

DEVELOPMENT BASED LAND VALUE CAPTURE (DBLVC)

基于开发的土地价值捕获

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OUTLINE 提纲

- Why Land Value Capture (LVC)
为什么要捕获土地价值
- How-To
如何做
- Relevance to China
与中国的关联性
- Concluding Thoughts
结束语

WHY LAND VALUE CAPTURE (LVC)

为什么要捕获土地价值

REINVENTING THE URBAN ENVIRONMENT

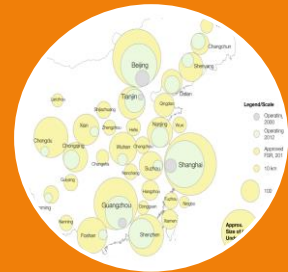
重建城市环境

Economic
Concentration
经济重心

Sustainable
Mobility
可持续的移动性

People Focus
以人为本

Using Mass Transit as backbone
利用公共交通作为骨干



High capacity
高容量

Low carbon emission
低碳排放

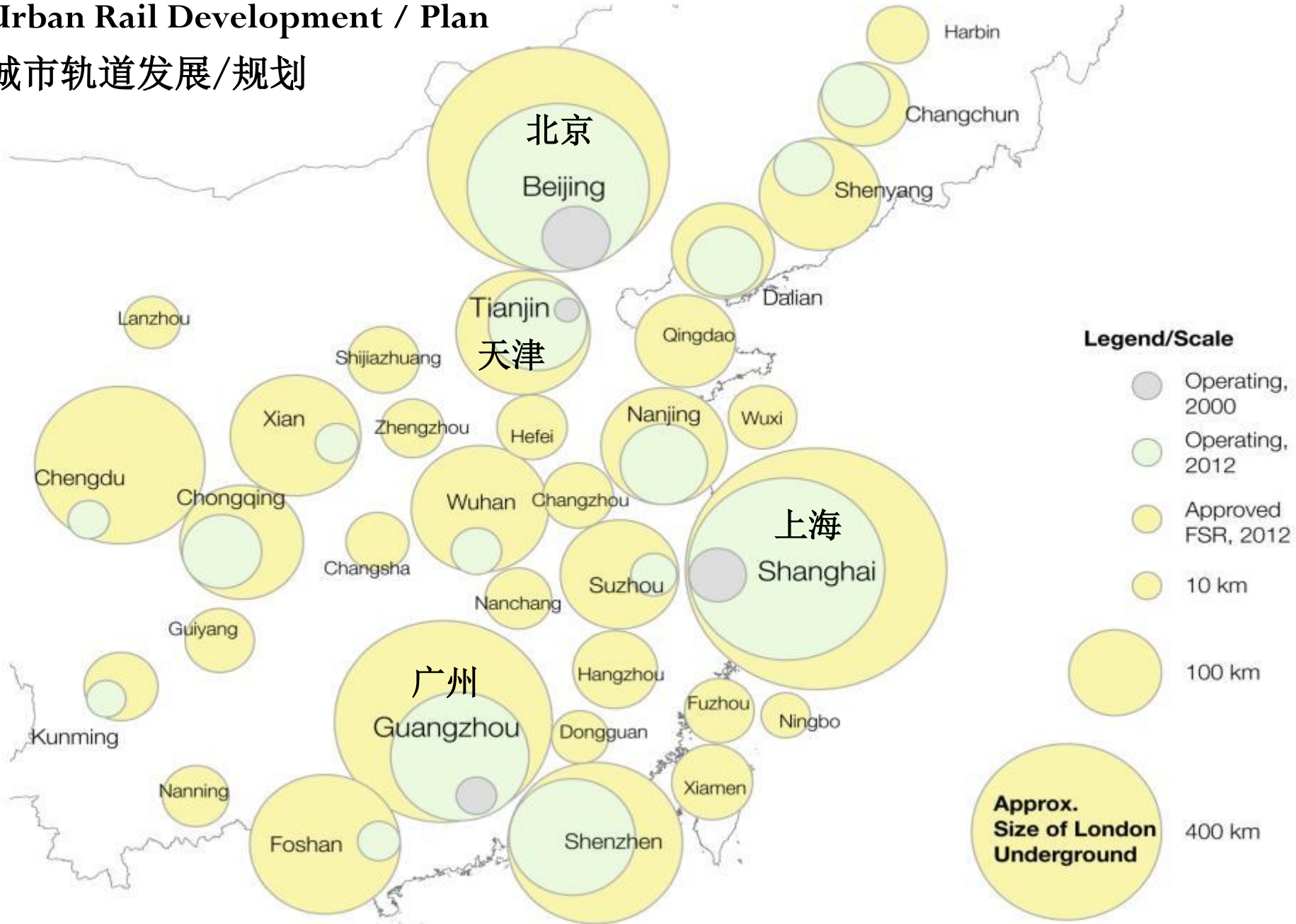
Energy efficiency
能源效率

Limited land use
有限的土地利用



Urban Rail Development / Plan

城市轨道交通发展/规划



LAND VALUE CAPTURE (STATE DIRECTIVE 64 [2012]) 土地价值捕获（国发[2012]64号）

- Encourage **private financing and participation** in the development of public transport infrastructure/facilities and service operation through *franchising, strategic investment, trust and investment*, and *equity financing*.
鼓励私营部门融资并参与公共交通基础设施和服务，方式有特许经营、战略投资、信托和投资以及股权融资。
- For the site of **new** public transportation facility, the space above and under the ground surface of the site may be developed according to the market principles.
对新建公共交通设施用地的地上、地下空间，按照市场化原则实施土地综合开发。
- For the site of an **existing** public transport facility, vertical development will be permitted so long as
对现有公共交通设施用地，在以下前提下进行立体开发：
 - (i) the development is in line with the planning, and 开发项目与规划一致，且
 - (ii) there is no change to the use. 没有改变土地用途。
- **Revenue** from such land development of a public transport site shall be used to **support** the development of public transportation infrastructure and **subsidize** the transit service operation
对公交点进行此类开发带来的收益应用于支持开发公交设施并补贴公交服务的营运。

STATE COUNCIL DIRECTIVE #2014(37) ON LAND COMPREHENSIVE DEVELOPMENT IN SUPPORTING RAILWAY CONSTRUCTION

国办发[2014]37号文件：
关于支持铁路建设实施土地综合开发的意见

Principles 原则

- Support for railway construction and **new urbanization** combined
支持铁路建设与新型城镇化相结合
- Government guidance and **market self-development** combined
政府主导与市场自主开发相结合
- Make an inventory of the stock of railway land and the **comprehensive development** of the new and old station sites combined
盘活存量铁路用地与综合开发新老战
场用地相结合

图解



国务院办公厅关于 支持铁路建设实施 土地综合开发的意见

土地综合开发原则

- 1 支持铁路建设与新型城镇化相结合
- 2 政府引导与市场自主开发相结合
- 3 盘活存量铁路用地与综合开发新老站场用地相结合

现有铁路用地 — 支持盘活现有铁路用地推动土地综合开发

- 科学编制既有铁路站场及周边地区改建规划
- 给予既有铁路站场综合开发用地政策支持
- 促进铁路运输企业盘活各类现有土地资源
- 鼓励提高铁路用地节约集约利用水平

新建铁路站场 — 鼓励新建铁路站场实施土地综合开发

- 支持新建铁路站场与土地综合开发项目统一联建
- 合理确定土地综合开发的边界和规模
- 明确站场建设和土地综合开发的规划要求
- 采用市场化方式供应综合开发用地

配套政策 — 完善土地综合开发配套政策

- 统筹土地综合开发相关规划管理
- 完善综合开发用地供应模式
- 落实综合开发用地指标支持政策
- 完善相关工程建设标准规范

监管 — 加强土地综合开发的监督和协调

- 实行备案管理制度
- 严格土地开发利用管理
- 切实加强建设管理

HOW TO

如何做

CREATING VALUE

创造价值

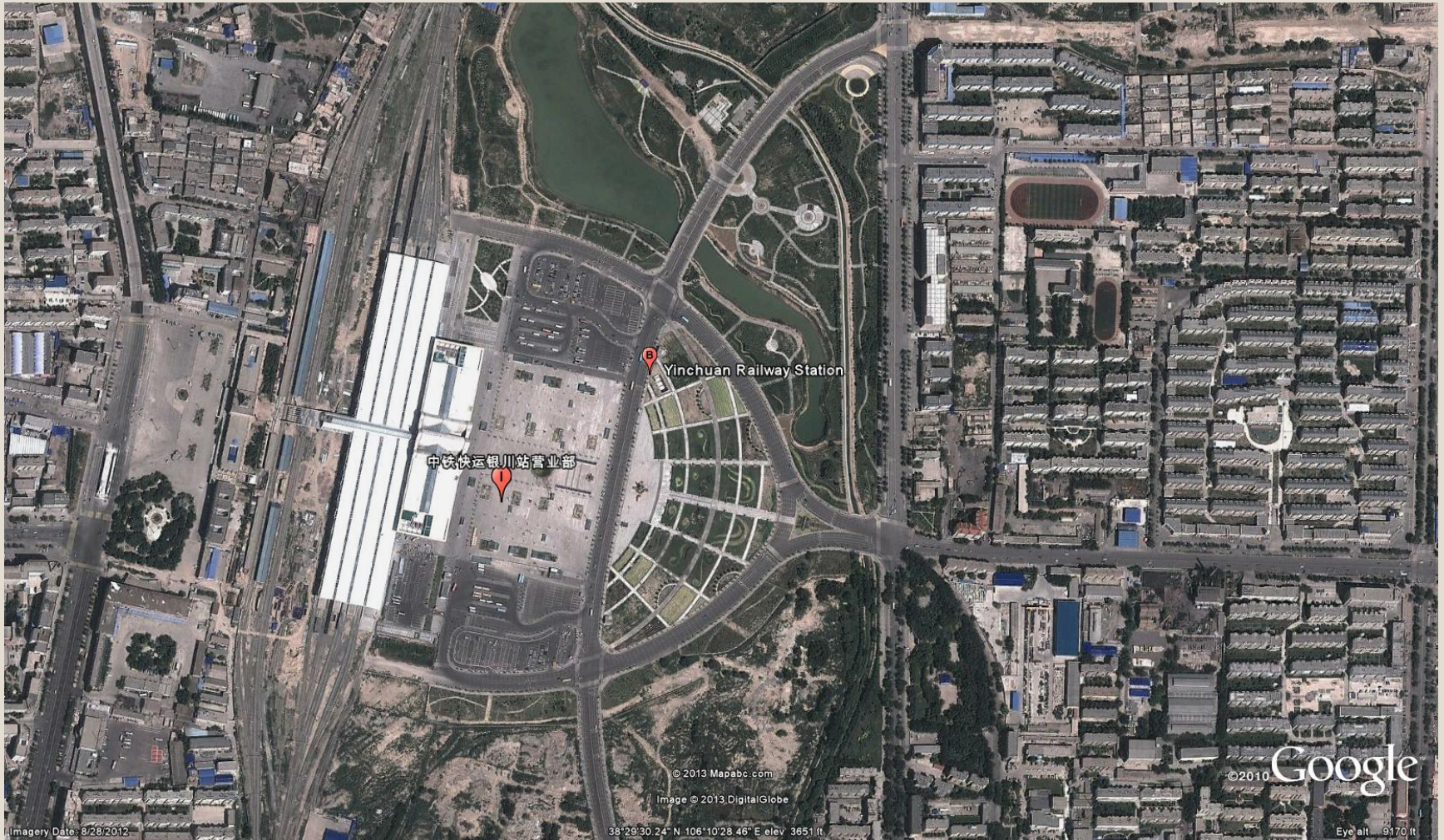
CREATING VALUE- WHAT ADDS VALUE & WHAT DOES NOT
创造价值-如何开发可产生附加值、如何开发无法产生附加值

Opportunities to densify around stations?
增加站点周边密度的机遇?



