

Federal Infrastructure Block Guarantee

*Expanding State Financing Capacity for Essential Infrastructure
Deferred Maintenance and Delayed Investment Projects*

Discussion Outline 1.1

August 23, 2017

InRecap LLC

Summary

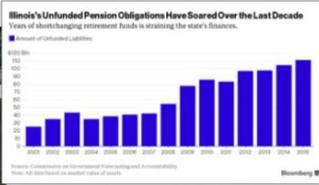
1. **Defining The Problem: *State & Local Short-Term Fiscal Constraints:*** Deferred maintenance and delayed investment on essential state and local infrastructure is effectively an expensive and debt-like public liability. It should be reduced and replaced with much less expensive forms of borrowing. But action is often discouraged by post-2008 state & local short-term fiscal constraints.
2. **One Solution: *Federal Infrastructure Block Guarantee Capacity (FIBG):*** The solution outlined here provides states with federal financial guarantees that can expand the capacity of state entities to finance deferred maintenance and delayed investment projects. If a guarantee is called, the state will reimburse the federal government under a customized agreement that is credit-worthy but also consistent with their short-term fiscal constraints.
3. **Structural Features: *Project Selection and Federal Guarantee Applications:*** The states will allocate FIBG capacity to qualifying state and local entities that may utilize it across a wide range of structural alternatives and applications. Projects which use FIBG financing must conform with qualifying criteria and policies of new and existing federal infrastructure loan programs.
4. **FIBG Implementation: *Adding Capacity to Existing and New Programs:*** FIBG capacity is not intended to be provided by a new, stand-alone program. Instead, it adds a specific type of loan guarantee capacity to existing infrastructure loan programs like WIFIA and TIFIA (and similar new ones) which already offer generalized guarantee options.
5. **Cost and Impact: *Significant Potential Capacity Builds Over Ten-Year Horizon:*** A small but steady appropriation for FIBG credit subsidy cost over time can result in a significant increase state entity financing capacity for infrastructure spending, due to high leverage ratios associated with an investment-grade state reimbursement obligation.
6. **FIBG Credit Subsidy Allocation: *A Block Approach, Based on State Population:*** Since the need for essential infrastructure deferred maintenance and delayed investment is widespread and roughly correlated with population, a block approach to FIBG credit subsidy cost appropriation allocation should be effective and politically acceptable.
7. **Models, Precedents and Existing Frameworks: *Using Off-the-Shelf Parts:*** All aspects of FIBG capacity are based on analogous federal models, specific precedents and existing US agency expertise and statutory frameworks. Demand for an approach based on mitigating short-term fiscal constraints is evidenced by state and local government interest in infrastructure public-private partnerships.

1 Defining The Problem: *State & Local Short-Term Fiscal Constraints*

Physical Cost: I-35W Bridge Collapse



Opportunity Cost: Public Pension Funding



Minnesota's Unfunded Pension Obligations Have Soared Over the Last Decade

Economic Cost: Loss of GDP Potential



Social Cost: Flint MI Lead Poisoning



A Very Expensive Form of Debt

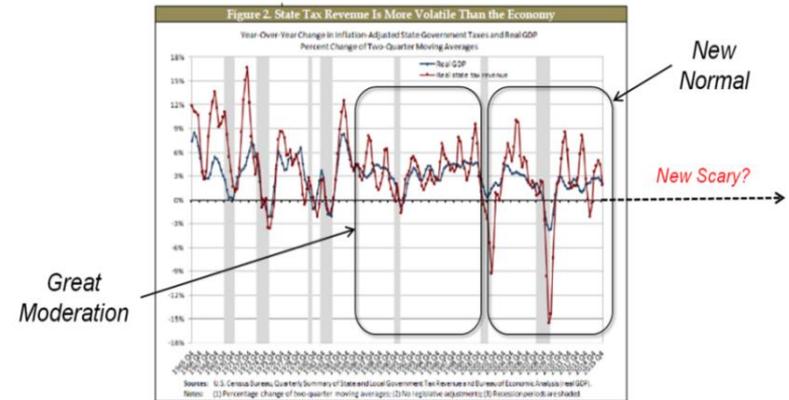
Deferred maintenance and delayed investment on essential infrastructure is a huge state & local government liability. Remediation at some point is not optional. In the meantime, the liability accrues at a significant rate.

