May 17, 2016

Wataru TANAKA
NIKKEN SEKKEI LTD



#### 1. NIKKEN SEKKEI introduction

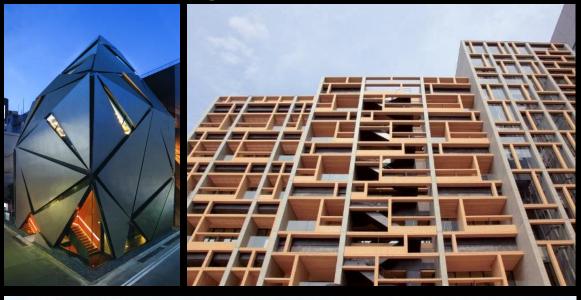




- Multi Disciplinary Design Consultancy Firm
- Established in 1900
- Over 20,000 projects in more than 50 countries
- 1,800 Staffs (Group Total: 2,470) in 2015

Kyoto State Guest House

## Small to Large







#### 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. S	tation	Integrated	Urban	Devel	opmen	t
------	--------	------------	-------	-------	-------	---

#### 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











SHIBUYA Station Case



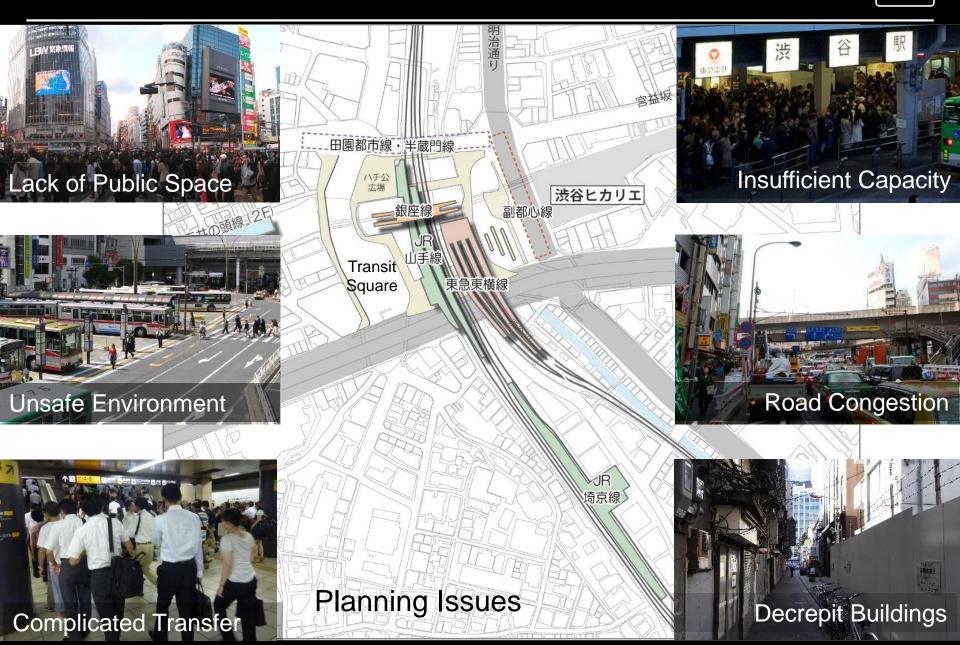


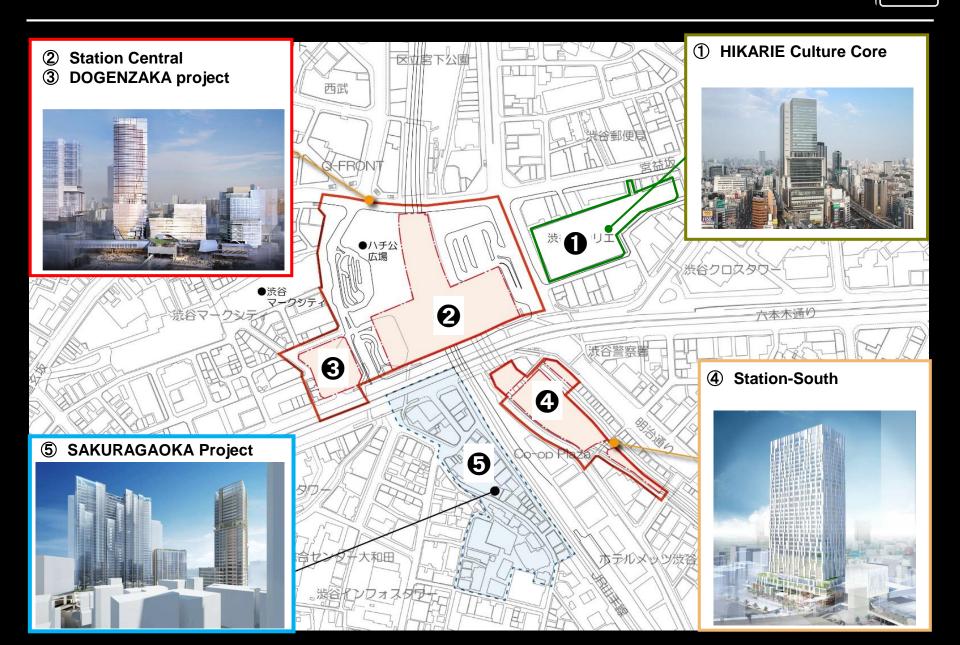
#### SHIBUYA as Culture & Entertainment Center of Tokyo

