SHARADA VADALI
TRB 5th International Summer Finance Conference

Thursday, 10th July, 2014

VALUE CAPTURE STATE-OF-THE PRACTICE EXAMPLES (UNITED STATES): HIGHWAYS
Summarize NCHRP Synthesis: *Economic Value Created by Transportation to Fund Transportation - Focus on Value Capture*

- Stages
- Scale
- Guiding framework and Initiation (the who?)
- Cost effectiveness and other considerations (what?)
- Costs
- Benefits
Value Capture— is an open ended term, variously defined.

- **Unearned increment**: Any rise in land values – whether due to public decisions or to the general economy; stressing the fact that the rise is not due to the landowners’ own initiatives and efforts. Used internationally (World Bank, UN, academic literature, Smith and Gibring (2006)- ascribe it to a benefit area).

- **Betterment**: The rise in land values directly caused by a planning or public works decision (contrasts with “compensation”, sometimes also called “worsement”) – *Term used in Britain.*

- **Plus value**: Latin-American countries to denote either betterment or the unearned increment. Also used internationally (World Bank, academic literature).

- **Windfalls**: Not a specific professional term. Coined here in United States and refers to “unearned” gains in property values.
FOUR STAGES OF VALUE CAPTURE

Value Capture Phases

- Value is Captured
- Value is Realized
- Value is Created
- Revenues Recycled

Transportation Projects
VALUE CAPTURE AND CREATION EXAMPLES

- Site-Specific
  - Air Rights, Joint Development
    - Boston’s Copley Place (Massachusetts Turnpike I-90)
  - Negotiated Exactions and Other Developer Agreements (direct)
    - Sales Tax Anticipation Revenue Rebate Agreement Centercal Properties- Eagle Road SH 55 and Fairview Ave Intersection (Idaho)- Meridian- 2012
VALUE CAPTURE AND CREATION EXAMPLES (CONT'D.)

- Project/Corridor (Direct)
  - Transportation-Specific Special Assessment Districts
    - Illinois Special Service Areas (SSA)
  - Tax Increment Finance
VALUE CAPTURE & CREATION EXAMPLES (CONTD.)

- **Project/Corridor (direct)**
  - Impact fees on New Development-Transportation-Specific
    - Portland System Development Charges (TSDC) - Multi-modal
      - Macadam - 2009
    - Mercer County New Jersey’s Transportation Development Districts (TDD-IF) (I-95/I-295)
  
- **Sales Tax Districts**
Programmatic (Indirect)

Other Property Tax Districts

Ohio, Butler County Transportation Improvement District TID (State Route 129 (Michael A. Fox Highway, and other projects): 1993; Completed 1999.

Impact fees on New Development-Transportation-Specific

Portland System Development Charges (TSDC) - Multi-modal 1997

Land Value Tax - Harrisburg, PA - 1975

Transportation Utility Fees

Pavement Maintenance Fees (Oregon) - 2005
VALUE CAPTURE - SUPPORT MECHANISMS EXAMPLES

- Transportation Corporations
  (Accompanying city-wide sales tax)

