GARVEE Bonds Rating Criteria

Sector-Specific

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This report updates and replaces *GARVEE Bond Rating Criteria*, dated March 24, 2020.

Applicable Criteria

Rating Criteria for Infrastructure and Project Finance (March 2020)

U.S. Public Finance Tax-Supported Rating Criteria (March 2020)

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Scope

This criteria report explains Fitch Ratings' analytical approach to evaluating both new and existing ratings of Departments of Transportation (DOTs) and transit agencies whose bonds are secured by future federal transportation grants in the U.S. These bonds are often referred to as grant anticipation revenue vehicles, or GARVEE bonds. Ratings on GARVEE debt consider a number of factors, such as the nature of the federal surface transportation program (the Program) and features specific to each issuer, including structural features and financial flexibility.

For GARVEE bonds that are further secured by a pledge of state tax revenues as backup, Fitch will evaluate the credit quality of the backup pledge using the *U.S. Public Finance Tax-Supported Rating Criteria*, relative to the risk of the lien on federal grants, and will generally assign a rating consistent with the higher of the two revenue streams.

Rating levels relate to Fitch's international rating scale and reflect standalone creditworthiness without considering external credit enhancement. They do not contemplate a policy choice to eliminate or significantly reduce the federal gas tax. These criteria should be read in conjunction with related criteria.

Key Rating Drivers

Federal and State Policy Decisions: Federal policy decisions on surface transportation and/or individual state decisions to increase leverage will have more weight in the rating than any other factor, barring a legal pledge of additional state resources. Grant anticipation revenue vehicle, or GARVEE, bond ratings are not directly linked to the U.S. sovereign; however, fiscal challenges at the federal level could ultimately affect GARVEE bond ratings. GARVEE bond ratings are capped at the 'AA' category level.

In some instances, unique state appropriation policies may affect the distribution of federally received funds, further capping GARVEE bond ratings generally one notch below the state's Issuer Default Rating to reflect appropriation risk. For further information on appropriation risk and notching, please refer to the *U.S. Public Finance Tax-Supported Rating Criteria*.

Nature of Federal Program: The strength, stability and reliability of the programmatic framework are evidenced by a dedicated revenue source, the longstanding history of uninterrupted funding and the formulaic nature of the program. This framework is nevertheless subject to authorization and appropriation risk and federal budget constraints.

Structural Features: Leverage limitations, a broad pledge of federal transportation funds, requirements governing early obligation of federal funds and tenor are key structural features that provide bondholders with an important financial cushion as are backup pledges of nonfederal resources.

Resources of the DOT/Transit Agency: GARVEE bonds are an important capital tool for many state DOTs and transit agencies. As such, GARVEE bond ratings do consider the obligor's financial flexibility, particularly management policies on overall leverage and on maintaining working capital in excess of debt-service payments.

Debt Structure: Fitch assesses protections in the transaction structure to ensure timely payment of debt service. This encompasses an assessment of payment waterfall ranking, refinance risk, financial profile, covenant package, structural features, hedging financial risk, and liquidity and reserves, as applicable.

Backup Pledge GARVEEs: In some cases, GARVEE bonds are also secured by a pledge of state revenues as a backup to the extent federal funds are not available. In such instances, Fitch will evaluate the credit quality of the backup pledge provided relative to the risk of the lien on federal grants. Fitch will assign a rating consistent with the higher of the two revenue streams — the federal grants or the state backup pledge

Framework for Ratings

Types of GARVEE Bonds

Fitch's criteria applies to both standalone highway and transit GARVEEs, which may be structured as either reimbursement (indirect) or direct payment GARVEEs.