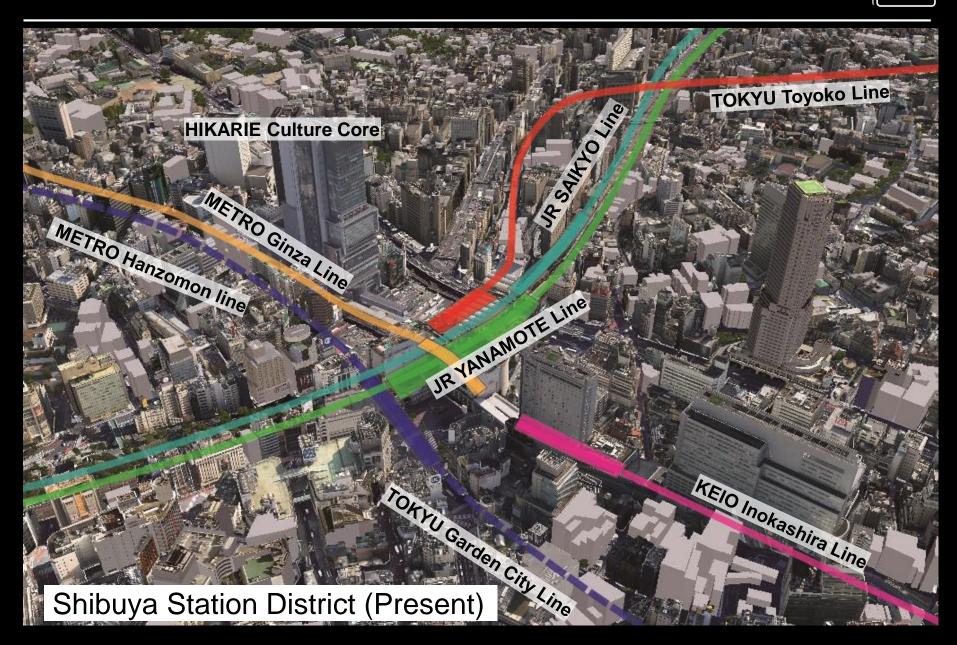


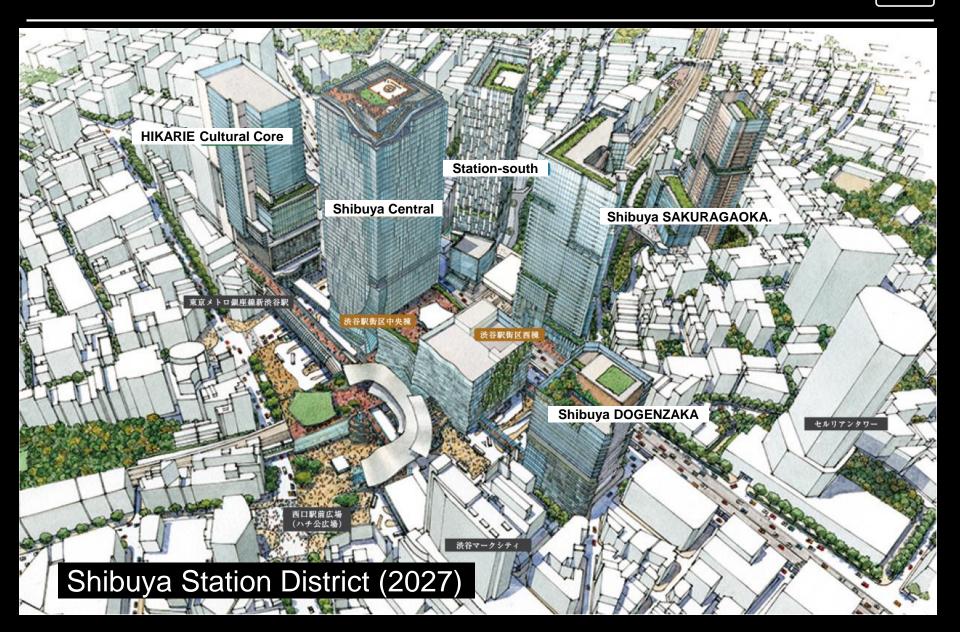
#### SHIBUYA as one of the major terminal stations in Tokyo

- 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)









#### HIKARIE Cultural Core

[ Completion of construction ] 2012

