Qualitative repletion of the public infrastructure combining reconstruction and redevelopment of public facilities

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1. Introduction

The increase in the number of deteriorated public facilities has been accompanied by a need for strategic maintenance and qualitative repletion of public infrastructure. This means there is a growing need for the creation of high quality spaces in order to form good landscapes and living environments as part of the process of renewal and redevelopment of public facilities.

When redeveloping road space in particular, it is necessary to create public space linked to roadside facilities in order to form integrated landscapes and stimulate tourism, etc. And as shown by the Scenic Byway Japan movement, diverse regional activities are being undertaken nationwide centered on roads from the perspective of their use. But linking multiple projects that include roads and other facilities and span the downtown and suburban parts of cities, and the frame work of road projects which effectively link local activities to the formation of landscapes have not been fully proven, and methods of enforcing the Landscape Act and other policies to develop the formation of good quality space have not been clarified.

This research will clarify project and system operating methods and their effectiveness based on innovations in project organizations and design, and maintenance and utilization methods applied after redevelopment in order to verify planning methods which link road projects with related projects, and the activities of concerned parties in city centers and in suburbs by looking at cases in which road space was redeveloped.

2. Analyzing the road redevelopment cases and organizing related system operations

For the survey, road and street redevelopment project cases are collected for about 100 locations nationwide in order to organize information and clarify actual state of redevelopment of road space. And in order to stress clarification of recent trends in redevelopment and improvement points etc. we broadly consider scales and the process of landscape formation (Table, Photo). These are systematically classified in parallel with the study of specific standards that can be applied to clarify the degree of qualitative improvement.

And present systems related to regional activities are organized. Focusing on the use of preservation districts for groups of traditional buildings, civil engineering legacies etc. through initiatives such as Scenic Byway Japan movement, challenges are organized and methods which can link local people over a wide range are studied.

3. Future development

Following the study conducted by collecting and systematically classifying the above cases, based on the detailed study of specified cases, methods of carrying out public works projects through linking road projects with other projects, analysis of the urban ripple effects, and formation of landscape in city centers and suburbs by enforcing the Landscape Act and other systems will be studied. And cases in overseas cities will also be comparatively analyzed. And as the final result, we want to support regional development focused on roads by constructing a data base and handbook which can be used to clarify characteristics of each case.

Table. Systematic Classification of Road/Street Redevelopment Cases and Sample Cases

[1] Pedestrian-centered roads that are the faces of tourist regions	Shinmondori Street in front of Izumotaisha Shrine
[2] Station plaza roads that form the skeleton of a city	Otemaedori Street in front of Himeji Station
[3] Commercial and shopping streets used mainly by pedestrians	Marugame-machi shopping street
[4] Creating open spaces	Soseigawa Park (Sosei Tunnel)
[5] Improved use by constructing buildings above and below roads	Ohashi Jct. on the Metropolitan Expressway
[6] Integrated redevelopment by revising route designations	Streets around the main building of the Dogo Hot Spring
[7] Road development linked to residential district development	Relocating on hills as part of earthquake disaster restoration
[8] Improving section configuration by changing the number of lanes etc.	Bicycle paths and on-road parking areas



Photo. Creation of Green Shady Space by Widening Roads (Kobe: former foreign settlement district. Corresponds to [3], [4], and [8] in the above classification)