The standalone highway GARVEE bonds in Fitch's portfolio usually benefit from a first lien on all legally available federal transportation funding. In the case of reimbursement GARVEE bonds, this is accomplished by a pledge of all legally available federal transportation funds set aside on a monthly basis. Alternatively, in the case of direct-pay GARVEEs, the broad pledge is accomplished through a covenant or policy to de-obligate and redirect federal funds if necessary. In addition, highway GARVEEs benefit from leverage limitations of at least 3.0x that provide the ability to retain sufficient flexibility at the 'A+' level even with a decline in federal revenues

The standalone transit GARVEEs in Fitch's portfolio usually benefit from a broad pledge of federal transportation funding. However, in contrast to highway GARVEEs, the transit GARVEEs rated by Fitch have materially lower additional bonds test (ABT) requirements of 1.5x or below and would thus have much less protection against declines in federal program revenues should agencies fully lever up to their ABT, and are rated in the 'BBB' category

Direct GARVEE bonds are those in which federal assistance directly reimburses debt service paid to investors in a debt-financed federal-aid project, as permitted under Section 122 of Title 23. For direct payment method GARVEEs, in which federal grant assistance directly reimburses the debt service paid to investors in a debt-financed federal-aid project, it is important that debt service payments from federal transportation funds are eligible under one or more core grant programs, such as the Surface Transportation Program of the bridge and national highway system for the Federal Highway Administration (FHWA), and the Urbanized Area and Fixed Guideway Modernization programs for the Federal Transit Administration (FTA). Amounts from federal transportation grant programs not legally available for debt service, such as metropolitan planning or discretionary earmarked projects, are not considered as part of the available revenue stream.

While there is typically no early segregation of cash under a direct payment method GARVEE, it is Fitch's opinion that an administrative set-aside of obligation authority serves as an important proxy. Covenants in the bond documents and agreements with the FHWA or FTA to obligate federal transportation funds at the start of the federal fiscal year first for debt service on a priority basis and/or prior to obligating them for any other purpose establish this critical administrative set-aside.

The term "indirect GARVEE" was adopted by the public finance community to describe municipal bonds backed by FHWA reimbursements for standard, pay-as-you-go federal aid projects (rather than for an eligible debt financing instrument). For indirect GARVEEs, Fitch analyzes transaction documents for security provisions that establish an early segregation of pledged federal transportation funds on a cash basis for debt service. Given that an issuer's federal transportation fund reimbursement cash flow can be variable based on the cycles of its construction program, Fitch evaluates monthly reimbursement cash flow trends and the backlog of the program of projects eligible for federal transportation funds relative to debt service set-aside requirements (under the state's program) to assess the flexibility available to comply with early segregation requirements. When debt service is paid when due without any legal early segregation, Fitch evaluates the issuer's track record in managing its finances, debt repayment obligations and federal transportation fund reimbursement cash flow. There are no differences in ratings between direct and indirect GARVEEs.

Additionally, a backup pledge of state highway funds — such as a motor fuel tax and/or revenues available from a dedicated transportation trust fund, a transit agency's dedicated regional sales tax or fare box revenue — can help mitigate the risks associated with the federal grant stream by providing additional debt service coverage. In these circumstances, Fitch will evaluate the credit quality of the backup pledge provided relative to the risk of the lien on federal grants. Fitch will generally assign a rating consistent with the higher of the two revenue streams —the federal grants or the state backup pledge. GARVEEs secured with such an additional pledge of revenues tend to be more highly rated by Fitch, typically at 'AA' category, than those only secured by federal transportation funds, which have been rated from 'BBB' to 'A+' by Fitch.

These backup pledge GARVEEs are typically rated higher than standalone GARVEEs because the state pledge is generally assessed at a higher rating than the federal program. The backup pledge GARVEE bonds are analyzed using both the U.S. *Public Finance Tax-Supported Rating Criteria*, as well as the GARVEE criteria, and assigned the higher of the two ratings

Attribute Strength Key to Rating

The nature of the federal Program is the most significant attribute as it addresses the dependability of the ultimate source of payment for GARVEE debt issuance. Fitch currently considers the federal Program attribute to be "midrange". Should this assessment change, we will update this section of the criteria. Programs rated in the 'AA' category will typically have a backup pledge of equivalent strength. Assuming a midrange attribute for the federal Program rating driver, GARVEES rated in the 'A' category will typically have a combination of strong and midrange attributes in the structural features and resources of the DOT/transit agency rating drivers. Programs rated 'BBB', assuming the federal Program is midrange, will likely have weaker attributes in the structural features and/or resources of the DOT/transit agency rating drivers.