CREATING VALUE- WHAT ADDS VALUE & WHAT DOES NOT 创造价值-如何开发可产生附加值、如何开发无法产生附加值

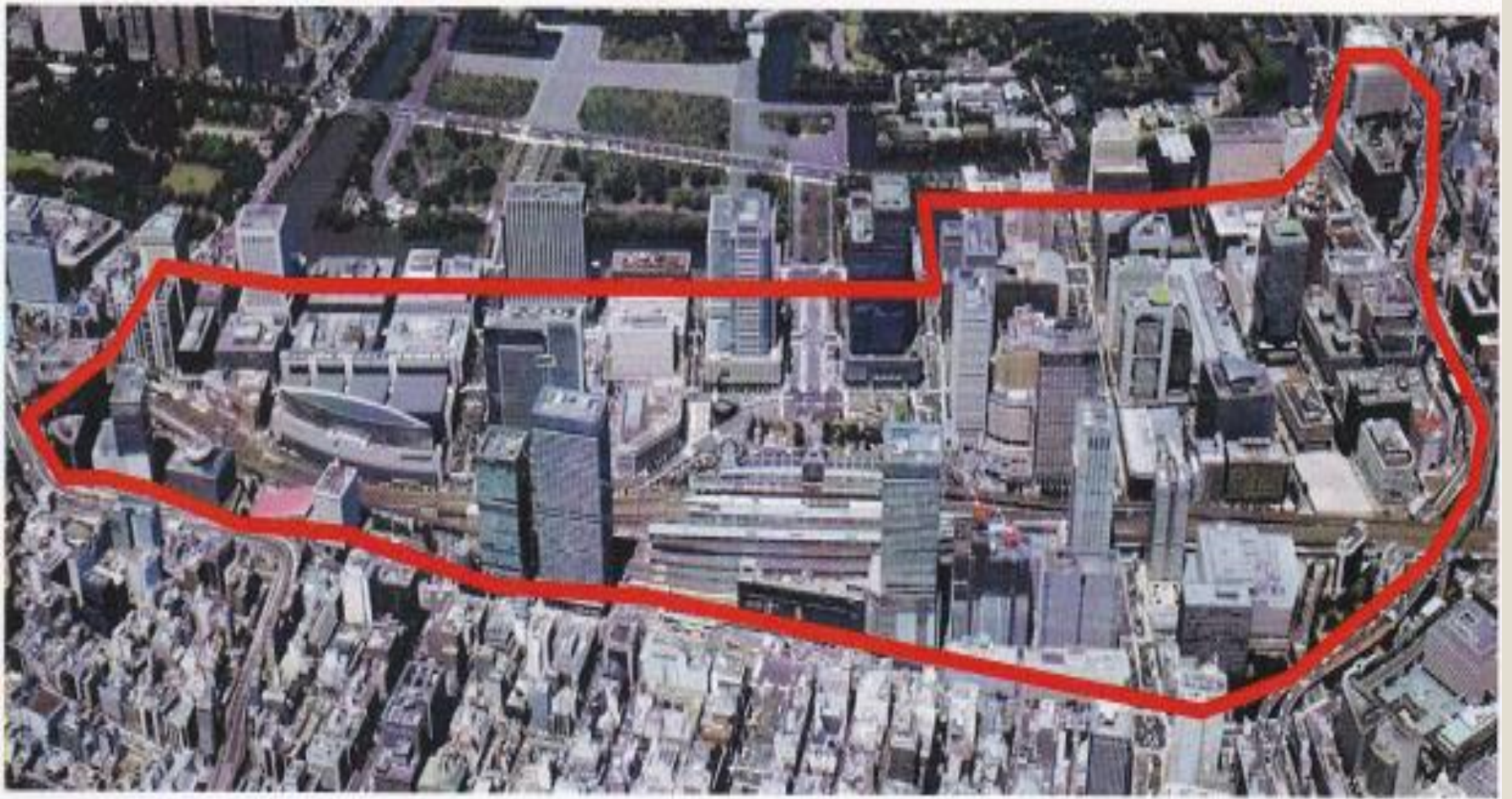
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CREATING VALUE- WHAT ADD VALUE & WHAT NOT

创造价值-如何开发可产生附加值、如何开发无法产生附加值

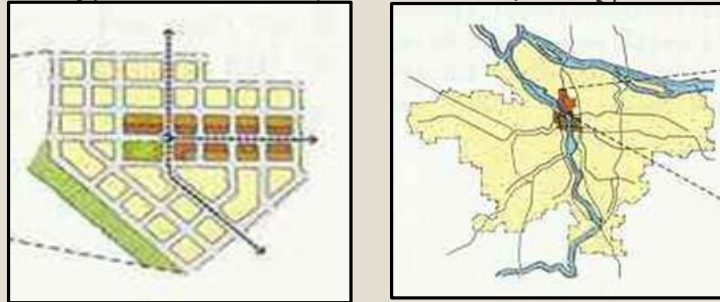
Opportunities around stations: Tokyo Station 站点周边：东京站



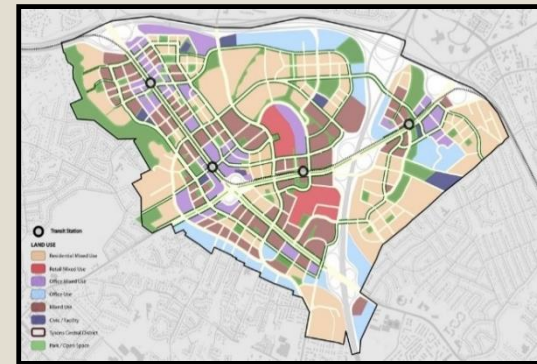
TOD: TYPES & FUNCTIONS

以交通为导向：类别与功能

- **Market Served:** Neighborhood; District; Regional 服务的范围：街道、区、大区



- **Land-Use Make-Up:** Commercial-Office; Residential; Mixed-Use; “Complete Community” 土地类别组合：商业-办公；住宅；混合用途；“完整社区”



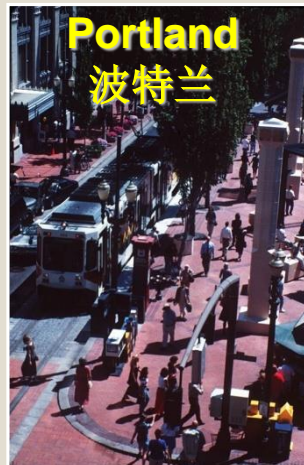
- **Dominant Function:** Node (access/logistics) vs. Place-Making (destination) 主要功能：节点（抵达/物流）地方营造（终点）

TOD AS PLACE-MAKING

公交导向创建地点



- *Place-making: a place “to be”* 地方营造：“生活”之地
- “Orientation” vs. “Adjacency” “导向”对“比邻”
- Soften Perceptions of Density 密度的软概念
- Enhance Walking Environment 改善步行环境
- Hubs – Community Centers 枢纽 - 社区中心



TOD DESIGN CHALLENGE: PLACE AND NODE COMBINATION 公交导向设计挑战：地点与节点相结合

Place 地点

- Community Hub – Modern-day “Agora” 社区枢纽-现代“城市广场”
- Attractive Milieu - Comfortable, Memorable, Accent on Aesthetics & Amenities, Connectivity, Legibility, Natural Surveillance
有吸引力的环境-舒适、值得回忆、有美感和舒适感、连接性、易识别性、自然监控
- Design Perspective – Architecture/Planning 设计视角-建筑/规划

Node 节点

- Logistical Points – Interchange for Parking, Bus, Paratransit, Kiss-&-Ride, Taxi, Bikes, Scooters, Pedestrians, Delivery Trucks 物流点-停车、大巴、辅助客运系统、临时接送点、出租、自行车、摩托车、行人、运货卡车交汇点
- Conflict Points - Safety 冲突点-安全
- Design Perspective – Engineering 设计视角-工程



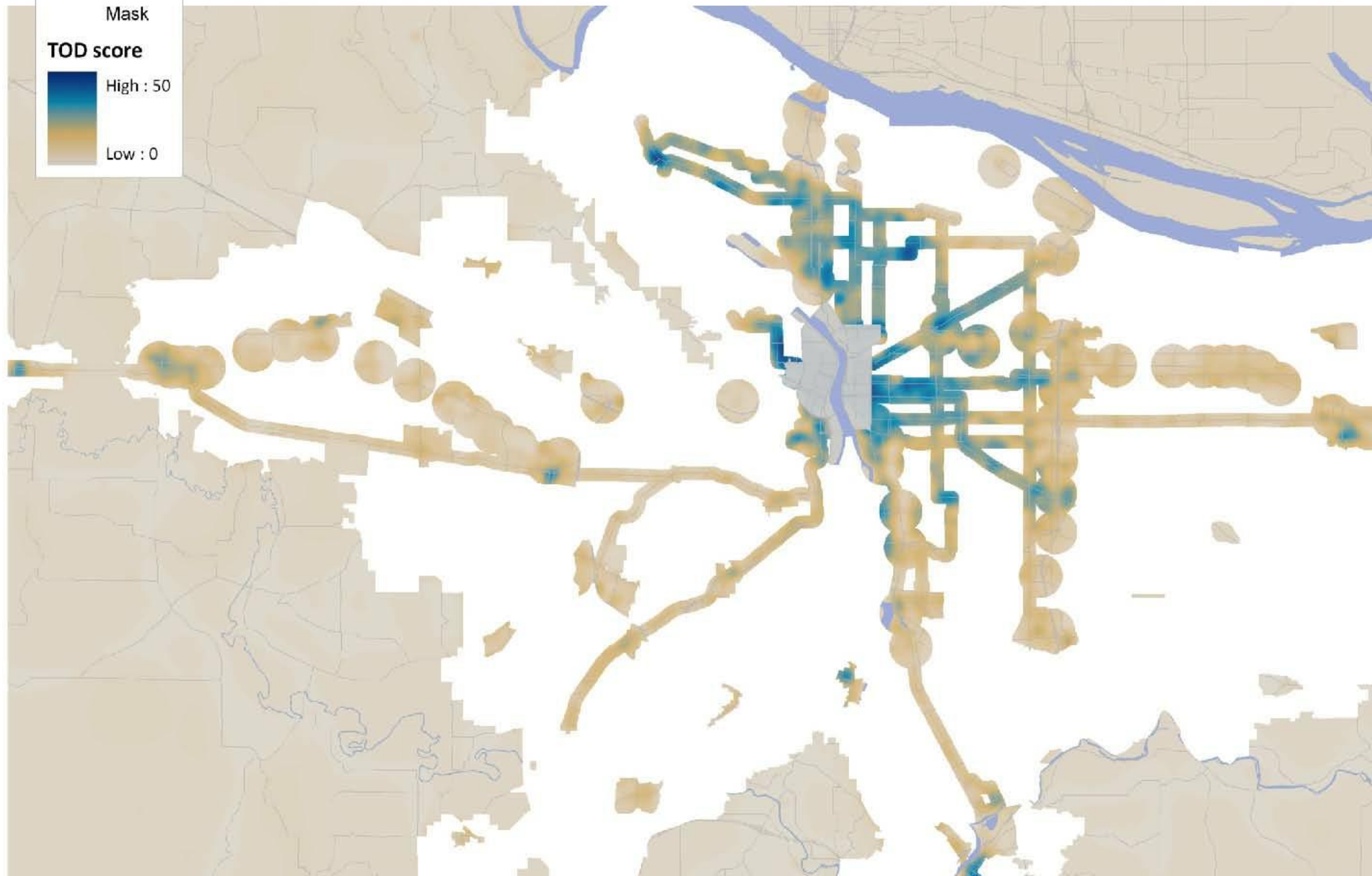
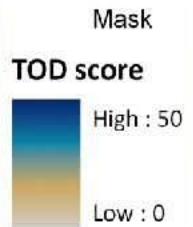
TOD TYPOLOGIES – EXAMPLE OF PORTLAND

公交导向类型-波特兰范例

- ❖ **50-year vision for managing region's growth** 管理本地区增长的**50年愿景**
- ❖ **Hierarchy of Transit-Oriented Centers: compact, mixed use, great walking, civic spaces, parking reforms** 公交导向中心层次结构紧凑、混合用途、大步行与公共空间、停车改革

