



**Federal Highway Administration (FHWA) Research and Technology Agenda**

**Meeting the Challenge: Innovative Program Delivery**

FHWA never stops working to develop innovative ways to improve the Nation's highway system. Population growth, economic development, and changing regional demographic and industry profiles are forcing transportation agencies to adapt. In times of constrained budgets, FHWA is providing tools and support to enable agencies to pursue innovative approaches to financing and revenue generation.

By providing individualized tools and technical assistance, FHWA helps State and local agencies assess the applicability of available financing options for complex projects so they can build the highways and bridges needed to keep pace with a growing Nation.

FHWA provides guidance on how to make Federal transportation dollars go further. For example, FHWA evaluates the effectiveness of new funding mechanisms, such as grant anticipation revenue vehicles, and makes the findings available to State and local agencies. Training and capacity building programs like the Innovative Program Delivery Academy assist FHWA's partners by increasing staff expertise and knowledge about emerging innovative program delivery options.

Innovative research, guidance, and technical assistance are helping State and local partners understand and implement new approaches to program delivery. These solutions not only provide new funding sources, but also enable more diverse policies and planning options, allowing partners the flexibility to choose the right mix of funding sources to better manage systems and resources.

**Objective: 1: Conduct research in the areas of financial stewardship and innovative program delivery.**

**Strategies**

- Research and document noteworthy practices in the delivery of major projects using innovative program delivery methods and tools.
- Research public policy, operational, and legislative issues associated with innovative procurement and revenue generation.
- Gather data on statutory, financial markets, and stewardship issues, as well as revenue options, debt capacity, and performance management.

**Showcase Activities**

- Value for Money State-of-the-Practice Research

**Value for Money State-of-the-Practice Research**

Value for Money (VfM) analysis is a methodology used by public agencies to compare conventional procurement approaches such as design-bid-build with public-private partnership (P3) options for high-cost projects. This method incorporates life-cycle costs, risks, and other considerations. To help agencies considering a public-private partnership approach make more informed decisions, FHWA researched and documented the methodology and the state of the practice for Value for Money analysis both in the United States and abroad; developed primers on Value for Money analysis, risk assessment, and financial structuring assessment; and developed a suite of analytical tools called P3-VALUE to help States learn how to determine if a public-private partnership is appropriate for specific projects. Research is now underway to refine P3-VALUE to incorporate benefit-cost analysis; and to develop concept guidebooks on risk assessment and Value for Money analysis to help determine values for key inputs.

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**Additional Resources**

- [FHWA: Value for Money State-of-the-Practice Report](#)
- [FHWA: Primers](#)
- [FHWA: P3-VALUE Analytical Tools](#)

**Objective: 2: Support innovative financing approaches that promote efficient, accelerated project delivery.**

**Strategies**

- Provide technical assistance to State and local governments in the use of innovative project financing mechanisms and funds-management techniques.
- Develop guides and tools to support State and local transportation agencies in the evaluation and use of innovative financing.

**Showcase Activities**

- Project Finance Primer for Nontraditional Transportation Funding

**Project Finance Primer for Nontraditional Transportation Funding**

One challenge for transportation officials at all levels of government is to identify ways to pay for improvements to the Nation's transportation infrastructure. Despite record levels of investment in surface transportation infrastructure in recent years, traditional funding sources have not kept pace with the investment demands of an aging and increasingly complex U.S. transportation system. For almost two decades, the Federal Government has responded to this investment gap by providing new techniques that complement and enhance existing grant reimbursement programs. The Project Finance Primer describes those techniques and provides examples of their application by State and local partners. The techniques described in the primer will continue to evolve and lay the groundwork for the identification of additional innovative strategies for financing surface transportation investments.

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**Additional Resources**

- [FHWA: Finance Primer](#)

**Objective: 3: Develop innovative procurement and revenue generation tools and technical resources.**

**Strategies**

- Develop technical tools and guides that advance the practice of program delivery.
- Provide technical assistance to State and local governments in the use of innovative procurement and revenue generation tools.

