

Innovation Profile: SIB & GARVEE Financing

Using Innovative Financing and Combined Funds to Advance Critical Transportation Infrastructure Projects in Missouri



The Rocheport Bridge and Mineola Hill project in Missouri is an example of how a transportation agency used a combination of innovative financing methods to leverage Federal, State and local funding. Missouri was able to pay back debt service on a State Infrastructure Bank (SIB) loan using future Federal-Aid highway funds via State-issued GARVEE financing. These types of credit assistance can lower interest rates and costs of borrowing when using GARVEE, which helps transportation planners stretch existing Federal, State and local funds.

Missouri also used a tapered match from the Federal Highway Administration (FHWA) to repay SIB loan, enabling the Missouri Department of Transportation (MoDOT) to repay the loan with 100% federal funds until the full federal share was reached. The flexibility of a tapered match agreement allows States to vary the required matching ratio over the life of a project.

Innovative Finance Technique	Definition	Legal Basis
GARVEE	GARVEES are bonds or similar debt instruments authorized for Federal reimbursement of debt service and related financing costs. States use these proceeds to fund Title 23 projects.	The National Highway System Designation Act (NHS Act) first authorized the use of GARVEEs in 1995, later codified into section 122 of Title 23 of the U.S. Code.
SIB	SIBs are revolving infrastructure investment funds for surface transportation that are established and administered by States. A SIB, much like a private bank, can offer a range of loans and credit assistance enhancement products to public and private sponsors.	SIB pilot programs and enabling legislation include the NHS Act; Transportation Equity Act for the 21st Century (TEA-21); and, in 2005, Congress authorized a permanent SIB program codified in 23 U.S.C. 610.
Tapered Match	A tapered match is a form of Federal-aid matching flexibility that allows a project's Federal share to vary from year to year as long as the final contribution of Federal funds does not exceed the project's maximum authorized share.	Section 1302 of TEA-21 amended 23 U.S.C. 121 by removing the longstanding requirement for a payment-by-payment match of Federal funds on individual projects.

Table 1: Definitions of each innovative finance technique used in the Mineola Hill project. Information courtesy of FHWA.

Project Highlights

- For the Rocheport Bridge and Mineola Hill project, MoDOT was able to stretch Federal and State dollars by combining several financing methods. Using GARVEEs to repay a SIB loan gave MoDOT stable and continuous access to project financing. In turn, this accelerated project delivery needed for concurrent construction projects and freed other funds for projects ineligible for Federal funding.
- MoDOT used a tapered match to accelerate the start of the Rocheport Bridge and Mineola Hill project. Planners can use a tapered match to move forward on a project immediately with 100 percent Federal funds, allowing time for potential new tax revenues to accumulate and to allocate new funds in capital improvement plans, like the Statewide Transportation Improvement Program (STIP). The use of tapered



match also may help an agency overcome near-term gaps in State matching funds. A tapered match allowed MoDOT a more flexible and creative vision for long-range planning, and enabled them to allocate State funds to other projects in the STIP, providing increased flexibility and stretching the capabilities of State and local funds.

Project Financing

Innovative financing tools can provide State and local agencies with options to plan creatively; MoDOT took advantage of two innovative financing tools—GARVEE and SIB financing—to raise the funding needed for several significant projects, including 1.2 miles of truck climbing lanes at Mineola Hill and replacement of the Rocheport Bridge. MoDOT, seeking to increase flexibility of project financing and ultimately accelerate project delivery, proposed a plan to utilize these tools to generate the funds needed. MoDOT also pursued a tapered match request with FHWA to create a payment schedule that would maximize the financial flexibility and stability of the suite of projects related to Rocheport Bridge and Mineola Hill.

In July 2019, MoDOT received an \$81.2 million Federal Infrastructure for Rebuilding America (INFRA) grant from the U.S. Department of Transportation to facilitate improvements along the I-70 corridor, including the Rocheport Bridge and Mineola Hill projects. In combination with a tapered match agreement with FHWA and using GARVEE, MoDOT will pay back debt service on a \$62.5 million SIB loan. This financing arrangement, along with over \$300 million in a new state backed transportation bonds program, will allow MoDOT to free up \$301 million from the current Statewide Transportation Improvement Program (STIP) and reprogram federal aid to other needed projects.



Figure 1: Rendering of the new Mineola Hill segment of I-70 featuring the new truck climbing lane. Image courtesy of Emery Sapp & Sons.

Challenges and Lessons Learned

- **Agencies can consider using innovative finance methods to leverage multiple funding mechanisms, which help agencies stretch Federal and State funding dollars for additional transportation projects.** Today, transportation agencies face a difficult challenge: they must build more with less. Innovative financing methods, GARVEE financing and SIBs, help agencies increase available resources, especially when used together; a tapered match, with upfront Federal funding, helps agencies jumpstart projects with complex and long-term loan financing. MoDOT used a SIB loan and a tapered match to generate up-front capital, which enabled the agency to finance the projects earlier than if the agency had to rely on more traditional resources, like STIP funding.
- **By financing Federal-aid highway construction using SIBs and bonds, agencies can distribute the cost of a project over a time.** Innovative financing tools help agencies strategize for long-term projects and plan future funding allocation. Agencies can use GARVEE financing and SIBs as reliable project funding mechanisms for both short- and long-term project lifecycles, which can increase project stability and funding flexibility for current and future transportation efforts.

