

Top 5 Challenges for Integrating Transportation & Land Use in Urban China

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Outline

- I. **Problems:** How to plan how to grow fast, well, and sustainably? Understanding goals and tradeoffs.
- II. **Solutions:** Tempting USA land use planning strategies aka Smart growth = address traffic via compact development, TOD, mixed use, human scale,...
- III. **China:** What are Travel/Land Use Goals/Means?
- IV. **Top 5 Challenges** to Transportation/Land Use Planning in Urban China

I. The Planning Problem

- Rapid urbanization & rising incomes => increasing motorization, sprawl, traffic congestion and associated pollution/safety problems, etc.
- But planning cities to function well is harder than it looks, whether centrally controlled or in a mixed market economy => requires negotiating a number of difficult tradeoffs & managing complex behaviors
- These in turn require that planning **goals** (values) and scope/feasibility of **means** (infrastructure, regulations, process) be transparent and understood.

II. Solution: Land Use?

Questions: Integrating land use & transportation is critical, but questions about details of implementation & effectiveness remain

- How are specific land use strategies different, in method or outcome, from conventional top-down, deterministic planning?
- Do we know how these strategies influence individual and market behaviors? (E.g., travel behavior?)
- What are the options for governance, & participatory and implementation strategies?
- Who are the constituencies, and who not? Which strategies apply in nearly all cases and which in only a few? What are the tradeoffs?

III. China: Travel/Land Use Goals

- What are the built form goals? (E.g., the physical plan?)
- What are the social & economic goals? (E.g., public services, transportation access, market reforms?)
- What are the planning means? (E.g., the regulatory framework, target mix of incentives vs commands, the consultative process, governance?)
- How to do all this **cheaply** (money, time, politics) and **effectively**?

Textbook lessons about what works and doesn't?

IV. Top 5 Challenges

1. **Every move forward is a tradeoff:** How to grow, fairly and efficiently, and the role of land use and transportation planning therein => mobility/accessibility, technical/behavioral strategies, growth/congestion, cross-sector integration/sector priorities, guidance/flexibility, forward looking/adaptive, costs/benefits of each mode and land use pattern,.... => **easy answers are out**
2. **Managing land use harder than transport investment**
3. **Travel behavior can be harder to manage than land use**

4. **Transport/Land Use integration is a “public good”** => problems with public/private support, funding, intergovernmental incentives, political dynamics

5. **There is much we do *not* yet know:**

- Mix of cars, trains & buses? Not obvious.
- Prices to control congestion and subsidies to promote sustainable mobility? Not obvious.
- Market-led land development and top-down land management that determine traffic patterns and flows? Not very obvious.

V. Closing Summary

- **Transportation Planning Problem:** Planning is harder than it looks, especially for rapid market-driven growth, and its associated rising demand for mobility & land, where growth presents a host of social & economic **tradeoffs**.
- Important to be transparent about what we do not yet know, and focus on knowing more and better
- In the meantime, proceed case-by-case with eyes wide open