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## Research on the Long-term Mechanism of Housing Supply under Urbanization in Guangzhou

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RESEARCH ON THE LONG TERM MECHANISM OF HOUSING SUPPLY UNDER URBANIZATION IN GUANGZHOU

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# Research on the Long-term Mechanism of Housing Supply under Urbanization in Guangzhou

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## I. INTRODUCTION

### a) The research background

Guangzhou Tenth Party Congress in 2011 has established the first strategic transformation and upgrading, the construction of Guangzhou happiness ideas, goals and major measures, with the Guangzhou grand blueprint of the development of the next. Its spiritual essence converge is to take a new path of urbanization with the characteristic of Guangzhou. New urbanization with no existing standard model, nor is the concept of the renovation, but the concept of urban development system innovation and enhance the shape of urban civilization. Guangzhou as a big city, "city disease" phenomenon is getting worse. Urban village housing, living environment deteriorate, traffic jams, infrastructure and public facilities is not complete, low efficiency of the use become the realistic dilemma of urbanization construction. New urban development will inevitably lead to changes in the way cities use spatial pattern of land and real estate, change people's awareness of the value of the house, in order to protect the housing needs of urban residents, and promote social and economic harmony, sustainable development, the government must establish long-term effective mechanism of housing supply.

## II. SITUATION ANALYSIS AND PREDICTION OF GUANGZHOU CITY HOUSING

### a) Population Status and carrying capacity of Guangzhou City

According to the "Guangzhou statistical yearbook 2011" population statistics data, in 2010 the

city of Guangzhou (including Zengcheng City, Conghua city) by the end of the year the household register population reached 8061400 people, the resident population reached 12709600 people. According to the fifth, sixth national population census data, Guangzhou, the average annual growth rate is 2.48%, with an average annual increase of the resident population of nearly 275800 people.

According to Liang Guiquan's research, the force from the following four aspects is to consider the carrying capacity of Guangzhou city in 2020: the water capacity of 14.13 million people, ecological environment capacity of 19.5 million people, the land resources population capacity of 18 million people, economy, population capacity of 15 million people.

### b) Housing market situation

#### i. Commodity housing construction

1. Analysis of structure and transaction new commodity housing in Guangzhou city in 2011. The largest area of the new commodity housing is Panyu with 1.8083 million square meters, the second is Huadu with 1.739 million square meters, the minimum is 64400 square meters in Huangpu. The main structure of the new housing apartment layout has three kinds: 90 square meters, with 90-144 square meters and 144 square meters. The 90square meters of the total 29.63% sets, fold 12541 yuan / square meter; 90-144 square meters of the total 55.86% sets, fold 11963 yuan / square meter; more than 144 square meters of the total 14.51% sets, fold 17183 yuan / square meter.
2. Analysis of 2011 Guangzhou commodity housing stock structure and transaction. In 2011, the total area of 5.9926 million square meters, the largest trading volume is 1.669 million square meters in Panyu District, 965000 square meters of Tianhe District, Luogang is the lowest of 82000 square meters. The main apartment layout structure of the housing stock is of three kinds: 90 square meters, with 90-144 square meters and 144 square meters. Of which 90 square meters of purchased account for 65.44% of the total volume, average price is 7127 yuan/square meters; 90-144 square meters of a cycle of total number of 28.47%, the average price is 6976 yuan/square meters; More than 144 square

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meters of residential account for 6.09% of the total volume, average price is 7632 yuan/square meters.

From the above housing market situation, the development of the housing market in recent years in Guangzhou is stable. The amount of housing starts, completed quantity, sales are rising steadily year by year. Per capita housing area has been improved, increased from 3.97 in 1980 to 21.4 square meters in 2010. As the center of city construction and transformation projects completed, the central city primary real estate has been very little, but there are plenty of second-hand housing transactions. New homes are mainly concentrated in Panyu District, Huadu District, Nansha District and Baiyun district. The transaction price of the highest is in Tianhe District, Yuexiu District, Liwan District and Haizhu District, but the largest price increases is Baiyun District, Guangzhou City Development Strategy is mainly presented in "North excellent", so the area's infrastructure and living environment quality have been improved, attracting a large number of home buyers to settle in the region.

#### ii. *Construction of affordable housing*

In 2011 the total construction of Guangzhou security housing is 5.29 million square meters, including the construction of public housing, the largest of 2.47 million square meters, accounting for 46% of the total area of affordable housing construction, mainly distributed in Yuexiu, Haizhu, Panyu, Huangpu, Huadu and Liwan; The construction of Capped-price housing is 2.37 million square meters, 45% of the total area of affordable housing construction, the price-limited housing all by developers to invest in the construction, centralized distribution on two districts in Baiyun and Luogang.

