## New Roles of Privatizing Public Approval Processes in Project Delivery

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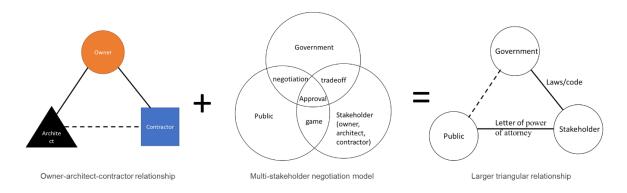
Innovation in Project Delivery

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### New Roles of Privatizing Public Approval Processes in Project Delivery

The relationship between owners, architects, and contractors is a market-based triangular relationship in project delivery system. But in some projects, the main body of participants in decision-making not only contains the three, but also a larger triangular relationship - government, citizens, project development subjects (including owners, architects, and contractors). When carrying out large-scale public projects or urban renewal projects, the main body of the government and the public residents need to intervene.



(figure 1. The larger triangular relationship)

There are two reasons for this. First, it is impossible for any country to solve the low-income housing problem only through the market mechanism. The best way to address the problems of poor communities in developing countries is through participatory community improvement programs, but so far these programs have been mostly implemented locally due to the limitation in participation in public decision-making. Second, the implementation results of a project is ultimately delivered to the users, which means that taking the responsibility for the results of the project is not only the obligation of the government, experts or planners, but also an important area of mutual benefit achieved through the joint participation and efforts of all parties. More and more countries need to disclose project information to the public in the approval process of community projects. Public participation policies generally adopted by countries include determining its application scope, implementation procedures and operational forms through legislation, and protecting the right of residents to know, the right to claim information, the right to participate in decision-making and the right to supervise.

Therefore, in this article, the new role is proposed to privatize public approval processes -- the ones would work as an intermediary employed by developers, under the role of incentive mechanism, fully participate in the public approval

process, promote the efficiency of project decision-making as soon as possible, and shorten the development cycle of such development projects.

### 1. Industry Disruptions

### 1.1 The improvement of public participation in decision-making in urban operation and urban renewal projects

Urban renewal is a kind of necessary and planned reconstruction activities in urban areas that are no longer suitable for modern urban social life. On the basis of soliciting the opinions of villagers/residents, the village collective economic organization drafts the agreement of cooperation intention and proposes candidate enterprises (always developers) whom they would like to corporate. The renewal and reconstruction will realize the win-win situation between village/community collectives and market subjects.

In conventional project delivery method, the project will go through the following stages: Conceptualization phase, Criteria phase, Detailed design phase, Implementation phase, Agency review phase, Buyout phase, Construction phase and Closeout phase. In the eight stages, it is more important to minimize the uncertainty of the project through sufficient discussion and communication in the early stage of the project. For urban renewal projects and community reconstruction projects, it is better to achieve the unity of developer's interests and social public interests in the early stage of the project. And advance public participation does matter, which focuses on listening to and absorbing the reasonable opinions of the masses, extending the activities of public participation, and strengthening the functions of planning supervision and management through public participation. Under these requirements, owners should more actively face the public approval process and schedule, plan scheme review, involve the vital interests of the citizens, and should disclose necessary information to the public and introduce the public participation mechanism.

### 1.2 A lack of overall coordination mechanism for the goal orientation among decision subjects

In urban-scale project, project implementation is generally carried out in PPP or EPC mode in cooperation with the market. Owners' representatives and project managers are not sufficiently familiar with new areas of business. Compared with the traditional development mode, the workload and promotion difficulty for real estate in urban-scale projects are increased sharply, and there are great differences in development mode, which requires real estate developers to upgrade their organizational structure and management methods to deal with difficulties. The traditional organizational framework of real estate development focuses on three points, namely, land acquisition, construction,

and sales. However, the development mode of urban operation projects adds a series of complicated work such as urban planning, industrial introduction, and citizen decision-making in its front end. The facilities construction of public welfare are often required to be launched and delivered first, and the project initiation area is the most stringent in terms of supervision and public attention, which requires the real estate development enterprises to invest more financial and material resources to implement the project, as well as give consideration to the task of external publicity and accelerating public approval processes.

