

Typical PPP Risk Allocation

Risk Type	Describe	Allocation	Mitigation
Technology Performance	Existing technology unproven in terms of revenue service	Private (vendors)	Warranties
Environmental Flaws or Delay	Lengthy studies Permitting delays Regulatory approval periods	Public	Strong process management Private Partner assistance
Market Revenues	Customer willingness to pay for level of service (LOS) unknown; affects interest rate and marketability for project-based revenues financing Traffic and revenue below projections Competing/alternative projects Excessive capital maintenance Insufficient revenues to fund ongoing O&M	Public and Private (funders/ lenders)	Investment grade traffic and revenue studies accepted by rating agencies Adequate debt coverage ratios Adequate reserves Credit enhancement, insurance Toll adjustment flexibility Careful budgeting processes and O&M controls Non-compete protections

Risk Type	Describe	Allocation	Mitigation
<p>Completion Costs</p>	<p>Cost and schedule overruns</p>	<p>Private (construction contractor) and Public</p>	<p>Use of fixed price/guaranteed maximum contract</p> <p>Adequate contingency funds</p> <p>Liquidated damages</p> <p>Force major insurance</p> <p>Design and construction management/oversight by Public Partners (which may be outsourced)</p> <p>Financially viable Private Partners</p> <p>Specialized surety products</p> <p>Allowing Private Partners to undertake majority of design</p>

Risk Type	Describe	Allocation	Mitigation
<p>O&M Costs</p>	<p>Excessive costs of operations</p> <p>Excessive capital maintenance expenditures</p> <p>Unpredictability of costs</p> <p>Regulation of DUC rates and contractor ROR</p>	<p>Private (O&M contractor) and Public</p>	<p>Non-recourse financing</p> <p>Minimum guarantees</p> <p>Toll adjustment flexibility</p> <p>Credit enhancement, insurance</p> <p>Careful budgeting processes</p> <p>Capital asset replacement assurances</p> <p>Warranties, incentives, and penalties</p> <p>Financially viable Private Partners</p> <p>Use of private O&M contract</p> <p>Use of fixed price/guaranteed maximum pricing, with escalations and adjustments over time</p>

Risk Type	Describe	Allocation	Mitigation
<p>Policy/Political Constraints/Support</p>	<p>Uncertainties regarding public policy and change in law</p> <p>Regulatory uncertainties</p> <p>Funding support</p>	<p>Public and Private</p>	<p>Persuasive and supported arguments for project</p> <p>Early regulatory agency involvement</p> <p>Public relations and citizen/policymaker education campaign</p> <p>Community engagement and buy-in strategy</p>
<p>Phasing Timing and Resources</p>	<p>Uncertainties regarding initial vs. subsequent phase economics</p>	<p>Public and Private</p>	<p>Strong process management</p> <p>Early regulatory agency involvement</p> <p>Expedited and streamlined procurement process</p> <p>Early and continuous contact with other states and local governments</p>
<p>Liability</p>	<p>Construction Defects</p> <p>Day-to-day operational</p> <p>Subcontractor claims</p> <p>Environmental</p>	<p>Public and Private</p>	<p>Warranties</p> <p>Insurance</p> <p>Well-thought out allocation of liability in contract based upon party best able to control and mitigate</p> <p>Innovative insurance products</p>