The construction of low-rent housing of 250000 square meters, accounting for 5% of the total area of affordable housing construction, the low rent housing is mainly distributed in the Baiyun, Tianhe, Haizhu and Liwan four areas; The construction of affordable housing is 200000 square meters, accounting for 4% of the total area of affordable housing construction, mainly distributed in the Tianhe, Baiyun, Haizhu, Liwan and Yuexiu five area.

From the situation of Guangzhou security housing construction, the indemnificatory housing type is complete, including low-cost housing, public rental housing, affordable housing, low-cost, etc. From the perspective of various types of security, the number of public rental housing and low-cost housing are the most, and the least number is low-cost housing. At the same time, the unit area of low rent housing is small, only 8 square meters /room. From the distribution of the indemnificatory housing , affordable housing distribution of the original is quite reasonable, closer to the center of the city, but the price-limited housing and several security housing planning is far away from the

downtown, and is not conducive to the community living.

#### c) *The housing demand forecast in Guangzhou*

1. Guangzhou urban per capita housing area of change and forecast. With the acceleration of urbanization, Guangzhou urban resident per capita living space is greatly improved. According to statistical data, released Guangzhou urban residents per capita housing area of 3.9 square meters from 1980 up to 2010's 21.4 square meters. According to the long-term trend method, and through the Excel function of office software to get the following prediction formula:  $Y = 7.1955 \ln(x) + 1.7867$ . According to the formula, predicted in 2020 Guangzhou's per capita living area is about 25 square meters, and per capita building area to control in 40 square meters.
2. Guangzhou urban housing demand forecasting. According to the Guangzhou moderate population scale control and forecast the per capita living area, to 2020, Guangzhou, the city's total population of 15 million people, and per capita housing area of 30 square meters, the total area of 450 million square meters of housing were required. In 2011 Guangzhou housing area of 291.07 million square meters, and need housing area of 158.3 million square meters. Considering the Guangzhou rural housing area of 181.2 million square meters, through the way as "three old reform", out of which 20% market (mainly rental), you can free up 36.24 million square meters of housing. In this way, by 2020 the Guangzhou housing shortfall is about 103.94 million square meters. From 2012 to 2020, Guangzhou City, the annual need of new housing area is approximately 11.55 million square meters.

### III. THE EXISTENCE OF GUANGZHOU CITY HOUSING SUPPLY PROBLEMS

For the operation of Guangzhou commercial housing, affordable housing in the analysis, combined with the future housing demand forecast, summarizes the Guangzhou housing supply and demand on the following problems:

1. Housing site selection and layout is unreasonable, And public facilities based local area pressure. According to 2010 Guangzhou sixth national census data, the city's resident population, the urban area of less than 50% of the land area gathered nearly 90 percent of the population, at present, the resident population is mainly concentrated in the old eight areas. The concentration of Yuexiu District household population density reached a maximum of 34239 people / km<sup>2</sup>, and the household register population density in the area of Conghua was only 301 people per square kilometer. Urban planning to

improve the urban land development intensity, cause local high population density, lead to serious overload of the foundation of the local city and public facilities become the important factor of deterioration of living environment.

2. The structure of housing units needs to be improved and property needs clarity.

Before 2008, because there was no limit housing units, the developers were keen to develop large-family housing, led to the development of the low proportion of small units of housing. Rural housing units are in the area of 110 square meters to 229 square meters, with an average of 152 square meters, most of these houses are single-layer or multi-layer, large area, low efficiency in the use of. Meanwhile, rural housing lack of unified planning, building and acceptance procedures, but also lack of a unified base construction investment and public facilities. Besides the rural housing property is not clear, homestead house mixed with small property construction, disrupting the normal real estate market, affecting the government's management and decision-making of the real estate market.

3. Affordable housing cannot be fully functional. In the construction of housing, although a substantial increase in the number of homes affordable than ever, but relatively speaking commodity housing, whether in quantity or in the location of choice, are not comparable. Meanwhile, the number of various types of affordable housing also needs to determine accurate prediction. In the use of affordable housing, especially public housing and low rent housing, are not fully in accordance with the market rules and regulations procedures for the allocation and use of effects, affect the persistent and fairness of the affordable housing consumption.
4. Part of the conditions of the regional living facilities need to be improved. In addition to the old town has an excellent education, health care, transportation, entertainment, shopping, sports, leisure facilities and other conditions, the new city infrastructure, there is a big imperfect, affecting the quality of living of residents. Such as Panyu plate, Huaduplate, Zengcheng plate, etc., prices are relatively cheap, but there exists a problem of supporting facilities. The latest development of Nansha district and Luogang area is also a complete lack of appropriate infrastructure.