The problem is that there are few professional decision-making information institutions, and only a small number of them are engaged in the collection, analysis, research, and judgment of urban renewal information. They are mainly concentrated in some universities and research institutes, and they tend to focus on academic research with low degree of application in real construction. Urban planning, project construction, industrial development, cultural heritage protection and other aspects of urban renewal are relatively isolated and are basically promoted by a certain functional department of the government. The government also lacks channels to communicate and understand with professional institutions, so there is a lack of information sharing and unified planning, and some comprehensive regional urban renewal projects are difficult to effectively implement.

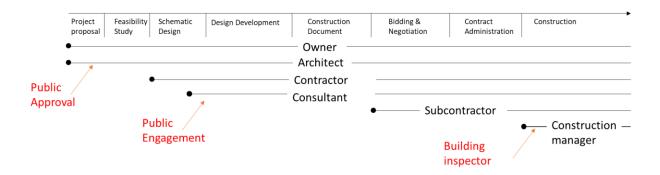
### 1.3 Current public approval processes

In projects involving the interests of collective groups, public and owners are often opposed to each other: developers want to get more profits faster, and residents want to negotiate for longer to ensure their own interests. Currently, the civil interests are mainly ensured by the a series of activities of government, taking the form of public participation:

(I) To work through Public Information Disclosure to encourage ethnic minorities and teenagers to participate in; (2) To set up the "District Planning Office", "Workshop/Studio", the opening of a telephone hotline, project site, special issue on the newspapers, radio, television, question research, neighborhood planning meeting, public review, public meetings and public hearings; (3) In terms of diverse participating institutions, there are various bureaucratized-civilian organizations and civilian organizations, and some of them have legal status. Project development must be approved by these organizations; (4) To publish a large number of operation manuals and guidelines and set up training institutions.

The examination and approval committee or public advisory committee under the government is more miscellaneous and inefficient. Public consultation and Supervision Committee is a new form of public participation in urban renewal

activities. It guides public participation by innovative means of consultation and communication, optimizes the process of urban renewal, and is gradually promoted in some areas. However, from the perspective of the development status of the public advisory committee in the current urban renewal, its role is limited, and the expected goals set by the committee have not been achieved.



(figer2.The urban scale project delivery processes, the red texts indicate the potential new roles in the project delivery)

### 2 New roles of privatizing public approval processes

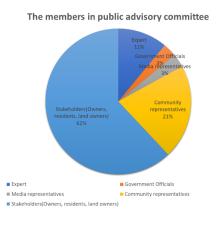
The public will spontaneously demand the basic right to know and participate in any investment behavior that affects their own interests. In addition, real estate tax is generally levied in the western countries, and the construction of public facilities and the improvement of infrastructure will increase the market value of surrounding properties, thus affecting the tax burden of their owners. Therefore, until the public's willingness to participate in politics and awareness of public power are fully awakened, democratic decision-making by expert groups is more conducive to the healthy development of cities. Architects, as experts with professional skills, owner's perspective and public standpoint, exercise power on behalf of the public by their elite groups, which can ensure efficiency and effectively guarantee the necessary space for public interests. Of course, social supervision is still important to safeguarding public interests. In fact, the publicity system currently implemented is in essence a supervision mechanism and a necessary supplement to the decision-making mechanism. It guarantees the public's right to know but avoids the ownership of decision-making power. Therefore, it is a transitional system that gives consideration to both efficiency and democracy.

The definite participants of the project have three characteristics: first, they have specific legal and moral claims on the old urban residential renewal project construction; second, they have the status, ability and corresponding means to influence the renovation project construction and implementation decision; third, their needs can immediately cause the renewal project construction and management decision - makers attention. Uncertain participants involved on behalf of the main body public interests are national government departments, local relevant government departments, local subdistrict office, community management committee and other officials of relevant departments institutions and management, expert consultants, investment companies, design companies, consulting companies, supply companies, construction companies, etc.

