

# TRANSPORTATION PLANNING PROCEDURE STIPULATED IN THE REGULATIONS ON CITY PLANNING IN CHINA

By Chunyan SHAN\*\* and Tetsuo YAI\*\*\*

## 1. Introduction

Stepping into the stage of rapid economic development, China has to face great challenges in the field of urban transportation planning system. With the governments' increasing attention to transportation infrastructure, the weakness of current planning institutional system is turning more obvious. As one part of city planning, the establishment and transformation of transportation planning in China is determined by the national economic structure and government structure.

At the stage of planned economy the government played a dominant role in resource allocation, while city planning was the continuity and detailed implementation of the national economic plan. Cities made their transportation plans according to the guidelines, premises and requirements provided by the general socioeconomic development plans on the national, provincial and local levels before China adopted the open and reform policy. Specifically, to all transportation projects at the regional and to most major projects at the local level, the central government has the most influential say. The planning of transportation system places emphasis only on road networks and location of transport facilities<sup>1)</sup>. There was not much need for the transportation professionals to care for the financing issue, public participation, and actual social and environmental impacts that are important concerns of transportation officials today.

The open policy has brought great changes to urban transportation planning. By absorbing successful experiences from more advanced countries, China had tried to make more effective transport planning and traffic management interventions<sup>2)</sup>. Techniques adopted for this purpose include land use and transport planning, travel demand forecasting, signalized junction design, and area traffic control systems. Increased attention has been given to urban transportation policies on the national level. However, relatively less legislation encompassing institutional aspects of urban transportation planning have been passed in recent years. The administrative system and some officers' personal wills have a great effect on transportation plan-making. Citizens are not involved in the plan-making process as well as their opinions can not be integrated in the final decision. This paper introduces the evolution of transportation planning in China firstly. The second section illustrates the transportation planning level and content which are stipulated in the regulations on city planning. The stage of public involvement activities in the planning process and its procedure are reviewed in the third section.

## 2. Transportation Planning Framework Stipulated in the Regulations on City Planning in China

### (1) Legislation on transportation planning

There is no specific national law for transportation planning in China now. According to the law, urban transportation planning is one of the components of city planning. In 1984, The State Council promulgated *Regulations on City Planning*. And it was replaced by the *City Planning Act* approved in 1989 by the National People's Congress. The Act was a major milestone in the history of the urban planning in China while it set up a comprehensive urban planning system<sup>3)</sup>. The *Formulation Method of City Planning* (FMCP) was enacted in 1991 and revised in 2005 by the Ministry of Construction who are responsible for urban construction in the country. The *Formulation Method of City Planning* is the department regulation to implement and specify the Act. Meanwhile, People's Congress at provincial level has issued local regulations on city planning while local government at different levels and authorities responsible for city planning have made great number of standardized and policy-oriented documents.

