The FUTURE....

11.953
Day 24
C. Zegras

The Future of the City....

= \( f \) (demand for density)?

- Will we embark on an evolutionary or revolutionary path?

- What role of ICTs on
  - Transportation

  and

  - Inter-Metropolitan and Intra-Metropolitan Spatial economies?
The Future: What do we know?

• Increasing incomes…likely
  – Demand for luxury goods, space
  – high value of time

• Technological advances…likely
  – Physical movement: Speed, comfort & productivity
  – Virtual movement…

Demand for Cities
Urban Rent Premium = Productivity Premium + Amenity Premium

• Productivity comes from…
  – Lower transport costs, labor pool efficiencies, informational “spillovers,” something “in the air”

• Amenities come from “consumption” of…
  – Social contacts
  – Non-tradeable goods
  – Scale economies in entertainment
  – Aesthetics..

• The future depends on….
Evidence?

- Some apparent support for demand for urban amenity
  - Positive correlation b/w “amenity” (1980) and population growth (1980-90)
- Demand for urban amenity apparently rising
  - Housing price elasticities > wage elasticities
- Some apparent evidence of income “returning” to the CBD

City “Typologies”?  

1. “Resurgent” dense cities
   - High human, architectural and consumption capital
2. Old, “left behind” dense cities
   - Lower human capital, etc.
3. “Edge” Cities
   - Private transport dependent
   - Will they proliferate outside the US?
Will cities survive? (what is a city?)

- Cities will survive based on their ability to provide amenity
  - Local (difficult to trade) goods and services
  - Aesthetics
  - Public Services (Tiebout…)
  - Speed (TRANSPORT)

What can planners and policy-makers do?

- Amenity (consumption)

- Attract human capital…

- Price transportation appropriately…
Scenario Planning – A Primer

• What?
  – **Scenarios** – “An imagined sequence of future events”

• Why?
  – **To prepare us for uncertain futures**, examining multiple sequences/stories because...

• How?
  – **Develop structured, in-depth stories of plausible futures**

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The “Houston Platform” (Steps 1-4)

1. **I. Define the Scope/Identify the Strategic Options**
2. **II. Identify Key Local Factors Affecting the Strategic Options**
3. **III. Identify the Driving Forces Which Impact the Key Local Factors**
4. **IV. Develop Potential Combinations of Driver “States” & Select Scenario Plots**
The “Houston Platform”:
Step II: Key Local Factors

- Both important to the decision to be made and uncertain
- In Houston case:
  - Health of the local economy
  - Shifts in environmental attitudes/policies
  - Demographics
  - Federal/state investments/control
  - Local politics

The “Houston Platform”:
Step III: Driving Forces

- Impact the Key Local Factors
  - *macro*-issues, which are most likely external to the area being considered.
  - Again, should be both uncertain & important to decision

- In Houston case
  - State of the economy - global and regional economic integration, trade, capital flows, competition, wages;
  - Finance - availability of infrastructure funding, user fees and charging mechanisms, private sector participation;
  - Future Technology - ITS, telecoms, vehicle technologies, fuel supply technologies, advances in other modes (rail, shipping);
  - Environment - local air pollutants, climate change, endangered species, water pollution, “sprawl”
The “Houston Platform”
Step IV: Potential Combinations of Driver “States”

• Matrix of the “states” (i.e., good/bad) provides potential driver combinations

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<thead>
<tr>
<th>Scenario</th>
<th>Drivers</th>
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<tr>
<td></td>
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<td>Growth</td>
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The Houston Platform – Step V

• Flesh Out the Scenario Stories
  – Give “full reality” to the scenarios, to leave a clear impression
  – Remain faithful to the scenario logic
  – Build plausible cause-effect relationships
    • Key to internal consistency and organizational learning
  – Estimate the driver effects (macro story lines) on the key local decision factors
The Houston Platform:
Drivers → Key Local Factors → Transport Effects

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What About Bai Ma?