



The P3 Frontier: Evolving Models for Infrastructure Delivery and Finance

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- Established 2013
- Mission: Support objective consideration of P3s for infrastructure renewal and expansion through research, education, and outreach
 - Objective An unbiased source of information and advice; not P3 advocates.
 - Research Papers and reports on strengths, limitations of P3s.
 - Focus areas: finance, bankruptcy and renegotiation, collaboration with state departments of transportation and other asset owners, and more.
 - Education graduate and undergraduate classes for public policy and administration, civil engineering, real estate, international development
 - Outreach briefings, testimony, guest lectures.
- Recently broadened scope to infrastructure; previously transportation focus.



P3 101 – What is a Public-Private Partnership?



A Public-Private Partnership (P3) is a long-term contract between a public agency and a private entity.



The private partner may finance, design, build, operate, and/or maintain the infrastructure.



Risks are allocated to the party best able to manage them.



P3s aim to deliver better value for money across the asset's lifecycle.



Private partner's return governed by key performance indicators (KPIs)

Motivations for P3s

Infrastructure deficits

Government budget shortfalls

Cost overruns

Delayed projects

Deferred maintenance

Not "a necessary evil" but rather "a better way to do business"

P3 Strengths, Limitations & Pitfalls — From the Owner's Perspective

Strengths

- Greater budget certainty
- Greater schedule certainty
- Project acceleration
- Greater ability to use new technologies/financial tools
- Better life-cycle maintenance/quality of service
- Greater visibility of project risks
- Equity capital (1/3), lender (2/3), government (varies) for revenue risk, much less for availability payments

P3 Strengths, Limitations & Pitfalls — From the Owner's Perspective

Limitations

- High up-front transaction costs
- Not suitable for every project
- Expensive to alter scope mid-project
- Subject to market interest in project

Pitfalls

- Political risk
- Change of law
- Poor concessionaire selection

CIAMTIS Research in Four Areas



Operations & Performance



P3s show potential for improved lifecycle cost efficiency—but data inconsistencies persist.



Progressive P3s enable early collaboration, but bring pricing and procurement challenges.



Overdesign remains a risk due to rigid standards and institutional inertia.

Finance & Risk Management



Refinancing of TIFIA loans surged post-COVID, unlocking value and flexibility.



P3, revenue bond, and public models all showed resilience during crises.

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Policy changes (e.g., FAST Act) shifted TIFIA funding toward highly rated projects.

Policy & Innovation



Strategic toll compensation mechanisms can reduce conflict and improve outcomes.



Lack of transparency and datasharing inhibits adoption of flexible financing tools.

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Equity concerns arise when conservative lending excludes lower-rated sponsors.

Education &

Capacity Building

Classroom integration of CIAMTIS research boosts student engagement.

Wikibook-based module on U.S. transport finance received positive feedback.

Opportunities exist for broader workforce-oriented curriculum development.

Future Opportunities & Discussion



How can we expand life-cycle performance benchmarking in real-world projects?



What innovations in finance and delivery are ripe for pilot testing?



How can federal tools like TIFIA better balance creditworthiness and access?



Where should we go next in research, policy, and education?