[ Owner ] Tokyu Corporation and others

 $[ \ Total \ floor \ area \ ] \quad 144,000 \, m^2 \ approx.$ 

[Total floors] 34F,

[ Total height ] 182.50m











nikken.jp

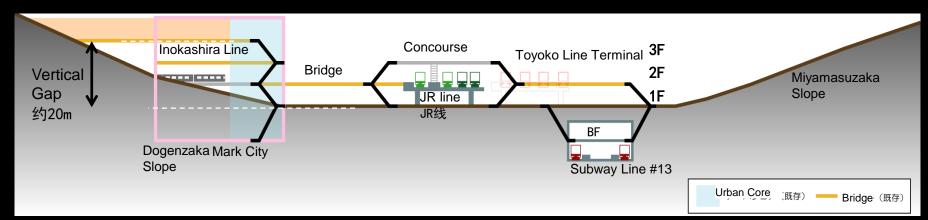


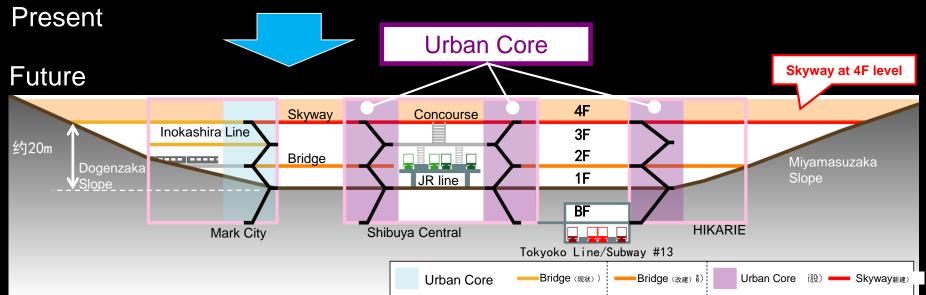
"Urban Core" in "HIKARIE"