Key Rating Driver Assessments for GARVEE Bonds

Assessment	Nature of the Program	Structural Features	Resources of the DOT/Transit Agency
Stronger	• Sustainable multiyear program where spending and receipts are equal. • HTF has a balance so that short-term changes in receipts do not affect the ability to meet state reimbursements. • Formulaic distribution of funds. • Gas tax revenues used solely for surface transportation program.	• Pledge of all surface transportation grants. • Early set-aside of obligation authority for debt service. • Covenants to de-obligate and redirect federal funds in the event of a shortfall. • Additional bonds test in excess of 3.0x (or equivalent) current receipts eligible to pay debt service. • Bond maturity within 10–15 years.	• Nonfederal sources represent the majority of total resources. • Board adopted policy to maintain working capital in excess of GARVEE upcoming debt service payment. • Relatively low level of obligor leverage.
Midrange	• Program where spending and receipts are generally in line, but some transfers from general fund may be needed. • Limited balance in the HTFso that short-term needs can be covered, but a downward trend in receipts could trigger a slowdown in reimbursement times. • Formulaic nature of program is diluted. • Congress alters HTFresources so that some revenues are diverted for nonsurface transportation uses or the program is reduced.	• Pledge of all surface transportation grants. • Early set-aside of obligation authority for debt service. • Covenants to de-obligate and redirect federal funds in the event of a shortfall. • Additional bonds test of 2.0x–3.0x (or equivalent) current receipts eligible to pay debt service. • Bond maturity of 20 years or less.	• Obligor funded equally by federal and nonfederal resources. • General practice of maintaining working capital to cover delays in federal payments. • Relatively moderate level of obligor leverage.
Weaker	• Unsustainable gap between spending and receipts. • No HTF balance. • Funds disbursed based largely on appropriation decisions, not formula • Tax allowed to lapse. • Redirection of receipts out of HTF and grants funded out of the general fund.	• Pledge of all surface transportation grants. • No early set-aside of obligation authority for debt service. • No covenants to de-obligate and redirect federal funds in the event of a shortfall. • Additional bonds test of less than 2.0x (or equivalent) current receipts eligible to pay debt service. • Bond maturity in excess of 20 years.	• A majority of obligor resources derived from federal resources. • No working capital/inability to withstand a delay in receipt of federal funds. • Relatively high level of obligor leverage.

GARVEE – Grant anticipation revenue vehicles. DOT – Department of transportation. HTF – Highway Trust Fund.
Source: Fitch Ratings.

Nature of the Federal Program

Federal grants continue to play an important role in the building and maintaining of interstate highways and mass transit systems nationwide. The overall federal contribution to transportation infrastructure varies by state/transit agency. A hallmark of this structure has been and continues to be a dedicated, albeit flat to declining, revenue stream from which formula grants to state DOTs and transit agencies are made. The Program essentially has nearly 60 years of uninterrupted funding, even during past lapses of authorization. The nature of the Program, as measured by the strength, stability and reliability of the programmatic framework, is the most significant factor in Fitch's analysis of GARVEE bonds. An inherent assumption underlying Fitch's ability to continue to rate GARVEE bonds, despite structural deficits in the Highway Trust Fund (HTF), is that the Program will continue to enjoy broad political support, which will enable it to keep going with no material changes anticipated over the rating horizon.

Dedicated Revenue Source

The HTF, which was established in 1956, is funded by collections of federally imposed motor vehicle fees, primarily fuel taxes. Highway user taxes consist of "gallonage" taxes on highway motor fuel and various truck-related taxes. The 18.4 cents per gallon gasoline and gasohol tax represents approximately 68% of the HTF's revenues, the 24.3 cents per gallon tax on diesel and special fuels contributes about 23%, and the remainder is derived from certain tire and truck taxes. The highway account, which funds the Program, receives about 84% of gasoline tax revenues, 87% of diesel tax revenues and all amounts derived from tire and truck-related fees. Except for 0.1 cent of the gasoline tax for the leaking underground storage tank trust fund, the remaining HTF revenues are deposited into the mass transit account to fund the federal transit portion of the Program. HTF taxes have been in place at these levels since 1993.

