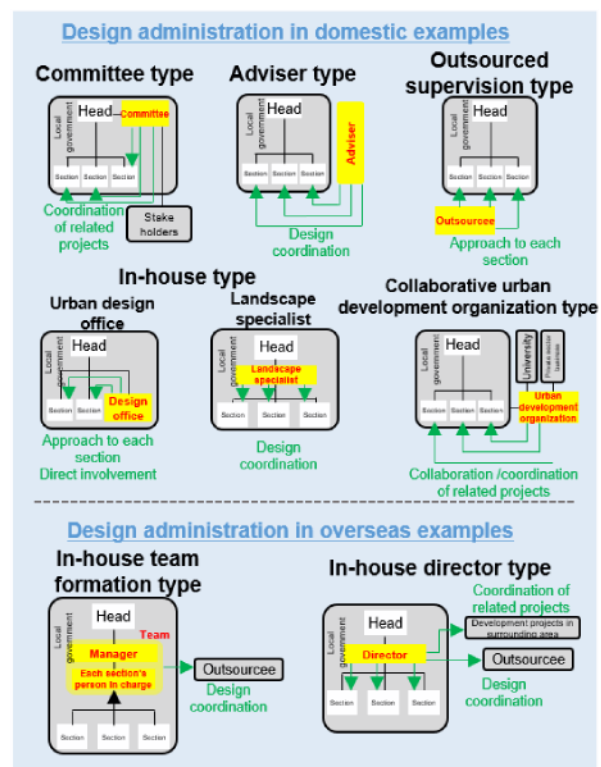
including "Securing experts who can assure the quality of design," "Continuous involvement of designers throughout the construction process," and "Transfer of know-how due to changes in project personnel." By city, Rotterdam in the Netherlands is characterized by the fact that the city's department in charge has about 600 engineers (in the fields of civil engineering, architecture, and landscape architecture), so they are able to take charge of design work (basic and detailed design). On the other hand, the town of Normal in the USA had the project director coordinate design for the whole development plan for the target project and the surrounding area, and reach a consensus with local residents and the City Council, which greatly contributed to the realization of the regional vision. Consensus-building with local residents is very important also in foreign countries, as was confirmed in examples like the "Uptown Normal Roundabout," where efforts were made to obtain the support of local residents by holding dozens of public meetings before creating a master plan, and thoroughly sharing the direction and content of the regional vision.

#### 4. Summary of results

The results of this research will be summarized in the form of a guide that explains successful frameworks of design administration and key points for creating high-quality public design, together with the contents of domestic examples studied in past years, based on the results of interviews with experts.

**Table 2: Six examples where in-depth study was conducted**

No.	Location (City/Country)	Project name	Project type
1	Rotterdam Netherlands	Water Square	Square
2	Rotterdam Netherlands	Dakpark Rotterdam	Park
3	Auckland New Zealand	Wynyard Quarter	Port
4	Chicago USA	Chicago Riverwalk Expansion	Waterside space
5	Normal USA	Uptown Normal Roundabout	Road
6	Houston USA	Levy Park	Park



**Fig. 1: Types of design administration in Japan and abroad**

<p><b>Water Square (Rotterdam)</b></p> <p><b>Purpose of the project</b> Flood prevention + Community formation</p> <p><b>Type of design administration</b> In-house team formation type</p> <p><b>Ideas / Features of project implementation</b> <ul style="list-style-type: none"> <li>- Flood control project proposal created by holding a Biennale</li> <li>- The project manager selected the relevant section and recruited the person in charge to establish an implementation system.</li> </ul> </p>	<p><b>Uptown Normal Roundabout (Normal)</b></p> <p><b>Purpose of the project</b> Environmental consideration + Community formation</p> <p><b>Type of design administration</b> In-house director type</p> <p><b>Ideas / Features of project implementation</b> <ul style="list-style-type: none"> <li>- Formulated a master plan through dozens of public meetings.</li> <li>- A single director controlled the design process from planning to completion, including the development of the surrounding area.</li> </ul> </p>	<p><b>Dakpark Rotterdam (Rotterdam)</b></p> <p><b>Purpose of the project</b> Job creation + Green space formation</p> <p><b>Type of design administration</b> In-house team formation type</p> <p><b>Ideas / Features of project implementation</b> <ul style="list-style-type: none"> <li>- Triggered by a original design competition proposal by volunteers in the city.</li> <li>- An internal administration team conducted the design work by incorporating the opinions of local residents.</li> </ul> </p>
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**Fig. 2: Overview of the three overseas examples (Photos were provided by Rotterdam City and Normal Town)**