Fiscal Uncertainty and Infrastructure Investment A Public/Public-Private Partnership Alternative

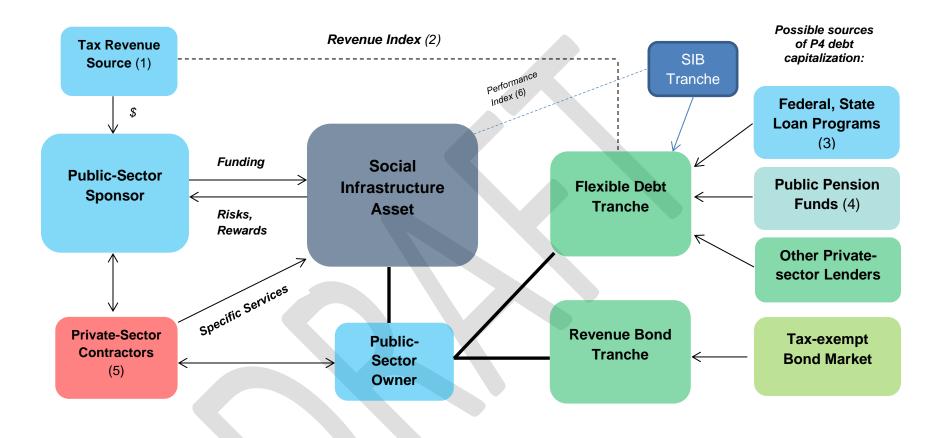
Infrastructure Investment by US State and Local Public Sector May Be Constrained by Fiscal Uncertainty, Not Long-term Risk

- Most US state and local governments are financially strong and maintain high credit ratings. Basic
 public infrastructure has an intrinsically low-risk profile and the public sector is very experienced in
 successfully providing it. Long-term fiscal and project risk is often *not* the constraint.
- However, these same governments may face a high degree of "fiscal uncertainty" volatile revenues, tight budgets that must be balanced annually, limited statutory debt capacity, etc.
- The drivers of fiscal uncertainty mainly tax revenue volatility and low overall growth in a context of
 increased mandatory spending and legacy obligations have intensified since the 2008 financial
 crisis and are now expected to persist indefinitely as the "new normal".
- Public-sector officials are understandably reluctant to add new long-term fixed obligations in such an
 uncertain environment. Yet most infrastructure investment requires long-term funding commitments
 for fixed-debt service and O&M costs. Historic low interest rates do not change the fact that
 infrastructure spending, regardless of long-term value, can worsen near-term fiscal uncertainty. This
 is especially true for social infrastructure assets that lack an independent source of revenues.
- Despite widespread interest, public-private partnerships (P3s) have not become a prevalent way to finance infrastructure investment in the US. Most current forms of P3s are designed primarily to transfer long-term fiscal and project risk -- and as such may not be efficient or cost-effective in addressing fiscal uncertainty.

Public/Public-Private Partnership (P4): A "Less is More" Approach to Fiscal Uncertainty

- When fiscal uncertainty is the constraint, alternatives to traditional infrastructure procurement and financing should be designed to address that problem specifically. Binding constraints need to be clearly identified, and "less is more" should be the guiding principle for proposed solutions.
- Third-party ownership of an infrastructure asset can help relieve some uncertainty constraints. But
 overall management and the long-term risks and rewards of the asset should remain within the public
 sector or non-profit organizations. This is the "public/public" aspect of a P4.
- Private-sector contracts can provide specific expertise, management or cost-control, especially when
 new technology or major complex construction is involved. These should seek to increase efficiency
 and provide discipline in the spirit of a partnership while leaving the fundamental long-term risks and
 rewards with the public sector.
- P4 private-sector capitalization will be exclusively debt, since the equity ownership effectively stays
 with the public sector. A P4 debt structure should include flexible and innovative repayment terms
 that "absorb" short-term fiscal uncertainty caused by down-cycle tax revenue volatility -- but also
 discourage "kicking the can" during up-cycles when higher payments can be made.
- Innovative debt structures will often be need to be sourced outside the traditional tax-exempt bond market but tax-exempt financing should be included wherever possible (e.g. by tranching or guarantee mechanisms). Sources of flexible debt may include public pension funds, federal or state infrastructure loan programs, and specialized private-sector lenders. [SIB investors]

Indexed Public/Public-Private Partnership (P4) Schematic [SIB]



- (1) General fund, dedicated tax source (e.g. special sales tax) and/or asset user fees
- (2) Index adjusts annual debt service payments up or down based on observable revenue metrics
- (3) [description federal/state innovative financing programs]
- (4) Direct alternative investment or indirect through infrastructure debt funds
- (5) Long-term contracts compliant with IRS Rev. Proc. 2016-44
- (6) Programmatic, environmental, sustainability performance index of social infrastructure asset