The Program, like all other federal programs, is subject to authorization and potentially appropriation. As a result, funding levels can and do vary over time based on policy decisions. In Fitch's view, the linkage of grant expenditures to the revenues in the highway account and mass transit account of the HTF, coupled with the size of the federal role in surface transportation funding, significantly mitigates the uncertainty that would otherwise be associated with an annual appropriation. Most other discretionary programs derive their funding from the general fund of the U.S. government, where they compete with many large programs that have had varying degrees of political support over time. In sharp contrast, federal aid highway and surface transportation programs operate under contract authority with no federal appropriation process and generally benefited from a more stable base of support, which is evidenced by a separately dedicated revenue stream.

Formulaic Distribution of Funding

Federally apportioned grants for highway funding are disbursed on a formulaic basis that takes into consideration various factors including interstate lane miles, interstate vehicle miles traveled, contributions to the HTF, state population and other factors. Likewise, grants under the Program disbursed by the FTA are based on population, population density, service levels provided and age of rail service. Distribution of funds in this fashion largely mitigates the exposure to annual legislative changes, limiting grant revenue volatility to annual changes in HTF tax receipts.

Structural Features

Leverage Limitations

Bonds secured by federal transportation grant receipts are exposed to rising oil prices; improving vehicle fuel economy and increases to corporate average fuel economy standards; the advent of electric or alternative fuel vehicles; and the potential for programmatic reductions or dramatic policy changes over time. As a result, Fitch recognizes the importance of leverage limitations in the analysis of GARVEE bond programs. Most of the programs rated by Fitch have additional bonds tests that require existing obligation authority eligible for debt service to be in excess of pro forma maximum annual debt service by 2.0x or more. In theory, federal transportation grants could be cut by 50% without affecting a DOTs/transit agency's ability to make payments.

In reality, most state DOTs/transit agencies exhibit debt-service coverage ratios well in excess of 2.0x. However, all federal dollars are utilized each year for major maintenance and new projects. A 50% reduction of federal transportation grants would require states to either significantly pare back their maintenance efforts or raise an equivalent amount of state resources through new taxes or user fees. Leverage limitations are important rating factors that provide significant bondholder protection against rising fuel prices, increasing fuel economy and the rollout of electric vehicles, but they are less helpful in mitigating the impact of changes in taxation levels or in mitigating policy changes that modify or eliminate the self-funded characteristics of the current program.

Pledge of All Transportation Grant Funds

A pledge of all legally available federal transportation funds set aside on a one-sixth and one-twelfth basis in the case of reimbursement (indirect) GARVEE bonds, or a covenant to de-obligate and redirect federal funds in the case of direct-pay GARVEEs can provide debt service coverage or cushion that protects bondholders from potential variability in the timing and receipt of funds for debt service. The broader pledge also removes project-specific risks that could otherwise impair bondholder security. Fitch evaluates transaction documents for covenants that functionally establish the pledge of all legally available federal transportation funds and create a first lien priority of debt service payments

Obligation of Federal Funds

State DOTs and transit agencies obligate (to designate or commit) federal transportation funds that have been apportioned or allocated pursuant to the authorization act. Once funds are obligated, the FHWA is legally committed to pay amounts when due, and committed funds do not lapse and are available to the state or transit agency until expended. Congress may set the amount of federal transportation funds that can be obligated — the obligation limit — below the amounts authorized. However, the unused authorization (unobligated balance) can be carried forward and provides available resources in the event there is a lapse between authorization periods.

By meeting federal project eligibility requirements and following specific planning, programming, construction and fiscal management procedures, a state or transit agency can obligate federal transportation funds and electronically bill the FHWA or FTA for reimbursement of approved costs, including debt service. If all requirements are met, federal transportation funds are provided to the state or transit agency in a matter of days. GARVEE bond programs generally stipulate that the first obligation of federal funds will be made for GARVEE bond debt service, within the first several days of the federal fiscal year. Given the high level of federal oversight and involvement, it is common for states to enter into a GARVEE memorandum of understanding (MOU) with FHWA stating how the state's GARVEE program will be administered and includes the program procedures, internal controls, requirements and expectations of both parties.

