Importance of corresponding territory investigation to work of responsible planners from content and time sequence perspective

Xiaoying Deng¹, and Jing Ma²*,

¹Urban Construction Department, Beijing City University, Beijing, China
²Urban Construction Department, Beijing City University, Beijing, China
*corresponding author’s e-mail: 13810101290@163.com

Abstract. In 2019, Beijing issued the Beijing Implementation Measures for the Responsible Planners System. The responsible planners then became one of fundamental strength in the refined urban governance chain. This paper discusses the importance of corresponding territory investigation to the work of responsible planners from content and time sequence perspective. This paper also points out the relationship between "urban physical examination" and corresponding territory investigation of responsible planners in the era of big data, and offers suggestions for the promotion of future work.

1. Introduction
As China's urbanization has entered a mature and sFigure period, from incremental planning to stock planning, streets and communities as the basic units of society will be in an important position in urban planning work. The 19th National Congress of the Communist Party of China pointed out that it is necessary to "strengthen the construction of community governance system, promote the focus of social governance at the grassroots level, give play to the role of social organizations, and realize the benign interaction between government governance, social regulation and residents' autonomy". As the planning professionals who mainly serve the local streets and communities, the responsible planners should not only transmit the administrative thoughts from top to the local residents and owners, publicize and implement the technical planning to the grass-roots level, but also need to convey the demands of the public. The role of the responsible planner is not only a professional and technical personnel, but also an important bridge between the government and the grassroots residents.

The special nature of responsibility planner determines the diversity and complexity of his work. "Participatory Governance" requires the responsible planners to fully grasp and understand the local streets and communities, and requires their work to be more meticulous and pragmatic. Long term, effective and accurate corresponding territory investigation is of great significance to ensure the smooth development of the work of the responsible planner.

2. Content and sequence of local investigation work of the responsible planner

2.1. Complexity of planning work
The corresponding territory investigation of the responsible planners mainly focuses on the population, land and houses of the streets, towns (townships), districts or villages, and needs to provide professional planning guidance and technical services for the planning, construction and management
within the scope of their responsibilities. In short, the corresponding territory investigation of the responsible planner needs to find out the interaction between the three elements of “population, land and house”, and the three processes of “planning, construction and management”, as in Figure 1.

![Figure 1. Interaction between the three elements, and the three processes](image)

2.2. Three stages of responsible planner's corresponding territory investigation

According to the time sequence of the work, the corresponding territory investigation of the responsible planner can be divided into three parts: basic investigation stage, physical examination investigation stage, and project investigation stage, as shown in Figure 2.

![Figure 2. Three stages of territorial investigation of responsible planners.](image)

Basic research is the first task of the responsible planner after he or she has been stationed in the territory. It is necessary to fully understand the basic situation of the territory, quickly get familiar with the service objects and explore the working methods. The physical examination investigation stage is a process of finding and discussing problems according to the specific situation of streets and communities, and the demand feedback of residents' owners after understanding the territorial conditions. This process is like a comprehensive physical examination of the territory to prepare for the subsequent work plan. The results of the work of the responsible planners will be directly reflected in the specific projects. The projects here include three situations: one is the construction projects led by enterprises; the other is the projects led by street organizations, such as the reconstruction of small and micro spaces and the renovation of back streets and alleys; the third is the projects led by the governments, such as regulatory detailed planning and village preparation. Responsible planners need to play different roles in the process of different projects, do a good job in the technical support work of consignor in the projects led by enterprises, undertake the design and research tasks in the projects
led by the street organizations, actively cooperate with the superior planning department in the projects led by governments and publicize relevant policies to the grassroots people.

2.3. Classification of main contents of corresponding territory investigation of responsible planner

The corresponding territory investigation work of the responsible planner is detailed and complicated. There are many research objects. The focus of each stage is different, as shown in Figure 3.

![Figure 3. Survey contents of responsible planner's territory.](image)

In the basic research stage, the research contents mainly focus on the three elements of population, housing and land use. Before that, the boundary of communities and villages should be clearly defined, so as to eliminate the hidden challenges and disputes for the future population statistics and housing and land ownership. Urban areas generally attach great importance to improving the level of urban development and people's livelihood services. Therefore, the research on public management and public service facilities, road traffic facilities and public facilities is a key work, while for towns (townships) and villages, the more difficult research work is to keep balance in the arrangement of urban and rural overall planning.

