Transit-Oriented Development, Joint Development, and Land Value Capture in Urban Metro Systems

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What is Transit-Oriented Development?

Characterized by four principles:

- Dense, compact development around stations
- A full mix of land uses: housing, jobs, retail, institutions
- A safe, interconnected, pedestrian environment
- Reduced parking that is shared and well-designed
Why is TOD Financially Good for Transit?

- **Increased ridership**
- **Joint development**
- **Land value capture**

South Boston Waterfront

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Joint Development

- Projects are built on transit property (land or air rights), or have a direct physical connection to a station.
- The Transit Agency is a business participant.
- Joint development generates revenue directly for the transit agency through land sale, lease, or in-kind contributions.
- Joint development gives the transit agency an opportunity to set the standard for TOD.
Land Value Capture: Two Models

• **Special Assessments**
  – Benefit Assessments, Improvement Districts, Development Charges.
  – Potential resistance from corridor property owners, who see it as “a new tax on TOD”.
  – Bogotá’s *valorización* is a form of special assessment.

• **Tax Increment Financing**
  – Capturing the “normal tax” that the land owner would pay anyway—usually the local property tax.
  – Welcomed by land owners and developers.
  – Potential resistance from the municipality, which has other priorities for the money.
The Station Level
Traditional Joint Development

- Washington, San Francisco, Boston, Atlanta, Miami, others
- Typical approach: developers solicited for individual stations
- Typical project: park-and-ride lot converted into garage + joint development parcel
- Typical results:
  - Good TOD for ridership
  - Developer helps maintain station
  - Payments go for the new garage

Washington, DC: Fort Totten Station
Washington: NoMa Station

- Urban district north of Capitol and Union Station
- Metro passes by, but no station
- 1998: land owners request a Special Assessment District for an “infill” station
- Station opened in 2004; key to NoMa District revitalization strategy.

- Special assessment financing: $25 million in bonds = 24% of total cost
Boston: Assembly Square

- 65-acre (26-hectare) obsolete industrial site
- Near downtown Boston, MIT
- Metro passes by, but no station
- Community wants dense TOD
- Station cost $56 million
- 6,000 new riders per day—built at no cost to transit agency

- **Developer pays first $15 million**
- **State Economic Development pays $26 million**

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Boston: Assembly Square

- 2,100 housing units
- 1.06 million sf (98,400 mc) retail
- 12-screen cinema
- 1.75 million sf (162,500 mc) offices
- 150-room hotel

- 65 acres of streets, sidewalks, parks, utilities financed by value capture: municipal and state tax increment
Denver: Union Station

- Historic station and 19.5-acre (7.8-hec) public site
- Transit program: $488 million
  - Intercity Rail (existing)
  - Commuter Rail (new)
  - Light Rail (expanded)
  - Central bus station (new)
  - Circulators (expanded)

- **Joint development:** 5 parcels + station; total payment $35 million
- **Tax Increment + Special Assessment financing:** $146 million
Denver: Union Station

- Historic station, rail, and bus facilities open 2014
- Three of five joint development parcels built or in construction
- 1,450,000 sf (125,000 mc) of mixed-use TOD on-site in station and five new buildings
- 4,000,000 sf (370,000 mc) of TOD within 1/4 mile (400 m)
The Corridor Level
San Juan: Tren Urbano

- Traditional joint development at multiple stations
San Juan: Tren Urbano

- New Metro line—first in San Juan
- Opened 2005: 18 km, 16 stations
- Ambitious joint development program:
  - 11 projects under contract at 6 different stations
  - 1,500 housing units
  - 1,000,000 sf (93,000 mc) office
  - 250,000 sf (23,000 mc) retail
  - Private investment: $1 billion
  - Land payments: $70 million
- Great recession stopped all construction financing
Portland: Cascade Station

- 120-acre (48-hec) urban renewal site at Airport
- LRT extension with 2 stations
  - Bechtel & Trammel Crowe joint development venture commits $28 million out of $125 million transit cost
  - City commits $23 million via Tax Increment Financing
Portland: Cascade Station

• Red Line opened 2007
• Development delayed by recession, now strong
• 1,325,000 sf (123,000 mc) offices
• 1,200 hotel rooms
• 400,000 sf (37,000 mc) retail
• 24-screen cinema
Copenhagen: Orestad

- 310 acres (766 hec) of undeveloped land between downtown and Airport
- 1992: Orestad Development Corporation (55% City, 45% Ministry of Finance) created to:
  - Build new Metro line to downtown (the M1)
  - Develop a “new town”
- Oresund Train provides a rapid ride to Copenhagen Airport and to Sweden
Copenhagen: Orestad

