

**Phase Two – State of Rhode Island Quasi-Public Agencies**

The second part of the debt affordability study focuses on the long-term liabilities of the quasi-public agencies in the State. These liabilities do not include any quasi-public agency debt that is included as tax-supported debt of the State. There is a wide variety of issuers in this category with different bonding programs, as listed below and described in more detail in Exhibit A. Exhibit A provides a list of quasi-public agencies with debt outstanding and the bonding programs under each with a description of the security and the additional bonds test. None of the debt issued by the quasi-public agencies is a direct obligation of the State, and the State does not provide any backstop or guarantee for the repayment of the debt, except for certain debt issued by the Rhode Island Commerce Corporation and the Rhode Island Housing and Mortgage Finance Corporation. However, these quasi-public agencies perform important functions for the State, and thus, the State maintains a strong interest in the viability and sustainability of the quasi-public agencies’ finances.

**Overview of Quasi-Public Agencies**

The quasi-public agencies in this part of the debt affordability study fall into two general categories: (i) those that issue debt secured by their own revenues and (ii) those that act as a conduit for debt secured by the revenues of separate underlying borrower(s) through loan or financing agreements. In addition, some quasi-public conduit borrowers may have bonding programs that pool a group of underlying borrowers into a single debt issue. The table below summarizes the quasi-public agencies in these two categories.

<b>Direct Borrower</b>	<b>Type/Purpose of Bonds</b>
Narragansett Bay Commission	Wastewater System Revenue Bonds
Rhode Island Turnpike and Bridge Authority	Toll Revenue Bonds
Tobacco Settlement Financing Corporation	Tobacco Master Settlement Agreement Bonds
Rhode Island Resource Recovery Corporation	Resource Recovery System Revenue Bonds
<b>Conduit Borrower</b>	<b>Type/Purpose of Bonds</b>
Rhode Island Commerce Corporation	GARVEEs, Airport Revenue Bonds, Economic Development, Moral Obligation Bonds
Rhode Island Health and Education Building Corporation	Public School, Higher Education, Other Education, Health Care Revenue Bonds (Includes Pooled Bonds)
Rhode Island Housing and Mortgage Finance Corporation	Single-Family and Multi-Family Housing Revenue Bonds, Moral Obligation Bonds
Rhode Island Infrastructure Bank	Water Pollution Control, Safe Drinking Water, Water, Sewer Revenue Bonds, Energy Efficiency Loans (Includes Pooled Bonds)
Rhode Island Student Loan Authority	Student Loan Revenue Bonds

In addition to the quasi-public agencies above, the State also has other quasi-public agencies that do not have any bonds currently outstanding, including the Rhode Island Public Transit Authority and the Rhode Island Water Resources Board Corporate.

Further, as covered in Phase One of this debt affordability study, the Rhode Island Convention Center Authority bonds and the Rhode Island Turnpike and Bridge Authority’s Motor Fuel Tax Revenue Bonds are included in the tax-supported debt of the State. The Rhode Island Commerce Corporation also has a portion of its debt that is treated as the tax-supported debt of the State, including the Transportation Motor Fuel Tax Bonds, URI Power Plant, Job Creation Guaranty, I-195 Land Sale, Historic Structures Tax Credit and various Performance Based Agreements. This debt is included in the debt analysis of Phase One of the study, and will generally not be included in this section of the study, to avoid double-counting.

## **Framework for Considering Debt Affordability Guidelines for Quasi-Public Agencies of the State**

In researching Phase Two, PRAG surveyed other states for evidence of existing debt affordability measures at quasi-public agencies. This survey, paired with discussions with rating agencies and national research groups including the Pew Charitable Trust, indicated that debt affordability measures for quasi-public agencies are not as explicitly integrated into state debt affordability studies in other states. Therefore, PRAG relied upon a methodology that included examining Rhode Island quasi-publics' existing covenants and rating agency criteria, and comparing practices with peer agencies in other states, to assess affordability.

The debt issued by the quasi-public agencies are revenue bonds, in which debt service is payable solely from the revenues derived (i) from a dedicated revenue sources, (ii) from operating businesses or the facilities acquired or constructed with proceeds of the bonds or (iii) under a loan or financing agreement. Revenue bonds are issued pursuant to a trust indenture or a bond resolution, which are types of legal documents describing in specific detail the terms and conditions of a bond offering, the rights of the bondholder to receive revenue repayment, and the obligations of the issuer to the bondholder. These documents describe the revenues that are pledged for the repayment of debt and may incorporate a rate covenant and provisions for the issuance of additional debt, as described further below.

A rate covenant is a legal commitment by a revenue bond issuer to maintain rates, fees, charges, etc. at levels necessary to generate sufficient revenues to provide specified debt service coverage. With revenue bonds, the most frequently used measure of financial health is debt service coverage or the margin of safety for payment of debt service on a revenue bond which reflects the number of times the net revenues (total revenues less operation and maintenance expenses) exceed the debt service that is payable for a 12-month period of time. The trust indentures may also include an additional bonds test (ABT), which specifies a certain debt service coverage level must be met, including the proposed new debt, before new (additional) bonds can be issued. The legal requirements established in the indenture are reviewed by the rating agencies and are key factors in determining the rating. In addition, while the rate covenant provides the minimum acceptable debt service coverage, credit analysts will generally want to see higher levels of debt service coverage than what is legally required for highly rated entities.

For certain revenue bonds, the rate covenant and ABT specified in the trust indentures provide a potential debt affordability measure that can be incorporated into the PFMB debt affordability study. Since being able to meet the ABT specified in a trust indenture is a legal commitment, any debt affordability target cannot be weaker than the ABT in the covenant. Among the quasi-public agencies in Rhode Island, there is a variety of revenue bonds, including utilities, toll revenue, GARVEEs, airport, housing, student loan, healthcare, higher education, secondary education and other not-for-profits. The appropriate debt affordability measure for each must be considered. Since revenues are the source of repayment for the debt, PRAG believes the focus of debt affordability should be based on some type of debt service coverage ratio, which may come in the form of additional bonds test debt service coverage and/or annual rate covenant debt coverage.

