Fostering and implementing Transit-Oriented Development (TOD)
Solutions, examples and lessons learned

Gilles Bentayou
What’s TOD?
A planning concept

Compact developments near public transport stations or nodes

- providing mixed uses
- designed as walkable areas
- with a high quality of public spaces

- Born as a label 25 years ago (Peter Calthorpe, 1993)
- Derived from diverse emblematic experiences
- Worldwide spread
Copenhagen

1947

1948

2007

Integrated planning since 1943
HLS Bus line corridors

Cerema

Curitiba

Rosslyn-Ballston

General Land-Use Plan since 1961

Key features of TOD

half-a-mile radius | mixed uses | density

quality of public spaces | diversity of housing programs

housing & shops & jobs | efficient & attractive footpaths

Half-a-mile radius
= 800 m radius
⇒ 2,000,000 sq m
The Scales of TOD

Source: Center for TOD, *Transit Corridors and TOD, TOD-203*
Some insight on diverse experiences

Vancouver
Collingwood Village

San Francisco
Fruitvale Station

Los Angeles

Los Angeles
South Pasadena

Portland

(…)

Cerema
Which effects of TOD?

Comparing US TOD areas with other areas of the same regions…

• Mixed results, but on average:
  - TOD residents own usually less cars
  - They use more public transport, and walk more
  - They spend less money for transport in their everyday-life

• TOD can contribute to higher land-values (keeping housing at affordable prices is a challenge)


Ex. Montréal, CA
Financing TOD: a Snapshot of some Mechanisms
Public Authorities Funds

Value-Creation on Public Land

Anticipated Tax-Increment Financing

Value-Capture on Private Ownership

Leasing or Selling of Public Land

Joint Development (USA, Hong-Kong)

Betterment Fees

Benefit-Assessment Financing (USA)

Business Improvement Districts

Business Rate Supplement (UK)
Potomac Yard Metrorail Station (Virginia, USA)

- Future (2021) infill station of Metrorail
- Convert a ‘big-box’ retail center into a mixed-use development (700 000 m²)
- Station cost ≈ $270 million covered by:
  - Public subsidies or grants
  - Tax-increment financing
  - Contribution of the owner of the shopping center ($55 million)
  - Two special tax-districts on future developments

Source: City of Alexandria, North Potomac Yard Small Area Plan, sept. 2017
Zhongshan Park Station (Shanghai)

• Interchange station between 3 metro lines

• ‘Cloud Nine’: 58-floor, 238-metre tall skyscraper with a shopping mall at its base, close to the station

• Interconnection between lines 2 & 3 paid by the developer, as counterpart of a rise by 20% of the building rights

Source: Delpirou et al., ‘Coordonner urbanisme et transports collectifs : un référentiel à l’épreuve de la ville made in China’, Flux 2015/3 (101-102)
Axis Contracts:
a French Bottom-Up Approach
Transport and urban planning: cooperation needed!

Regional Rail Transport

Intercity Transport

Urban Transport

Regional Land-planning Document

Territorial Coherence Plan

Local Plan

Building Rights/Permits

(Transport competence transferred to Régions in 2017)
Principle of axis contracts

- A mutual engagement between:
  - The transport authority
    - Implementation of a new transport supply
  - The municipalities deserved
    - New dense and high-quality developments around stations

- Bottom-up initiatives that have spread in different regions, around diverse public transport lines (tram, metro, bus, train)
- A challenge: deserving peripheral and low-density areas
- A wider cooperation between several public bodies
Overview of the axis contracts

Île-de-France
Extension of metro line 11

French Outskirts of Geneva (Ain)
Cross-border tram+bus

Grenoble
Tramway E line

Périgueux – vallée de l’Isle

Pau
Two lines

Toulouse
Several BRT projects

Alès – Nîmes

Avignon – Carpentras

Nice – Digne
“Chemins de fer de Provence”
The main added-values

- For the transport system
  - Better coherence between the transport offer and the territorial needs ⇒ more clients!
  - Rationalisation and improvement of multimodality
  - Less pressure on car parking areas (P+R)
  - Better socio-economical efficiency of the investments made
The main added-values

- **At the scale of the corridor deserved**
  - Benefits of an integrated approach
  - Design of a shared vision to reduce urban sprawl
  - Less car-dependency for everyday trips
  - Reduce traffic congestion and air pollution
The main added-values

- For the (For some!) municipalities
  - Better appropriation of the transport project
  - Extra technical support to foster the implementation of TOD
  - Better accessibility, added-value for the stations areas, attractiveness
## Key Lessons

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Thank you for your attention!

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