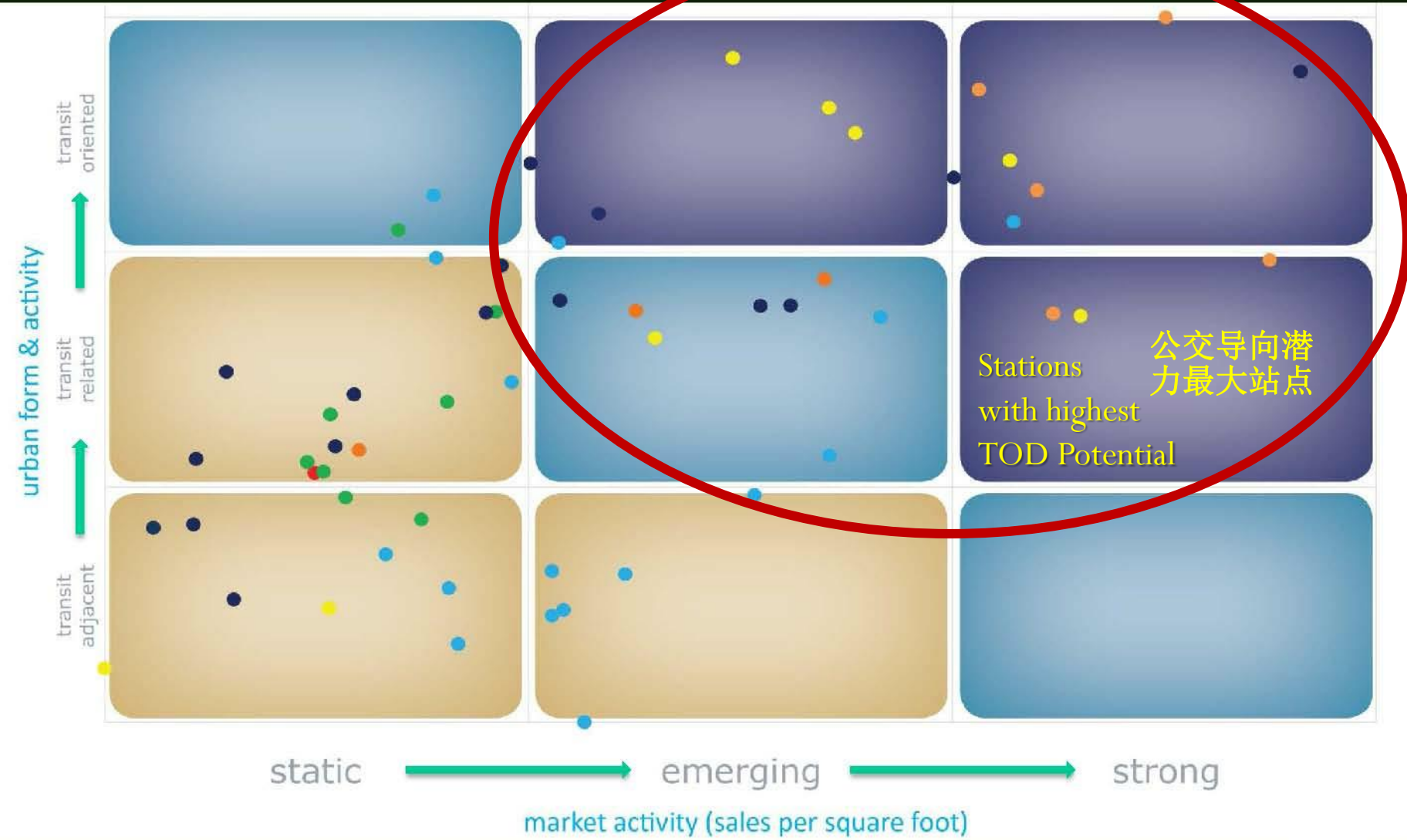


TRANSIT ORIENTED DEVELOPMENT PROGRAM



TOD Station Community Typology

公交站社区类型



- Eastside
- Westside
- Airport
- Interstate
- Green

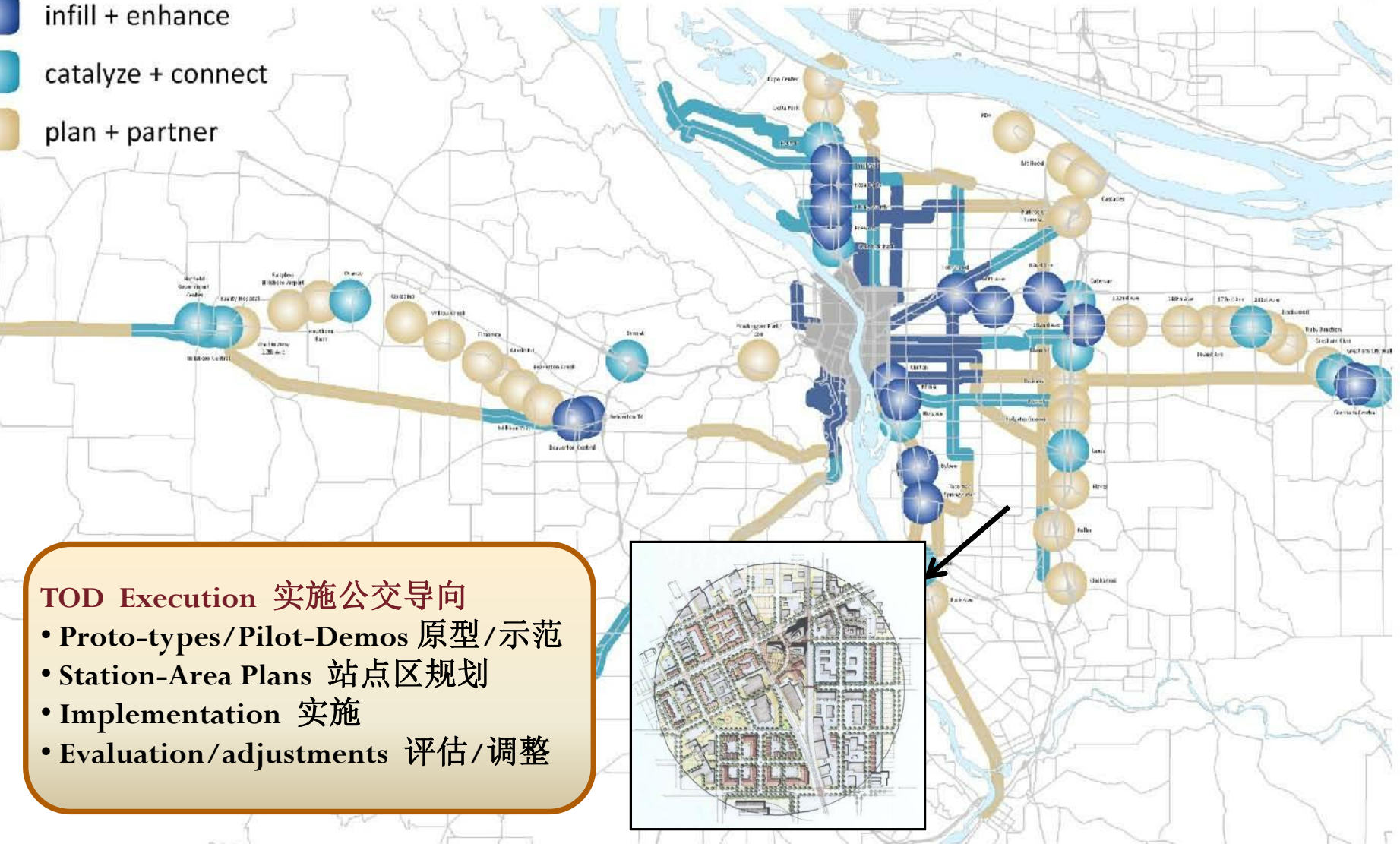


Portland Oregon 俄勒冈波特兰

TOD Typology Clusters (market + urban form readiness)

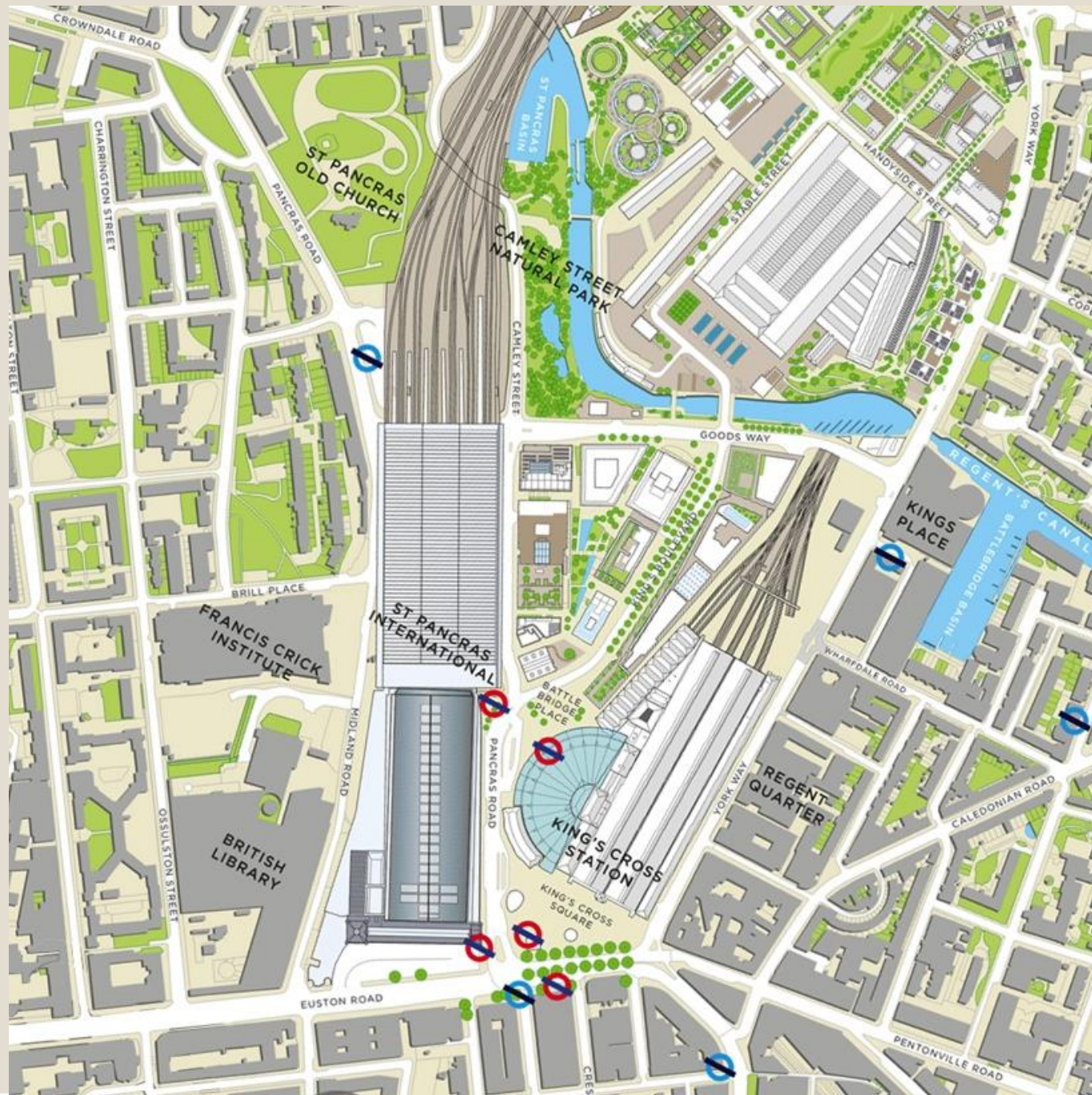
stiers

- infill + enhance
- catalyze + connect
- plan + partner



TOD Execution 实施公交导向

- Proto-types/Pilot-Demos 原型/示范
- Station-Area Plans 站点区规划
- Implementation 实施
- Evaluation/adjustments 评估/调整



KING'S CROSS CENTRAL EXAMPLE

国王十字车
站范例

King's Cross Central

2 Billion £ investment in 20 new streets and 10 new public spaces

国王十字车站 对20条街道和10个新建公共 场所，投资20亿英镑

Public realm 公共区域

2 Billion £ (21 Billion RMB) already spent in local transport infrastructure and public realm)

20亿英镑（210亿人民币）用于当地交通基础设施和公共区域建设

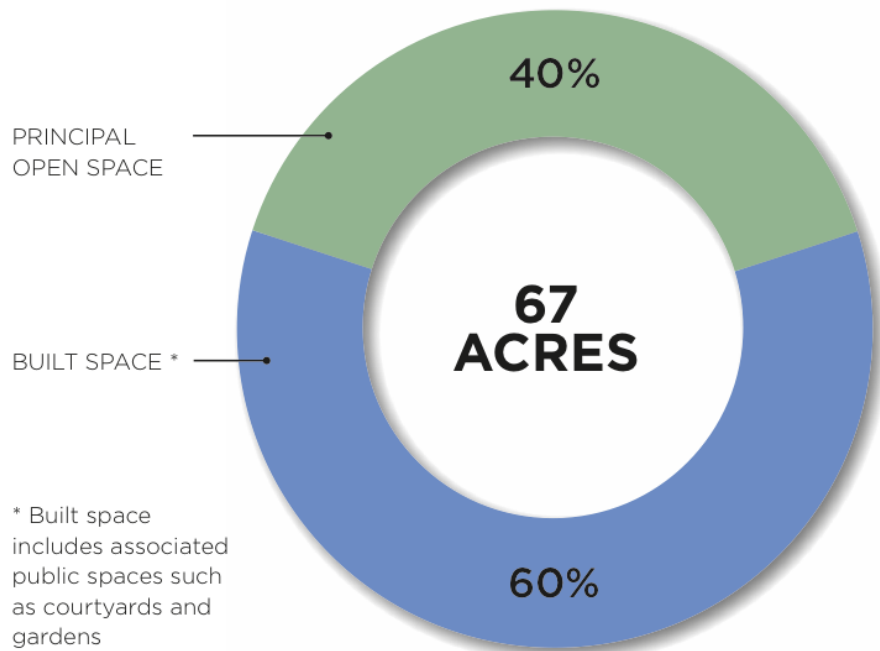
A third of the site (10 ha) dedicated to new public streets and open spaces

三分之一的场地（10公顷）用于建新的公共线路与开放空间

20 major streets created 建设20条主要街道

10 new public spaces 10个公共空间

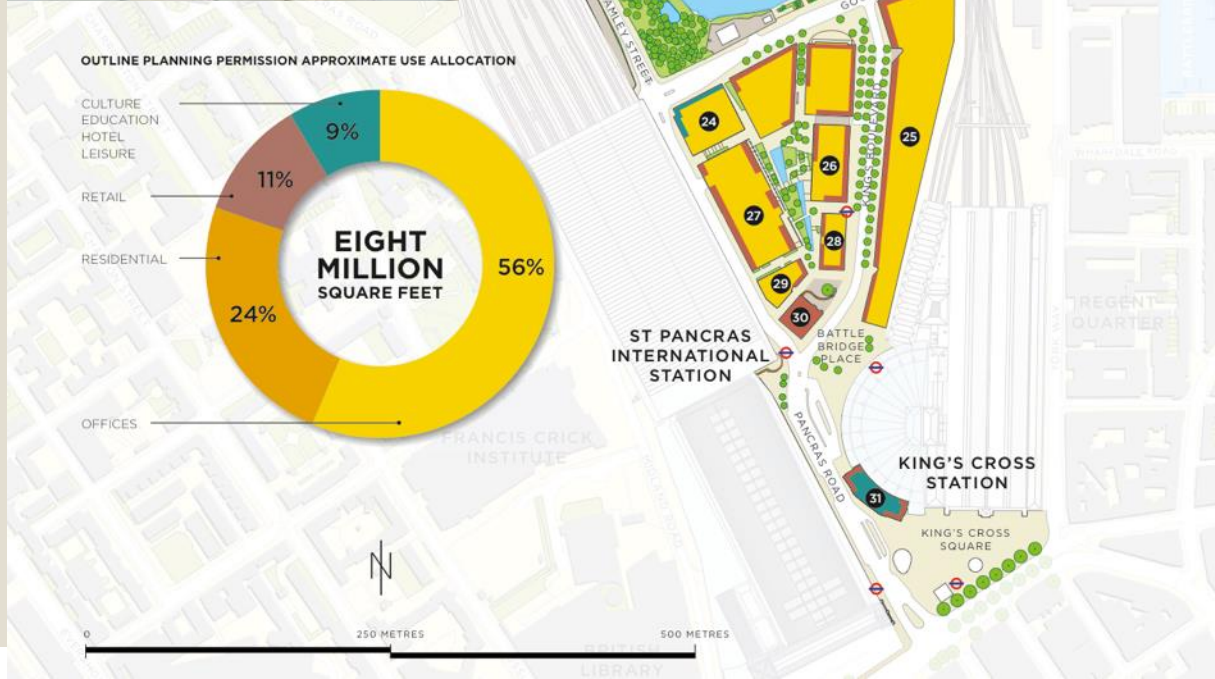
Including 5 major squares totaling 3.2 ha 包括3.2公顷的5大广场



London King's Cross Central On 26 ha

伦敦国王十字车站占地26公顷

- 280,000 m² of new workspace
新建28万平方米工作场所
- 46,000 m² of retail, cafés,
bars, restaurants and leisure
facilities 4.6万平方米零售、咖啡
馆、酒吧、餐馆和休闲设施
- 2,000 new homes 2000户住宅
- A new university 一所新大学
- Educational, hotel, cultural
facilities 教育、宾馆、文化设施



London King's Cross Central 伦敦国王十字车站

Mixed use 混合用途

5000 students (Granary Complex) 5000名学生（谷仓型大楼）

650 student's housing rooms 650间学生宿舍

50 new buildings 50栋新建筑

Residential buildings (2000 homes including affordable homes)

住宅建筑（2000户，包括经济适用住房）

Office buildings (One Pancras Square) 办公建筑（一处潘克拉斯广场）

A concentration of high tech economy

高技术经济中心

Google new UK headquarters is a low-rise building longer (330 m) than the Shard skyscraper is tall.