- In essence, an essential infrastructure liability is another form of state & local public-sector “debt” -- one that is extremely expensive, non-transparent and fiscally destabilizing.
- In an environment of ultra-low interest rates and high demand for long-dated debt, addressing the infrastructure liability by borrowing (in effect, “refinancing” a very expensive obligation) would have significant immediate benefits in terms of cost, transparency and fiscal condition – all apart from the benefits of improved infrastructure itself. Yet this happens far less frequently than it should – why?

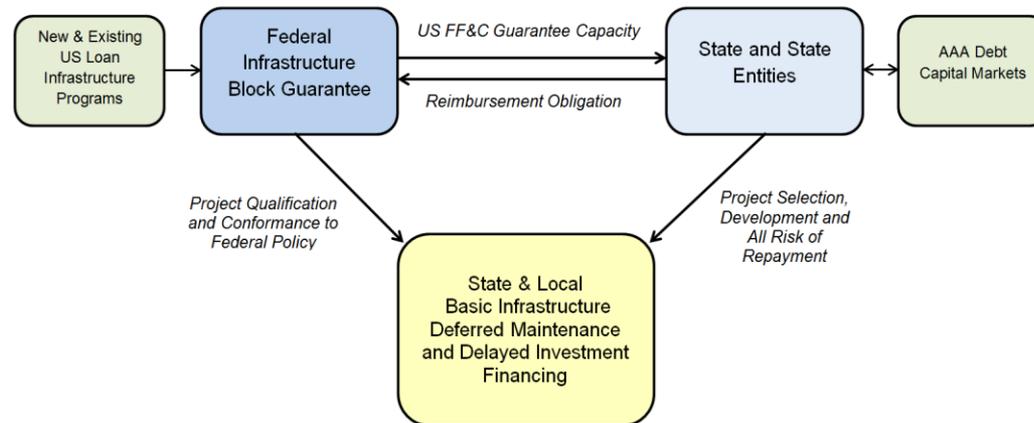
Short-Term Constraints – Not Resources – Are the Problem

Almost all US states and local governments are financially very strong, as evidenced by their generally high credit ratings. This reflects the scale of long-term resources available within their jurisdictions.

- But in the post-2008 “new normal” economic environment, state & local governments face many short-term constraints on making long-term commitments – revenue volatility, difficult budget processes, statutory debt limits, ratings pressure, voter resistance, etc.
- These short-term fiscal constraints make local officials reluctant to restore essential infrastructure by using traditional debt financing, despite the obvious long-term benefits. Since a return to more stable times looks unlikely, this problem can be expected to persist while ever-larger essential infrastructure liabilities accrue.



2 One Solution: *Federal Infrastructure Block Guarantee Capacity*

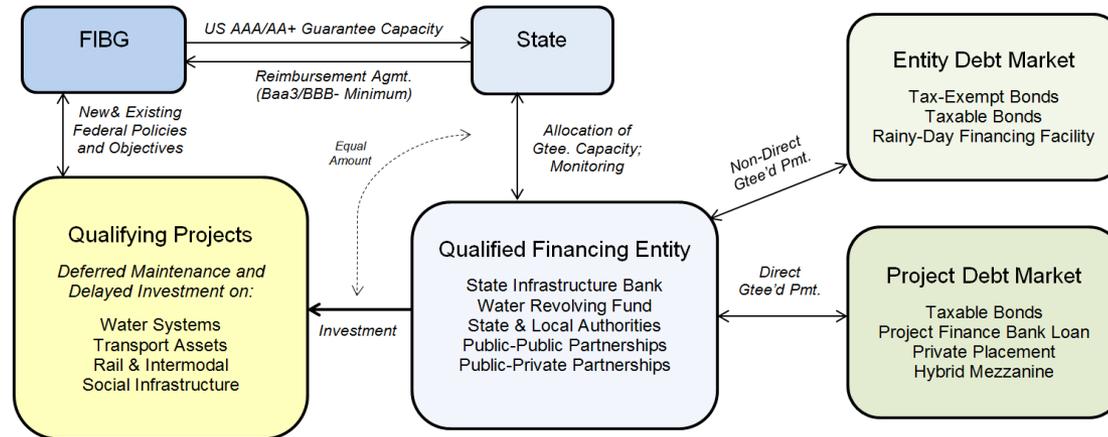


Using Federal and State Respective Strengths

The US federal government also faces fiscal constraints, but these are generally different – and longer-term – than those of state & local governments. One unique federal strength is basically unconstrained – the universal acceptance in debt capital markets of a US unconditional “full faith & credit” guarantee of payment. This federal strength is the core of a solution for constrained state and local infrastructure financing.