nikken.jp

#### Multi-layered Public Space across Private/Public Properties





nikken.jp

"Urban Core" in Areal Pedestrian Network

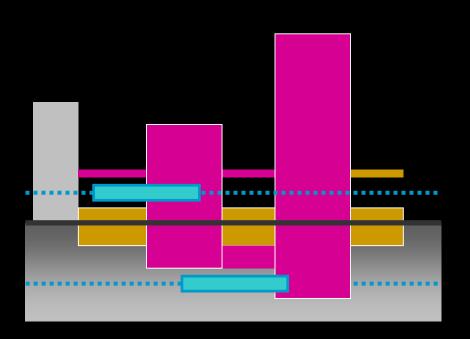
原宿 代々木 渋谷区役所 青山・表参道 オルガン通り **Urban Core** 西武 東急本店 松濤 松海 六本木通り 金王八幡曾 Shibuya Station Company **District** 乘泉寺 代官山 恵比寿

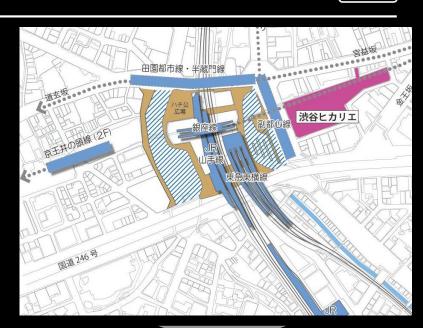
Master Plan for Pedestrian Network of Shibuya Area

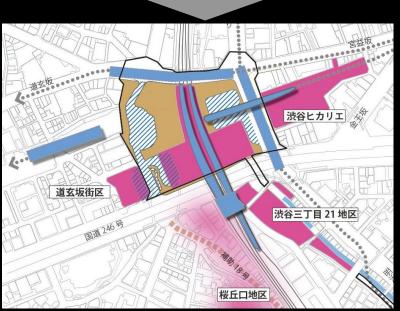


#### Project Formation in Shibuya

- Rail/Station Construction & Improvement by Railway Sectors
- 2. Infrastructure Improvement by Public Sector
- 3. Real Estate Developments by Private Sectors and Railway Sectors

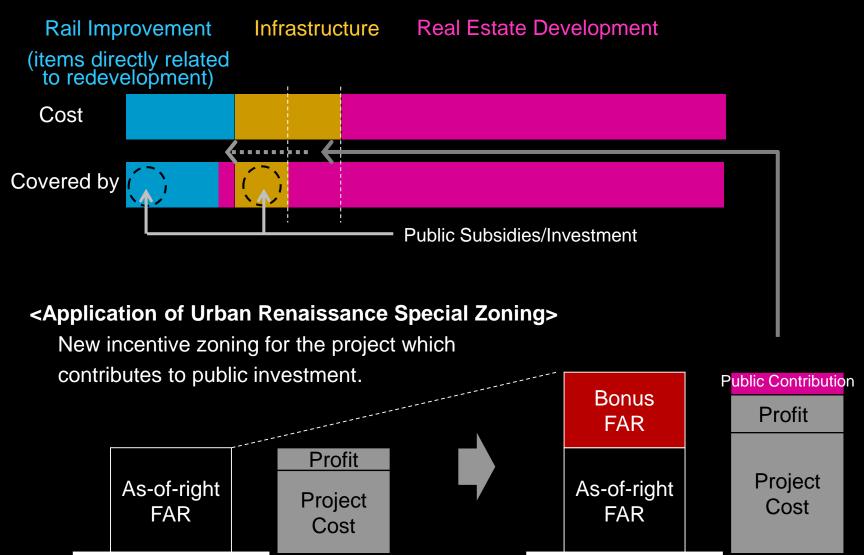






nikken.jp

Public Investment utilizing Generated Value by Private Redevelopments





#### **Project Coordination Organization**



#### **Project Coordination Committee**

- 1. Infrastructure Sub-committee
- 2. Planning Sub-committee
- 3. Design Sub-committee