Debt Tenor/Timing of Payments/Reserves

GARVEE bond proceeds generally fund highway improvements and major maintenance. In analyzing the GARVEE bond financial performance, Fitch assesses an obligor's HTF receipts to calculate annual debt service coverage, and then runs base and rating cases to develop a forecast of future coverage levels. Fitch favorably views bonds that more closely match the useful life of the asset. However, federal grants are primarily funded with HTF gas tax receipts, and Fitch views exposure to gas tax collections beyond 20 years as a weaker attribute, though debt tenor is not a major driver of ratings.

As noted above, federal grants are subject to authorization and budgetary cycles, including the annual provision of obligation authority. In the past, Fitch has favorably viewed a cushion between the Oct. 1 start of the federal fiscal year and debt service payment dates. However, circumstances in 2008 and 2011 indicate that staggering debt service payments alone does not mitigate this risk. Most GARVEE bonds do not currently have a debt service reserve fund (DSRF) to deal with timing issues. Fitch would view the presence of a dedicated DSRF equal to the succeeding principal and interest payment as a stronger attribute.

Resources of the DOT/Transit Agency

Structural features of GARVEE bonds programs often require DOTs/transit agencies to de-obligate or reallocate federal highway grants in the case of a debt service shortfall. This is an important feature that essentially creates a pledge of all federal transportation grants as highlighted above. However, some level of flexibility at the obligor level would be required to actually comply with the covenant should the need arise.

Fitch will look at a number of factors when evaluating an obligor's ability to de-obligate or reallocate federal highway grants, including the characteristics of nonfederal sources; the level of working capital available to meet unforeseen needs/delays in federal funding on a short-term basis; and the overall financial leverage of the obligor, including GARVEE debt. Fitch will also evaluate the mix of spending between operations and maintenance, major maintenance, and new projects. A more even mix between the last two categories of spending will generally indicate more flexibility.

Debt Structure

Fitch focuses on the margin of safety provided to lenders via any financial covenants and leverage limitations. Fitch's approach to debt structure is explained in the *Infrastructure and Project Finance Rating Criteria*.

Base Case and Rating Case

Should Fitch find the sponsor case to be consistent with its own view of the most likely future performance, Fitch will generally use the sponsor's projections as its base case. However, if Fitch finds the sponsor projection unrealistic or unlikely in its view of the likely future performance, it will develop its own base case scenario by assuming flat growth of grant receipts. In addition, reflecting the current state of the HTF, Fitch's rating case on all standalone GARVEEs assumes federal transportation spending is cut to keep the HTF solvent (i.e. outflows match inflows). Based on Congressional Budget Office (CBO) projections, Fitch will calculate the average annual HTF shortfall as a percentage of total outlays over the CBO projection period, and currently estimates funding support to GARVEEs would decrease by an average of approximately 30%. Though coverage is not a primary driver of GARVEE bond ratings, Fitch generally views highway and transit GARVEE credits with maximum annual debt service coverage of greater than 2x and 1.5x, respectively, as adequate cushion to weather potential shortfalls in federal funding.

Transaction-Specific Disclosure

Each specific rating report discusses those attributes most relevant to the individual rating assignment. More specifically, Fitch expects to disclose the following items in reports and/or rating agency commentary for both new issuances and surveillance:

- Key rating drivers and their assessments;
- Financial metrics;
- Peer analysis;
- Primary analytical assumptions; and
- Rating sensitivities.

Variations from Criteria

Fitch's criteria are designed to be used in conjunction with experienced analytical judgment exercised through a committee process. The combination of transparent criteria, analytical judgment applied on a transaction-by-transaction or issuer by issuer basis, and full disclosure via rating commentary strengthens Fitch's rating process while assisting market participants in understanding the analysis behind our ratings.