We recognize that the overall creditworthiness of many of the quasi-public agencies is based on a variety of factors including management, operating and other financial matters, in addition to debt service coverage levels. The rating agencies and other credit analysts view revenue bond borrowers' ability to pay their obligations based on many factors related to the management, balance sheet and operations of the specific program or business that is generating the revenue used to pay debt service. However, since this study focuses on managing debt through debt affordability measures, other financial metrics, such as days' cash equivalents on hand and level of operating reserves, which reflect operating performance and balance sheet position, are not covered in this report except with Rhode Island Housing and Mortgage Finance Corporation ("RI Housing") and Rhode Island Student Loan Authority ("RISLA").

There are different considerations in the application of debt affordability guidelines to the two categories – direct borrowers and conduit issuers of quasi-public agencies in Rhode Island. The discussion below describes the debt programs for each of the quasi-public agencies, the options of debt affordability measures to consider and a proposed debt affordability measure to use for each quasi-public agency. Along with debt affordability policy, the PFMB can provide guidance on debt management best practices similar to those reviewed in Phase One of the debt affordability study. These would include method of sale, debt structuring practices, refunding policy, debt issuance practices and disclosure and post issuance debt management.

### ***Direct Borrowers***

This category includes the Narragansett Bay Commission, the Rhode Island Turnpike and Bridge Authority, the Tobacco Settlement Financing Corporation and the Rhode Island Resource Recovery Corporation. With these borrowers, debt is secured by the entity's own revenues and the State does not provide any backstop or guarantee for the repayment of the debt. Debt is issued pursuant to the respective trust indentures. For the Tobacco Settlement Financing Corporation, under its master indenture only refunding bonds can be issued; no new debt can be issued. This discussion will focus on the Narragansett Bay Commission, the Rhode Island Turnpike and Bridge Authority and the Rhode Island Resource Recovery Corporation.

For each of these quasi-public agencies, the respective trust indentures provide for rate covenants and additional bonds tests, as summarized below, and in the case of public offerings, ratings have been assigned and maintained factoring in the required rate covenant and ABT (as well as reserve levels, operating performance and other factors). As discussed, rate covenants require that the issuer certify that in a given year pledged revenues are able to cover debt service by a certain amount, and the ABT prohibits the issuance of additional debt if pledged revenues do not cover the debt service on the existing and the contemplated future debt issue by a certain amount.

The debt service coverage ratio provides a measure by which we can assess the quasi-public agencies' ability to repay their debt and is a key statistic used by rating agencies in their review of the credit of revenue bonds. Additional debt is limited by the legally required ABT and breaching the rate covenant compels the quasi-public agency to raise rates. To maintain the ratings on the bonds, the quasi-public agency must demonstrate the ability to meet its rate covenant. The PFMB can consider using the required ABT as the guiding debt affordability measure. Alternatively, the PFMB can provide guidance in the adoption of a policy that requires a stronger debt service coverage ratio than the ABT. Note that having a stronger ABT would be a policy, and the indenture required ABT would remain the legal requirement. In developing a potentially stronger ABT, the PFMB will need to review with the respective quasi-public agencies how the modified ABT can impact debt capacity and will need to ensure it does not limit the flexibility to finance necessary capital improvements.

### ***Narragansett Bay Commission***

The Narragansett Bay Commission (NBC) issues debt on its own and also through the Rhode Island Infrastructure Bank (RIIB). Under the trust indenture in which the NBC issues its own debt, the required ABT is 1.25x its revenue bonds and 1.35x for its RIIB loan. In its criteria for utilities, Standard & Poor's assesses coverage in the 1.25x to 1.40x range as "strong"; NBC's ABT of 1.25x/1.35x is in this range. Standard & Poor's confirmed its 'AA-' rating with a stable outlook for the NBC in July 2016. Based on the Standard & Poor's report, for 2009 through 2015, net revenues covered debt service by at least 1.25x with debt service coverage for 2015 at 1.4x. NBC has been able to maintain its high 'AA-' rating and maintain debt service coverage at or above the required level.

[Add and show NBC other financial statistics versus peers and rating agency criteria]

Quasi-Public Agency	Indenture Required Additional Bonds Test	Rate Covenant
<b>Narragansett Bay Commission</b> (--/AA/--)	Requires estimated net revenues (gross revenues less operating and maintenance expenses) for the three years following the issuance of bonds to be at least 1.25x the debt service requirement for revenue bonds and 1.35x the debt service requirement for RIIB loans	1.25x the debt service for revenue bonds and 1.35x the debt service on the RIIB debt

*Rhode Island Turnpike and Bridge Authority*

The Rhode Island Turnpike and Bridge Authority (RITBA) issues toll revenue bonds with an ABT and rate covenant that requires net revenues (after payment of operating and maintenance expenses) plus Dedicated Payments to be at least 1.20x. As specified in Standard & Poor’s toll road criteria, the most common ratio used in a toll covenant is 1.25x. Based on the Standard & Poor’s RITBA report dated April 1, 2016, annual debt service coverage has ranged from 1.6x to 2.1x from fiscal years 2011 through 2015, with debt service coverage at its low point of 1.6x in fiscal year 2015, which Standard & Poor’s still considered strong. RITBA’s 1.20x covenant requirement is on the low side, but likely given the limited desire to raise tolls on the Pell Bridge beyond the planned toll increases, a policy to target a stronger ABT may not be possible.

