Urban Growth Management in Portland Metropolitan Region and Its Reference to Beijing

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OUTLINE

1. 中美城市增长的背景差异
   ——Different context of urban growth between China and U.S.

2. 波特兰都市区城市增长管理实践
   ——Urban growth management in Portland metropolitan region

3. 对北京城市增长管理的启示
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The power, location and content of urban sprawl

U.S. —— Car revolution : "Transit Oriented"

- **Power:** (1) Highway— For more than 40 years after World War II, the federal government funded all the interstate highway; (2) the **American Dreams**— Every family has independent garden house and cars

- **Location:** growth along the highway

- **Content:** housing

Growth along the Highway 84
Portland Metro
China—— Land system defect : "Land Oriented"

- **Power:** (1) Urbanization -- For example, Beijing’s population has grown 600,000 per year in the last ten years; (2) Land Finance -- Beijing made about half of its revenue from land-transferring fees; (3) Illegal construction

- **Location:** urban fringe zone (Circle-type spread)

- **Content:**
  (1) housing; (2) Industry
U.S. : Adopted beginning in the 1970s, continued through various phases and emphases until today

● “Push” & “Pull” Methods
  ✓ “push” method – physical boundaries control land use patterns
  ✓ “pull” method – place infrastructure (sewer and water) at specific areas to encourage higher density and direct growth

● Types of growth management tools
  ✓ Urban Growth Boundaries (UGB) : OR, WA, TN
  ✓ Transfer of Development Rights
  ✓ Adequate Public Facilities Ordinances (APFO)
  ✓ etc.
CHINA: manage urban growth by controlling the total amount of urban construction land

  - Clearly put forward to delimit *urban growth boundary* to restrict the city development scale and define the scope of city construction when formulating master planning outline and planning for downtown area. (article 29 and 31)

  - Not mention of the UGB
  - Emphasis on the total amount of urban construction land
管理目标 - The main goal of management

U.S.
- Protect the ecological environment
- Save energy
- Urban sustainable development

CHINA: stricter and higher goals
- intensive use of resources to reconcile the conflict between limited resources and growing urban population

The U.S. has a much smaller population and its per capita habitable resources are far higher than in China.
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In 1973, the Oregon Legislature enacted the Comprehensive Land Use Planning Act (Senate Bill 100), which is one of the strongest state growth management laws in the nation.

Under Oregon law, each city or metropolitan area in the state has an urban growth boundary (UGB) that separates urban land from rural land.

- Salem, OR UGB became model for state.
- 1975: New state law requires all cities to have UGBs.
- 1985: All Oregon cities and Metro had established UGBs.
- 1975-2005: UGBs expanded by 6.5% statewide.
◆ **Nature of UGB**

- **UGB is a legal boundary** separating urban land from rural land.
  - UGB declares where government will invest in urban services.
  - UGB stops urbanization of farm and forest land outside UGB.

- **UGB is not permanent. UGB can expand if region needs more land.**
  - establishes 20-year supply of land
  - every 5 years, must review city’s needs
**Updates of UGB**

- Metro’s UGB established in 1979.
  - 920.5 km², in 1979
  - 1034.6 km², in 2008.
- Several times the boundary has been expanded.
  - Minor expansions 1979-2002
  - Major expansions 2002-2005
    - 71.9 km² in 2002
    - 7.1 km² in 2004
◆ **Supporting Policies of UGB**

- Provide public facilities and services inside UGB through economic means. Invest public infrastructure, such as public transit system (buses, streetcars, Max) —— *free in centre area.*
- Demand high density and in-fill land use development.
- Encourage mixed use of housing and businesses.
- Create Regional Centers.
**Effects of UGB**

- Metro has lost less farmland than other states.
  - USA: 1982-2007, Urban Area Grows by 57%
    Population Grows by 30%
    Sprawl Index 1.9 : 1 (ratio of urban area growth to population growth)
  - Portland Metro: 1980-2000, Urban Area Grows by 35.8%
    Population Grows by 54.3%
    Sprawl Index 0.66 : 1

Figure 1: Fragmentation and Sprawl in the 25 Largest Metropolitan Areas
(Correlation = .66)
◆ **Effects of UGB**

- Slow down suburbanization, enhancing infill development.

  Compared to similarly-sized metropolitan areas, the Portland region has a larger urbanized area and more rural land, with fewer suburbs and exurbs.
◆ **Effects of UGB**

- Slow down suburbanization, enhancing infill development.

In the past two decades, a strong majority of the Portland area’s population growth has taken place in urban areas.