### (2) Transportation planning framework

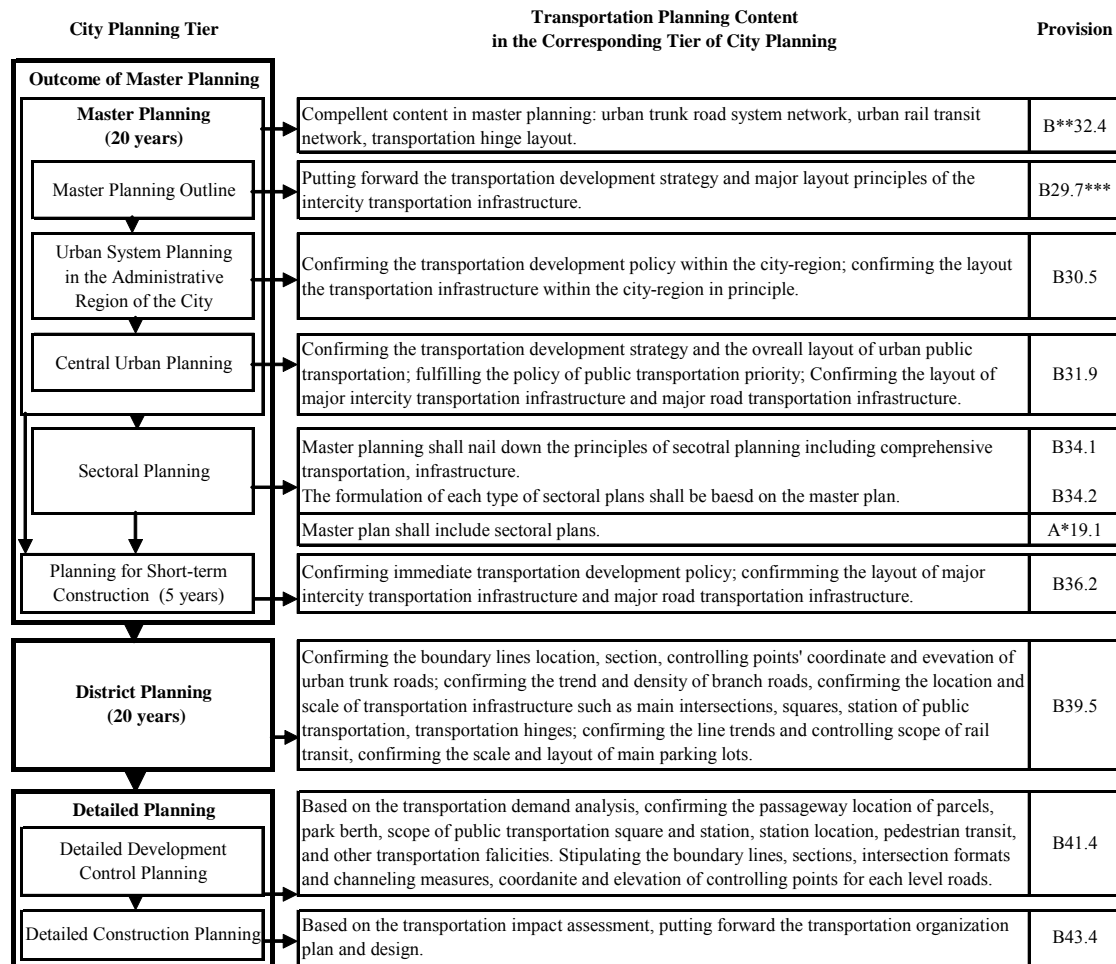
The city planning tiers are illustrated in Figure 1. According to the Act<sup>4)</sup>, master planning and detailed planning belong to statutory planning (Article 18). The city master plan shall include the designated function of a city, the development goal and target planning size of the city, the standards, norms and criteria for the main constructions in the city and the land use structure, functional land use differentiation and the general layout for various types of constructions, comprehensive transport system, water space and green space system, sectoral planning and planning for short-term constructions (Article 19, Section 1). The district plan can be prepared after making the master plan to further control land uses at the district level. According to Article 18 of the Act, the city district plan is not compulsory and belongs to the master planning stage. It can be conducted in the large and medium-sized cities according to their

\*Keywords: Transportation Planning, City Planning, Public Involvement, Planning Procedure, China

\*\*Doctoral Course Student, M. Sc., Dept. of Built Environment, Tokyo Institute of Technology  
(4259, Nagatsuda-cho, Midori-ku, Yokohama, Kanagawa, Japan, TEL & FAX: 045-924-5675)

\*\*\*Member of JSCE, Dr. Eng., Dept. of Built Environment, Tokyo Institute of Technology  
(4259, Nagatsuda-cho, Midori-ku, Yokohama, Kanagawa, Japan, TEL & Fax: 045-924-5675)

situation. The district plan may be compiled on the basis of a master plan for large and medium sized cities to further control and define land uses, the boundary and development intensity of the districts, as well as to coordinate various infrastructure, public amenities and facilities in the districts. According to the Act, the detailed plan shall be based on the city master plan or district plan to stipulate the planning for the various construction projects within the short-term development area of the city. The detailed plan shall include the boundaries of each construction project within the planned plot, control indices such as building density and building height, general layout plan, utility engineering plan and three dimensional site plan” (Article 20).The detailed planning includes two types--the detailed development control planning (DDCP) and the detailed construction planning (DCP). The DDCP is prepared in city planning districts where future development projects are uncertain, while the DCP is prepared in areas that are facing immediate construction<sup>5)</sup>.