- The Federal Infrastructure Block Guarantee (FIBG) approach makes US financial guarantee capacity available to states and state entities to expand financing capacity for infrastructure deferred maintenance and delayed investment projects. FIBG capacity would be available through new and existing federal infrastructure loan programs.
- In turn, FIBG requires that states will reimburse the federal government if a guarantee is called, on terms that are consistent with their short-term fiscal constraints but also with a minimum investment-grade rating.
- Since states and state entities (1) are effectively using their own long-term resources to repay guaranteed obligations, and (2) are best-positioned to determine infrastructure priorities and guide development, they will select specific infrastructure projects and associated financing structures.
- Notwithstanding state selection, all projects using FIBG-guaranteed financing will conform with general and sector-specific policy requirements of new or existing federal infrastructure loan programs that offer FIBG capacity.

3 Structural Features: *Project Selection and Federal Guarantee Applications*

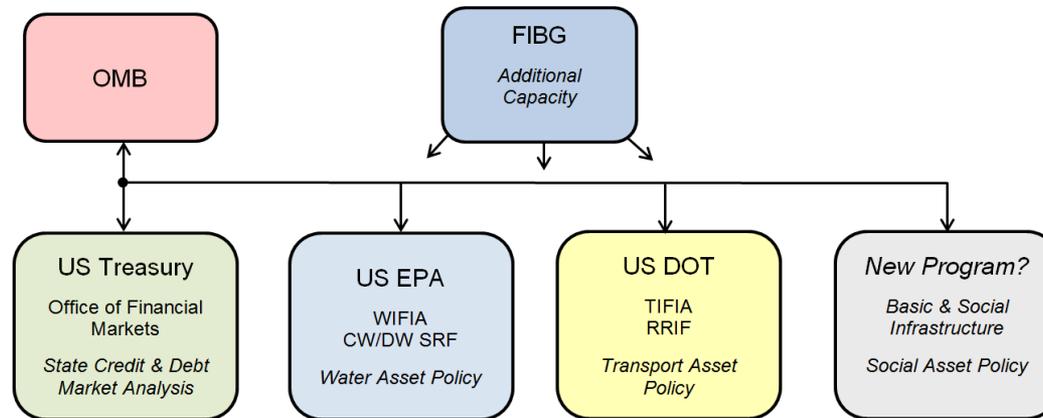


Allowing States to Optimize US Guarantee

FIBG capacity is intended to allow states to utilize guarantee capacity across a wide range of structural alternatives and applications, reflective of the unique power of a US financial guarantee in many debt markets.

- The state's Reimbursement Agreement with the federal government can be highly customized in order to efficiently mitigate specific state fiscal constraints. A minimum Baa3/BBB- rating is required from two NRSROs. These agencies will already have the state's credit profile modelled in depth and can evaluate the Reimbursement Agreement effectively -- and quickly.
- The Reimbursement Agreement will be secured on a senior basis as required but acceptable security will generally exclude non-marketable assets (e.g. the specific infrastructure projects themselves)
- The state can allocate approved guarantee capacity to Qualified Financing Entities (as defined by FIBG). These entities may use the guarantee to (1) enhance their balance sheet capacity for expanded debt issuance or (2) attach to specific project obligations.
- The Qualified Financing Entity will then make an investment in amount equal to the utilized guarantee capacity in Qualifying Projects (as defined by FIBG). Other project qualifications, limits (e.g. 49% of project cost), and federal environmental and labor standards will apply per requirements of new or existing federal loan program for the relevant infrastructure sector.