### Regional Population Growth Allocated By Density 1990-2000

<table>
<thead>
<tr>
<th>Density Level</th>
<th>Charlotte</th>
<th>Columbus</th>
<th>Orlando</th>
<th>San Antonio</th>
<th>Portland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban (3000+ persons/sq mile)</td>
<td>7%</td>
<td>31%</td>
<td>64%</td>
<td>63%</td>
<td>88%</td>
</tr>
<tr>
<td>Suburban (1000 to 3000 persons/sq mile)</td>
<td>49%</td>
<td>44%</td>
<td>22%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Exurban (300 to 1000 persons/sq mile)</td>
<td>45%</td>
<td>18%</td>
<td>12%</td>
<td>12%</td>
<td>1%</td>
</tr>
<tr>
<td>Rural (0 to 300 persons/sq mile)</td>
<td>-1%</td>
<td>7%</td>
<td>2%</td>
<td>17%</td>
<td>3%</td>
</tr>
</tbody>
</table>
◆ Effects of UGB

- **Pros**
  - Stops leapfrog development and sprawl
  - Maintains a sharp geographic border between urban/rural
  - Encourages higher density, which dovetails with the needs of public transit effectiveness
  - Forced mixed use and transit oriented projects.
  - Less land consumed/more sustainable

- **Cons**
  - Artificially increases the cost of land
  - Artificially increases the cost of housing, making it less affordable to the masses
  - Existing landlords profit from housing scarcity
  - Perhaps decreases the price of land just outside the UGB, thus punishing land owners there who would like to see to developers
  - Limit economic development
  - More people + less space = more congestion
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—Metro’s urban growth management is built on a good combination of perfect planning system and comprehensive matching policies, and benefited from a good social environment (such as public participation) and a sound legal system.
Cities in China

- Local governments make the UGBs by themselves. In order to get more tax revenue from land-transferring fees, governments often tend to maximize the UGBs.

Metro

- Metro council, not cities themselves makes 25 cities’ UGBs.
How to make the UGB?

Cities in China: (1) Forecast population; (2) Multiplied by per capita construction land

- China is in the stage of rapid urbanization, the population mobility is large.
- The different stages of development, all kinds of construction land demand is different.

Metro: (1) Forecast population and employment; (2) Residential and employment land are calculated Separately.

- Determined mix of housing types (houses, apartments, etc.) and housing densities market can support.
- Estimated new jobs by type of industry or business. For each type, estimated job density.
How to make the UGB?

- How to delimit UGB?

--- Cities in China: The boundary is usually rough and fuzzy, and the level of detail and openness is not enough, which make the implementation of the policy full of uncertainty, and hinder public understanding and awareness of policy.

--- Metro: A clear and stable boundary significantly improve public awareness of the policy, enhance the predictability of policy impact, and ensure the effect of the policy implementation through the widespread public supervision.
● 部门间各类空间界线的整合

— Integration of various types of spatial boundaries

✓ — Problems needed to resolve in China: Urban planning and land use planning are managed in different ministries. They don’t joint in the technical standards, planning period and construction sequence, especially in the scale of urban and rural construction land.

✓ — Metro: Benefited from an integrated planning management department (Metro) and an administrative system of clear function division and smoothly linking.
Такие процедуры объективно увеличивают сложность расширения UGB.

— Maybe complex procedures objectively increase the difficulty of UGB expansion.

Legislation for urban growth management (Senate Bill 100) AND a clear and stable UGB are the basis for management.
公众参与——Public participation

——All stakeholders fully participate in the planning process, which is the basis for implementing growth management policies.

——Metro consult with three counties, civil society, the developer and the landlord to form a legal compromise.
Since the fundamental issues between China and U.S., such as stage of development, land system and administrative system are quite different, so effectively implementing UGB in China faces some difficulties.
发展阶段 - Stage of development

——U.S. with urbanization rate of more than 90%, is in the stage of relatively stable urbanization and Slowing economy. The demand of UGB expansion is less, which is easier to manage.

——China is in a stage of rapid urbanization. To 2050, urban population is expected to grow by about 600 million, and the new demand of urban construction land is 50,000 to 60,000 square kilometers, which is 2.2 to 2.7 times of the national urban area in 2000.
In Metro, Public participation throughout all the links, such as the making, implementation and update of UGB. China has no mature environment for public participation, at the same time legal environment for planning management is also not sound.
Current land requisition system and tax system impel local governments to rely on "land finance". The governments are often the main drivers to enlarge UGB.
The supporting policy of Metro’UGB is to control the development of the surrounding and promote the development of the center. The goal is to improve density and enhance the value of the land, which accord with most people's interests.

The supporting policy of Beijing’s construction zone is to control the development of the center and promote the development of the surrounding, which doesn’t accord with most people's interests.

First, the government would not be tied hands and feet. Second, residents do not want to move to surrounding. Third, developers prefer to develop in the central area to get higher profits and face less risk.
Hearing something 100 times is not as good as seeing it once.