\*A: City Planning Act of PRC; \*\*B: Formulation Methods of City Planning enacted by the Ministry of Construction, PRC;  
 \*\*\*B29.7 means the content of transportation planning is stipulated in the article 29 section 7of B

Figure 1: Transportation Planning Stipulated in the Regulations on City Planning

As one component of city planning, the content and depth of transportation planning in the corresponding city planning tiers are required in the Act and 2005 *Formulation Method of City Planning* (Figure 1)<sup>6)</sup>. The *Design Criterion on Urban Road Transportation Planning* (GB 50220-95) enacted in 1995 by the Ministry of Construction is the unique technique document concerning transportation planning. This criterion requires that urban road transportation planning shall be based on the city master plan to meet the needs of transportation and to enhance the promoting and restricting effect of urban road transportation on land use development degree (Article 1.0.4). Urban road transportation planning shall include development strategic planning of urban road transportation and comprehensive network planning of urban road transportation (Article 1.0.5)<sup>7)</sup>. No matter in the Act or the department regulations, the current provisions related to transportation planning are limited to the technique content. There is no regulation or guideline to confirm and stipulate the planning procedure for each level of transportation planning. Lacking of standardized procedure, most cities conduct transportation planning follow the conventions and usual practice. Yang (1989) proposed three types of transportation planning including strategic transportation planning (20-30 years), comprehensive transportation and road network planning (10-15 years) and detailed improvement program (0-5 years)<sup>2),8)</sup>. In accordance with the city planning, Zhao presented that urban transportation planning can be divided into two levels: city comprehensive transportation planning and district transportation planning. City comprehensive transportation planning is based on the

city master plan to make out the transportation system layout of whole city while district transportation planning is generally based on the district plan or detailed plan to make out the district transportation system and the layout of important transportation facilities. District transportation planning has just been conducted in recent years in some cities as deepening and specifying the city comprehensive transportation planning<sup>9)</sup>.

### 3. Public Involvement for Transportation Planning

One weakness of the current transportation planning process is that planning is still very much an art of the technocracy. Only the opinions of other related administrations are integrated into the planning proposal while citizens have few chances to access the transportation planning process. While professional technical competence is needed for the planning practice, it is not sufficient. Effective and meaningful public participation and monitoring is an essential element to protect the long-term interest of the city and the interests of disadvantaged groups<sup>10)</sup>.

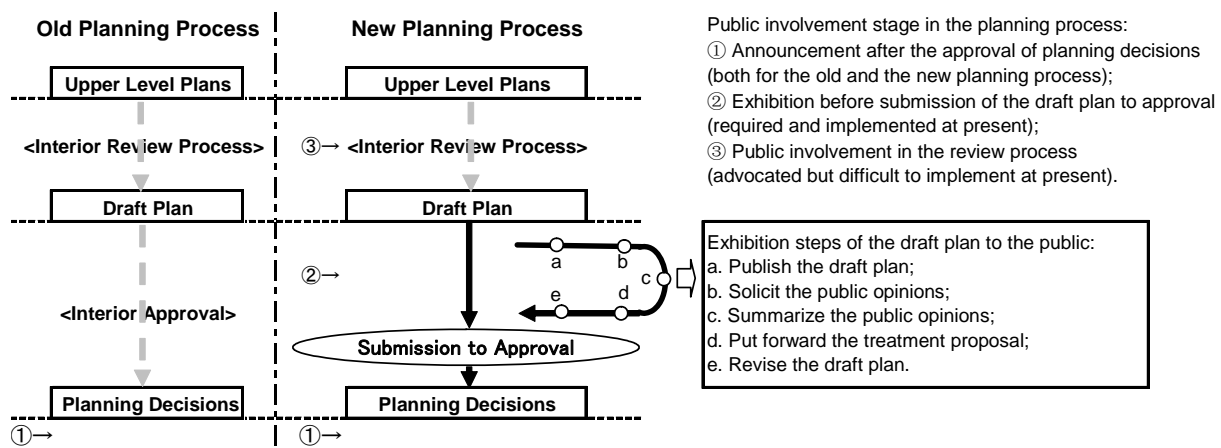


Figure 2: City planning process and public involvement activities

Table 1: Requirement of some provinces on exhibition and openness span of city planning process (unit: day)