谷歌的英国新总部是一所低层建筑，其高度（330米）大于Shard摩天大楼。

Google has spent about 650 million £ (RMB 6.8 Billion) to buy and develop a 1 ha site. The finished development will be worth up to 1 billion £ (RMB 10.5 billion) .

Google presence is expected to draw other technology companies to King's Cross - especially small start-ups - and help bump up rents.

谷歌耗费约6.5亿英镑（68亿人民币）购买并开发一块1公顷土地。完工后价值将升值至10亿英镑（105亿人民币）。谷歌进驻将吸引其他技术公司进驻英王十字中心—尤其是小型创业公司—并可帮助提升租金。

Value creation 创造价值

50 new and restored buildings and structures 50所新建及修复建筑和设施

GOOGLE UK headquarter 1 Billion £ per ha 谷歌英国总部每公顷10亿





By 2020 up to 50,000 people will be studying, living and working in King's Cross

到2020年，约有5万人将在国王十字车站区域学习、生活和工作



2008



2014



2017



2020+

TOD CHECK LISTS 对照表

2.2 对照表 Checklists

TOD 基本特征对照表

TOD Checklist of Essential Features



1. 开发密度中度至高度
Medium to high densities
2. 小地块混合利用
Fine-grained mix of land uses
3. 街区长度较短至中等长度
Short to medium-length blocks
4. 公共交通线路间距不超过 800 米
Transit routes every 800 meters or closer
5. 街道有二至四车道 (少数例外)
Two to four-lane streets (with rare exceptions)
6. 适宜尺度的连续步道
Continuous sidewalk appropriately scaled
7. 安全的路口
Safe crossings
8. 与机动车交通设置适当的缓冲
Appropriate buffering from traffic
9. 向街开放的建筑
Street-oriented buildings
10. 舒适而安全的等候区
Comfortable and safe places to wait

提升 TOD 吸引力项目对照表

TOD Checklist of Highly Desirable Features



1. 地标建筑
Landmarks
2. 配套商业功能
Supportive commercial uses
3. 网格状路网
Grid-like street networks
4. 车辆减速措施
Traffic calming
5. 密集的遮荫树木
Closely spaced shade trees
6. 少有死角
Little dead space
7. 临近的公园及其它公共空间
Nearby parks and other public spaces
8. 小尺度建筑群 (或相连接的大型建筑)
Small-scale buildings (or articulated larger ones)
9. 行人尺度的照明
Pedestrian scale lighting
10. 吸引人的公共交通设施
Attractive transit facilities

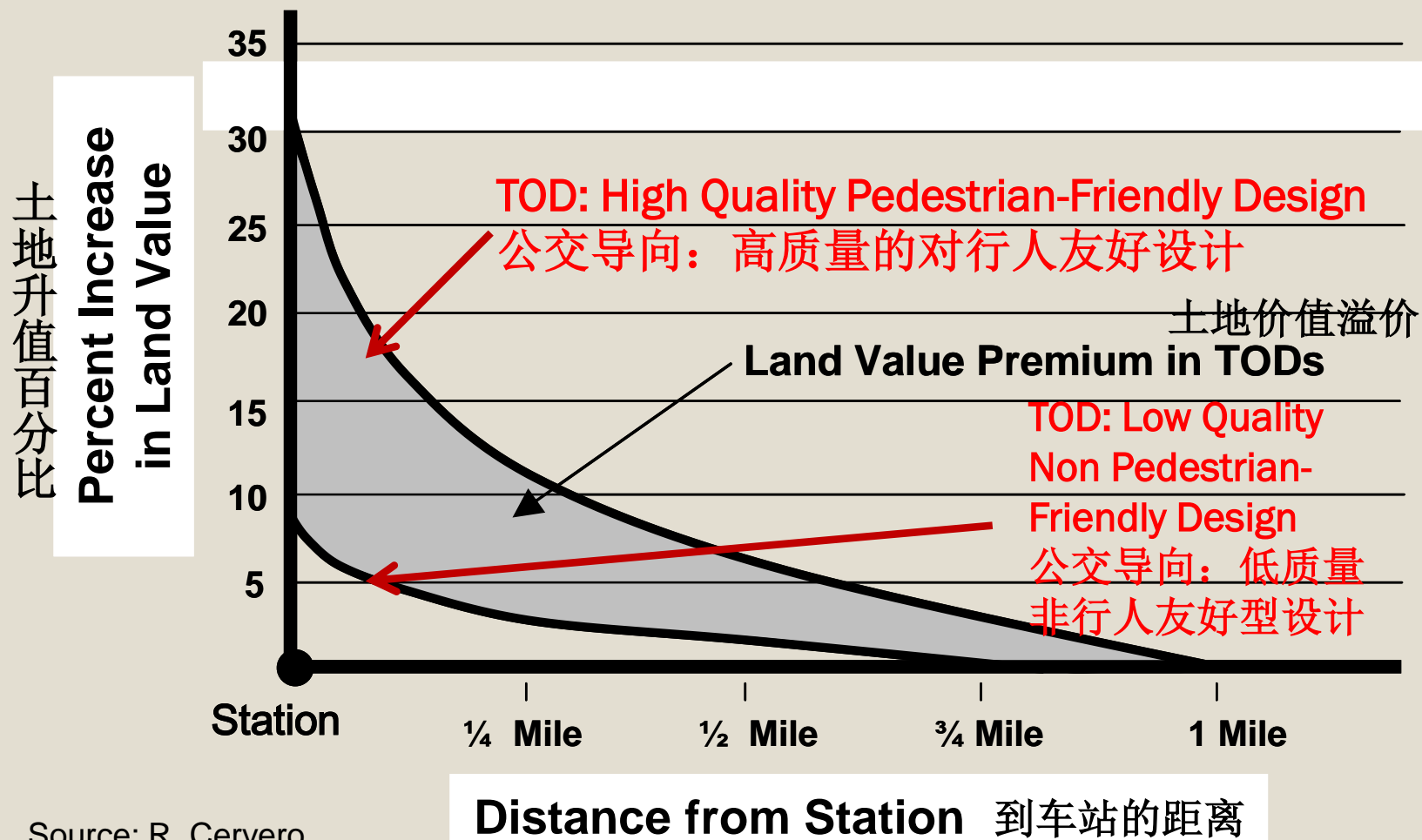
提升 TOD 价值的附加项目表

TOD Checklist of Worthwhile Additions



1. 公共艺术
Public Art
2. 街墙
Street walls
3. 实用的街道家具
Functional street furniture
4. 协调一致的小尺度标识系统
Coherent small-scale signage
5. 有特点的铺装
Special pavement
6. 水景
Water features
7. 露天就餐环境
Outdoor dining
8. 地下设施
Underground utilities

IMPACT ON VALUE 对价值的影响



Source: R. Cervero

CAPTURING VALUE

捕获土地价值

LVC for Finance & Planning 融资与规划的捕获土地价值

“Synergetic Benefits to be Shared”

协调效益需要分享

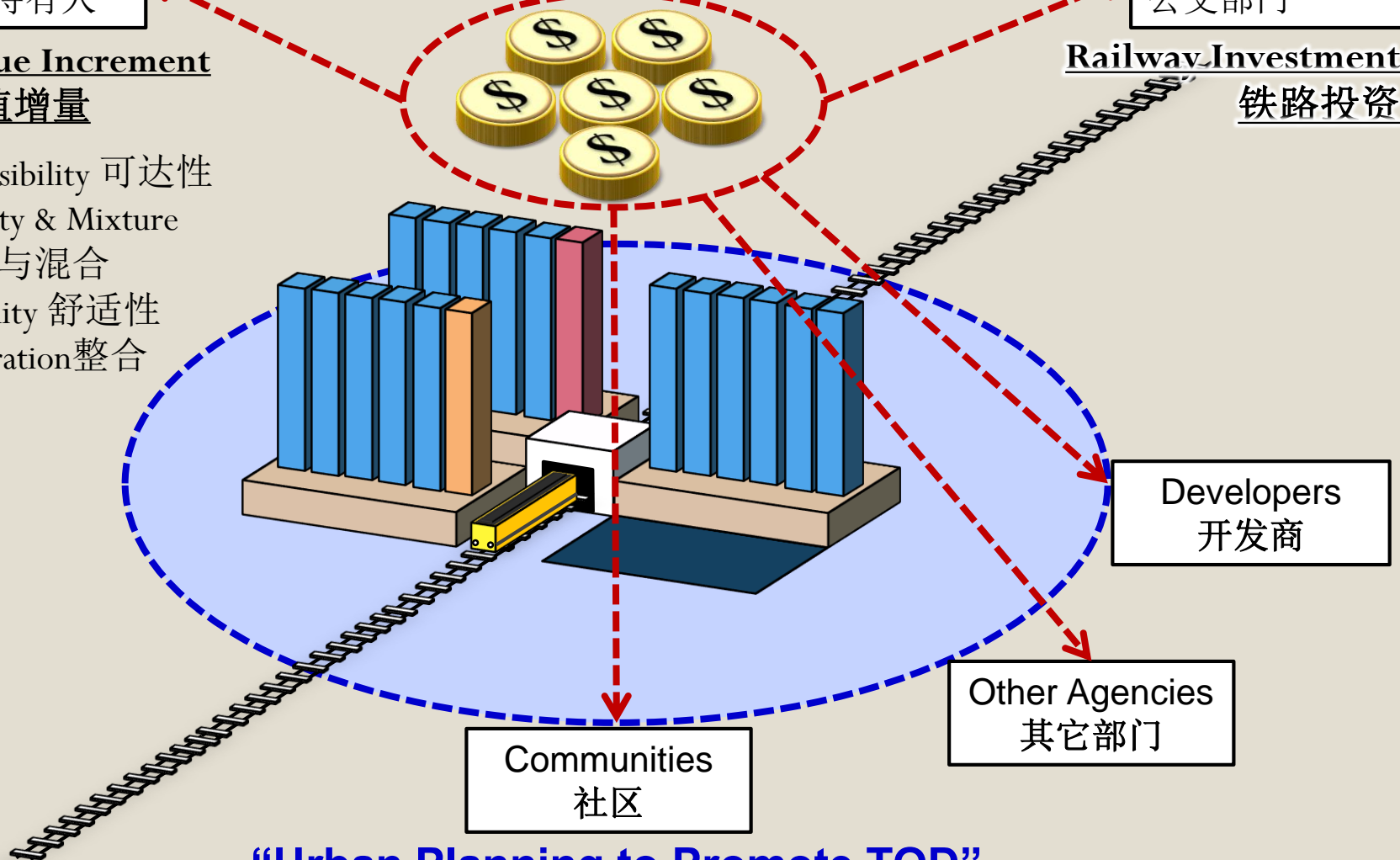
Landholders
土地持有人

Transit Agency
公交部门

Land Value Increment
土地价值增量

Railway Investment
铁路投资

- Accessibility 可达性
- Density & Mixture 密度与混合
- Amenity 舒适性
- Integration 整合



“Urban Planning to Promote TOD”

城市规划促进公交导向

CONCEPT OF LAND VALUE CAPTURE

捕获土地价值概念

人口增长、经济发展提升土地价值

基础设施公共投资、土地用途法规变化提升土地价值

土地所有者投资提升土地价值

土地固有价值



The government, on behalf of the general public, should keep this portion of the land value 政府应代表公众维持这一土地价值

Public service providers should capture this portion of the increment to cover the costs of public infrastructure and local service provision 公共服务提供方应挖掘增量价值，以覆盖公共设施和提供当地服务的成本

Private land owners should profit from this portion of the increment 私营土地业主应从这类增量中获益

Land buyers (or lessees) pay sellers (lessors) to obtain the property rights of land.