Here in addition to the above participants involved in the projects, this paper proposes a new role to be responsible and to plan all the public-approval-processes related issues-- public permitting representative of the owner, their practice is based on the common interest of the investors, the relevant government officials, builders, experts, residents and other stakeholders. These social subjects constitute the "project unity", which is characterized by the unified economic and value goals of all relevant interest groups. The possibility of this role is described below in terms of the four phases in the project development (concept phase, design phase, implementation phase and post-project evaluation phase).

### 2.1 Government-led public advisory committee

The government-led public advisory committee is composed of developers, residents, professionals, and government departments, and mainly functions at the conceptual stage. The Public Advisory Committee may establish a community resident forum to discuss the project public approval process. The communication in community resident's forum is two-way. On the one hand, professionals are invited to answer questions related to residents' interests and popularize relevant knowledge on the forum. On the other hand, residents can also contribute their ideas to the planning and reconstruction of the community by posting on the forum. In this way, the Public Advisory Committee can not only obtain timely feedback, but also act as a "bridge" and easily coordinate the updated interests.



(figure3. The members in public advisory committee)

### 2.2 Professionals or experts employed by the developer

### 2.2.1 Concept phase—Decision-making Information Consultant Agency

Decision-making Information Consultant Agency base on the overall interest of the society, at the same time, combines the public's expressed wishes that have been solicited, develops urban transformation of the overall construction blueprint, and releases the blueprint to the public in a timely manner, so as to seek further public advice and opinions, to give the public some of the power to make decisions about urban projects, which is closely related to public life. Developers publicity through the media posts public information about the latest planning in urban renewal trend and relevant information about projects, and Decision-making Information Consultant Agency publicly choose participation groups formed through random sampling or community elected representatives to have detailed discussions with the planning department on the urban renewal process. Based on this and the relevant information mastered by the planning department itself, the planning blueprint of urban renewal that conforms to the appeal of the public interest is prepared for further demonstration and discussion with the public.

Decision-making Information Consultant Agencies are of great significance to the preliminary planning of the project, mainly saving manpower and material resources (26.3%), obtaining required information in a relatively short time (26%), capturing information comprehensively (23.5%) and accurately (20.4%). The decision-making scheme put forward by the Information Consultant Agency is investigated and demonstrated, and the development subject can agree, supplement, improve or deny it.

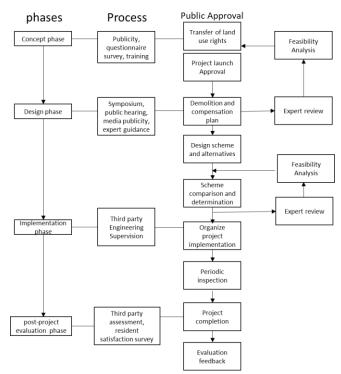
### 2.2.2 Concept phase—Preservation professional to solve the problem of cultural context

The owner could employ qualified cultural heritage conservators to coordinate the demolition of historic preservation buildings in the development process. Whether a building can be demolished depends on whether it has rich historical and cultural values worthy of preservation. But the criteria for identifying and evaluating these protected buildings are unclear and opaque. In addition, there are many requirements and restrictions on the historical district protection, and the existing regulations and building codes do not match the requirements of urban renewal in this special case. As a result, developers are often unfamiliar with the relevant regulations of special buildings, causing public opposition and causing the project construction to delay.

The heritage conservators, who always work in research institutions, universities and colleges, and hold a certificate issued by the state, can review and evaluate the project, judge the historical value elements of the building from a neutral perspective, and decide whether the building will stay or go. For projects can not to be demolished, the cultural heritage conservators can put forward suggestions for the protection of cultural relics and transformation of intangible resources, such as the activation and utilization of local historical and cultural resources, integrating the resources into the modern life of inhabitants.

# 2.2.3 Design phase—Third party scheme review expert

Experts and scholars in specific fields of public care mainly have two dimensions. One is the identity of experts and scholars. This is mainly determined by the profession they are engaged in and the standards set by the relevant qualification accrediting bodies. Secondly, the professional scope of experts. As urban scale construction is a comprehensive work, experts here should not only be limited to experts in urban professionals planning, but also with other knowledge backgrounds, such as environmental protection experts, land resources experts and so on.