A rating committee may adjust the application of these criteria to reflect the risks of a specific transaction or entity. Such adjustments are called variations. All variations will be disclosed in the respective rating action commentaries, including their impact on the rating where appropriate.

A variation can be approved by a ratings committee where the risk, feature, or other factor relevant to the assignment of a rating and the methodology applied to it are both included within the scope of the criteria, but where the analysis described in the criteria requires modification to address factors specific to the particular transaction or entity.

Rating Assumption Sensitivity

A change in the view of the federal Program to "stronger" could result in ratings in the 'AA' or 'A' for standalone GARVEEs depending upon the assessment of other attributes.

Should the federal Program be deemed "weaker," the ratings for standalone GARVEE bonds will likely fall to below investment grade as the ultimate revenue source would no longer be considered reliable.

GARVEEs secured with an additional pledge of state tax revenues could potentially be rated higher than standalone GARVEEs only secured by federal transportation funds, which are typically rated from 'BBB' to 'A+' by Fitch.

The structural bond features of GARVEEs do not change during the life of the debt and do no fluctuate, though credits with ABTs of 3.0x or more are generally rated in the 'A' category, while credits with ABTs of around1.5x or less are generally rated in the 'BBB' category.

The DOT or transit agency's resources are not a primary driver of ratings, but qualitative factors unique to the DOT/transit agency may negatively affect ratings.

Models

Fitch may use the following models in the analysis of GARVEE sector credits: GIG AST Model. The Models section in the Infrastructure and Project Finance Rating criteria provides a description of the models.

Data Sources

The key rating assumptions for the criteria as well as the data used in the rating analysis are informed by Fitch's analysis of transaction documents and data, and information received from issuers and/or obligors for financed projects, arrangers and other third parties, public information and Fitch's analytical judgement. The data used includes annual apportionments, obligations authority, grant receipts, and obligated unreimbursed balances for each issuer. In addition, Fitch receives account balances for the issuer on an annual basis.

Limitations

Rating levels discussed in this report relate to Fitch's international credit rating scale and reflect stand-alone creditworthiness without considering external credit enhancement or government support. Ratings, including Rating Watches and Outlooks, assigned by Fitch are subject to the limitations specified in Fitch's Ratings Definitions available at www.fitchratings.com/site/definitions. Ratings do not contemplate a policy choice to eliminate or significantly reduce the federal gas tax.

Appendix — Key GARVEE Program Definitions

Authorization: The term “authorization” is typically used in the context of an authorization bill or act (law): substantive legislation that establishes or continues Federal programs or agencies and establishes an upper limit on the amount of funds for the program or programs. Within such an act, the term may also refer to the program-specific upper limit.

Appropriation: The term “appropriation” is typically used in the context of an appropriations bill or act: a law that typically makes funds available for obligation and expenditure with specific limitations as to amount, purpose, and duration.

Apportionment: In the context of GARVEE programs, the distribution of federal funding to states as prescribed by a statutory formula. Apportionments are made on the first day of the federal fiscal year, and added to unused portions (unobligated balances) from prior apportionments. Apportioned funds are available to be obligated for four-year periods. Obligating funds reduces the amount of a state’s total apportionment.

Allocation: In the context of GARVEE programs, the administrative distribution of funds for programs that are not distributed to states by a statutory formula.

Obligation: The federal government’s legal commitment (promise) to pay or reimburse a state for their federal share of a project’s eligible costs. In the context of GARVEE programs, FHWA obligates funds at the request of the GARVEE issuer.

Obligation Limitation (OL): A restriction, or “ceiling” on the amount of federal assistance that may be promised (obligated) during a specified period. This is a statutory budgetary control established by Congress that does not affect the apportionment or allocation of funds. Rather, it controls the rate at which the funds may be used.

Obligation Authority (OA): The maximum amount of funds that may be obligated in a year, based on a state’s apportionment size. For federal aid highway programs, OA is comprised of the obligation limitation plus amounts for programs exempt from limitation. Unlike apportionments, OA must be used by the end of the federal fiscal year or otherwise be redistributed to other states.

Unobligated Amounts: The portion of a state’s OA or apportionment that has not been obligated for use.