The physical examination investigation is the stage of finding problems according to the basic situation of the territory. At the beginning of the investigation, it is advisable to fully listen to the requirements and suggestions from the superior planning department, the territorial docking staff and the residents' owners. At present, due to the limitations of the professional composition of the responsible planners, they do not have the ability to master the advanced technology of spatial big data analysis. Therefore, the content of physical examination research is still limited to the field of space creation and planning management, which urban planning professionals are good at.

Urban safety, urban environment and historical and cultural resources are the research contents that need long-term follow-up and key work of the responsible planners. Among them, urban safety is mainly related to the safety of local residents, and is the capacity of the city to cope with emergencies. It is an important content of urban safety investigation to find out the potential safety hazards, check the configuration of fire-fighting facilities, and reasonably and fully arrange emergency shelters. The research focus of urban environmental physical examination project is mainly on the evaluation of the quality of local human settlements. The distribution of green space, walk-ability, road network density and pollution are important evaluation indicators. The important significance of territorial historical and cultural resources research to the work of responsible planners is not only to better protect the work, but also to make full use of the historical and cultural resources familiar to the common people.
to publicize and educate the residents' owners. The historical and cultural resources of the territory are like a starting point, which can help the responsible planners smoothly carry out the public participation work of interpreting planning results and publicizing relevant policies. Territorial residents and owners can also establish contact with responsible planners more quickly and recognize their work.

In addition to the three fixed special contents of urban safety, urban environment and historical and cultural resources, the dynamic special project of urban hot spots should be included in the physical examination investigation of responsible planners. Urban hot spots are mainly the hot topics of urban development in the region in this period. The problems can come from the concentrated demands of residents, social concerns and key work plans of government departments. In recent years, the improvement of block environment, the renovation of back streets and alleys, the transformation of old residential areas, and the elderly people and children friendly community are all hot topics of great concern to the public in recent years.

The project investigation stage is a stage in which the responsible planner provides technical support and other assistance services for specific projects of the territory after being familiar with and mastering the situation of the territory. These projects are mainly from the construction projects of enterprises, from the government planning departments related to territorial planning projects, and from the streets and other local grass-roots management departments of transformation projects. For projects with different demands from different sources, the responsible planner needs to play different roles, not only as a technician but also as a coordinator, as well as to bear part of the responsibilities of consignor.

3. Importance of corresponding territory investigation to work of responsible planners
For the responsible planners, corresponding territory investigation is a long-term participation and dynamic maintenance work. It is a process from "finding the background" to "finding problems", and finally implementing in the "offering services". Research itself is an important part of the work of the responsible planner, not only at the early stage of the core work, but also the key to the success of the planning.

3.1. "Urban physical examination" attribute of responsible planner's work
The work of the responsible planner has a strong "city physical examination" attribute. The responsible planner is responsible for helping the government to carry out the planning publicity and interpretation. At the same time, as the territorial staff, they are connected with the smallest unit of the city. Long term residence in the territory reflects the demands of the territory and responds to the residents' demands. At present, such professional roles and working methods seem to be very suitable for undertaking the work of "urban physical examination". "Beijing Urban Master Plan (2016-2035)" considers urban physical examination as one of the important work contents of Beijing's future urban development. The responsibility planner system itself is the product of the requirements of refined governance of big cities, and the emergence of "urban physical examination" is also to deal with the "urban disease". It analyzes and evaluates the current situation of a series of social management and public service problems in the process of urban development. The two are essentially identical.

"Urban physical examination" evaluation has the characteristics of space-time precision, real-time monitoring, regular evaluation and dynamic maintenance [1]. The personnel composition of the responsible planner covers planning, architecture, civil engineering, industrial design, municipal administration and sociology, etc. He or she has been stationed in the territory for a long time, is familiar with the situation of the territory, understands the demands of the residents, and has a strong sense of territorial responsibility. The monitoring, assessment and maintenance provided by the responsible planner are full of emotion and "grounding gas". This "pyrotechnic gas" from territorial responsibility can make up for the inflexibility of assessment by using technical platform alone.
3.2. Research is an important means of planning and publicity

The Beijing Implementation Measures of Responsible Planner System (Trial version) clearly stipulates that responsible planners should publicize relevant policies to urban and rural community residents and interpret planning results. At present, the main research methods of responsible planners are still questionnaire, interview, discussion and field survey. Because of the long-term nature and complexity of corresponding territory investigation, the responsible planners can closely contact a large number of territorial grass-roots staff and residential owners in the survey. This repeated communication process itself is also a high-frequency implantation of the concept of public participation in planning and governance. With the further enrichment of various research and publicity means, the "Participatory Governance" of territorial units will be more flat and polycentric, which will get better support from residents' owners.