[Add and show RITBA other financial statistics versus peers and rating agency criteria]

Quasi-Public Agency	Indenture Required Additional Bonds Test	Rate Covenant
<b>Rhode Island Turnpike and Bridge Authority</b> (--/A-/A)	After retirement of 2003A Bonds, Net Revenues (gross revenues less operating and maintenance expenses) plus Dedicated Payments in most recent fiscal year or projected for each of the next 5 fiscal years must be at least 1.20x Maximum Annual Debt Service	1.20x the debt service, including dedicated payments

*Rhode Island Resource Recovery Corporation*

The Rhode Island Resource Recovery Corporation issued revenue bonds through a private placement with an ABT and rate covenant that requires net revenues (after payment of operating and maintenance expenses) plus State Subsidy, and Assets Held in Trust to be at least 1.25x debt service. As stated earlier, generally for utilities, Standard & Poor’s assesses coverage in the 1.25x to 1.40x range as “strong”. One option is to use the ABT of 1.25x as specified in the trust indenture as the debt affordability measure, which also includes any State Subsidy as revenues. Alternatively, the PFMB can propose implementing a policy that the 1.25x ABT must be met only with revenues of the system and no State subsidy should be used to meet the ABT.

Quasi-Public Agency	Indenture Required Additional Bonds Test	Rate Covenant
<b>Rhode Island Resource Recovery Corporation</b> (Not Rated)	For any 12 month period out of the last 18 months, Net Revenues (gross revenues less operating and maintenance expenses) plus State Subsidy plus Assets Held in Trust must be at least 1.25x Maximum Annual Debt Service	Maintain Debt Service Coverage Ratio of not less than 1.25x

*Conduit Issuers*

The debt that is issued by the quasi-public agencies as conduit issuers is secured by the revenues of the underlying borrower. In these issues the key to affordability is the credit of the underlying borrower. There are two categories of underlying borrowers: (i) single entity and (ii) multiple entities under a pooled bond program.

With the single-entity underlying borrower, the PFMB will need to consider the appropriateness of establishing debt affordability targets for each underlying entity. Under the Rhode Island Health and Education Building Corporation, based on its FY2015 annual report, there are 50 different single-entities as underlying borrowers; the Rhode Island Commerce Corporation has seven single-entity underlying borrowers; and the Rhode Island Industrial Facilities Corporation has six single-entity underlying borrowers. The underlying entity can be categorized into different groups:

- (i) State agency (e.g. Rhode Island Department of Transportation, Rhode Island Airport Corporation);
- (ii) Political subdivision of the State (e.g. City of Pawtucket, City of Providence);
- (iii) Non-profit entity (e.g. Lifespan Obligated Group, Brown University, Providence College); or
- (iv) Private for-profit entity (e.g. CAPCO Steel, Bullard Abrasives).

Non-Profit and Private Entities. For the non-profit and private entities that secure the debt with its own revenue sources and those revenues are not in any way connected to the State, an agency of the State or a municipality, the PFMB should exclude these underlying borrowers and their debt from the debt affordability study unless the debt has a moral obligation of the State. The State is not a party to the legal agreements or the operations of these entities and, therefore, PFMB guidelines or debt affordability measures would not have enforceability.

State Agencies. For those bond issues with another state agency as the underlying borrower and a specified revenue stream used to secure the debt, the debt affordability considerations are similar to those described above for the quasi-public agencies that are direct borrowers. This group includes the Rhode Island Department of Transportation’s GARVEE bonds and the Rhode Island Airport Corporation’s Airport Revenue Bonds and Special Facility Revenue Bonds. The PFMB can consider recommending a stronger ABT. However, the PFMB should first review with the respective agencies how a stronger ABT can impact debt capacity and ensure it does not limit the flexibility to finance necessary capital improvements.

*Rhode Island Department of Transportation*

For GARVEE bonds, the standard ABT is 3.00x, which is what the Rhode Island GARVEE bonds have and the rating agencies view this as a strong additional bonds test. Some GARVEE issuers have a 4.0x ABT and one has a 5.0x ABT. See Exhibit B for ABT of GARVEE bond issuers that are secured solely by Federal highway reimbursements. For Rhode Island, a stronger ABT would severely hamper the ability to issue more GARVEEs. Based on projections, debt service coverage by Federal highway reimbursements is about 4.0x in 2017 and grows to 4.3x in 2020. Rating agencies already view the 3.0x ABT as a credit strength and thus, from a credit perspective, having a policy in place with a stronger ABT, such as 4.0x, will not improve the ratings and does not add to the creditworthiness of the GARVEEs. PRAG recommends using the ABT as specified in the trust indenture as the debt affordability measure for his debt affordability study. Additionally, we believe the PFMB should require notice of any rating agency action, including confirmation of ratings, outlook changes, or any upgrade/downgrade of the rating.

Underlying Borrower	Indenture Required Additional Bonds Test	Rate Covenant
<b>Rhode Island Department of Transportation Grant Anticipation Revenue Bonds (GARVEEs) (A3/AA--)</b>	Federal Transportation Funds must be 3.00 maximum bond payments in any federal fiscal year	Not applicable

*Rhode Island Airport Corporation*

The Rhode Island Airport Corporation’s Airport Revenue Bonds were downgraded in June 2016 by Moody’s from A3 to Baa1.<sup>1</sup> These bonds are also rated by Fitch and Standard & Poor’s at BBB+. As cited by Moody’s debt service coverage for RIAC has ranged from 1.14x in 2011 to 1.23x in 2015. Moody’s reports the debt service coverage median in 2015 for all airports as 1.60x and 1.52x for airports rated Baa1. One factor Moody’s cited that could cause the rating to go up is “maintenance of net revenue DSCRs [debt service coverage ratios] above 1.5 times.”

[Add and show RIAC other financial statistics versus peers and rating agency criteria]

Underlying Borrower	Indenture Required Additional Bonds Test	Rate Covenant
<b>Rhode Island Airport Corporation</b>	<u>Airport Revenues Bonds</u> : RIAC’s net revenues (include rentals, fees, and other charges) and certain Passenger Facility Charge revenues must be 1.25x debt service (Baa1/BBB+/BBB+) <u>Special Facility Revenue Bonds</u> : Revenues generated by the operation of the Intermodal Facility, including Customer Facility Charges, Rental Car Companies fees and Parking Revenues must be 1.25x debt service Debt Affordability Study (Baa1/BBB+/--)	1.25x rate covenant (including pledged passenger facility charges)

Political Subdivision. For those bond issues with municipalities as the underlying borrower, the general obligation of the municipality secures the debt and debt affordability measures for these municipalities will be developed in Phase Three of this debt affordability, as discussed below under Pooled Bonds.