土地购买方（或承租方）向卖方（出租方）支付费用以获得土地产权。

Tax- & Fee-based LVC 基于税费的LVC

LVC Schemes in American Contexts (Market Freehold)

美国LVC计划（市场自由持有）

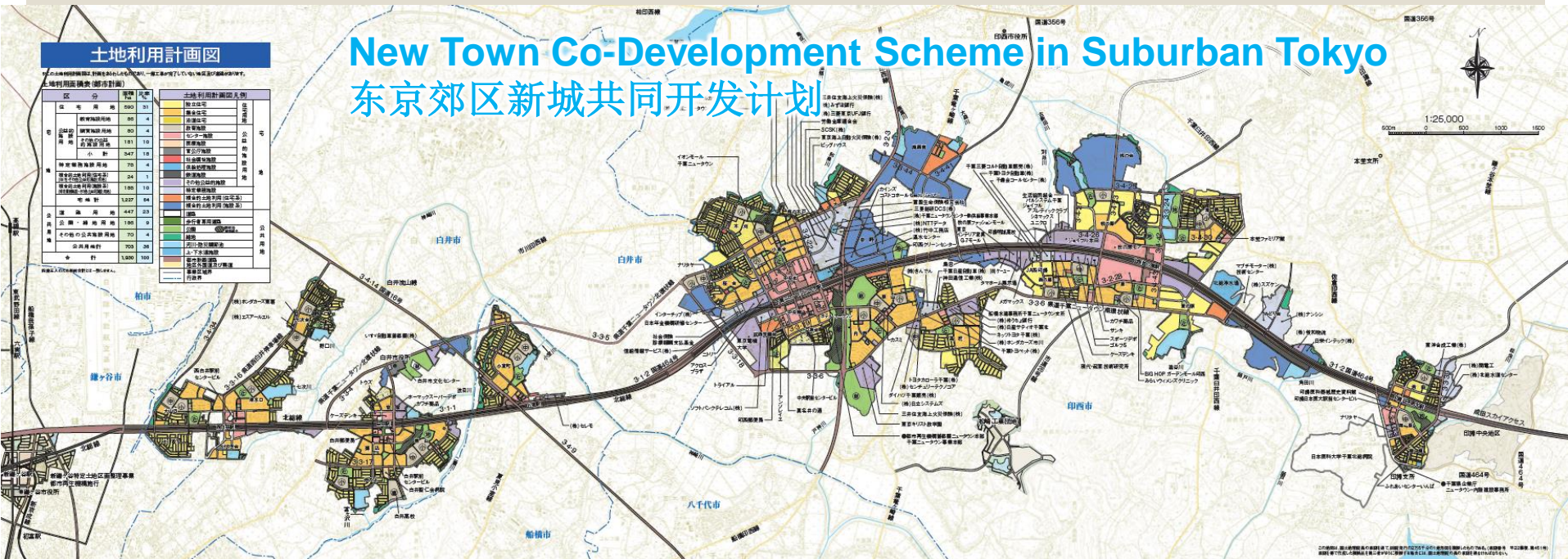
- **Betterment Levy/Special Assessment** 增值税/特别评估
- **Tax Incremental Financing (TIF)** 增量融资税（TIF）
- **Business Improvement District (BID)** 改进商业区（BID）
- **Development Impact Fee** 开发影响费

Development-based LVC 基于开发的LVC

LVC Schemes in Asia (Market Freehold & Gov. Leasehold)

亚洲的LVC计划（市场自由持有及政府租赁持有）

- **Development Right (Land Leasing) 开发权（土地租赁）**
- **Land Readjustment 土地整理**
- **Urban Redevelopment Finance 城市再开发融资**
- **Tradable Development Right (TDR) 可交易的开发权（TDR）**

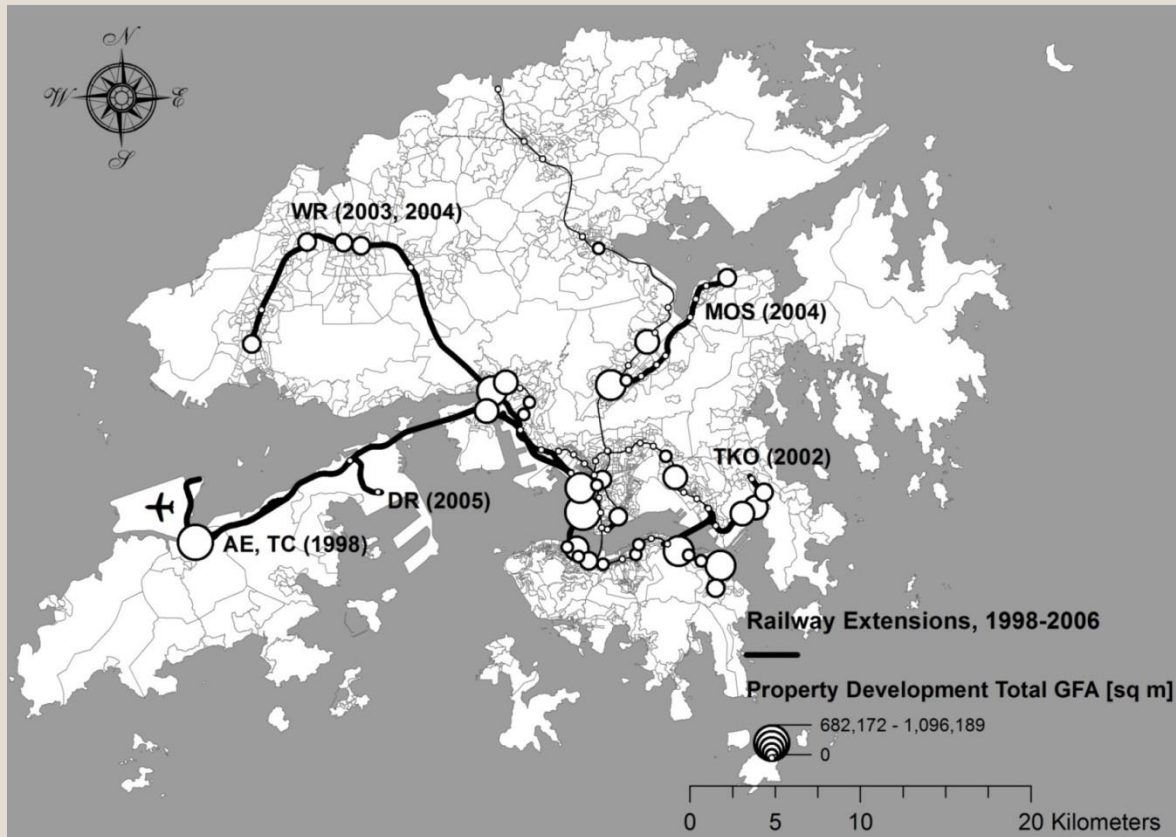


LVC EXAMPLES:
HONG KONG AND TOKYO

LVC实例：香港与东京

HONG KONG MTR: A MIX OF FINANCING MECHANISMS

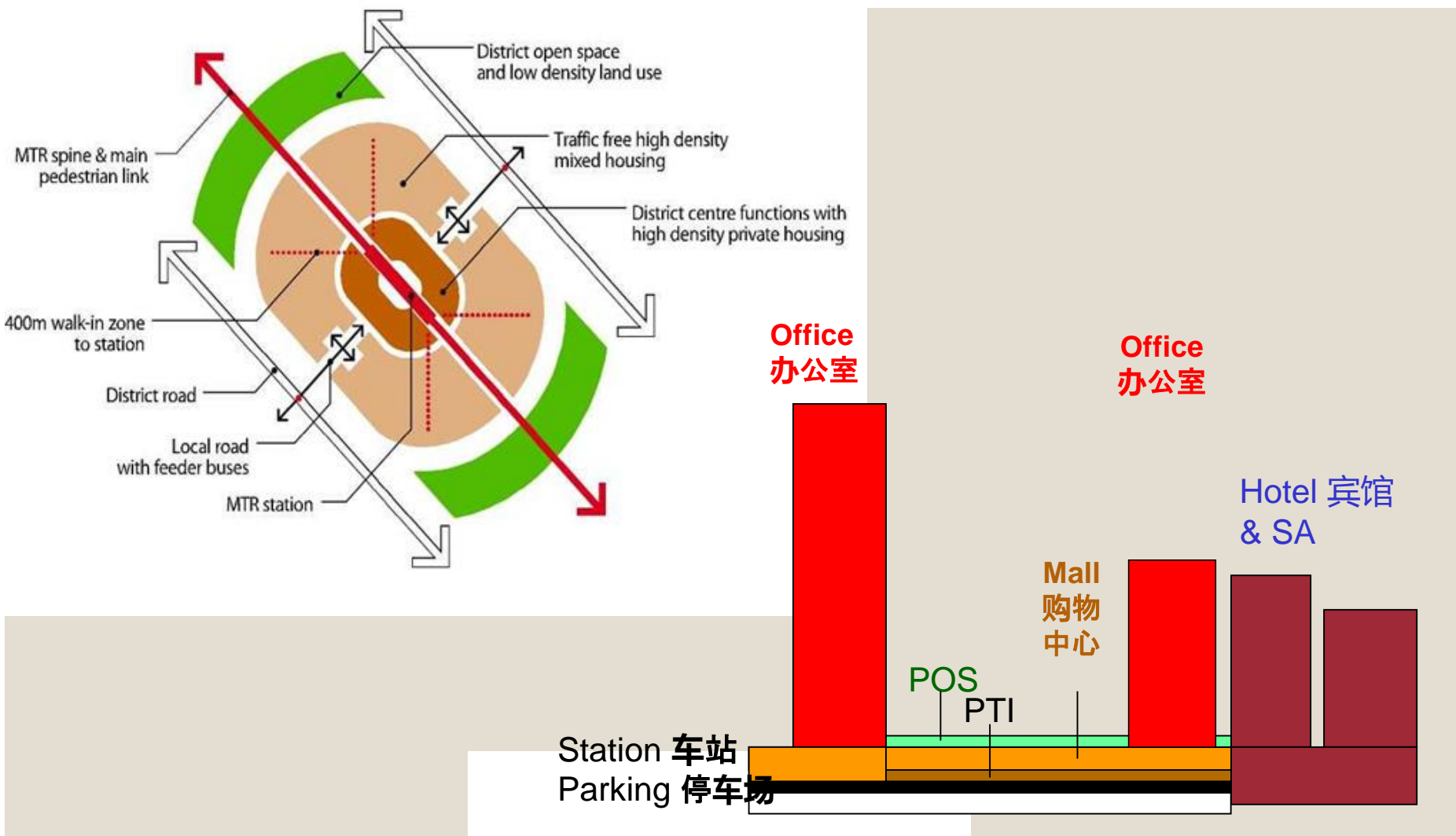
香港地铁：混合融资机制



- Use of Development Rights (R+P)
利用开发权 (R+P)
- Capital Grants
赠与资本
- Service Concessions
服务特许经营

MTR'S CONCEPT OF TOD

港铁的TOD概念



HONG KONG: R+P MECHANISM

香港：R+P机制

(a) Usual Government Land Leasing Program 常规政府土地租赁项目



(b) Rail Plus Property (R+P) Program 轨道加物业 (R+P) 项目



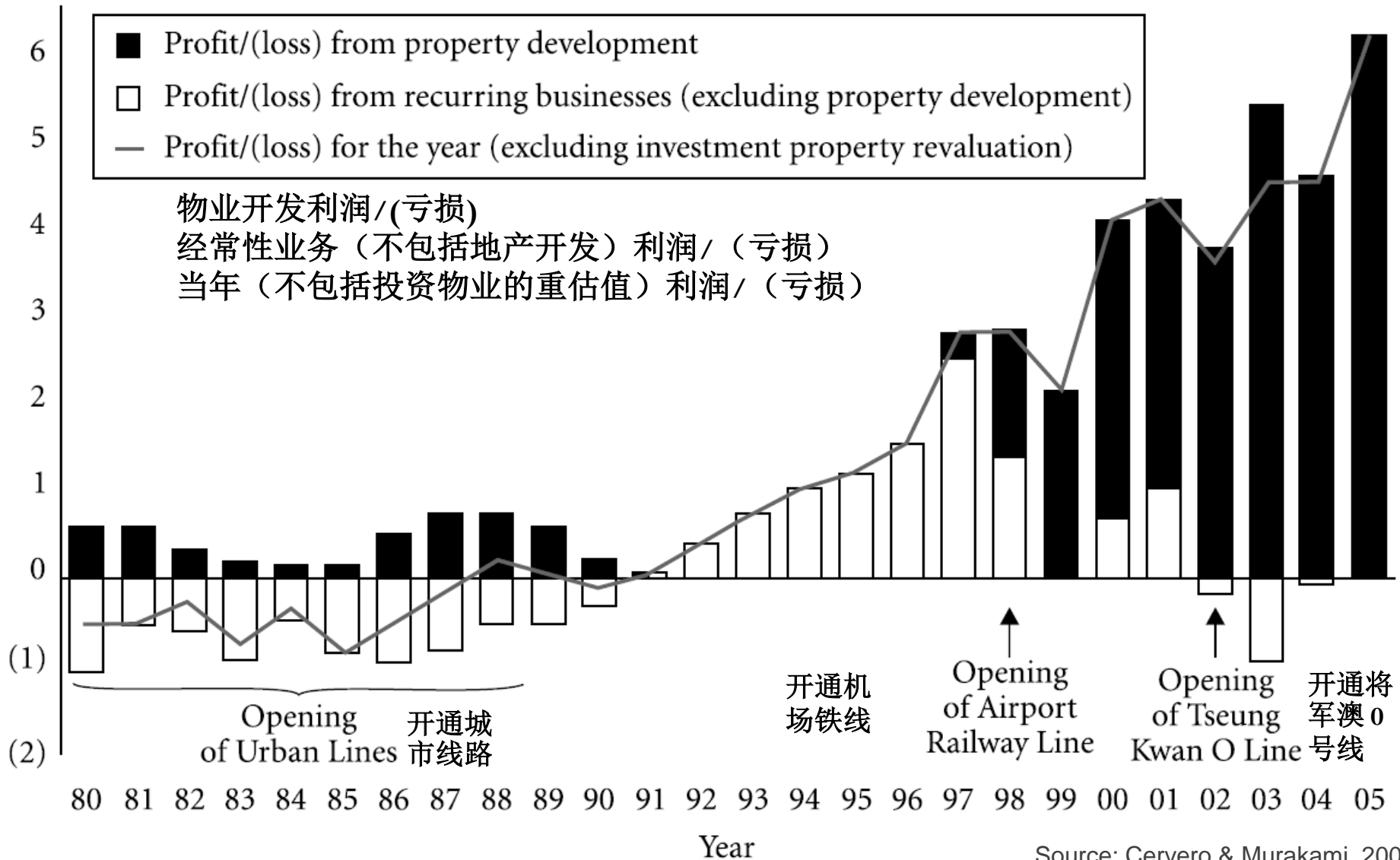
“Profit Sharing” “利润共享”