#### **Organizer**

:Local Authorities (Tokyo Met, District)

Join Instruction

Join 1 Instruction

Join Instruction

#### 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

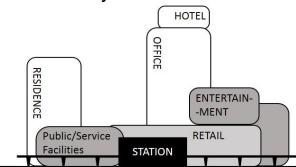
:TOKYU Rail

:Tokyo METRO

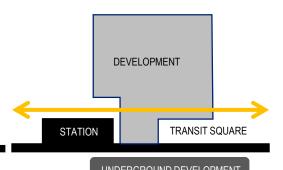
: Private Developers, Landowners

#### 4. Implications for Global TOD Projects - Planning Principles -

- 1. Density Concentration
- **STATION**
- 2. Diversity for Station Users

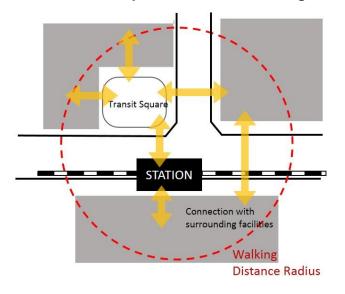


3. Integration for Space-saving

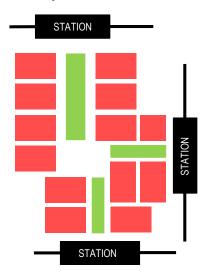


UNDERGROUND DEVELOPMENT

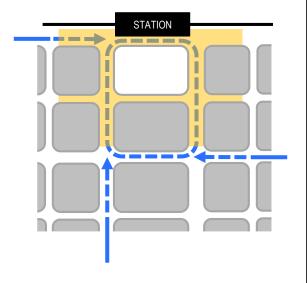
4. Connectivity with Surroundings



5. Vibrancy and Human Scale

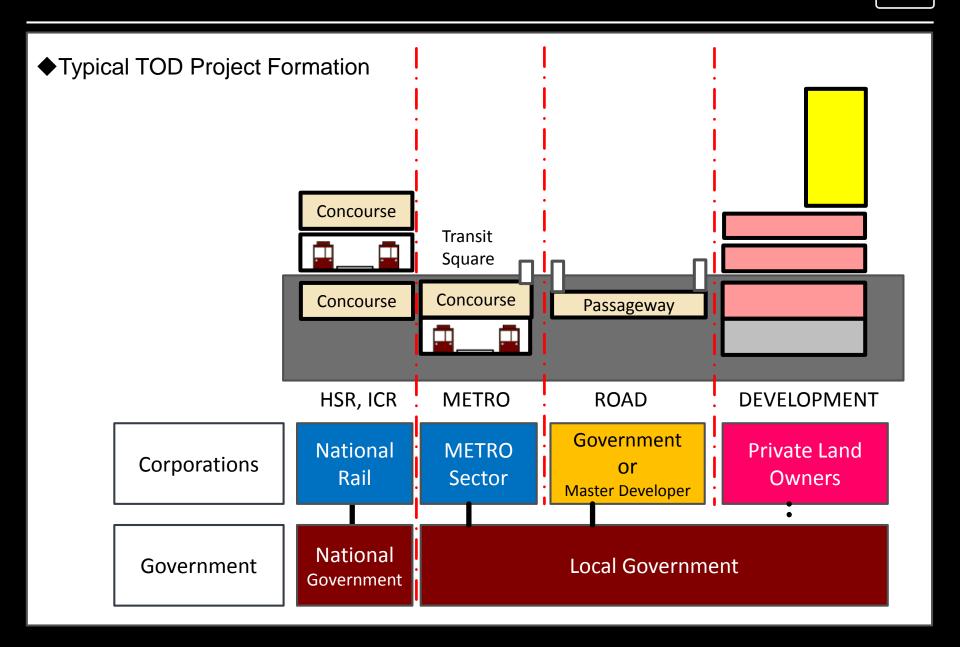


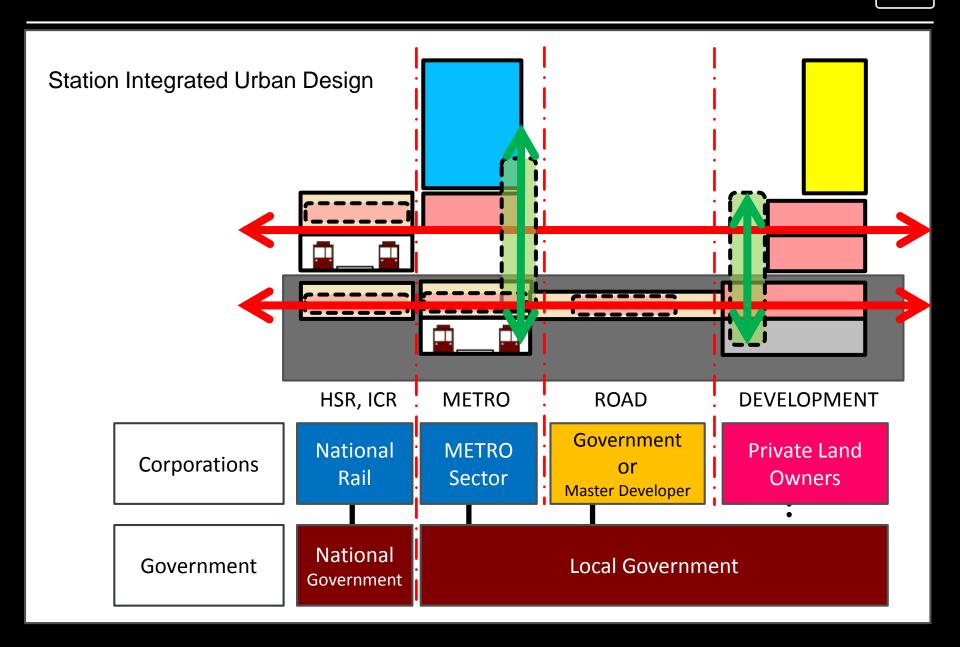
6. Car Free & Low Carbon





- 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







Application of FAR Incentives (only in Metropolitan Areas)