(figure4. The public Approval Process)

How to guide and encourage orderly public participation? How can current theories be used to guide public participation? This requires the support of a wealth of public participation knowledge experts and experts in urban reconstruction. The public lacks professional knowledge to participate. Under the guidance of expert professional theories, they can understand the participation process, participation channels and participation methods, and can implement participation and expression in accordance with their own conditions and needs. This can reduce the internal cost of blind participation.

There are many ways to involve the public in the design and selection of the scheme during the design phase of the project. For example, design competition can be held so that the public can give full play to their talents and effectively

express their interest demands; Or owners could combine their interests and design alternatives so that the public can participate in the evaluation and comparison. In the process of evaluation and selection, the scheme is analyzed from multi-dimension. For example, various factors such as geographical features, location advantages, preservation and utilization of advantaged urban space in old districts, environmental protection, economic development, demolition and resettlement, and proportion of educational resources should be considered. When all parties carry out the program selection seminar, the suggestions from the public, relevant experts, relevant government departments and development enterprises should be fully expressed, so as to seek a construction program that can balance the interests of all parties in the collision. In the process of comparison and selection, the public's voice should be respected, especially when it comes to decision-making issues related to people's life, such as green rate, lighting, parking space, etc. Of course, if there are clear standards in laws and regulations, the prescribed standards shall prevail. The technical interpretation of the scheme cannot be ignored, attention should also be paid to the interpretation of technical issues, developers should adopt appropriate ways for the public to understand and participate in the decision-making.

### 2.2.4 Implementation phase—Building inspector

Australia has a tradition of private building inspectors such as licensed professionals hired by the developer to inspect the construction and ensure that the public purposes of the building code are being followed.

To become a Building Inspector, one need a demonstrated knowledge of the Australian construction industry, as well as proficiency in mathematics and/or engineering. Vocational training is also required, as well as holding a Construction Induction Card. There are several training options to prepare to work as a Building Inspector including the Diploma of Building and Construction (Building) (CPC50210), an Advanced Diploma of Building Surveying (CPC60115), or a Bachelor of Construction Management.

Building Inspector is a legal management professional qualification in Australia, which is mandatory market access. In the United States, the supervision of IPD mode is taken charge by the chief construction company, while according to the relevant regulations of supervision system in China, the construction supervisor shall be hired by the owner and supervise the implementation of the project. Therefore, in the implementation phase, we can introduce the role referring to the Australian system supervised by law, the one who holds a certificate could carry on the construction management work of the building on behalf of the public purposes according to the building code.

During the implementation phase, the Building Inspector makes the construction activities transparent. With the support and assistance of the law, the Building Inspector avoids the situation that the hidden operation and asymmetric information will cause harm to the public interest, and the public participation and supervision will be implemented, thus promoting the smooth construction work. At the same time, Building Inspector can directly supervise the site as a third party supervision representative, in order to avoid the loss of public interest caused by some enterprises and government officials secretly changing the optimal plan selected in the decision-making stage for personal benefit during the implementation process.

### 3 Public vs Privatization.

Owners should retain the right to make economic decisions linked to capital. The lack of a sound occupational behavior monitoring mechanism increases owners' concerns about the safety and efficiency of its own funds. But certain rights may be granted to public permitting representative of the owner in order to enhance project development efficiency.

### 3.1 The public approval process could be construed as a private process

The new role is introduced as public permitting representative of the owner, besides the triangular owner-architect-contract relationship, involving in the development process. This role requires specialization and third-party supervision in order to be on behalf of the public socially optimal benefit such as village joint-stock companies, owners of housing ownership, users, stakeholders, and other related subjects, but the role is also hired by the owners. The following professional work may be considered in the scope of the privatization of the public approval processes, under third-party certification of qualifications and legal supervision.

### 3.1.1 Project supervision

The public approval system requires the scope of the architect's business far beyond the design stage, and the architect's business capacity is seriously insufficient due to the long-term absence of project planning, construction management and post-service. Under the agency system of architects, those qualified public permitting representatives may work as the engineering consultants of architects instead or they could be hired as the owner's construction manager. The inspectors are certified in one or more disciplines qualifying them to make professional judgment about whether a building meets building code requirements.