4 FIBG Implementation: *Adding Capacity to Existing and New Programs*

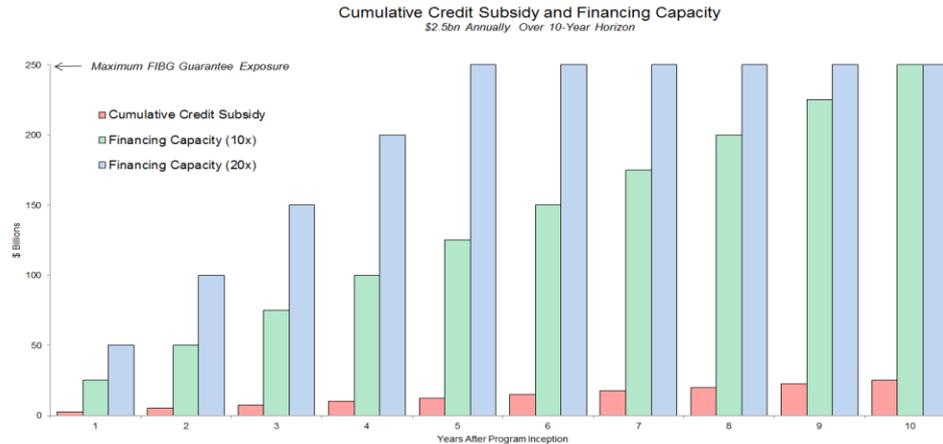


Implementation Through Existing Federal Framework, New and Existing Programs

FIBG capacity is not intended to be provided by a new, stand-alone program. Instead, it is designed to add a specific type of loan guarantee capacity to existing infrastructure loan programs (and similar new ones) which already offer generalized guarantee options. In effect, FIBG is a new “product” that federal infrastructure loan programs may offer within their existing federal legislative and regulatory framework.

- The credit analysis of a state’s customized Reimbursement Agreement is a central part of FIBG risk management. In addition, any market impact of proposed FIBG guarantee use must be evaluated. These analyses require structured finance and AAA debt market expertise (not infrastructure or project finance per se) and are best performed directly by US Treasury (e.g. in the Office of State and Local Finance) in conjunction with OMB approvals and credit subsidy calculations.
- All other project policy and qualification aspects of FIBG capacity would be undertaken by the specific infrastructure program that has the required sectoral expertise, rules and protocols. In addition, since these programs are already in dialogue with state and local officials on infrastructure projects, loan programs would manage overall FIBG product outreach and relationships.
- Assuming that in the near-term, any new sectoral loan programs will be based on existing ones (e.g. as WIFIA was modelled on TIFIA), the above approach should be applicable. FIBG capacity may be especially relevant for a new program focused on basic social infrastructure.

5 Cost and Impact: *Significant Potential Capacity Builds Over Ten-Year Horizon*



A Small But Steady Appropriation Leads to Significant Impact

As with all federal infrastructure loans, FIBG capacity will require payment of FCRA credit subsidy cost (based on the credit risk of the state's Reimbursement Agreement). Assuming that FIBG authorization includes an annual appropriation for credit subsidy cost as an additional benefit to encourage state & local infrastructure investment, and that this benefit will be utilized promptly, the impact of FIBG capacity can be projected in terms of essential infrastructure spending.

- An appropriation program for FIBG capacity roughly equal to EPA 2007-2016 enacted appropriations for SRFs would provide \$2.5bn annually for ten years for a total of \$25bn.
- The resulting FIBG capacity will depend (as in existing programs) on the leverage ratio associated with credit quality of the Reimbursement Agreement. If states offer the minimum investment-grade standard, the ratio will be about 10. If they offer a higher credit standard (e.g. accessing FIBG capacity is more important than decreasing risk with respect to mitigating fiscal constraints), the ratio may be 20. The chart above projects FIBG impact of cumulative credit subsidy appropriations for both ratios.
- Total FIBG capacity should be capped at the outset for US risk management purposes. The chart above reflects a \$250bn cap. A cap may also have the effects of encouraging higher credit quality Reimbursement Agreements and faster implementation as states seek to attain capacity before the cap is limiting. Both effects are consistent with federal goals.