- Missouri US-63 Corridor Expansion

- Missouri SH 67 Corridor Expansion:
  1990, ½ cent 2005 (30 years) construction 2005, Hwy 67 Corporation
<table>
<thead>
<tr>
<th>Mechanism/Example</th>
<th>Legal</th>
<th>Long Run Vision and Long Run Plan</th>
<th>Initiator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Rights and Joint Dev: Boston’s Copley Place and others like it</td>
<td>✓</td>
<td>Corridor Master Plan Civic Vision</td>
<td>-</td>
</tr>
<tr>
<td>Developer Agreements (Idaho Eagle Road/Fairview Ave)</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Virginia Route 28 TID, Illinois SSA and Ohio TIDs</td>
<td>✓</td>
<td>-</td>
<td>Local governments</td>
</tr>
<tr>
<td>Texas TRZ</td>
<td>✓</td>
<td>Example: Comprehensive Mobility Plan</td>
<td>Local governments</td>
</tr>
<tr>
<td>Portland TSDC</td>
<td>✓ (multi-modal requirement)</td>
<td>Transportation Improvement Plans and Capital Improvement Plans.</td>
<td>Local governments</td>
</tr>
<tr>
<td>Missouri TDD and Transportation Corporations</td>
<td>✓</td>
<td>Projects sometimes from Capital Improvement Plans (TDD)</td>
<td>Local governments</td>
</tr>
<tr>
<td>New Jersey TDD (Impact fee)</td>
<td>✓</td>
<td>Long run plan</td>
<td>Local governments</td>
</tr>
<tr>
<td>Land Value Tax</td>
<td></td>
<td>-</td>
<td>Local governments</td>
</tr>
<tr>
<td>Transportation Utility Fees</td>
<td></td>
<td>-</td>
<td>Local governments</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanism/Example</td>
<td>Revenue</td>
<td>Capital Cost Share</td>
<td>Duration/ Timing Relative to Construction and Periodicity</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>--------------------------</td>
<td>-------------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Developer Agreements (Idaho Eagle Road/Fairview Ave)</td>
<td>-</td>
<td>Developer Cost share: $25.4 million</td>
<td>2011/Before- one shot</td>
</tr>
<tr>
<td>Virginia Route 28 TID</td>
<td>$227.13 million since 1996</td>
<td>75% of project costs as of 2013</td>
<td>Ongoing for 25 years as of 2013/Before -Recurring</td>
</tr>
<tr>
<td>Texas TRZ</td>
<td>$641,132</td>
<td>21% of the project cost.</td>
<td>2010 onwards (30 years)/Before - Recurring</td>
</tr>
<tr>
<td>Missouri TDD - US 36/1-72</td>
<td>38% of project costs paid</td>
<td>50% of project costs</td>
<td>2005-2020/Before -Recurring</td>
</tr>
<tr>
<td>Missouri TDD and Corporations – Hwy 63</td>
<td>$11.5 million paid</td>
<td>30% of project costs from sales tax</td>
<td>2003-2013/Before -Recurring</td>
</tr>
<tr>
<td>Missouri TDD and Corporations – Hwy 67</td>
<td>Adequate so far</td>
<td>50% of project costs only</td>
<td>2005-2035/Before -Recurring</td>
</tr>
<tr>
<td>New Jersey TDD (Impact fee)/Portland TSDC</td>
<td>Paid/-</td>
<td>Approximately $6 million share /-</td>
<td>Before and paid by new developments</td>
</tr>
<tr>
<td>Transportation Utility Fees</td>
<td>$400,000 annually</td>
<td>Maintenance only</td>
<td>2005 on /Continuous</td>
</tr>
</tbody>
</table>
STAKEHOLDER INVOLVEMENT

Typical Stakeholders

- Local governments and State DOT
- Land owners and or developers

Other Stakeholders

- Federal agencies (USACE)
- Private Companies (in PPP arrangements) (Route 28, MO US-63)
- Transportation Corporation
US Highway 63 Project Timeline (Kirksville, MO).
POLITICAL ACCEPTABILITY

Programmatic (Impact Fees LVT)

Site and Project
1. Developer Agreements
2. TIF
3. SAD

Programmatic (Utility fees)
Site: Air rights and Joint Development
COSTS ASSOCIATED WITH FUNDING INITIATIVES

- Stakeholder involvement process can be lengthy
- Economic and fiscal risks - maintain fiscal responsibility
- Transactions costs
BENEFITS OF FUNDING MECHANISMS

- Accelerated project delivery
- Money received in advance of construction – seed money (capital cost)
- Capital budgeting - Leverage dollars from multiple sources (capital cost) to fund fixed assets
- Project finance: recurring dollars from fees and tax revenues used to back loans or to service debt (capital cost)
- Repay maintenance expenses (one case)
VALUE CAPTURE AS OBSERVED

Value Creation and Capture Process

Guiding framework

Plan Transport Investment

Opportunity to create value

Realize, Recycle

Fund and finance, construct
CONCLUSIONS

- Factors that could facilitate or hinder future ability of agencies to take on VC:
  - Coordination between multiple jurisdictions
  - Support from private developers and property owners
  - Project location and design
  - Macroeconomic conditions
  - Legal considerations

- Value capture can be a valuable “gap funding” approach.
- Toolbox as part of an overall funding strategy.
Questions?


Sharada Vadali, Ph.D
Associate Research Scientist
Texas A&M Transportation Institute
Texas A&M University, TX 77845
Email: s-vadali@ttimail.tamu.edu