Province		Heilongjiang	Xinjiang	Henan	Shanxi	Anhui	Hunan	Jiangsu	Guizhou	Jiangxi	Guangxi
Issued Year of Circular		2002	2006	2003	2006	2007	2006	2005	2006	2004	2007
Master Planning	Before Approval*	≥15	≥30	≥15	≥15	15	≥15	≥15	≥15	≥15	≥15
	After Approval**	≥15	Long term	Long term	×	60	≥60	×	≥30	Long term	≥60
District Planning	Before Approval	≥15	≥30	≥15	≥15	15	≥15	≥15	≥15	≥15	≥15
	After Approval	≥15	Long term	Long term	×	60	≥60	×	≥30	Long term	≥60
Sectoral Planning	Before Approval	≥15	≥30	≥10	≥15	×	≥15	≥15	≥10	≥10	≥15
	After Approval	≥15	Long term	≥10	×	60	≥60	×	≥15	≥10	≥60
Detailed Development Control Planning	Before Approval	≥15	≥30	≥10	≥15	15	≥15	≥15	≥15	≥15	≥15
	After Approval	≥15	Long term	≥10	×	30	≥30	×	≥30	×	≥30
Detailed Construction Planning for Important Plot	Before Approval	≥10	≥30	≥10	≥10	10	≥15	≥10	≥10	≥10	≥15
	After Approval	≥10	Long term	≥10	×	30	≥30	×	≥15	≥10	≥30

\*the draft plan is published before submission for approval; \*\*the plan is published after approval.

The stage of involving public into the planning process in China is changing as ①→②→③ in Figure 2. Stage ① is announcing the planning decisions after the approval; Stage ② is publishing the draft plan before submission to approval; Stage ③ is engaging the public in the review process of planning. In the 1990 City Planning Act, it is only stipulated that city plans shall be announced by the people's government of the city after it is approved (Article 28). In the 1991 *Formulation Method for City Planning*, it is mentioned that the opinions of related administration and citizens should be solicited broadly (Article 9), but there is no implementation procedure to follow. Almost no public participation activities are conducted during the previous planning process. From the beginning of 21 century, it is realized that planning procedure should be made mandatory and ensured by law as well as public participation. The *Formulation Method for City Planning* revised in 2005 added the provisions concerning public involvement. It stipulates that before submitting the city master plan for examination and approval, the city government shall solicit social public opinions adequately by taking effective measures according to law. In the formulation of detailed plan, the opinions of the public, organizations affected by the plan shall be heard adequately through the means such as exhibition, consultation and so on. The results of opinion adoption shall be announced (Article 16).

Based on the national Act and regulations, many local government and departments enacted the local rules and administrative documents to enhance the openness of planning process to the public. Most provinces have issued the circulars or directive documents on the exhibition and openness of city planning process. Master planning, district planning, detailed planning as well as sectoral planning is required to be published before and after approval of planning decisions. Transportation planning at each level should follow the same stipulations. The public may comment for the draft plan before the submission for approval. Table 1<sup>11)-19)</sup> listed the requirement of some provinces on the exhibition span for each level planning. For example, Heilongjiang province required that the comprehensive transportation and

road network planning shall be published for not less than 15 days both before and after the approval. Some provinces such as Anhui, Hunan, Guangxi and Beijing city, Shanghai city regulated that exhibition procedure of the draft plan and treatment method of public opinions before submission to approval (Figure 2). Generally the procedure is as follows: publishing the draft plan; soliciting the public opinions; summarizing the public opinions; putting forward the treatment proposal; and revising the draft plan. In addition, the reaction of government to the public opinions should be announced. Regarding the public involvement in the review process, most effort has been put into the lowest level of city planning—detailed planning, especially detailed development control planning. Guangdong province, Sichuan province, Shandong province, Anhui province have enacted the regulations on management of city detailed development control planning. However, the feasible method still rest on the openness before the approval of draft plan. Questionnaire and interview survey are only conducted in a small-size samples for some special questions<sup>20)</sup>.

Being the same situation as city planning, the draft plans of road construction in short-term are generally published after the detailed layout and design have been finished before the submission to approval. This step to public involvement is already a big progress for many local governments. On April 5<sup>th</sup>, 2006, the urban planning bureau of Zhengzhou city, Henan province published the draft plans of 21 roads (equipped with 7 pipelines of water supply, rain, sewerage, electric power, gas, heating-power and communication) and 2 grade separation bridges before approval at the first time. The bureau readjusted the planning decisions by integrating the opinions from all aspects and announced the final decisions<sup>21)</sup>. At the stage of considering road construction programs in 2007, Langfang city of Hebei province listed road construction proposals over 20 to the public, and picked out the programs in dire need of improvement by citizens' vote in public<sup>22)</sup>. Reviewing the three stages of involving the public, the opinions of the citizens have little influence on the transportation plan-making process. Stage ① just lets the public know the planning decisions; Stage ② gives the public the opportunities to comment for the draft plan which has been formed and is difficult to be changed greatly; Stage ③ may give the opportunities of the public to affect the planning process. However, the present institutional system and social situation proved it not easy.