**Showcase Activities**

- Public-Private Partnership Toolkit

**Public-Private Partnership Toolkit**

State departments of transportation (DOTs) are exploring alternative finance and procurement options for large-scale transportation projects. One option is a public-private partnership (P3). FHWA's public-private partnership (P3) Toolkit includes a series of educational tools to help State departments of transportation and other transportation agencies understand the concepts and technical needs to establish public-private partnerships. The tools include Value for Money analysis tools discussed above, including the P3-VALUE analytical tool. A primer on establishing a public-private partnership program also was developed; it was based on a series of roundtable discussions with public and private sector experts documented in a report on "P3 Opportunities and Challenges." FHWA now is developing a public-private partnership (P3) Best Practices Guide to assist States and local governments in public-private partnership project development, evaluation, procurement, implementation, oversight, and monitoring. Outreach both through Web-based educational sessions and onsite training is being conducted to disseminate the public-private partnership (P3) Toolkit to State and local government practitioners and develop the skills they need to use these innovative procurement methods.

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**Additional Resources**

- [FHWA: Challenges and Opportunities Series: Public Private Partnerships in Transportation Delivery](#)
- [FHWA: Primers](#)
- [FHWA: P3-VALUE Analytical Tools](#)

**Objective: 4: Provide technical support and oversight for major projects.**

<p><b>Strategies</b></p> <ul style="list-style-type: none"> <li>• Research noteworthy practices in overcoming financial and project management challenges associated with major projects.</li> <li>• Provide States with training and technical assistance on financial planning, probabilistic cost and schedule estimating, and project management for major projects.</li> </ul>	<p><b>Showcase Activities</b></p> <ul style="list-style-type: none"> <li>• Cost and Schedule Estimating Guidance</li> </ul>
<p><b>Cost and Schedule Estimating Guidance</b></p> <p>The estimated cost of a project is critical information for the public, decision makers, and transportation officials when deciding which transportation projects to support. Since important funding decisions are often made during the early stages of planning and programming when information is sometimes limited and cost estimates can be conceptual in nature, the cost profile of a project is liable to change in subsequent phases. Sometimes these changes can be significant enough to impact initial decisions to advance the project. FHWA promotes the adoption of a risk-based probabilistic cost and schedule estimating approach where estimates are reviewed and updated regularly from the planning and programming stages through the completion of construction. Utilizing this approach helps to ensure that accurate and current cost estimate data is available to all project stakeholders, including project decision makers.</p>	<p><b>Activity Contact</b></p> <p><b>James Sinnette</b>  FHWA Office of Innovative Program Delivery  Tel: 202-366-1561  Email: <a href="mailto:james.sinnette@dot.gov">james.sinnette@dot.gov</a></p> <p><b>Additional Resources</b></p> <ul style="list-style-type: none"> <li>• <a href="#">FHWA: Cost Estimating Tools and Programs</a></li> </ul>
<p><b>Objective: 5: Build technical expertise at the Federal, State, and local levels in the use and stewardship of innovative program delivery methods and programs.</b></p>	
<p><b>Strategies</b></p> <ul style="list-style-type: none"> <li>• Develop innovative program delivery experts at the Federal level.</li> <li>• Educate, train, and support State and local transportation agencies in the use of innovative program delivery methods and programs.</li> <li>• Develop and distribute technical guidance and evaluation tools that support innovative program delivery.</li> </ul>	<p><b>Showcase Activities</b></p> <ul style="list-style-type: none"> <li>• IPD (Innovative Program Delivery) Academy</li> </ul>
<p><b>IPD (Innovative Program Delivery) Academy</b></p> <p>Successful implementation of innovative program delivery strategies demands a knowledgeable and confident U.S. Department of Transportation workforce, which can effectively engage with its State and local partners on these topics. Expertise in these topics will help the Department's professional staff integrate innovative program delivery strategies into their specific disciplines and focus areas. The IPD Academy is building this internal capacity by providing a comprehensive selection of courses and curricula, including webinars, workshops, and expert assistance. The IPD Academy also delivers training to professionals at State and local transportation agencies through FHWA division offices and in collaboration with the American Association of State Highway and Transportation Officials' Center for Excellence in Project Finance.</p>	<p><b>Activity Contact</b></p> <p><b>Darren Timothy</b>  FHWA Office of Innovative Program Delivery  Tel: 202-366-4051  Email: <a href="mailto:darren.timothy@dot.gov">darren.timothy@dot.gov</a></p> <p><b>Additional Resources</b></p> <ul style="list-style-type: none"> <li>• <a href="#">FHWA: IPD Academy</a></li> </ul>
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