

Financing the Opportunities: New Financing Challenges and Options for Infrastructure

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The context of infrastructure finance

- Infrastructure investment is essential for economic development
- Importance of infrastructure on land use and the character of a community
- Infrastructure affects land values, and therefore the wealth of landowners
- Political importance of infrastructure decisions (location, size, financing, letting of contracts)
- Resistance of public to increased taxes and reduced intergovernmental aid from central governments

Politics of infrastructure development

- Decisions are of crucial importance to long-term prosperity and environmental health, but are often politicized and dominated by powerful economic and political interests
- There are strong incentives for elected officials to build new infrastructure to “bring home the bacon” to their constituents
- Contractors, bankers and labor unions also benefit from construction of infrastructure
- The location of a given investment can provide economic stimulus to that area, though it may be as a result of shifting activity from elsewhere

The Challenge and an Answer

- The Challenge: To make efficient and timely investments in infrastructure that will enhance community wealth and environmental quality in a political context
- “The challenge facing the transportation community is not how to build projects more quickly, but how to develop sustainable sources of funding for transportation investment and partnering with relevant stakeholders to address mobility issues.” James Taylor in *TRB* (2005).
- An Answer: Move to a value-driven investment process in partnership with private sector, sharing risks and rewards. Meet the public demand for performance and provide a return on investment to attract private funds. Rely more on IT, user fees, debt financing, and differentiated levels of service quality at different prices.

Changing Values

- Increasingly, the goal is not just to build infrastructure, but to provide services of value to residents and investors.
- The focus of government is shifting from inputs to outputs and outcomes. Infrastructure is an input and not the goal *per se*. The focus should be on how best to provide the services desired, not only on building facilities.
- Performance standards and reporting are critical management component. With the shift to the outcomes of services provided, we need to monitor and report performance, and require accountability for resources.

Changing Technology

- Information technology has greatly improved the ability to assess charges on users, report real-time information to manage capacity, and report performance.
- For example, road tolls can be adjusted to optimize traffic flows and manage capacity. This information can be used to set tolls that accurately reflect resource use, which improves the long-run investment decisions about maintenance and expansion.

Traditional Financing

- More pay-as-you-go, using grants from higher level governments, broad user charges and some general tax sources (local property tax and sales tax)
- User fees not closely tied to costs
 - Gas tax not a close reflection of road costs
 - Aviation charges in the US favor general aviation and small airports. Few congestion charges or green taxes
 - Water charges sometimes flat fees rather than metered
- Gas tax proceeds declining as consumption falls and may ultimately disappear

Innovative Financing

- New financial vehicles facilitate shifting values and technology
- Debt financing from central government aid: Grant Anticipation Revenue Vehicles (GARVEE bonds) are backed by future federal aid allocations
- Issue debt based on new revenue flows from user fees, such as tax exempt private activity bonds supported by toll revenues. May involve independent public authorities such as Toll Road Authorities
- State/provincial and central government credit assistance: Guarantees, infrastructure banks, tax exemptions, tax credit bonds, etc.

Public Private Partnerships (P3)

- Case study
- Characterized by
 - Each party brings something of value to exchange
 - On-going relationship between parties with flexibility for future changes
 - Shared risk and responsibility for financial and operational success
 - Projects often integrated (e.g., design, built, maintenance, financing)
 - Emphasis on outcomes, not on the asset
 - Often involve a subsidiary or independent public entity (special district, economic development corporation)

PPP advantages and disadvantages

- Advantages
 - Integration of project planning and budgeting
 - Often innovative in delivering the project as the focus is on results, not building an asset
 - Cost savings: spread costs over lifetime, tax advantages
 - Time savings: fewer bid cycles, phases can be concurrent rather than sequential
 - Governments can better manage broad social risks
- Disadvantages
 - Accountability: private sector assumes some control
 - Need stability in demand, political support and legal authority
 - Importance of specifying project and contingencies, and ability to monitor and enforce the contract
 - Assess and allocate risk appropriately

New economic and financial tools

- Importance of careful analysis to assess projects
 - Need to forecast revenues accurately
 - Risk assessment analysis
 - Need careful application of benefit-cost analysis (BCA) and return on investment (ROI) analysis
 - Ideally, benefits and costs of infrastructure should be aligned by project and over time. Then investment decisions should follow the highest social return.
- Financing techniques that capture value can leverage private capital
 - Tax increment financing, infrastructure banks, flexible matching grants, and credit assistance all leverage increased local asset values and include a market test to assist in infrastructure development.

Potentials

- Develop projects that might not otherwise be built
- Build quicker, with lower contract costs
- Loans can provide funds up front to build the facility and bridge the gap until user fees come in
- Risk is shared but also rewards
- Rather than a one-size-fits all model of service delivery, can offer more service quality options that can generate profits
- Create greater value for private sector from public infrastructure developments which can generate a new source of revenue flow for the project.
- More responsive service provided to public

Conclusion

- The opportunity is ripe to improve the process of infrastructure investment
- IT facilitates developing accurate user charges which can improve performance and accountability
- New financing alternatives can harness the increased value in private assets to fund public projects
- We have the opportunity to meet infrastructure needs in a more efficient and responsive way. Government institutions need to facilitate a more value-driven investment process and variations in service levels
- Need to develop new skills and apply new technology
- Some governments are constrained or may be resistant

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