#### IV. CREATING WAYS OF GUANGZHOU CITY HOUSING SUPPLY OF LONG-TERM MECHANISM

- a) *Increase the supply of affordable housing and renovation of commercial stocks*
  1. Increase the development and investment in affordable housing construction. The guide used in

accordance with the Guangzhou municipal industry, reasonable to determine the number of housing construction in Guangzhou City, the type and location, to ensure everyone has a house to live in, but also does not cause the housing vacant waste. Increase efforts to develop affordable housing to solve the housing needs of low-income people. Give full play to the decisive role of the market in the allocation of resources, and better regulation of the regulatory role of the government. By speeding up the low rent housing, public rental housing construction, expansion of low rent housing and public rental housing benefit coverage, invest in the construction of affordable housing and launch the limit commercial housing. Further research should formulate specific affordable housing property management approach, the implementation of the housing property management system in the districts, the play value of property management services.

2. Clean up idle land, remediation backlog of vacant housing, inefficient development of rural collective construction land, prompting the stock of housing to enter the market as soon as possible. For the idle land resumption, Guangzhou City has taken a series of measures, but how to re-enter the market after the land is recovered, will have to be carefully considered. Under no violation in the early period of the overall urban planning, can be appropriately increased the intensity of land development, appropriate changes to the affordable housing purposes.
  - b) *Increase the number of construction land, control the residential dwelling size.*
    1. According to the Guangzhou city land for industry guidelines, under the total cultivated land ownership control indicators, moderately reduce the amount of construction land; explore the potential to make full use of the stock of urban construction land. Meanwhile, the moderate increase in urban land development intensity, increase floor area ratio and building density, retained space for urban development. In addition to determine the reasonable housing vacancy rate, the appropriate housing vacancy, meet the needs of city of Guangzhou under the background of the rapid development of urbanization.
    2. Strict control of residential dwelling size, with a reasonable size and area.

Small family policy implementation increases the small and medium-sized residential family homes, increasing the residential land and commercial housing supply and to crack down on hoarding and speculation, increasing the real effective commodity houses. According to the above forecast of Guangzhou's population change and per capita living area standard,

the planning scheme of Guangzhou city residential construction is published. The government or developers in determining the plots in each apartment layout control indicators, per site should build more small family model, away from the city center to increase the appropriate proportion of apartment layout, away from the city center to increase the proportion of units appropriate to ensure that the intensive use of land resources.

*c) Establish a unified real estate registration information platform*

Establish a unified real estate registration information platform; promote the process of legislation of property tax. The establishment of a unified real estate registration information platform can play a clear background, to fully grasp the role of real estate information, so that the future of real estate regulation is more well-founded. In addition, after the enforcement of the real estate registration, the property tax will also get technical support, on the basis of "through the reasonable rate setting, the scope of Taxation setting, forcing many property owners to release the idle housing market, increasing the market supply, promoting the house prices down". Regulation of the real estate market economic means to become more prominent, with tax means changing the structure of market demand, adhering to the "investment", to bring the market back to rationality, the property market long-term regulation mechanism gradually formed.

*d) Reform the transfer ways of the land use right*

1. Reform the transfer ways of the land use right and implement annual rent system of the housing land. Practicing a system of paid use of land in China for over 30 years has made great achievements. Increasing land revenue greatly enhances the government's financial strength, improves the urban infrastructure construction, and improves the urban residents living conditions and office. But the land transfer system also has many disadvantages, such as in pursuit of political achievements, local government sold a large amount of land, which not only makes a lot of "land Kings" and indirectly boosts house prices and affect the healthy development of the housing market, also affects the intensive and sustainable utilization of land resources. Reason should be innovative land system; land lease mode should be modified as rent mode, which maintains the stability of the market. Using the way of partial payment for transfer fee of the right to use the land for decades is beneficial to people in country.

## V. CONCLUSION

The new development of urbanization, urban land use patterns and spatial pattern of real estate will be great changes, which will change consumers'

attitude and awareness of the value of residential. In order to protect the housing needs of urban residents, the government must establish a long-term mechanism housing supply. This paper takes the current situation of Guangzhou city housing in 2011 as the research object, analyzes the existing problems of Guangzhou city housing supply, and to predict the future demand for housing in Guangzhou City, and finally puts forward to create the path to Guangzhou city housing supply of long-term mechanism.

Through the analysis of the housing needs of Guangzhou, This paper creates long-term effective mechanism of the housing supply in Guangzhou; it has reference significance for the development of the city. Study of housing supply of long-term mechanism is a systematic project, it involves many fields, and this paper is hard to avoid the omission. Path way in future studies still need to be more comprehensive and detailed market survey, to get more practical long-term mechanism housing path.

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