Japanese Experiences on Transport/Land Use Integration

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Outline

1. Introduction
2. Background
3. Characteristics of Japanese City Planning
4. Perspectives for the Future
5. Lessons Learned from the Japanese Experience
1. Introduction

Current Condition ➔ Visioning ➔ Future

Substantial Laws and Regulations
Cooperation between the Private and the Public Sectors
2. Background
Compact Urban Form along Railways

Densely populated areas (1960)  Densely populated areas (1995)
Problems of Rapid Motorization

Motorization Trend
- Explosion of car ownership

1965  8 million

1996  72 million

- Use of railways in large cities

Urban sprawl not along railways
- Expansion of residential areas
- Suburban factory development
- Suburban development academic and research facilities
- Rapid increase of vehicular transport demand

Congestion
- Loss of 12 trillion yen
- Slower traffic
3. Characteristics of Japanese City Planning

- Regulation and Operation toward Formation of Compact Built-up Areas
  - Land Use Regulation: Area Division, Use/Bulk Regulation, Land Development Permission
  - Concurrence of Planning and Development
  - Allocation of Land Development Profit to Railway Development
  - Emphasis on Development of Transportation Nodes
Japanese City Planning Structure

City Planning Area
- 25% of the total land area
- 92% of the total population

Urbanization Promotion Area
- 4% of the total land area
- 66% of the total population (80 million)

3. Characteristics of Japanese City Planning

<table>
<thead>
<tr>
<th>Area</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Total</td>
<td>National Total</td>
</tr>
<tr>
<td>377,800km²</td>
<td>125.0 million</td>
</tr>
<tr>
<td>Outside City Planning Area</td>
<td>Outside City Planning Area</td>
</tr>
<tr>
<td>280,900km² (74.3%)</td>
<td>10.5 million (8.4%)</td>
</tr>
<tr>
<td>Urbanization Promotion Area</td>
<td>Urbanization Control Area</td>
</tr>
<tr>
<td>14,600km² (3.9%)</td>
<td>38,900km² (10.3%)</td>
</tr>
<tr>
<td>Un-divided City Planning Area</td>
<td>Un-divided City Planning Area</td>
</tr>
<tr>
<td>43,400km² (11.5%)</td>
<td>20.7 million (16.6%)</td>
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as of March 1996
3. Characteristics of Japanese City Planning

Structure of City Planning System

- Designation of City Planning Areas
- City Planning Approval
  - Contents of City Planning
    - Land Use Regulation
  - Application of City Planning
- Urban Facilities
- Urban Development Projects
Image of Urbanization Promotion Area and Control Area

3. Characteristics of Japanese City Planning
Concept of Land Use Planning System

- District Plan
- Other Additional Zonings
- Land Use Districts
  - Urbanization Control Area (UCA)
  - Urbanization Promotion Area (UPA)
  - City Planning Area

3. Characteristics of Japanese City Planning
Zoning Map of Yokohama City

3. Characteristics of Japanese City Planning

Legend

- Urbanization Control Area
- Type 1 low-rise exclusive residential district
- Type 2 low-rise exclusive residential district
- Type 1 medium/high-rise exclusive residential district
- Type 2 medium/high-rise exclusive residential district
- Type 1 residential district
- Type 2 residential district
- Semi residential district
- Neighborhood commercial district
- Commercial district
- Semi industrial district
- Industrial district
- Exclusive industry district
Urbanization Promotion Area, Urbanization Control Area, Land Use Zoning

? Land Use Regulation

? Strategic Utilization of Use, FAR, Lot Coverage
- Incentive Zoning
- Bulk Bonus on “Good Development”
- Designating Urbanization Control Areas and Restriction of Transportation Facility Development
Development Permission System

- Planned Control of Private Development Projects
- Cost Sharing of Public Facilities
Operation of Urban Development Project

Emphasis on Concurrence of Planning and Development

- Financial assistance from a core facility development

Examples
- Land Readjustment Project
- Urban Redevelopment Project
Land Readjustment Project
Kamiohoka-West Redevelopment

3. Characteristics of Japanese City Planning
Futamatagawa Redevelopment

3. Characteristics of Japanese City Planning
Approval of “City Plan” and Limitation of Private Rights

- Approval of “City Plan”:
  - Urban Facility Development
  - Urban Development Project

- Smooth Land Acquisition
Development in Suburbs and Railway Development

- Railway and Corridor Development by a Railway Operator: eg.) Tokyoy Railway

- Newtown Development: eg.) Kohoku Newtown
Tokyu Denentoshi Railway

Legend

- Station
- Railway
- Urban development corporation
- Public cooperation
- Urbanization control area

3. Characteristics of Japanese City Planning
### Kohoku Newtown

#### Land for Public Facilities
- Road, Station Plaza and Others
- Pedestrian Walkway
- Parks, Greenery, Green Area, Trail
- River, Canal

#### Public Welfare Facilities
- Education Facilities
- Athletic Park
- Medical Facility
- Administration Facility
- Welfare and Cultural Facility
- Commercial, Office Facility and Others
- Road Facility
- Facility for City Operation
- Cemetery

#### Land for Planned Development

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Land</td>
<td>Land for General Housing</td>
</tr>
<tr>
<td></td>
<td>Apartment, Condominium</td>
</tr>
<tr>
<td>Industrial Land</td>
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</table>
Urban Planning around Transportation Nodes such as at Train Stations

- Cooperation between Local Governments and Railway Operators
- Concentrated Use of Space at and around Railway Stations
4. Perspectives for the Future

- Historical Difference between Japanese Cities and Asian Cities
- Transit Oriented City Planning for Sustainable Development
- Integration of Land Use and Transportation Planning
- Comprehensive City Planning
5. Lessons Learned from the Japanese Experience

- Concentration of Development around a Railway Stations

- Promotion of Uses of Public Transportation and Road Use Geared toward Public Transportation

- Core City Development
Concentration of Development around a Railway Stations

5. Lessons Learned from the Japanese Experience
Promotion of Uses of Public Transportation and Road Use Geared toward Public Transportation

5. Lessons Learned from the Japanese Experience
Core City Development

Present Structure

Concept of Future Development

5. Lessons Learned from the Japanese Experience