- **Profits in Agreed Proportions** 利润比例协商一致
- **Assets In-Kind** 实物资产
- **Upfront Payments** 支付签约金

HONG KONG: R+P EVOLUTION

香港：R+P模式演变

HK\$ billion



TUNG CHUNG STATION (1998-2011)

东涌站 (1998-2011年)

Tung Chung Station (1998)

东涌站 (1998年)

Site Area... **21.7** ha

场地面积.....21.7公顷

Residential... **935,910** sqm (90.8%)

住宅.....935910平方米 (90.8%)

Office... **14,999** sqm(1.5%)

办公室.....14999平方米

Commercial... **55,862** sqm(5.4%)

商业.....55862平方米 (5.4%)

Hotel... **22,000** sqm(2.1%)

宾馆.....22000平方米 (2.1%)

Others... **2,063** sqm(0.2%)

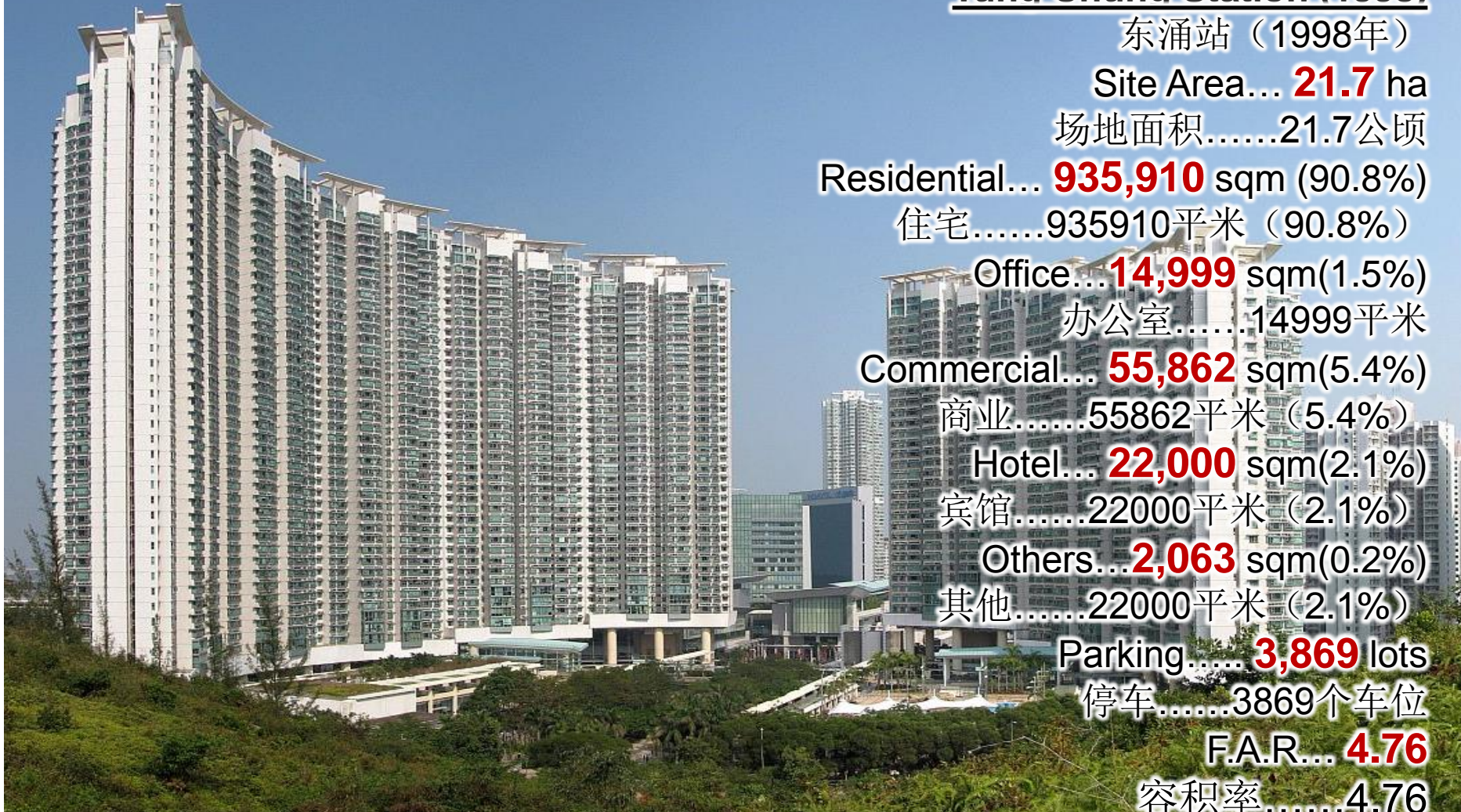
其他.....22000平方米 (2.1%)

Parking..... **3,869** lots

停车.....3869个车位

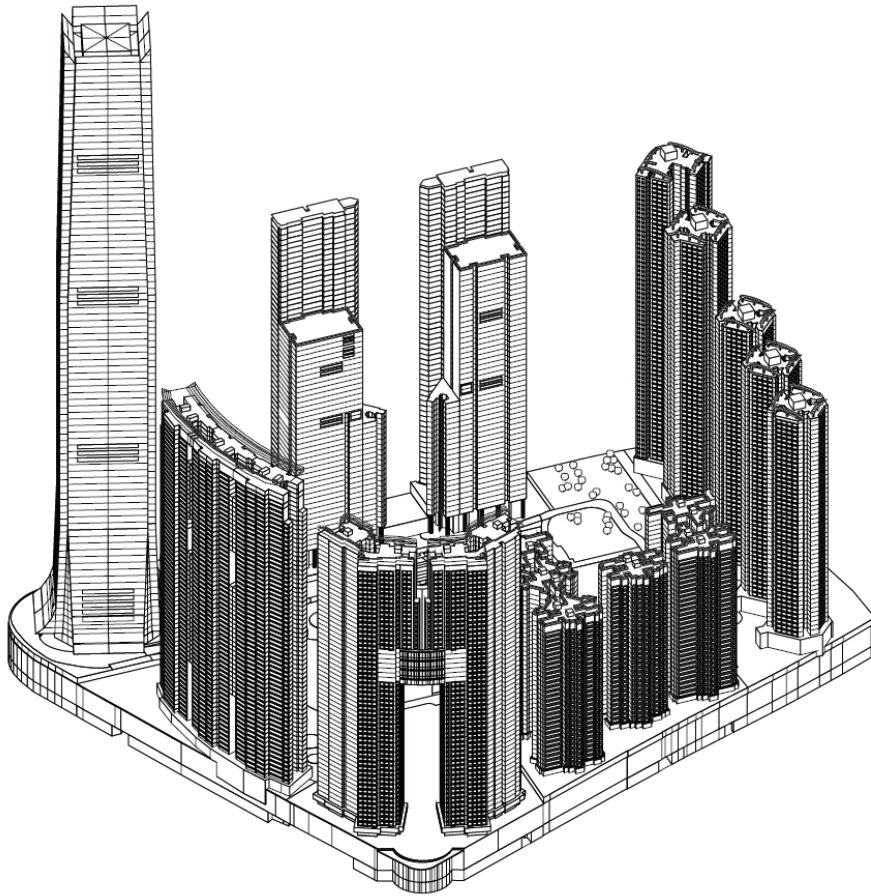
F.A.R... **4.76**

容积率.....4.76

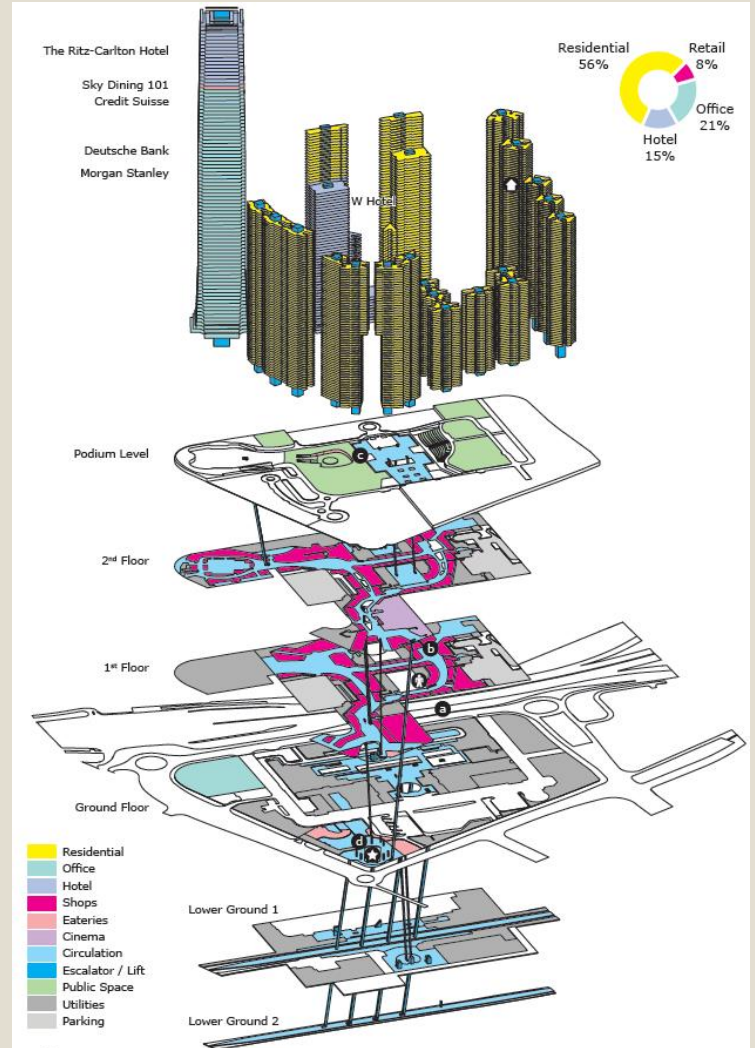


KOWLOON STATION (1998-2010)

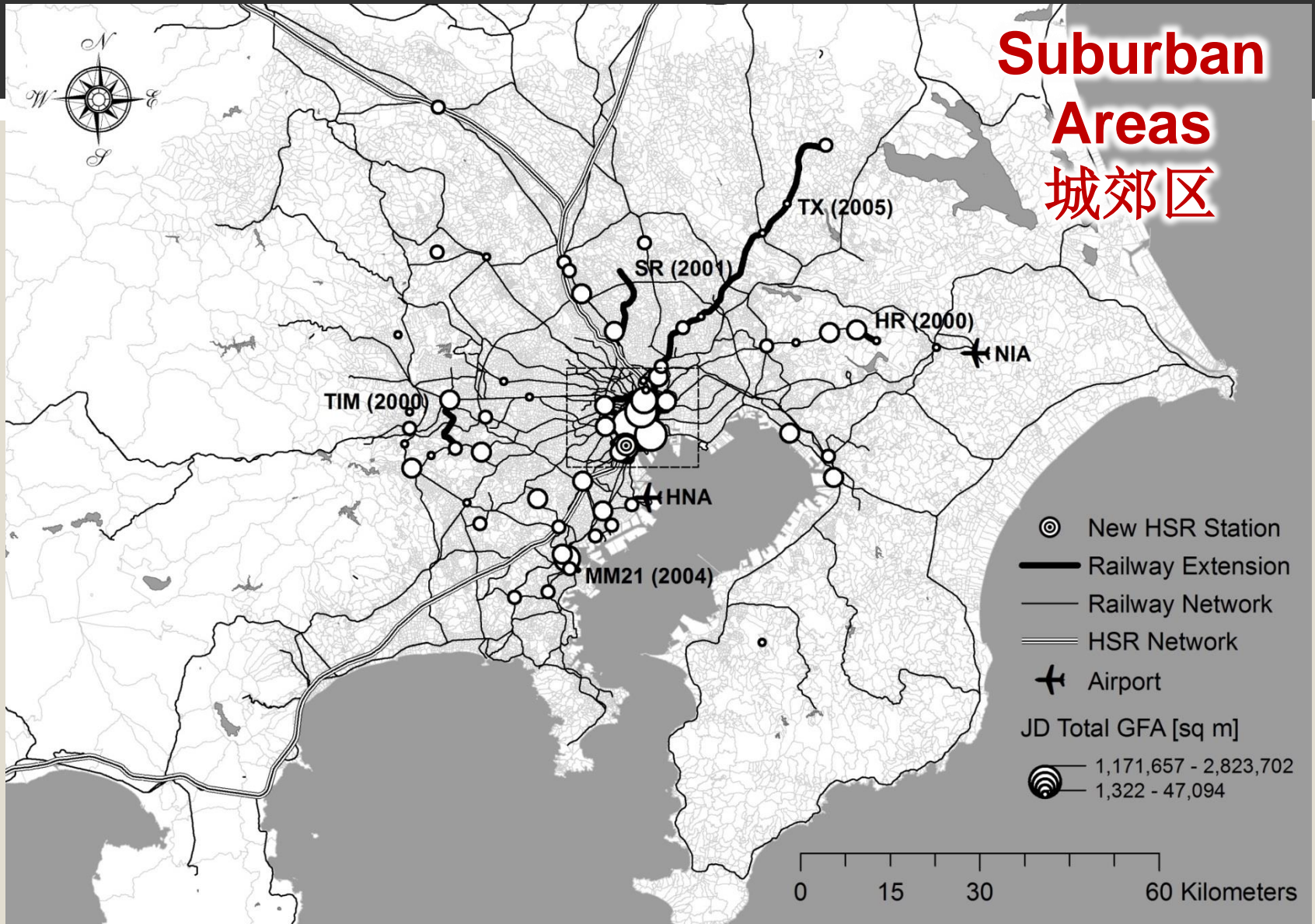
九龙站 (1998-2010年)