Pooled Bond Programs. The Rhode Island Health and Education Building Corporation (RIHEBC), the Rhode Island Infrastructure Bank (RIIB), the Rhode Island Housing and Mortgage Finance Corporation (RI Housing) and the Rhode Island Student Loan Authority (RISLA) are conduit issuers that issue pooled bonds for various purposes. Given the uniqueness of each of these quasi-public agencies, there are some different considerations for determining appropriate debt affordability measures. To assist in determining appropriate debt affordability measures, rating agency criteria have been compiled along with current procedures and policies of the quasi-public agencies and debt management practices of selected New England states:

- Exhibit C: Rating agency criteria for pooled loan programs and state revolving funds, which can be applied to the RIHEBC pooled programs and the RIIB pooled programs.
- Exhibit D: Procedures and policies for RIIB, RI Housing and RISLA. [To Come]
- Exhibit E: Debt management practices of selected New England states with respect to quasi-public agencies.

*Rhode Island Health and Education Building Corporation*

RIHEBC has a three phase process in the selection of the underlying borrowers for its bond programs. First, an application is submitted by the underlying borrower. Second, RIHEBC’s financial advisor reviews the application to determine debt affordability by the underlying borrower, similar to a rating agency review of the credit, and after the review, a recommendation is made to proceed. Third, RIHEBC provides final approval. RIHEBC does not have any formal guidelines but does review the underlying borrower’s ability to repay the debt, examining information provided by the underlying borrower, which, depending on the underlying borrower, may include a five-year history of tax revenues, assessed value, debt ratios, cash flows and collateral.

<sup>1</sup> Moody’s cited “RIAC’s passenger levels, scale, cost-competitiveness and financial strength have diverged from levels consistent with Moody’s A-rated airports, and RIAC’s market position has diminished to a degree that will make it challenging to recover the ground that has been lost.”



There are three active pooled bond programs under RIHEBC: (i) Public Schools Revenue Bond Financing Program; (ii) Higher Education Facility Revenue Bonds; and (iii) Board of Governors for Higher Education Revenue Bonds. With the Public Schools Revenue Bond Financing Program, the underlying borrowers are municipalities in the State, and these participating municipalities are ultimately responsible for the payment of the debt service, pledging the general obligation of the municipality. Prior to submitting an application to RIHEBC, these municipalities have received city or town council authorization and/or voter approval for the issuance of the debt. These municipalities include their portion of the debt as part of their tax-supported debt reported in the comprehensive annual financial reports (CAFRs). Therefore, this debt would be captured in Phase Three of the debt affordability study at the municipality level.

For municipalities the debt to full value ratio is more relevant than at the state level since a significant portion of revenues comes from the property tax. Target levels for these ratios will vary depending on the characteristics of each municipality and the desired rating level of each municipality. Phase Three of the debt affordability study will address target debt ratios.

For the Higher Education Facility Revenue Bonds and Board of Governors for Higher Education Revenue Bonds debt service is paid from revenues of the Rhode Island Board of Education and from Educational and General Revenues derived from higher education institutions, which may include state appropriations. The PFMB can potentially look at defining debt service coverage ratios with the Educational and General Revenues. [Add and show financial statistics versus peers in other states.]

*Rhode Island Infrastructure Bank [To be updated with information from RIIB]*

The Rhode Island Infrastructure Bank Water Pollution Control Revenue Bonds and Safe Drinking Water bond programs have some level of State support with the Local Interest Subsidy Trust Fund (LIST Fund) that is capitalized with Federal capitalization grants and a required State match and can be viewed similarly to a debt service reserve fund. Therefore, providing guidance on debt affordability may be appropriate and can take the form of a stronger additional bonds test than the legally required 1.00x/1.15x, as described below. Fitch reports that the Rhode Island Infrastructure Bank requires all prospective borrowers to maintain a minimum of 1.25x debt service coverage on loans. In addition, Fitch and Standard & Poor's calculate what Fitch calls the program's asset strength ratio (PASR), which is a form of debt service coverage. The PASR includes the sum of the total scheduled pledged loan repayments, account interest earnings and reserves divided by total scheduled bond debt service. Fitch's 2015 'AAA' rating category median is 1.9x, and calculates 1.5x for RIIB's Water Pollution Control bonds and 1.6x for the Safe Drinking Water and Clean Water bonds, both of which Fitch considers sound.

*Rhode Island Housing*

There are several pooled loan programs under the Rhode Island Housing and Mortgage Finance Corporation for single-family and multi-family housing. Two of the programs, Multi-family Housing Bonds and the Rental Housing Bonds have the moral obligation of the State, in which the State agrees to make up any shortfalls in the Capital Reserve Fund. The State has never had to make up any shortfalls in the Capital Reserve Fund and therefore, this debt is not treated as tax-supported debt of the State. Rating agencies only include moral obligation debt as tax-supported debt if the moral obligation has been called upon. RI Housing indicated that they do not plan to issue any additional bonds under these two programs and have been refinancing the outstanding bonds with bonds issued under their other bonding programs. They anticipate all of the outstanding moral obligation debt to be retired in four to five years. If this plan changes, it may be prudent to restrict the issuance of additional debt under these two programs, applying any new issuance to the state's tax-supported debt affordability limits reflected in Phase One.

