

A map of a transit system, likely a light rail or tram system, showing various lines and stations. The lines are color-coded: yellow, pink, blue, and purple. Stations are marked with colored circles corresponding to the lines. The map is overlaid with a large title and author information.

Transit-Oriented-Development: Making It Happen

by C. Curtis, J. L. Renne, & L. Bertolini
Presented By Oliver F. Shyr

大眾運輸導向發展推動策略

- Definition: 何謂TOD
- Components: TOD的內涵
- Strategies: TOD的策略
- Global Lessons: TOD的國外經驗
- Seamless Transit: TOD與無縫公共運輸
- Prospective: TOD的展望與未來

DEFINITION

- 5D for Transit-Oriented-Development
 - 高強度土地使用 Density
 - 混合型土地使用 Diversity
 - 友善步行與轉乘設計 Design
 - 可步行之服務範圍 Distance
 - 目的地之可到達性 Destination
- Basic Transport & Land Use Correlations 土地使用+交通
- Synergy Between Transport & Land Use
- Compact City Policy: 'Build in or Next to Existing City'
- TRANSIT ORIENTED DEVELOPMENT INSTITUTE

COMPONENTS OF TRANSIT ORIENTED DEVELOPMENT (WWW.TOD.ORG)

- Walkable design with pedestrian as the highest priority
 - 提供良好的步行環境
- Train station as prominent feature of town center
 - 以車站為發展中心
- Public square fronting train station
 - 開放的站前廣場空間
- A regional node containing a mixture of uses
 - 混合使用之區域中心
- High density within 10-minute walk circle train station
 - 10分鐘步行距離內採高密度發展
- Collector support transit systems (light rail, buses & Taxi)
 - 轉乘公共運輸(輕軌、公車、計程車、DRTS)

COMPONENTS OF TRANSIT ORIENTED DEVELOPMENT (WWW.TOD.ORG)

- Designed to include easy use of bicycles & scooters with large ride-in parking areas within stations
 - 提供方便且大量的自行車與機車轉乘停車空間
- Bike-share rental system & bikeway network integrated into stations
 - 結合U-BIKE與自行車專用路網
- Reduced and managed parking inside 10-minute walk circle around town center / train station
 - 車站中心區10分鐘步行圈內減少汽車停車位或加強停車管理
- Specialized retail at stations serving commuters and locals including cafes, grocery, dry cleaners
 - 鼓勵零售商業進駐

STRATEGIC PRINCIPLES

BY PETER NEWMAN

- Strategic Policy for Centers
 - Why we do need centers in a strategic plan?
- Strategic Policy for Rail Transit
 - Why do we need rapid transit in a strategic plan?
- Statutory Process to Implement TOD
 - Why do we need a statutory planning process to require development in centers?
- Public – Private Funding Mechanism
 - Why do we need a financing mechanism for TOD's?
- Examples from Aussie Cities

STRATEGIC PRINCIPLES

BY PETER NEWMAN

Applications of Four Part TOD Strategy to Australian Cities

City	Policy for Center	Policy for Rail Transit	Statutory TOD Process	Public – Private Funding
Sydney	Yes	No / Yes	Yes	No
Melbourne	Yes	No / Yes	Yes	No
Brisbane	Yes	Yes	No	No
Perth	Yes	Yes	No	No
Adelaide	Yes	No / Yes	No	No

PUBLIC TRANSIT & SUSTAINABLE URBANISM: GLOBAL LESSONS

BY ROBERT CERVERO

- TOD in Asia: Singapore
 - The role of HDB
 - ERP: electronic road pricing
- TOD in United States
 - Arlington County, Virginia
- Bus-based TOD: Bogota & Curitiba
- Topologies of TOD Stations

KEY PRINCIPLES TO MAKE IT HAPPEN

- Guidelines for Successful TOD Implementation Strategies
 - Strong leadership
 - Forward-looking urban planning
 - Efficient pricing of scarce resources
- Implementation Tools, Processes, & Actors
- Transferring Lessons
 - Tool box for TOD implementation

TRANSIT STUDIES

- Factors Affecting Rapid transit patronage
 - Stations
 - Population
 - Car & scooter ownership
 - Cost-of-living
 - Economies of Scale
- Rapid transit and housing prices
 - Percent increased: KHH > TPE > HKG 漲幅：高雄 > 台北 > 香港
- National Surface Transportation Policy and Revenue Study Commission

TOD & SEAMLESS PUBLIC TRANSPORT

無縫運輸維度

空間縫隙

旅客能在可接受步行距離內搭乘公共運輸工具

時間縫隙

旅客能在可接受等待時間內搭乘公共運輸工具

資訊縫隙

旅客能迅速便利地取得所需交通資訊

服務縫隙

公共運輸服務品質符合旅客預期

無縫運輸維度間可以互相支援、彌補

空間
無縫

資訊
無縫

時間
無縫

服務
無縫

有

多

質

TOD: FUTURE PROSPECTIVE

- Competition and Evolutions
 - Carpooling
 - DRTS
 - PRT



TOD: FUTURE PROSPECTIVE

- Smarter & Cleaner Private Mode of Transport
 - Autonomous Car
 - Uber
 - U-Car





THANK YOU FOR LISTENING



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