Source: AL Stephan (2013)

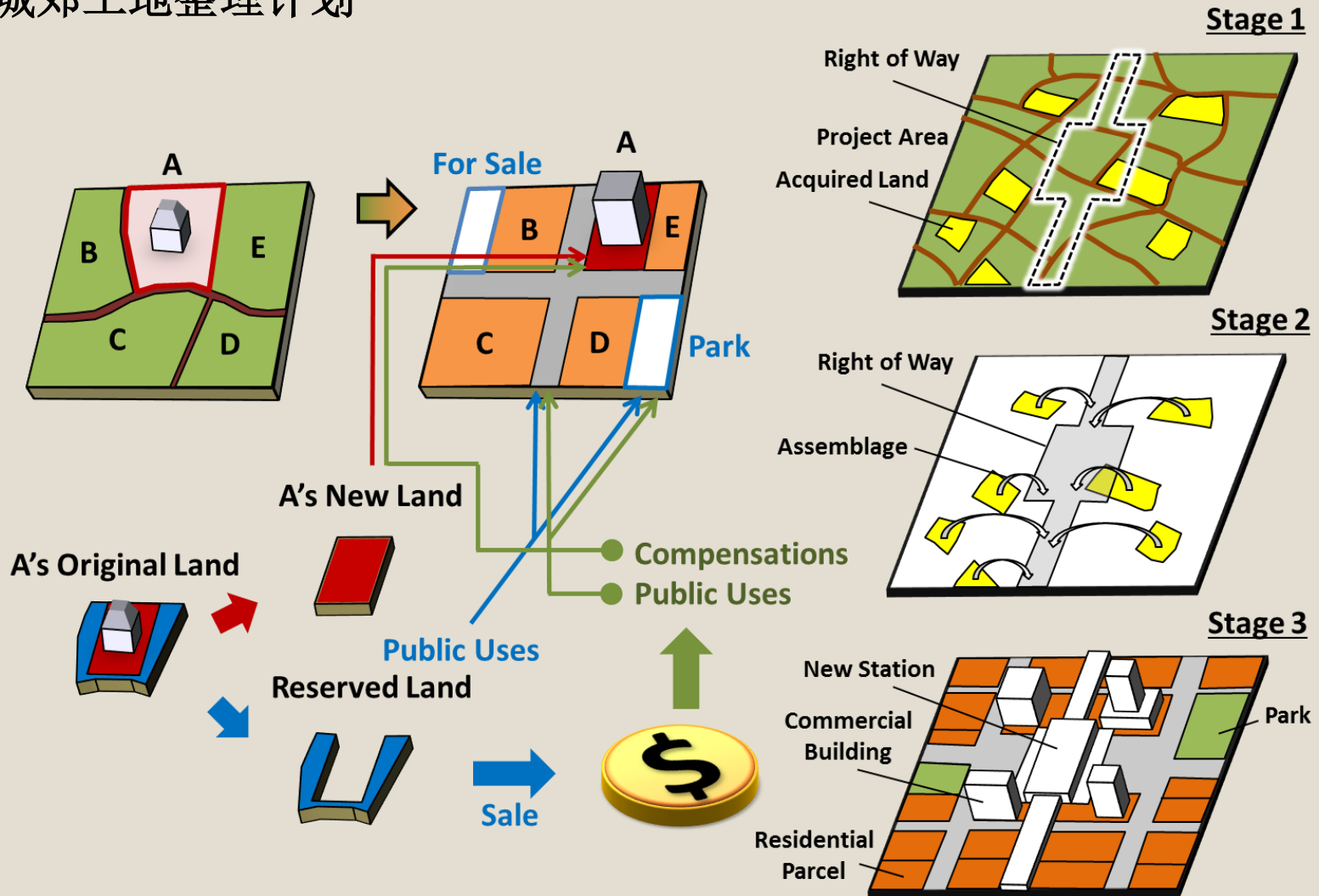


TOKYO: STRATEGIC EXTENSION 东京：战略延伸



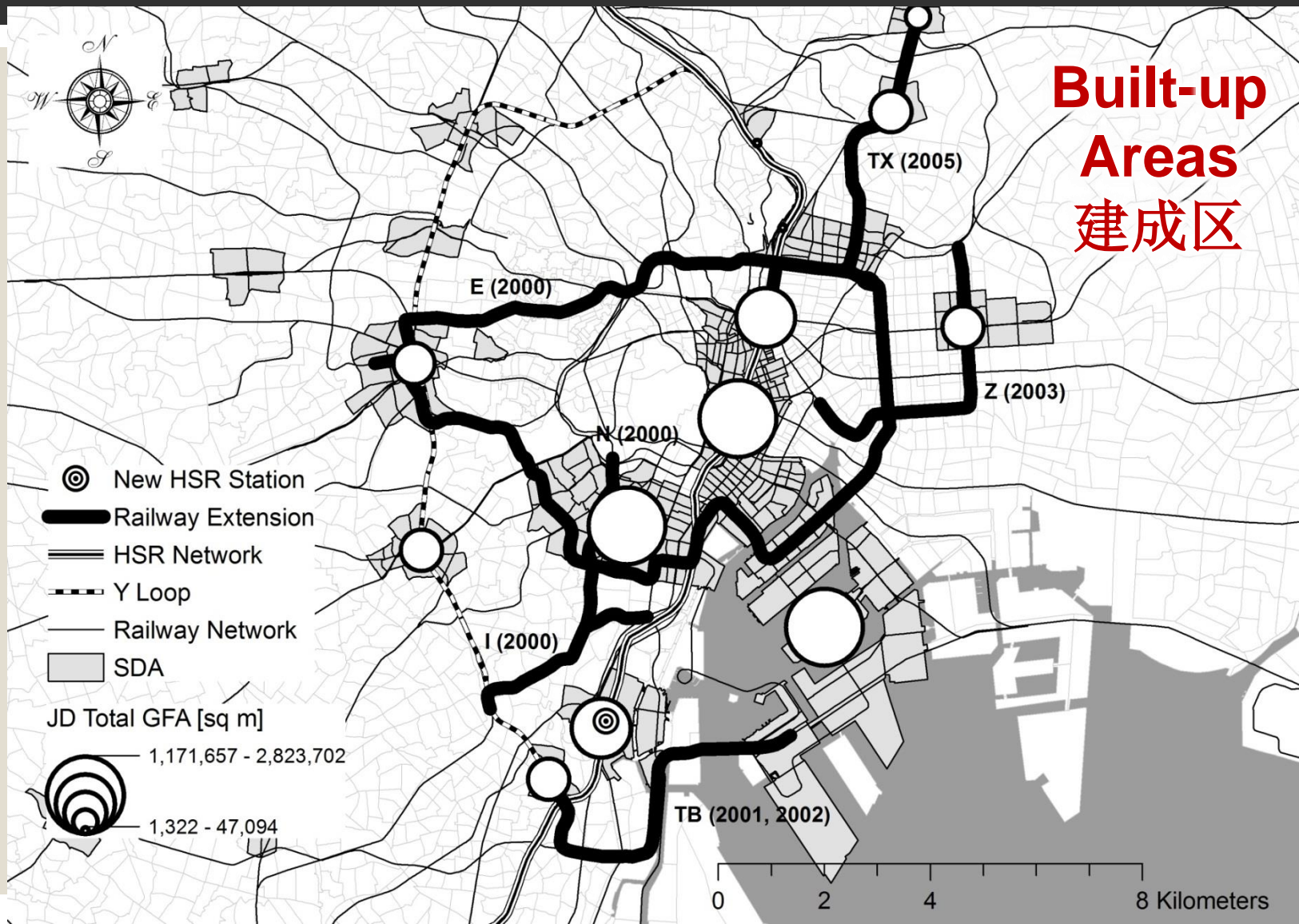
TOKYO: STRATEGIC EXTENSION 东京：战略性延伸

Inclusive Land Readjustment Scheme in Suburban Areas 城郊土地整理计划



TOKYO: STRATEGIC REGENERATION

东京：战略性再开发

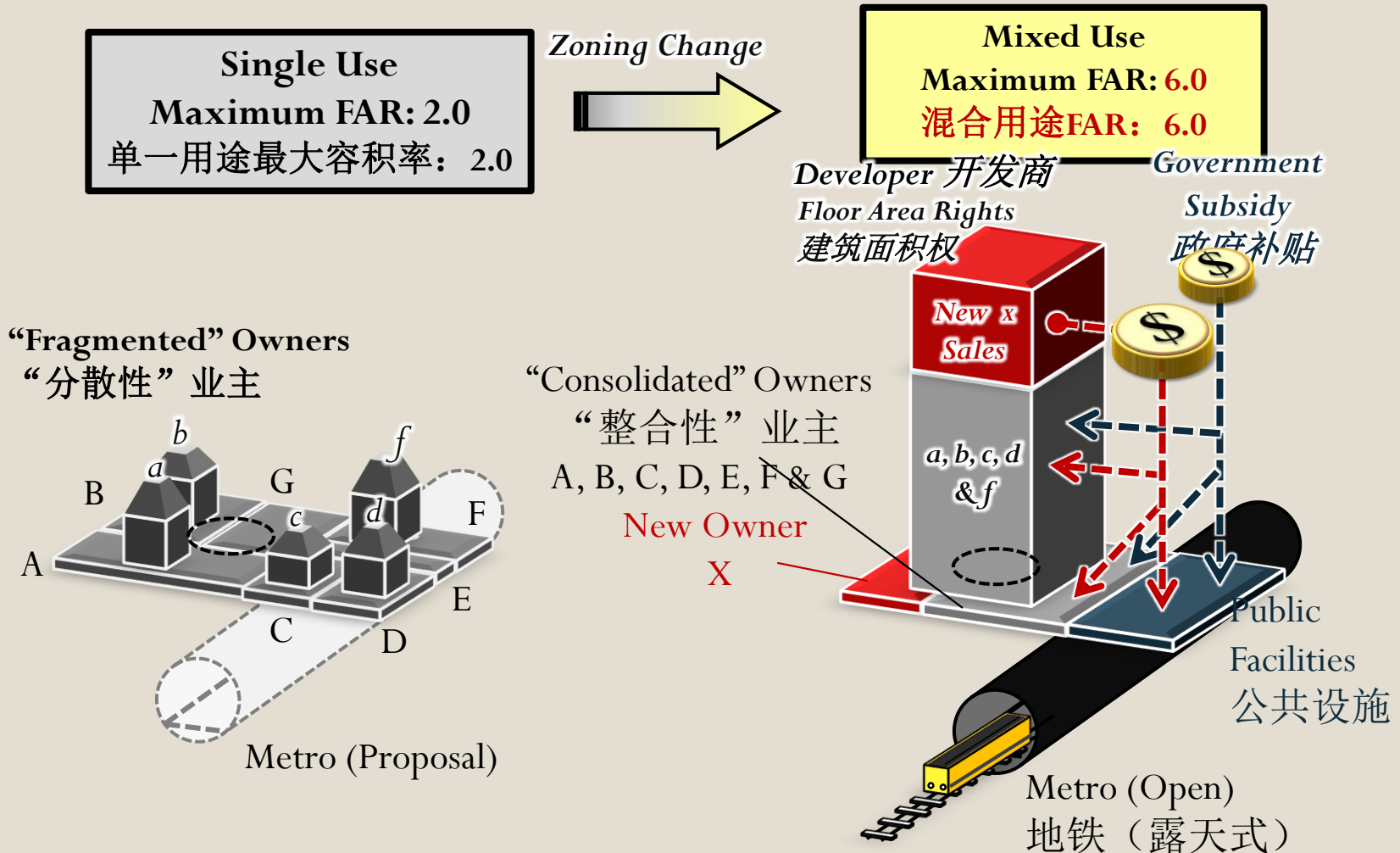


TOKYO: STRATEGIC REGENERATION

东京：战略性再开发

Inclusive Urban Redevelopment Scheme in Built-up Areas

包容性建成区城市再开发计划



RELEVANCE TO CHINA

与中国的关联

WORLD BANK: CONTINUOUS DIALOGUES WITH PARTNERS

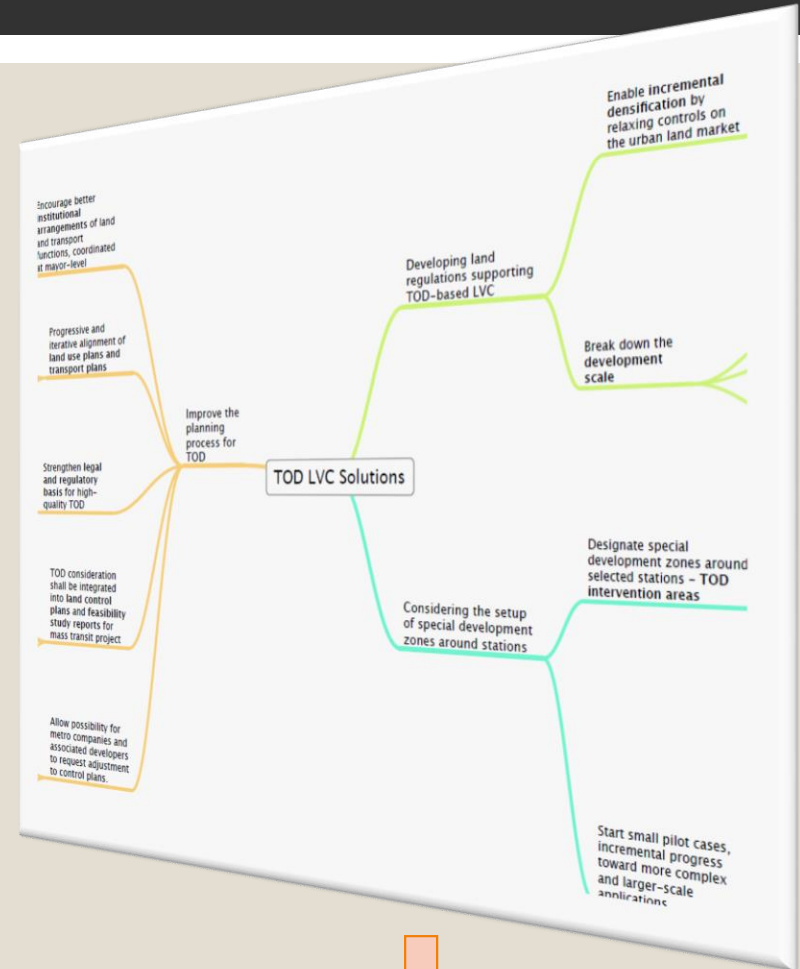
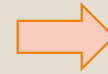
世界银行：与合作伙伴持续对话

