Transit Planning Practice in the Age of Transit-Oriented Development

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Theoretical TOD implementation process

1. Statewide Planning
2. Regional Planning
3. Transit System Planning
4. Transit Project Delivery
5. District Planning
6. Land Use Planning
7. Infrastructure Investment
8. PreDev
9. TOD Delivery
How have fixed-guideway transit investments been planned with TOD in mind?

- Statewide Planning
- Regional Planning
- Transit System Planning
- Transit Project Delivery
- District Planning
- Land Use Planning
- Infrastructure Investment
- PreDev
- TOD Delivery
Literature on U.S. transit investments’ influence on real estate development

1. Numerous necessary conditions for transit investments to influence real estate development outcomes
   - e.g., Knight and Trygg 1977, Loukaitou-Sideris and Banerjee 2000, Cervero et al 2004

2. Transit investments’ impact on markets and real estate development modest in most locations given U.S. context
   - e.g., Myer and Gomez-Ibanez 1981, Cervero and Landis 1995, Giuliano and Agarwal 2010

3. Development has occurred when stations were located where real estate investment was allowed and financially feasible (in some cases, transit catalyzed critical land use policy changes)
   - e.g., Knight 1980, Cervero et al 2004, Giuliano 2011

4. The potential for station area real estate development is best understood at a site-specific scale
   - e.g., Knight and Trygg 1977, Porter 1997, Giuliano and Agarwal 2010
Transit plans have been modified to foster TOD but costs have not consistently yielded benefits.

Practitioners’ TOD theories may contribute to ineffective and inefficient transit planning.

Complexities of real estate development potential can be addressed in the transit planning process.
Planning Transit for TOD
## Interviewees

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<tr>
<th>Professional experiences</th>
<th>Interviewees that contributed relevant data</th>
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<td>Travel demand modeling</td>
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<td>Real estate services</td>
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<td>Non-transit transport planning</td>
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<td><strong>Total</strong></td>
<td><strong>98</strong></td>
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“Transit investments are a precursor and catalyst for sustainable urban development”
TOD-related planning process and project design impacts

System

Alignment

Station location

Station layout
Charlotte, North Carolina, 2013
Portland, Oregon, 2012
Portland’s South-North Light Rail Alternatives

**Interstate Ave**
1. Fewer takings
2. Better perceived safety
3. Fewer I-5 risks
4. More economic development - **TOD**

**I-5 right of way**
1. Lower capital cost
2. Faster travel times
3. Closer to trip generators
4. More riders
5. Lower operating costs
6. Fewer business impacts
7. Reduced highway externalities
8. No TIF funds

Image source: Oregon Metro, 1995
Interstate Avenue Alignment

I-5 Alignment

Image source: Google (photos taken in 2012)
Portland’s South-North Light Rail Alternatives
Killingsworth Street

Interstate Avenue Alignment

I-5 Alignment

Image source: Google  (photos taken in 2012)
Theories of practice inform (in)effectiveness
Transit planners’ real estate development-related theories-of-practice

Doug  Lauren  Gary  Stan

Image source: USGBC, LA Metro, Bay Area Economics, CTOD
Planners’ learning loop is incomplete

- Transit planners rely on real estate theories
- Planners establish high development expectations
- Planners support costly transit elements
- Investors assess real estate development
- Developers pass on investment options
- Planners lament shortfall in real estate investment
- Planners reflect on/improve real estate theories
Planners’ learning loop is incomplete

Rationalization

Planners lament shortfall in real estate investment

Developers pass on investment options

Investors assess real estate development

Transit planners rely on real estate theories

Planners establish high development expectations

Planners support costly transit elements

Developers pass on investment options

Investors assess real estate development

Planners lament shortfall in real estate investment

Transit planners rely on real estate theories

Planners establish high development expectations

Developers pass on investment options
Why are planners unreflective about their real estate-related theories-of-practice?

• Strategic misrepresentation
  • Pickrel 1992, Flyvbjerg et al 2003

• Implementation / rent seeking success
  • Hamer 1976, Schon 1983

• Unquestioned norms
  • Kuhn 1977, Argyris and Schon 1974

• Public policies cement/validate norms
  • Yanow 2000

• Professional self-image

• Wicked Problems
  • Rittel and Webber 1973, Argyris and Schon 1974
Federal transit funding policies do not evaluate real estate as developers do

- Transit Supportive Plans and Policies
- Performance and Impact of Plans and Policies
- Economic Development Score – “Future Land Use”
- Affordable Housing

Cases of Development Station Area Development Proposals
- Adaptability of Station Land
- Corridor Economic Environment

Need and Supply

Adopted Tools and Strategies

Evidence of Developer Activity

Support for Very/Extremely Low Income
Change federal evaluations of sustainable real estate development potential

- Applicants describe developments that they anticipate within five years & why they’re expected
- Employ panel of real estate professionals to review applications
- Reward applicants for anticipated development determined to be credible
- Conduct ex-post evaluations
Research → Practice

Consulting experiences
ULI’s TOD reality-check altered Southwest LRT alignment in Minnesota
Development potential informed Federal Boulevard station location preference