For bonds tied to single-family housing programs, there is an application process and RI Housing reviews the potential homeowners to ensure they meet IRS regulations to qualify to participate in the affordable housing program and also performs credit reviews to ensure the asset to liability ratios required by the trust indentures are met. [Exhibit D summarizes the procedures RI Housing has in place to evaluate the borrowers and for monitoring the loans.] The proceeds of the Homeownership Opportunity Bonds are applied to origination of the new mortgage loans, and generally more than 50% of the portfolio is insured by private mortgage insurers. For the multi-family housing programs, RI Housing conducts a full credit analysis of the underlying borrower and ensures the asset to liability ratios required by the resolutions are met. The proceeds of the Multi-Family Development Bonds are used to finance construction and permanent loans to rental housing developments with 100% of the permanent loans enhanced with FHA insurance. The Home Funding Bonds and the Multi-Family Funding Bonds have been issued in connection with the New Issue Bond Program established jointly by Fannie Mae and Freddie Mac, the Federal Housing Finance Agency and the US Department of the Treasury. The loan portfolio is comprised of GNMA securities and whole loans that are all government insured, primarily with FHA Insurance. The Multi-Family Mortgage Revenue Bonds carry Freddie Mac credit enhancement. RI Housing also conducts its own cash flow and mortgage default stress tests, similar to those performed by the rating agencies. Further, RI Housing monitors the underlying borrowers to ensure the loans will be serviced. For multi-family housing projects, monthly and annual financial information is required and RI Housing will also conduct inspections of the projects.

A majority of the single-family loans in these programs are insured by private mortgage insurers or government insurers, and the multi-family housing loans are all 100% insured. The insurance provides a significant credit enhancement, and with the multi-family housing all insured, RI Housing has minimum risk. Further, all these programs have a high level of overcollateralization. RI Housing and the rating agencies perform cash flow analyses to ensure that cash flows generated by these programs are more than sufficient to cover debt service, and not only do RI Housing and the rating agencies perform stress tests to measure the likelihood of default, both also monitor the programs.

A key ratio that is assessed by rating agencies is the program asset-to-debt ratio (PADR) with 1.00 required for investment grade ratings. If the PFMB is considering applying any debt affordability measures to the RI Housing, then PFMB may wish to provide for guidelines on minimum a PADR level and cash flow sufficiency reporting. Moody's rates most of the State's housing bonds at the Aa2 level and based on its criteria, requires a 1.04 to 1.02 level to be maintained for both single and multi-family housing. Fitch also requires for most double-A rated single family and multi-family mortgage bond programs, a minimum of 1.02 asset parity is to be maintained. Standard & Poor's also uses an adjusted unrestricted assets to total debt ratio to analyze financial performance and specifies for an investment-grade rating a minimum leverage ratio of 104%, with available liquid assets equal to 102% of total loans outstanding. Moody's reports a PADR of 1.19x as of June 30, 2015 for RI Housing's single-family Homeownership Opportunity Bonds, and a PADR of 1.12x as of June 30, 2015 for the Multi-Family Development Bonds. Additionally, we believe the PFMB should require notice of any rating agency action, including confirmation of ratings, outlook changes, or any upgrade/downgrade of the rating.

[Peer analysis to come.]

#### *Rhode Island Student Loan Authority*

There are two distinct pooled loan programs administered by the Rhode Island Student Loan Authority ("RISLA"): (i) a FFELP Loan Program, and (ii) a state-based Supplemental Loan Program. RISLA's ratings are AA(sf)/AAsf by Standard & Poor's and Fitch. These financings are undertaken to finance origination of student loans, and provide liquidity for lenders. The loans are used as collateral for repayment of the debt and the rating agencies and markets require over-collateralization of the debt instruments with the loans. The loan repayments by students, parents, the guarantor, the insurer or the re-insurer pay debt service on the bonds or notes. Since July of 2010, FFELP Loans no longer were being



originated, and therefore, since no new bonds, except refunding bonds can be issued, the PFMB guidance debt affordability for RISLA debt will focus on the Supplemental Loan Program.

RISLA maintains certain credit standards for each loan that it originates and should continue to do so. RISLA performs a credit evaluation of all RISLA fixed rate loan applications utilizing twelve underwriting criteria that has been developed over the 20-year history of the program, as described in Exhibit D. There are also monitoring procedures in place and RISLA must provide quarterly updates to the rating agencies, including information on bond paydown, asset performance and portfolio characteristics. In addition, each financing program must withstand rating agency stress tests involving non-origination, late payments, defaults and recoveries in order to obtain and maintain ratings. The rating agency review is the best method to determine the creditworthiness of the programs. It is difficult to apply simple parity tests to determine the viability of the programs. There have been occasions in other states, whereby the mismatch between the cash flow on the debt instrument and the cash flow on the loans, caused student loan agencies to ask for intervention by the general government. Much has been written about an impending student loan debt crisis and the PFMB may wish to provide guidelines on minimum parity ratios and cash flow sufficiency reporting. The parity ratio is the percentage of total assets, including loans and funds in the loan acquisition account and the reserve account, to the total outstanding bonds. For private loans, rating agencies require a minimum parity ratio of 120% for a double-A rating and 110% for a single-A rating. With the issuance of the 2016 bonds in April, the parity ratio was calculated as 119.46% at closing. Additionally, we believe the PFMB should require notice of any rating agency action, including confirmation of ratings, outlook changes, or any upgrade/downgrade of the rating.

[Peer analysis to come.]