Activities on TOD & LVC TOD和LVC活动

GEF-China Urban Transport Partnership Project supported TOD studies at city level
GEF-中国城市交通伙伴项目支持城市层面TOD研究

World Bank lending projects supporting innovative discussions and solutions on TOD and LVC with client cities
世行贷款项目支持与客户城市开展TOD和LVC的创新讨论和解决方案

Event: Nov. 1, 2013 Transforming Cities with Transit & Financing Transit with Land Values.
活动：2013年11月1日，城市公交转型与公交土地价值融资研讨会

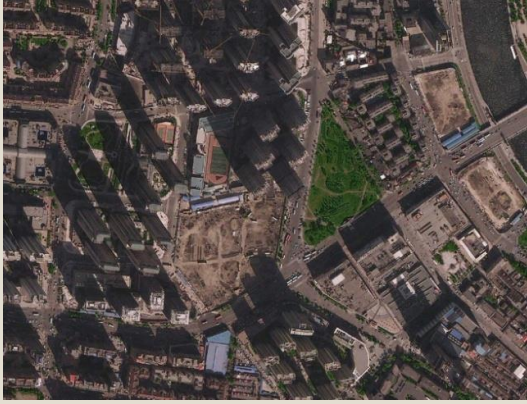


TIANJIN DESIGN: GREEN TRIANGLE

天津设计：绿色三角



A Green Triangle in a Dense Neighborhood 绿色三角位于稠密街道



Golden Triangle Park is an asset for the 250,000 people living in a radius of 2 km (very high density of offices)

It should become a destination and a civic space for this community
金三角公园是一处半径2公里的地带（极高密度的办公楼宇）
为25万人留下的一处资产，应该成为此社区的公共空间

Environmental benefits: heat island effect reduction

环境效益：减少热岛效应

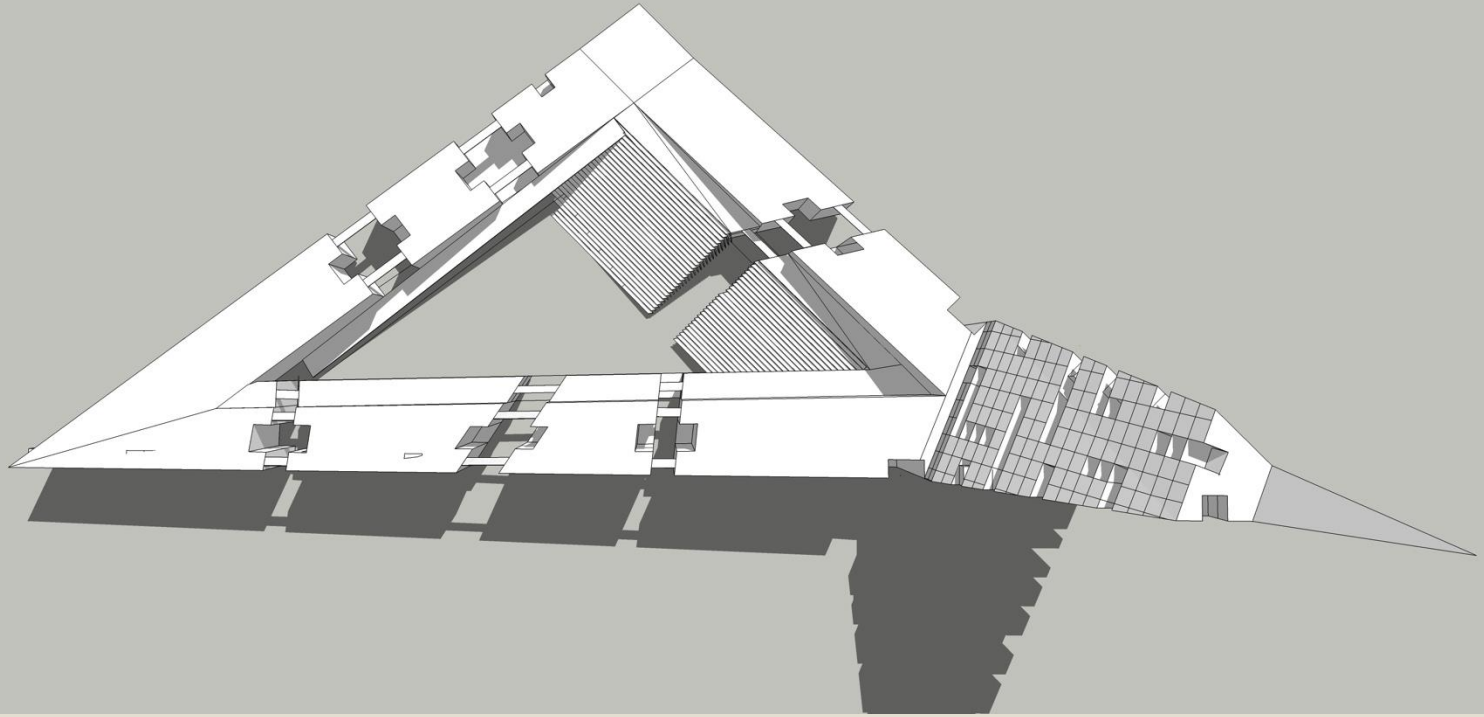
Social benefits: creates community civic space

Economic benefits: increases property values around the park

社会效益：创建社区公共空间

经济效益：增加公园周边物业价值

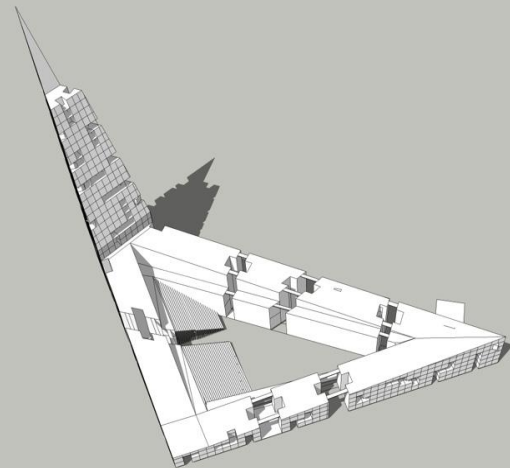


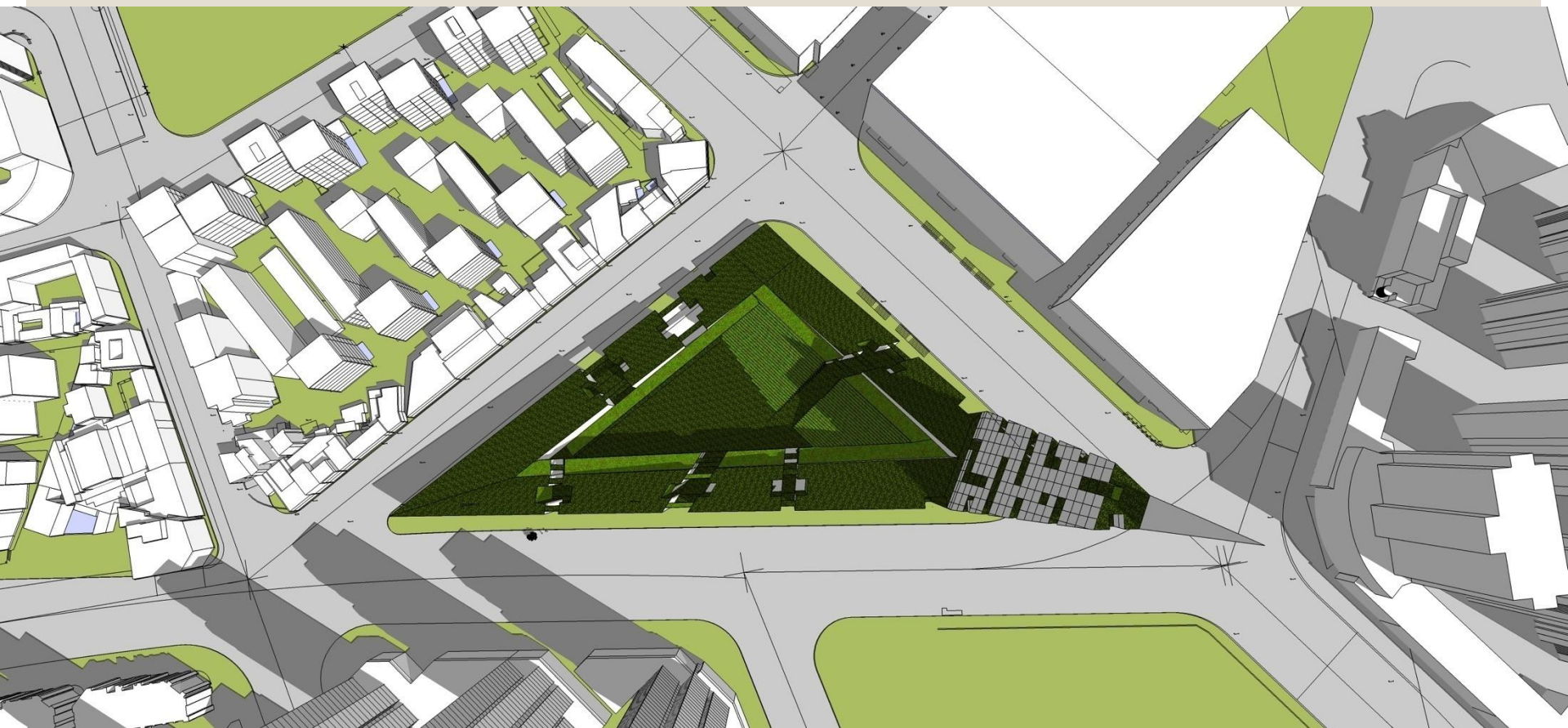


EFFICIENT LAND USE 高效利用土地

Perimeter block development reaches a FAR of 4 with medium rise buildings and 50 % of land for inside green civic space

综合体开发FAR达到4，配建中等高度建筑，50%土地用于公共绿地





GREEN TRIANGLE 绿色三角

A green preserved island in a highly dense neighborhood 高密度街区绿色保留地

Preserve Green Space entirely : after project more green space than before thanks to suspended gardens, green roofs and terraced gardens. 50% of the park is preserved at ground level; More than 50% is recreated in the form of elevated gardens. 完全保留绿色空间：项目完工后，因为设计了空中花园、绿色屋顶和平台花园，绿色空间得以增加。公园有50%是在地面预留，50%以上是以高架花园形式重新创建的。



CONNECTED :Transport Node 连接: 交通节点

- BPS and subway lines are connected by a pedestrian lane through public garden. 采用穿越花园的行人线将BPS与地铁线相连接
- 6 public passages allow crossing the garden from adjacent streets and move towards the river. 设计6条公共通道, 得以从毗邻街道穿越花园, 前往河道方向
- Green roof will be extended at second stage towards the commercial street and will replace the existing overpass. 在第二层, 向商业街道方向延伸绿色屋顶, 取代现有过街天桥





LINKAGE: A continuous green promenade for pedestrians on the green triangle roofs

links all spaces (inside and outside) with elevated gardens and bridges sloping gently up and down from street level to the tower

连接: 绿色屋顶行人专用、不间断绿色长廊将高架花园与所有空间（内外）和桥梁相连接，从街道向塔楼方向的坡道缓慢上下延伸

LEGIBILITY: refers to the ease with which the spatial structure of a place can be understood and navigated as a whole. The legibility of a place is improved by a street or pedestrian network that provides travelers with a sense of orientation and relative location, and by physical elements that serve as reference points.

易识别性: 指一处地方的空间结构被识别并可总体被作为导航物的容易程度。街道或行人网络可为出行者提供方向和相关位置感，实体建筑也可作为参照物，从而改进一处地点的易识别性。

RIGHT TIMING 恰当时机
GREAT POTENTIAL 巨大潜力

**Concluding
Thoughts**
结束语

LAND VALUE CAPTURE LINKS PLANNING AND FINANCING THROUGH TOD

通过公交导向，发掘土地价值将规划与融资连接在一起



Source: Mitsui Fudosan Co., Ltd/ World Bank

CONFERENCE EDITION—NOT FOR CITATION

URBAN
DEVELOPMENT
SERIES

OVERVIEW FINANCING TRANSIT WITH LAND VALUES

Adapting Development-based Land Value Capture in Developing Countries

Hiroaki Suzuki, Jin Murakami, Yu-Hung Hong, and Beth Tamayose



THANK YOU

谢谢

The slides build on several key presentations in the evolving topic of TOD&LVC carried out by the World Bank, references are contributed by Robert Cevero, Hiroaki Suzuki, Jin Murakami, Serge Salat, and from the upcoming new book on Financing Transit with Land Values.

本幻灯片是基于世行数份有关TOD和LVC的主要报告而编制的，其间Robert Cevero, Hiroaki Suzuki, Jin Murakami, Serge Salat等提供了宝贵意见。作者还参考了即将出版的公交土地价值融资一书。