Station
Integrated
Urban Development

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NIKKEN SEKKEI LTD
1. NIKKEN SEKKEI introduction
NIKKEN SEKKEI 日建設計

- Multi Disciplinary Design Consultancy Firm
- Established in 1900
- Over 20,000 projects in more than 50 countries
- 1,800 Staffs (Group Total: 2,470) in 2015

Kyoto State Guest House
My Profile

Fields of Expertise:
Urban Design & Planning
Public Space Design

Projects:
Mixed Use : TOKYO MIDTOWN
Mixed Use : Shanghai South Bund Urban Design
TOD : SHIBUYA Station Area Master Plan
TOD : Beijin Liu Li Qiao Station Master Plan
Public Design : Singapore Rail Corridor Competition
2. Station Integrated Urban Development
2. Station Integrated Urban Development

**JAPAN, THE COUNTRY OF MOST ADVANCED TOD**

- Long History of Urban Expansion with Railways
- Worldly Top-ranked Modal Split of Public Transit
- Seamless Connection between Transit Modes
- Advanced ICT system for Smooth Transfer
- Wide Variety of Business by Private Rail Sectors
- Variety of Regulations & Incentives to promote TOD
2. Station Integrated Urban Development

SHIBUYA Station Case
SHIBUYA as Culture & Entertainment Center of Tokyo

2. Station Integrated Urban Development

SHIBUYA as one of the major terminal stations in Tokyo

- Daily Use: 2.1 Million total
- Rail Stations: 8
  (1. JR Yamanote line, 2. JR Saikyo line,
   3. TOKYU Garden City line, 4. TOKYU Toyoko line, 5. KEIO Inokashira line
   6. METRO Ginza line, 7. METRO Hanzomon line, 8. METRO Fukutoshin line)
2. Station Integrated Urban Development

- Lack of Public Space
- Unsafe Environment
- Complicated Transfer
- Insufficient Capacity
- Road Congestion
- Decrepit Buildings
- Planning Issues
2. Station Integrated Urban Development

① HIKARIE Culture Core

② Station Central
③ DOGENZAKA project

⑤ SAKURAGAOKA Project

④ Station-South
2. Station Integrated Urban Development

Shibuya Station District (Present)
2. Station Integrated Urban Development

Shibuya Station District (2027)
2. Station Integrated Urban Development

HIKARIE Cultural Core

- Completion of construction: 2012
- Owner: Tokyu Corporation and others
- Total floor area: 144,000 m² approx.
- Total floors: 34F
- Total height: 182.50m

Urban Core

Office (17-34F)

Theater (10-16F)

Retail (B3F-8F)
2. Station Integrated Urban Development

“Urban Core” in “HIKARIE”
2. Station Integrated Urban Development

Multi-layered Public Space across Private/Public Properties

Present

Future

Skyway at 4F level
2. Station Integrated Urban Development

“Urban Core” in Areal Pedestrian Network

Master Plan for Pedestrian Network of Shibuya Area
3. Mechanism in Station Integrated Urban Development
3. Mechanism in Station Integrated Urban Development

Project Formation in Shibuya

1. Rail/Station Construction & Improvement by Railway Sectors
2. Infrastructure Improvement by Public Sector
3. Real Estate Developments by Private Sectors and Railway Sectors
3. Mechanism in Station Integrated Urban Development

Public Investment utilizing Generated Value by Private Redevelopments

- Rail Improvement
  (items directly related to redevelopment)
- Infrastructure
- Real Estate Development

Cost Covered by

Public Subsidies/Investment

<Application of Urban Renaissance Special Zoning>
New incentive zoning for the project which contributes to public investment.

As-of-right FAR
Profit
Project Cost

Bonus FAR
As-of-right FAR

Public Contribution
Profit
Project Cost
3. Mechanism in Station Integrated Urban Development

Project Coordination Organization

**Project Coordination Committee**
1. Infrastructure Sub-committee
2. Planning Sub-committee
3. Design Sub-committee

**Organizer**
Local Authorities (Tokyo Met, District)

**Railway Sectors**
: JR East
: TOKYU Rail
: Tokyo METRO

**Infrastructure Sectors**
: National Road Agency
: Tokyo Met. Gov.
: Shibuya Ward Gov.
: UR Land Rearrangement

**Private Development Sectors**
: JR East
: TOKYU Rail
: Tokyo METRO
: Private Developers, Landowners
4. Implications for Global TOD Projects
4. Implications for Global TOD Projects - Planning Principles -

1. Density Concentration
2. Diversity for Station Users
3. Integration for Space-saving

4. Connectivity with Surroundings
5. Vibrancy and Human Scale
6. Car Free & Low Carbon
4. Implications for Global TOD Projects

◆ Issues in Implementing Planning Principles

- Public/Private realm should be highly integrated
- Various stakeholders need to be coordinated
- Multi-track Planning/Development Procedure are needed
- Initial/operational costs need to be properly allocated.
- Demarcation in operation and management needs to be properly coordinated.
- Rail Sectors should be motivated to lead the project
4. Implications for Global TOD Projects

◆ Typical TOD Project Formation

- HSR, ICR
- Concourse
- Transit Square
- Concourse
- Metro
- Concourse
- Passageway
- Road
- Development

- Corporations
  - National Rail
  - METRO Sector

- Government
  - National Government
  - Local Government

- Private Land Owners
  - Government or Master Developer
4. Implications for Global TOD Projects
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Application of FAR Incentives (only in Metropolitan Areas)

A. Basic Limitation
- Building Use, Height, BCR, Minimum Plot Size, etc.

B. Infrastructure Improvement
- Road Widening
- Sewage Improvement
- Station Improvement
- Ownership Consolidation

C. Environmental Improvement
- Open Space
- Pedestrian Networking
- Public/Cultural Facilities
- High Environmental Rating
- Building Design in Context

‘As of right’ FAR

FAR Bonus C

FAR Bonus B

A. As of right FAR

Property

Property
4. Implications for Global TOD Projects

i) Green-field Development Case (Master Developer style)

1) One Green Field

2) Infrastructure/Plots Formation

3) Land Bid /Individual Projects

'M as of right' FAR

Property

Revised FAR

Property

Revised FAR

Property
4. Implications for Global TOD Projects

ii) Redevelopment Case (common in recent Japan)

1) Divided Ownership

2) Infrastructure Improvement

3) Private-Driven Improvement

‘As of right’ FAR

FAR Bonus

A. As of right FAR

FAR Bonus

A. As of right FAR

Property
5. Global Projects
5. Global Projects – Beijing, CHINA

LIU LI QIAO STATION PROJECT
5. Global Projects – Beijing, CHINA

Client: Beijing Institute of Architecture Design
Site Area: 15ha
Total floor area: 800,000m²
Program: Station, Commercial, Office, Hotel
Planning: 2013
5. Global Projects – Tianjin, CHINA

TIANJIN BINHAI STATION NORTH PROJECT, CHINA
5. Global Projects – Tianjin, CHINA

- Animating Underground Passageway
- Introducing Retail / Community Service Use in the Station Block
- Proposing the Additional Station in the Northern Development Area
5. Global Projects – Ho Chi Minh City, VIETNAM

BEN THANH Hub Station

- Originating Station of MRT line 1, which is funded by JICA and targeting TOD projects
- Hub Rail Station for 4 lines is now under construction
- Under-the-street Shopping Mall in Vietnam under Private Investment Initiative
5. Global Projects – Moscow, RUSSIA

BOTANIC GARDEN STATION PROJECT
5. Global Projects – Moscow, RUSSIA
THANK YOU

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