Issuer/Debt Program	Ratings (M/S/F)	Security	Indenture Required Additional Bonds Test	Outstanding as of 6/30/2015
<b>Narragansett Bay Commission</b>				
Wastewater System Revenue Bonds <i>(Also issues debt through the Rhode Island Infrastructure Bank)</i>	--/AA/--	Revenues derived from operation of the wastewater system	Requires estimated net revenues for the three years following the issuance of bonds to be at least 1.25x the debt service requirement for revenue bonds and 1.35x the debt service requirement for RIIB loans Rate Covenant: 1.25x the debt service	\$239,050,000 (2016)
<b>Rhode Island Turnpike and Bridge Authority</b>				
Toll Revenue Bonds	--/A-/A	Net revenues derived from the operation of the System (currently tolls from Newport Bridge)	After retirement of 2003A Bonds, Net Revenues plus Dedicated Payments (gifts, grants or other payments to the Authority from US government, State or any public or private entity) in most recent fiscal year or projected for each of the next 5 fiscal years must be at least 1.20x Maximum Annual Debt Service	\$56,160,000 (2016)
<b>Tobacco Settlement Financing Corporation</b>				
Tobacco Settlement Asset-Backed Bonds	S: A, BBB+, BBB F: BBB+sf	Pledged Tobacco Settlement Revenues	Additional bonds may be issued only for the purpose of refunding outstanding bonds	\$604,785,000 (2016)
<b>Rhode Island Resource Recovery Corporation</b>				
Resource Recovery System Revenue Bonds	Not Rated (Private Placement)	Net revenues of the Corporation	For any 12 month period out of the last 18 months, Net Revenues plus State Subsidy plus Assets Held in Trust must be at least 1.25x Maximum Annual Debt Service	\$29,142,861 (2016)
<b>Rhode Island Commerce Corporation</b>				
Rhode Island Department of Transportation Grant Anticipation Revenue Bonds (GARVEEs)	A3/AA/--	Federal reimbursements for eligible projects	Additional bonds test – Federal Transportation Funds must be 3.00 maximum bond payments in any federal fiscal year	\$230,280,000 (2016)
Rhode Island Airport Corporation Airport Revenue Special Facility Revenue Bonds Subordinate TIFIA Loan	Baa1/BBB+/BBB+ Baa1/BBB+/-	Airport Revenues: Pledge of RIAC’s net revenues (include rentals, fees, and other charges) and certain Passenger Facility Charge revenues Special Facility: Revenues generated by the operation of the Intermodal Facility, including Customer Facility Charges, Rental Car Companies fees, Parking Revenues	Rate covenant: 1.25x rate covenant (including pledged passenger facility charges). Additional bonds test - 1.25x	Airport Revenue: \$265,973,591 (2016) Special Facility + TIFIA: \$90,123,400 (2016)
YMCA of Pawtucket	S: AA-/A-1+	Secured by Borrower’s pledge and grant, assignment effected by the Agreement, all other monies and securities held from time to time by the Trustee and letter of credit.	Additional bonds may be issued that are equally and ratably secured with the Bonds and secured with a letter of credit.	\$10,751,474
RI Philharmonic Orchestra	S: AA-/A-1+	Secured by assignment effected by the Agreement, all other monies and securities held from time to time by the Trustee, pledge of Borrower’s Gross Receipts and letter of credit.	Additional bonds may be issued that are equally and ratably secured with the Bonds and secured with a letter of credit.	\$5,445,000

Exhibit A - State of Rhode Island Quasi-Public Agencies

Draft 12/2/16

Issuer/Debt Program	Ratings (M/S/F)	Security	Indenture Required Additional Bonds Test	Outstanding as of 6/30/2015
<b>Rhode Island Health and Education Building Corporation -Education</b>				
Public Schools Revenue Bond Financing Program	Various. Range of A1 to Aa3	Loan repayments reflecting general obligation pledge of the participating borrowers. Failure to pay would result in intercept of the State Housing Aid and Basic Education Aid of a borrower	Additional bonds may be issued and separately secured by applicable revenues. Intercept of State Housing Aid and Basic Education Aid is available	\$479,517,000
Higher Education Facility Revenue Bonds	Various: A+ Range of A1 to Aa3	Rent payments, Educational and General Revenues of specific university/state colleges	Additional bonds test: 1.0x MADs	\$43,410,000
Board of Governors for Higher Education	Aa3/--/--	Rent payments, Educational and General Revenues, including tuition and state appropriations, except Auxiliary Enterprise Revenues	Additional bonds test: 1.0x MADs	\$195,220,000
Brown University	Aa1/AA+/--	General obligation of Brown University	No additional bonds test	\$619,235,000
Bryant University	A2/A/--	General obligation of Bryant University	If rated below investment grade, additional bonds must be secured by a letter or credit.	\$73,475,000
Catholic School Pool Program	S: A-/A-2	Each Borrower has a general obligation for their share	No additional bonds test	\$24,110,000
CVS-Highlander Charter School	S: AA-/A-1+	General obligation pledge of Borrower's Gross Receipts and letter of credit.	Additional bonds must have a letter of credit and ratings confirmation.	\$3,620,000
Johnson & Wales University	A2/A/---	Secured by pledge of tuition fees similar to other Johnson & Wales debt	Additional bonds permitted	\$11,395,000
Meeting Street School	M: A2/VMIG-1	Secured by pledge of School's Gross Receipts and letter of credit.	Additional bonds must have a letter of credit and ratings confirmation.	\$8,020,000
Moses Brown School	S: A+/A-1	Secured by the loan, all moneys and securities held by the Trustee, mortgage and letter of credit.	Unless Institution maintains an Investment Grade Rating, any additional bonds shall be secured by a letter of credit.	\$6,615,000
New England Institute of Technology	--/A-/A+	General obligation of New England Institute of Technology and a mortgage.	Additional bonds permitted with DSRF	\$48,835,000
Providence College	A2/A/--	General obligation secured by a pledge of certain Tuition Fees up to 1.1x MADs	Additional bonds test: 1.1x MADs	\$122,065,000
Providence Public Buildings Authority	Baa2 Insured: A1/A1	Secured by payments under the financing agreements and an intercept of the State Housing Aid and Basic Education Aid and a mortgage.	No additional bond test	\$246,885,000
Rhode Island School of Design	A1/--/A+	Pledge of Unrestricted College Revenues.	Additional bonds must have a letter of credit and ratings confirmation.	\$75,170,000
Roger Williams University	S: AA+/A-1+	Pledge of Tuition Fees and Rentals up to 1.1x MADs	Additional bonds must have a letter of credit and ratings confirmation.	\$116,081,305
Salve Regina University	--/BB/--	Secured by Tuition Fees and Mortgage	Additional bonds may be issued pursuant to a supplemental loan and trust agreement	\$53,086,469
St. George's School	M: Aa3/VMIG-1	Secured by assignment effected by the Agreement and all other monies and securities held from time to time by the Trustee.	Additional bonds may be issued that are equally and ratably secured with the Bonds.	\$44,685,017