### 3.1.2 Public approval information consulting

In the early stage of the project, the decision-making Information Consultant Agency can be hired to carry out a survey according to the public interest conflict points and current public intentions in the project. The collective information may come from different parties on different aspects. Public opinion survey is an applied social survey activity in which surveyors use scientific survey and statistical methods to truthfully reflect the attitude tendency of the public to a certain issue within a certain range and within a certain time through personal contact or extensive understanding. The business was undertaken by the University's Research and Statistics Institute, a business consultancy, and the government's policy-making polling department, who are contracted to the developer as consultants in the project. Although it is an employment relationship, these institutions have their own academic purpose of research or corporate reputation, or are directly responsible to the government, so they have a high neutrality.

### 3.1.3 Public affair coordination

Project related information should be publicly disclosed in accordance with the law to protect the public's right to know and accept social supervision. So, the owner could apply the public participation mode. There would be workshop, field investigation, public brainstorm, seminars, and other forms for public engagement. With these forms of organization, the public is more likely to accept the undergoing scheme and feel that their opinions are more fully expressed, and there is less possibility of opposition in the subsequent implementation of the project.

This role can be played by an owner's representative with a legal background or by a scheme design architect. In the concept design stage of the project, the forms of expanding public participation mainly include: 1. Public vote to express residents' opinions on the current master plan examined by the government; 2. Second, technical support. The public can get expert advice from other non-public service organizations to choose their preferred proposal. 3. Participate in scheme design, and residents will draw their design ideas through certain professional training; 4. The public hearing shall be organized by the government and owners, and the public shall give their approval or opposition to the design and objectives of the planning scheme; 5. Sand table simulation: the sand table simulation of public participation in project decision-making can play other roles different from the real role, such as government representative, developer, etc., so as to express opinions; 6. Public vote: publicize project information through telephone, poster, TV and other media and invite residents to vote in specific forms to obtain public opinions.

### 3.2 The public approval process should be remained as public

The constraints of the external environment represented by the public should be reflected in all stages of project approval processes and fully reflect the public's will. On the other hand, every stage of the urban renewal process involves multiple parties, including government agencies, consulting units, developers, experts, and residents, etc. The final decision scheme is formed after the full coordination, consultation and running-in of various opinions, which can meet the economic, social, and environmental benefits of the urban renewal project scheme to the greatest extent. In order to ensure the interests of residents, some processes must be kept public and directly supervised by citizens.

### 3.2.1 Transfer of land use rights

Before a project is launched, the developer and residents should first sign the "Letter of Transformation intention and power of attorney", that is, the owner of the land or the buildings should first agree to the transformation. The number of the land owner who agrees to the transformation is required to have a certain proportion, which accounts for more than 2/3 of the total building area and more than 2/3 of the total number of the subject of the right, and then project can only be carried out after this public approval.

For projects requiring demolition, compensation standards for urban renewal project must also be agreed by the public to avoid hostile takeovers of land-use rights. The developer negotiates with the indigenous people and signs a compensation agreement for relocation. There is no uniform standard. Generally, the compensation is 1:1 in building area, and there are corresponding preferential terms for residents. (figure 5. The process remained public)

# Approval of the application for construction Approval of design documents Quality supervision procedure Completion inspection and acceptance, Post project evaluation

### 3.2.2 Project permission and scheme selection

Before the detailed design documents can be started, the public must express their opinions and approve the conceptual design. In this process, the architect can guide, but not intervene too much or substitute for public consent. The updated unit design scheme may be adopted by centralized or decentralized voting, and the approval of more than two-thirds (including 100%) of all the stakeholders shall be deemed to be passed.

### 3.2.3 Feedback and acceptance

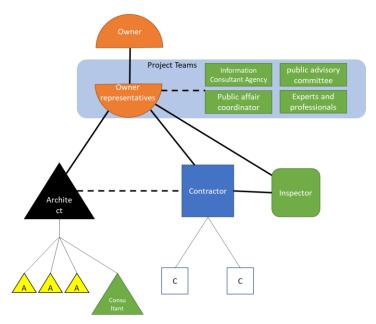
Relevant government departments organize participants and public representatives to evaluate the satisfaction of urban renewal projects, analyze feedback from the public and other parties so as to make timely adjustments to achieve better economic and social benefits.