6 FIBG Credit Subsidy Allocation: *A Block Approach Based on State Population*

State	Annual Credit Subsidy	10-Year Credit Subsidy Total	10-Year Credit Capacity (10x)	10-Year Credit Capacity (20x)	State	Annual Credit Subsidy	10-Year Credit Subsidy Total	10-Year Credit Capacity (10x)	10-Year Credit Capacity (20x)
Alabama	38	379	3,787	7,574	Montana	8	81	805	1,610
Alaska	6	58	576	1,151	Nebraska	15	148	1,478	2,956
Arizona	53	532	5,322	10,644	Nevada	23	225	2,253	4,506
Arkansas	23	232	2,321	4,643	New Hampshire	10	104	1,037	2,074
California	305	3,051	30,511	61,021	New Jersey	70	698	6,982	13,964
Colorado	43	425	4,253	8,506	New Mexico	16	163	1,625	3,250
Connecticut	28	280	2,799	5,598	New York	154	1,543	15,429	30,859
Delaware	7	74	737	1,475	North Carolina	78	783	7,828	15,655
Florida	158	1,580	15,800	31,600	North Dakota	6	59	590	1,180
Georgia	80	796	7,962	15,924	Ohio	91	905	9,052	18,104
Hawaii	11	112	1,116	2,232	Oklahoma	30	305	3,049	6,097
Idaho	13	129	1,290	2,580	Oregon	31	314	3,140	6,281
Illinois	100	1,002	10,023	20,047	Pennsylvania	100	998	9,979	19,957
Indiana	52	516	5,160	10,319	Rhode Island	8	82	823	1,647
Iowa	24	243	2,435	4,870	South Carolina	38	382	3,816	7,632
Kansas	23	227	2,269	4,539	South Dakota	7	67	669	1,338
Kentucky	34	345	3,449	6,898	Tennessee	51	514	5,144	10,289
Louisiana	36	364	3,641	7,281	Texas	214	2,141	21,410	42,821
Maine	10	104	1,036	2,072	Utah	23	234	2,335	4,670
Maryland	47	468	4,682	9,363	Vermont	5	49	488	976
Massachusetts	53	530	5,296	10,592	Virginia	65	653	6,534	13,068
Michigan	77	773	7,734	15,468	Washington	56	559	5,589	11,178
Minnesota	43	428	4,279	8,558	West Virginia	14	144	1,437	2,875
Mississippi	23	233	2,332	4,665	Wisconsin	45	450	4,498	8,997
Missouri	47	474	4,742	9,484	Wyoming	5	46	457	914

Allocated per 2017 population proportion; amounts in \$ millions

A Block Approach for Allocating FIBG Credit Subsidy Appropriations

Deferred maintenance and delayed investment on essential US infrastructure is very widespread. There is no regional, sectoral or scale concentration. As a result, state and local need for (and potential beneficial impact of) FIBG capacity should roughly correlate with population. In addition to other state-level features of FIBG design, this supports a “block” approach to credit subsidy cost appropriation.

- A population-based approach (with certain adjustments) is used to allocate EPA SRF annual grants
- The chart above shows how the FIBG appropriations and capacity projections described in the previous page would be allocated in accordance with 2017 state population.

7 Models, Precedents and Existing Frameworks: *Using Off-the-Shelf Parts*

Market-Oriented Use of US Financial Guarantee Capacity to Encourage Investment: FNMA, FHLMC and other federal financing GSEs show how (even implicit) US credit support can establish market capacity for asset financing in large scale. They also demonstrate the pitfalls, which FIBG should avoid: (1) Reimbursement Agreements are all minimum investment-grade and individually reviewed, (2) deferred maintenance and delayed investment spending on public infrastructure is self-limiting and non-speculative, (3) FIBG guarantee exposure will be spread across diverse markets and instruments

Direct Use of US Guarantee in Project Financing and SPV Structures: ExIm Bank, OPIC, and US DOE's Financial Institution Partnership Program (FIPP) successfully use or have used federal guarantees directly attached to debt issued in project financings and other SPV-based structures. FIPP's guarantee was directly copied from ExIm precedent.

State & Local Government Demand for Less-Constrained Infrastructure Financing Capacity: A state Reimbursement Agreement is the one innovative component in FIBG. However, demand for relief from short-term fiscal constraints on infrastructure financing is reflected in huge state & local interest in public-private partnerships (P3s) since 2008. In most cases, the primary motivation for a P3 is related to mitigating local fiscal constraints. The FIBG approach will often have wider application and far greater efficiency for this objective than P3s. Some contractual features of availability-payment P3s designed for fiscal constraint relief may provide guidance for Reimbursement Agreements.

State Ability to Utilize Long-Term Federal Support on Small Scale, Local Projects: The long-term success of state SRFs, and the key role of federal government in creating and supporting them, is a useful precedent for several aspects of FIBG design.

Existing Federal Capabilities for Near-Term FIBG Implementation: Existing infrastructure loan programs, US Treasury offices and OMB have among them all the expertise, rules, operating protocols and statutory frameworks to implement FIBG quickly and effectively.

Block Approach for Infrastructure Deferred Maintenance and Delayed Investment Challenges: For the specific purpose of addressing essential infrastructure deferred maintenance and delayed investment, where need correlates to population and deep state & local expertise exists, a block approach to appropriation allocation is effective and should be politically acceptable.

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