4. Analysis of problems existing in corresponding territory investigation of responsible planners

4.1. Lack of unified and effective technical platform support

Compared with the basic stage, the research content in the physical examination stage is more difficult and needs more data, which should be accompanied by professional research and thinking. The research needs continuous progress and should fully rely on the city fine management platform supported by big data technology to ensure the effectiveness of the research.

Beijing's responsible planner system has been put on trial since May 2019. The responsible planners teams in various districts are still in the stage of constantly exploring the working framework and working methods. At present, there is no unified and effective technical platform to support the research work. Some teams have a certain understanding of the territory because they have done planning projects in the territory before. More teams have no experience in territorial projects and have no accumulation of information and data. At the same time, in order to fulfill the various tasks entrusted by the government and the residents' owners to the responsible planners and truly realize the fine management of the city, the investigation work of the responsible planners must be long-term and sFigure. This long-term stability should not only be reflected in the stability of team members, but also in the stability of real-time monitoring and dynamic updating of territorial data. On this basis, the long-term resident responsibility planner team can better serve the territory.

At present, Beijing's responsible planners team is mainly composed of planning, architecture, municipal, civil engineering, sociology and other professional and technical personnel, most of which do not have the conditions to master the advanced technology ability of spatial big data analysis. In the future, with the improvement of the new smart city spatial information service framework and the open sharing of big data system, the investigation difficulty and workload of the responsible planners will be greatly reduced and reduced. After the basic research work of "touching the family" is completed, the dynamic updating and real-time monitoring physical examination investigation will be an important work content of the responsible planner team.

4.2. Inconsistency of territorial survey contents and standards

In this stage, it is necessary to find a way to reduce the burden of the responsible planners. The planning committee or the competent planning department can provide a list of different survey contents and standards according to the situation. Taking Beijing as an example, the content and depth of investigation should be differentiated among urban core areas, urban central areas, towns (townships) and villages. Other solutions should be taken for data beyond the capacity of the responsible planners. At the same time, the contents and standards of corresponding territory investigation with similar nature should be unified as far as possible, so as to facilitate the communication and exchange of experience between the responsible planners. Research results should be preserved in a unified and standardized way to ensure long-term and sFigure monitoring of territorial development. With the further improvement of the responsible planner system, it is important to provide the research guide and work list to help the work.
4.3. Research cooperation problems caused by unclear responsibilities, rights and interests
Beijing's responsibility planner system is still at the exploratory stage, and the unclear "responsibilities, rights and interests" will bring great obstacles to the promotion of the work. In the territorial survey, the effectiveness of the work is related to the cooperation of the local grass-roots staff and the superior planning department to the work of the responsible planner, and more closely related to the education level of the residents, owners and villagers. The coordination degree of rural responsible planners in the investigation work is obviously not as high as that of urban responsible planners. On the one hand, due to the insufficient status data accumulated by the villages themselves, on the other hand, because the cultural level of villagers is not as high as that of urban residents, it is difficult to put forward demands in accordance with the problems in the process of communication, and the willingness to participate in the construction and development of villages needs more mobilization. This has brought great difficulty to the work of rural responsibility planners. In the case of insufficient research, it is difficult to offer perfect outcome of the work, which becomes a unsustainable way to develop.

5. Conclusion
In the future, the responsible planners will become an important link in the chain of urban refined urban governance, and play a key role in communication with the government, the grass-roots management institutions and the residents' owners. As an important work content of the responsible planner, corresponding territory investigation should be more standardized and get more institutional support and technical support. With the further normalization of "urban physical examination", the corresponding territory investigation of responsible planners should further rely on the means of big data and informationization, so that accurate and efficient research work can become an important support for territorial refined urban governance.

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