Issuer/Debt Program	Ratings (M/S/F)	Security	Indenture Required Additional Bonds Test	Outstanding as of 6/30/2015
The Groden Center	--/AA/--	Secured by revenues of the Institution.	Additional bonds may be issued that are equally and ratably secured with the Bonds with rating confirmation.	\$3,210,000
<b>Rhode Island Health and Education Building Corporation – Health Care</b>				
Care New England Health System	--/BB/BBB-	General obligation of the Borrower. Secured by Gross Receipts of the Obligated Group.	Additional bonds test at 1.10x of historical debt service	\$156,297,249
Child and Family Services of Newport County	S: AA-/A-1+	Secured by Borrower’s pledge and grant, assignment effected by the Agreement, all other monies and securities held from time to time by the Trustee and letter of credit.	Additional bonds may be issued that are equally and ratably secured with the Bonds and secured with a letter of credit.	\$9,532,042
Home & Hospice Care of RI	S: AA-/A-1+	General obligation secured by pledge of Borrower’s Gross Receipts and letter of credit.	Additional bonds permitted with a letter of credit and ratings confirmation.	\$9,064,500
Lifespan Obligated Group	--/BBB+/BBB+	Gross receipts from the hospitals, including contributions, donations, pledges and revenues derived from the operation of all the facilities of the members of the obligated group. Also secured by mortgages on portions of certain hospital campuses.	Additional indebtedness with 1.25x coverage with additional tests.	\$341,484,683
Newport Hospital	S: AA+/A-1+	Secured by Borrower’s Gross Receipts, letter of credit and Guaranty.	Additional bonds permitted with a letter of credit and ratings confirmation.	\$20,390,000
NRI Community Services, Inc.	S:AA-/A-1+	Secured by assignment effected by the Agreement, all other monies and securities held from time to time by the Trustee and letter of credit.	Additional bonds may be issued that are equally and ratably secured with the Bonds and secured with a letter of credit.	\$2,790,000
Seven Hills Rhode Island Inc.	Baa3/BBB/--	Unlimited obligation of the Hospital and pledge of Gross Receipts and a mortgage.	Additional bonds test with 1.30x coverage historical and 1.40x coverage projected.	\$4,959,666
South County Hospital	Baa3/BBB/--	Unlimited obligation of the Hospital and pledge of Gross Receipts and a mortgage.	Additional bonds test with 1.30x coverage historical and 1.40x coverage projected.	\$45,465,000
St. Antoine Residence	M: Aa2/VMIG-1	Secured by Revenues of Borrower and letter of credit	Additional bonds may be issued so long as loan agreement is in effect, no event of default shall exist and written consent of the letter of credit bank.	\$11,485,000
Steere House	--/--/BBB-	Secured by pledge of Gross Receipts of Institution, monies in the Debt Service Fund, monies in the Debt Service Reserve Fund and Mortgage.	Additional bonds may be issued that are equally and ratably secured with the Bonds and pursuant to a supplemental loan and trust agreement.	\$4,958,000
Tockwotton Home	--/--/--	Secured by mortgages on current facility of Borrower and on project facility of the Borrower and security interest in the unrestricted Borrower revenues.	Additional bonds require majority holder consent above \$1 million.	\$40,600,000

Issuer/Debt Program	Ratings (M/S/F)	Security	Indenture Required Additional Bonds Test	Outstanding as of 6/30/2015
<b>Rhode Island Infrastructure Bank</b>				
Water Pollution Control Revenue Bonds	--/AAA/AAA	Pledged loan payments from underlying borrowers and Local Interest Subsidy Trust (LIST) fund reserves	Additional senior bonds can be issued if projected loan revenues and LIST earnings are at least 1x maximum annual debt service (MADS) on existing and proposed senior bonds. When incorporating planned LIST de-allocations and direct loan principal, these revenues need to represent at least 1.15x MADS on senior bonds. To issue subordinate bonds, all available revenues must represent at least 1x pro forma MADS.	\$486,640,000 (2016)
Safe Drinking Water	--/AAA/AAA	Pledged loan payments from underlying borrowers and Local Interest Subsidy Trust (LIST) fund reserves	Additional senior bonds can be issued if projected loan revenues and LIST earnings are at least 1x MADS on existing and proposed senior bonds. When incorporating planned LIST de-allocations and direct loan principal, these revenues need to represent at least 1.15x MADS on senior bonds. To issue subordinate bonds, all available revenues must represent at least 1x pro forma MADS.	\$163,835,000 (2016)
Water Utility Revenue Bonds City of Pawtucket	A3/A/--	Pawtucket Water Supply Board's (PWSB) net revenue pledge secures the bonds	Revenue Sufficiency Certificate, stating that revenues are sufficient to pay debt service.	\$24,265,000 (2016)
<b>Rhode Island Housing and Mortgage Finance Corporation</b>				
Homeownership Opportunity Bonds	Aa2/AA+/-	Secured by bond proceeds, mortgage revenues and non-mortgage receipts, accounts under the resolution and all program obligations financed by the resolution	Certificate stating revenues are sufficient to provide for the payment of bonds	\$611,704,448 (2016)
Home Funding Bonds and Notes	Aa2/--/--	Secured by all proceeds of bonds deposited to the Loan Account and revenues derived from program obligations	Certificate stating revenues are sufficient to provide for the payment of bonds	\$130,262,468 (2016)
Multi-Family Housing Bonds	Aa2/--/--	Includes moral obligation to fill-up capital reserve fund	Certificate stating revenues are sufficient to provide for the payment of bonds	\$630,000 (2016)
Rental Housing Bonds	S: A/A-1+	Mortgage loans financed from bond proceeds and Revenues, including Pledged Receipts or payments required by any Mortgage Loan. Includes moral obligation to fill-up capital reserve fund	Certificate stating revenues are sufficient to provide for the payment of bonds	\$65,039,132 (2016)
Multi-Family Funding Bonds	Aaa/--/--	Mortgage loans and revenues	Certificate stating revenues are sufficient to provide for the payment of bonds	\$88,760,000 (2016)
Multi-Family Development Bonds	Aa2/--/--	Mortgage loans and revenues	Certificate stating revenues are sufficient to provide for the payment of bonds	\$214,758,428 (2016)
Multi-Family Mortgage Rev Bonds	S: AAA/A-1+	Freddie Mac credit enhancement. Mortgage loans and revenues	Certificate stating revenues are sufficient to provide for the payment of bonds	\$100,691,010 (2016)