### 4 New project delivery system with the new role

### 4.1 Modified project delivery modes

The main subjects in the project delivery system are owner, owner's representative, architect and contractor, and the representative of the owner should function as the intermediary to address all the public approval issues:

Information Consultant Agency, Public Affair
Coordinator (a project audit team that prepares strategic
and intelligent answers to stakeholder questions) and
third-party experts and professionals (a functional expert



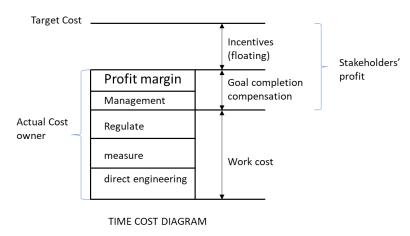
advisory group that provides skills training and provides project-related advice as needed to help public to fulfill their project responsibilities) consist of a project support group that formalizes the organization's operational procedures and consistency standards. (figure 6. The innovation in project delivery)

Under the government leading, the existing of the Public Advisory Committee creates a project management community that interacts with the people and organizations involved to minimize ineffective allocation of resources and "projectitis disease" (a social phenomenon involving inappropriately intense loyalty to the project).

Here, more agreements and documents should be drafted and promoted smoothly for the development of collective assets on the premise of protecting the collective interests of the community.

### 4.2 Remuneration structure and incentives

The compensation and incentive mechanism are similar to the IPD mode. The parties to the contract do not get a direct profit, they provide the cost and the service directly, and the profit is compensated in two ways, which are goal achievement compensation and incentive compensation. (figure 7. Compensation mechanism diagram of the new mode, the topper the target line, the less time used)



This model adopts time-based incentives, namely efficiency-based indicators, and emphasizes the integration of risks and benefits among all participants. This is fundamentally different from the traditional project delivery mode in which all parties only focus on maximizing their own interests (especially the developer and the public often have a game relationship). The benefit distribution among all parties is based on the development efficiency to set up public incentive funds. Based on efficiency is to motivate the project team by reducing the project development time and the number of public lawsuits, and the final balance of the project cost is also shared among all participants. The project progress of each team and the control of the second-level nodes meet the internal controlled schedule of the project. "Public incentive funds" is the project team members' (limited to developers' directly employment and cooperation) remuneration extracted for setting a stimulate mutual funds, according to the teams work implementation, reasonable rewards for each team are allocated between the parties can increase or decrease depending on the agreed standard.

In order to urge the public to vote for the Compensation and Resettlement Plan as soon as possible, the owner will issue a certain reward to each resident who has voted.

### 5. Conclusion:

At present, urban scale projects have a certain dependence on the intervention of the government and must be supervised by the third party, building codes and laws. The developer team needs to take a more proactive approach to development than the policies currently adopted by relevant government departments. This approach will allow teams to better communicate with the public through privatizing public approval processes in project delivery.

### Reference:

- [1] Yang Cao. The Research of Optimization on Coordination Mechanisms of Chinese Architecture Design Based on Architecture Ethics.
- [2] Lees L. The ambivalence of diversity and the Politics of urban renaissance: The case of youth in downtown Portland, Maine. Intonational Journal of Urban and Regional Research, 2003, 27(3):61.
- [3] Allen P. Cities and regions as self-organization system: models of complexity. New York: Gordon and Breach,1997
- [4] Cheng E, Li H, Love P. Establishment of critical success factors for construction Partnering. Journal of Management in Engineering.
- [5] Lin Suxu. Research on the Pattern of Government Decision- making Information Consultant Agency--take Guangdong Province for example
- [6] Dennis Heung-Fu Mui, Shankar Sankaran. An effective Project Management-based Application Model for Sustainable Urban Renewal in Hong Kong.
- [7] The American Institute of Architects Official Guide to the 2007 AIA Contract Documents American Institute of Architects, 2009.