FAR Bonus C

FAR Bonus B

A.
As of right
FAR

Property

C. Environmental Improvement

✓ Open Space

✓ Pedestrian Networking

✓ Public/Cultural Facilities

✓ High Environmental Rating

✓ Building Design in Context

B. Infrastructure Improvement

✓ Road Widening

✓ Sewage Improvement

✓ Station Improvement

✓ Ownership Consolidation

A. Basic Limitation

: Building Use, Height, BCR, Minimum Plot Size, etc. ど

'As of right' FAR

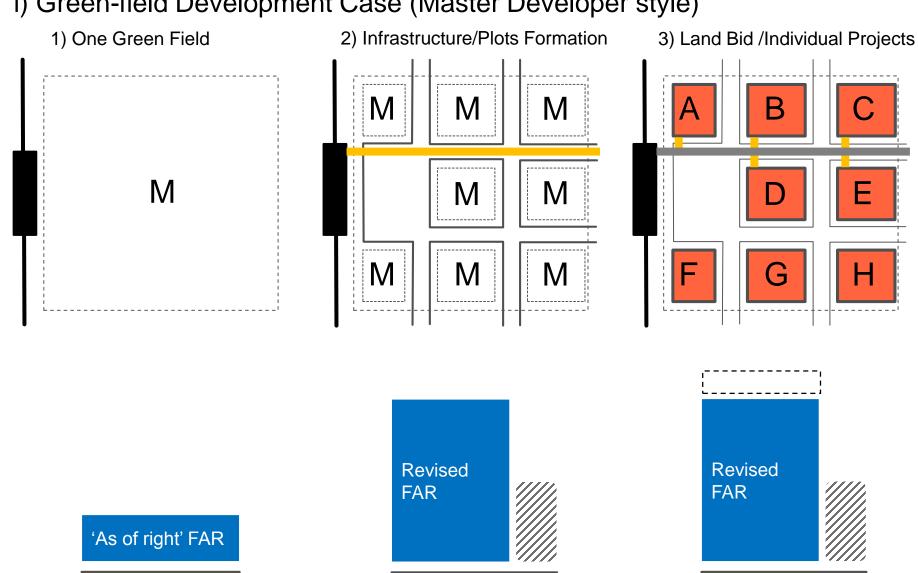
Property

**Property** 



**Property** 

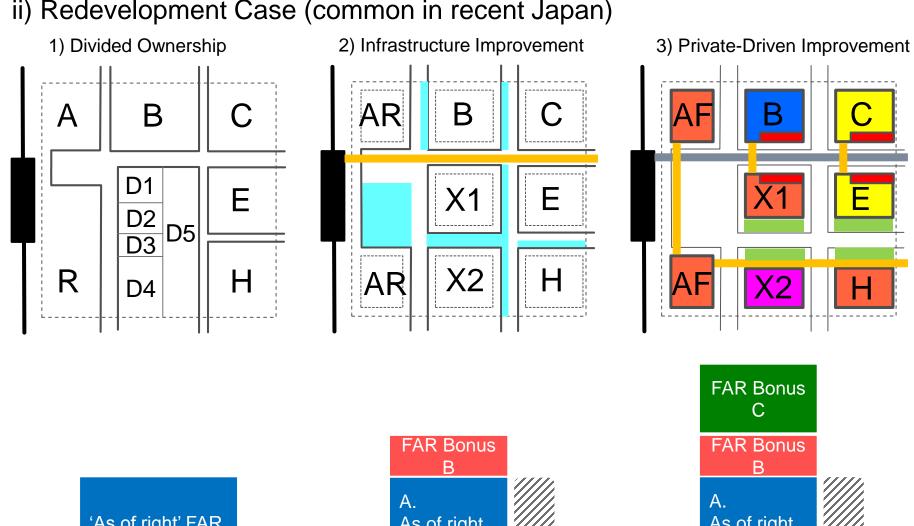
i) Green-field Development Case (Master Developer style)



**Property** 

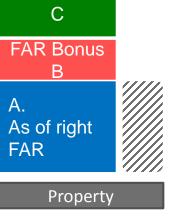


ii) Redevelopment Case (common in recent Japan)



'As of right' FAR **Property** 





### 5. Global Projects



nikken.jp

Client: Beijing Institute of Architecture Design

Site Area: 15ha

Total floor area: 800,000m2

Program: Station, Commercial, Office, Hotel

Planning: 2013





#### TIANJIN BINHAI STATION NORTH PROJECT, CHINA



#### 5. Global Projects – Tianjin, CHINA

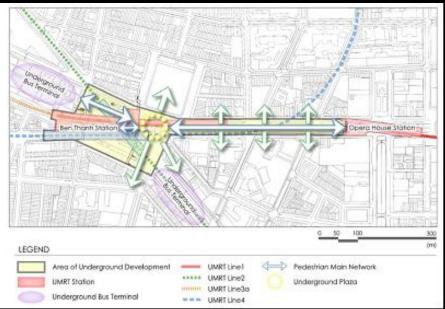




- Animating Underground Passageway
- Introducing Retail / Community Service Use in the Station Block
- Proposing the Additional Station in the Northern Development Area

#### 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 <u>Investment Initiative</u>





#### 5. Global Projects – Moscow, RUSSIA



#### **BOTANIC GARDEN STATION PROJECT**











# THANK YOU

nikken.jp

NIKKEN SEKKEI planners | architects | engineers