- Development objective: 20,000-30,000 residents, 60,000-80,000 jobs
- Began slowly, accelerating now
  - A 310-hec joint development project: land sales were to cover capital cost. Partially successful.
  - Land taxes from new development were to cover operations. Partially successful.
Los Angeles: Red Line Stations

SAN FERNANDO VALLEY
- North Hollywood P
- Universal City PR
- Hollywood/Highland
- Hollywood/Vine P3
- Hollywood/Western
- Vermont/Sunset R
- Vermont/Santa Monica R
- Vermont/Beverly R
- Wilshire/Normandie
- Wilshire/Western R
- Wilshire/Vermont R
- Westlake/MacArthur Park
- Pershing Square

5 stations
Los Angeles: Red Line Stations

- 1985: special assessment to fund 5 Red Line Metro stations
- Downtown: 1/2 mile (800 meter) district around each station
- Westlake: 1/3 mile (500 meter) district around station
- Won litigation, collected 1992-2009

➢ Bond financing from revenues:
  - $130 million financed
  - only 9% of Red Line cost, but
  - 75-80% of 5 stations’ cost
Streetcars

- Smaller, less costly projects
- Mostly for circulation rather than suburban commuting
- Limited federal funding

➤ *Typical: value capture used as a principal financing method.*

Seattle, San Francisco

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Streetcars

- Portland: four phases, 7.35 miles (12 km) of double-track streetcar
- Over $3 billion in TOD
- Total streetcar cost: $251 million
- Phases 1-3 (before any federal funding): $103 million

➢ *Local Improvement District, Tax Increment Finance, and downtown parking revenue bonds:*
  - 34% of total system cost
  - 67% of phases 1-3
Atlanta BeltLine

- 22-mile (35-km) circumferential belt around the urban core, following old rail corridors
- An integrated plan of light rail transit, parks, trails, mixed-use TOD
- Intercepts the four Metro Lines
- Partnership of City of Atlanta and MARTA (regional transit agency)
- Total cost: approximately $4 billion (all components)
Atlanta BeltLine

- Program components:
  - 22 miles (35 km) transit
  - 1300 acres (525 hec) of parks
  - 33 miles (53 km) trails
  - 5600 units of affordable housing

- Largest financing source: a Tax Allocation (Tax Increment) District established in 2005:
  - Covers 6500 acres (2630 hec)
  - Will finance $1.7 billion in bonds
  - Approximately 40% of total cost
  - Currently paying for planning, parks

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New York: #7 Subway Extension

- 33-acre (13.3-hectare) uncovered railroad yard on West Side of Manhattan
- Part of 360 acres (145 hectares) of underutilized land
- Two-part strategy:
  - extend the Number 7 subway 1 mile (1.6 km) from Times Square to West 34th
  - air rights joint development over the yards
- Unique partnership:
  - City finances and builds the subway
  - MTA (transit agency) operates subway
  - MTA sells air rights for joint development
- Subway opens 2014, TOD underway
New York: #7 Subway Extension

- Air rights mixed-use TOD: 17,000,000 sf (1,580,000 mc)

- City creates two public corporations to build infrastructure and control development

  - **Tax Increment Finance-like model:**
    - Hudson Yards Infrastructure Corporation issues $3 billion in revenue bonds ($2.4 billion subway, land acquisition, other)

  - **Joint development:**
    - MTA receives $200 million for air rights, which can be used for other transit construction
The System Level
Hong Kong MRTC

- Massive system carries 5.2 million passengers per weekday
- Government corporation was privatized in 2000, but Government owns 78% of stock
- Joint development is a core business, funding construction and operations

- In 2012, Property Development, Property Management, and station commercial businesses generated HK$9.3 billion in operating surplus ($1.2 billion US)

Kowloon High-Speed Rail Terminus: 25-acre joint development
Hong Kong MRTC

• MTRC real estate includes:
  – 13 shopping malls; 9,200,000 sf (850,000 mc) of retail
  – 9,900,000 sf (916,000 mc) of offices
  – 126,000 housing units

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Tokyo’s Commuter Rail System

• Unique evolution:
  – eight private railways built before WWII
  – public corridors privatized in 1987

• Unique scale: private commuter lines carry 16 million passengers per weekday, Tokyo subway carries 6 million

➢ Oldest form of joint development:
  – *Private commuter lines were built by land developers to serve new districts*

• Land value capture:
  – *When public company builds a new line, land owners were required to fund 50% of the cost and contribute the right-of-way*
Conclusions

• TOD is always good for transit: more riders, more support.
• Transit can support existing mixed-use development and attract new TOD.
• Joint development—TOD on transit land—brings:
  – extra revenue from the real estate deal (maybe)
  – the chance to shape the rest of the station area
• Land value capture, by tax increment or special assessment, has many successful applications to transit.
• Two fundamental constraints:
  1. TOD plans can influence location, but not overall market conditions.
  2. The over-riding factors: scale and density.