#### 4. Conclusions

There is no specific national law for transportation planning in China. Urban transportation planning is one of the components of city planning. The content and depth of transportation planning are stipulated in the regulations on city planning according to the city planning tiers. The provisions related to transportation planning are limited to the technique content. There is no regulation or guideline to require the planning procedure for each level of transportation planning. There is lack of public participation in the planning process. The stage of involving the public is moving forward from announcing the planning decisions after approval, to publishing the draft plan before approval, then to the review process of planning in the future. The local cases showed public involvement of road construction planning is just stepping into the stage publishing the draft plan for soliciting public opinions before approval.

#### References

- 1) Zhou, J.: Exploration of China's urban transportation planning history, problems and policy recommendations, *Urban Transport of China*, Vol.4(3), pp. 33-37, 2006
- 2) Huang, Z.: Data integration for urban transport planning, Doctoral Dissertation, Faculty of Geographical Sciences, Utrecht University, The Netherlands, pp.49, 2003.
- 3) Yeh, A. and Wu, F.: The transformation of the urban planning system in China from a centrally-planned to transitional economy, *Progress in Planning* Vol. 51(3), pp.165-252, 1999.
- 4) The Standing Committee of National People's Congress: *City Planning Act*, 1990.
- 5) Shan, C. and Yai, T.: The role of public involvement in urban planning process in China: review of laws and regulations of urban planning, (submitted)
- 6) The Ministry of Construction, the PRC: *Formulation Method of City Planning*, issued in 1991, revised in 2005.
- 7) The Ministry of Construction, the PRC: *Design Criterion on Urban Road Transportation Planning* (GB 50220-95), 1995.
- 8) Yang, T.: On Administrative Levels and Allotted Times of Urban Traffic Planning in China, *Urban Planning Forum*, 1989 (4) (in Chinese).
- 9) Zhao, Y.: Preparation of Urban Transportation Planning and Urban General Planning Management—Taking Beijing as an Example, *Urban Transport of China*, Vol. 5(1), pp.37-40, 2007 (in Chinese).
- 10) The World Bank: China: building institutions for sustainable urban transport, EASTR Working paper NO.4, Transport Sector Unit, Infrastructure Department, East Asia and Pacific Region, pp.11, 19, 2006.
- 11) Infrastructure Planning Department of Beijing Planning Committee, and Transportation Research Center of Beijing University of Technology: *Research on Exhibition System and Method of Infrastructure Planning Projects in Beijing City*, 2003.
- 12) Shanghai Urban Planning Management Bureau, *Interim Regulation of Shanghai City on Hearing the Public in Formulation of Detailed Control Plan*, 2006.
- 13) The Ministry of Construction, Heilongjiang Province, *Circular on Promoting the Political Affairs Openness of Provincial Urban Planning and the Social Monitoring by Learning and Generalizing Shangdong Province's Experience of "Sunshine Planning"*, 2002.
- 14) The Ministry of Construction, Henan Province, *Circular on Implementing Exhibition System of Urban Planning in the Whole Province*, 2003
- 15) The Ministry of Construction, Shanxi Province, *Circular on Generalizing Exhibition System of Urban Planning*, 2006
- 16) The Ministry of Construction, Anhui Province, *Interim Method of Anhui Province on Urban Planning Exhibition System*, 2007.
- 17) The Ministry of Construction, Hunan Province, *Urban Planning Exhibition System of Hunan Province (Tentative)*, 2006.
- 18) The Ministry of Construction, Guizhou Province, *Urban Planning Exhibition System of Guizhou Province*, 2006.
- 19) The Ministry of Construction, Jiangxi Province, *Circular on Implementing Exhibition System of Urban Planning in the Whole Province*, 2004.
- 20) He, D. and Zao, M.: On political and economic base of public participation in urban planning and its institutional arrangement, *Urban Planning Forum*, pp.31-34, 1999(5) (in Chinese).
- 21) <http://ha.people.com.cn/news/2006/04/06/97179.htm>, June 26, 2007.
- 22) Website of the Ministry of Construction, Hebei province, [http://www.hebjs.gov.cn/jszx/hybz/hybz138/jrjl/200701/t20070130\\_78544.htm](http://www.hebjs.gov.cn/jszx/hybz/hybz138/jrjl/200701/t20070130_78544.htm), June 26, 2007.