Exhibit A - State of Rhode Island Quasi-Public Agencies

Draft 12/2/16

Issuer/Debt Program	Ratings (M/S/F)	Security	Indenture Required Additional Bonds Test	Outstanding as of 6/30/2015
<b>Rhode Island Student Loan Authority</b>				
Student Loan Program Revenue Bonds	--/AA(sf)/AAsf	Secured by non-federal loans, various accounts established under the indenture, payments of principal and interest on Non-Federal Loans financed pursuant to the Indenture and investment earnings.	Requires rating affirmations from rating agencies rating the bonds.	\$239,755,000 (as of February 29, 2016)
FFELP Loan Program Revenue Bonds	--/AA+(sf)/AAAsf	Secured by FFELP Loans, all amounts held under the indenture, and the rights to the servicing agreements and guarantee agreements related to the loans.	The FFELP Loan program is not available. Any additional bonds would likely be only for refinancing outstanding bonds.	\$286,233,000 as of February 29, 2016
<b>Rhode Island Commerce Corporation</b>				
Redwood Library and Athenaeum (1)	Private placement. Non-recourse debt.			\$1,595,063
Providence Art Club (1)	Private placement. Non-recourse debt.			\$2,508,698
Ocean Community YMCA (1)	Private placement. Non-recourse debt.			\$3,721,423
Greater Providence YMCA (1)	Private placement. Non-recourse debt.			\$7,702,963
Quonset Development Corporation (1)	Private placement. Non-recourse debt.			\$5,262,476
<b>Rhode Island Health and Education Building Corporation</b>				
Immaculate Conception School	Private placement. Non-recourse debt.			\$5,443,750
International Institute of RI Inc.	Private placement. Non-recourse debt.			\$1,795,000
La Salle Academy	Private placement. Non-recourse debt.			\$4,047,584
Mercymount Country Day School	Private placement. Non-recourse debt.			\$3,545,334
Portsmouth Abbey School	Private placement. Non-recourse debt.			\$7,301,250
Rocky Hill School	Private placement. Non-recourse debt.			\$2,929,494
St. Andrew's School	Private placement. Non-recourse debt.			\$16,185,000
The Compass School	Private placement. Non-recourse debt.			\$1,580,000
The Learning Community Charter School	Private placement. Non-recourse debt.			\$3,490,000
The Pennfield School	Private placement. Non-recourse debt.			\$4,428,591
The Wheeler School	Private placement. Non-recourse debt.			\$7,619,692
Times Academy, Inc.	Private placement. Non-recourse debt.			9,957,6005
Blackstone Valley Community Health Care, Inc.	Private placement. Non-recourse debt.			\$5,999,941
J. Arthur Trudeau Memorial Center	Private placement. Non-recourse debt.			\$2,310,000
Ocean State Assisted Living Series	Private placement. Non-recourse debt.			\$10,015,000
Rhode Island Blood Center	Private placement. Non-recourse debt.			\$8,360,267
Scandinavian Home Series	Private placement. Non-recourse debt.			\$4,052,656
St. Elizabeth Manor	Private placement. Non-recourse debt.			\$7,986,390
Tamarisk, Inc.	Private placement. Non-recourse debt.			\$9,215,000
The Kent Center, Inc.	Private placement. Non-recourse debt.			\$4,478,285
The Providence Community Health Centers, Inc.	Private placement. Non-recourse debt.			\$10,831,592
Thundermist Health Center	Private placement. Non-recourse debt.			\$3,135,708

Issuer/Debt Program	Ratings (M/S/F)	Security	Indenture Required Additional Bonds Test	Outstanding as of 6/30/2015
<b>Rhode Island Industrial Facilities Corporation – Additional Information Needed</b>				
New England Expedition (Eagle Square Commons) (1)		Private placement. Non-recourse debt.		\$3,305,000
Neurotech Pharmaceuticals, Inc. (1)		Private placement. Non-recourse debt.		\$1,496,931
CAPCO Steel (1)		Private placement. Non-recourse debt.		\$3,920,146
Ashaway Pines (1)		Private placement. Non-recourse debt.		\$2,079,412
Exxon Mobile (1)		Private placement. Non-recourse debt.		\$15,400,000
Hall Real Estate LLC Projects (1)		Private placement. Non-recourse debt.		\$1,570,000
CP Assoc. (Cranston Police HQ) (1)		Private placement. Non-recourse debt.		\$8,216,008
Bullard Abrasives		Private placement. Non-recourse debt.		\$2,848,212
Calise & Sons		Private placement. Non-recourse debt.		\$2,400,000
CAPCO Steel		Private placement. Non-recourse debt.		\$928,035
SCOJEN Limited Partnership (2)		Private placement. Non-recourse debt.		\$70,000
NFA Corp (2)		Private placement. Non-recourse debt.		\$5,000,000
AKL-PJ (2)		Private placement. Non-recourse debt.		\$745,000
Eric Goetz Custom Sailboat (2)		Private placement. Non-recourse debt.		\$4,050,000

(1) Listed in <http://commercieri.com/financial-statements/>. More information needed.

(2) Listed on Bloomberg/EMMA. More information needed.



**Stand-Alone GARVEE Programs  
(No Back-Up Security of State Revenues)**

State	Moody's	Standard & Poor's	Fitch	Additional Bonds Test
Rhode Island	A2	AA-	NR	3.0x
California	A2	AA	A+	4.0x
Delaware	A1	AA	NR	3.0x
District of Columbia	A2	AA	NR	3.0x
Georgia	A2	AA-	A+	3.0x
Idaho	A2	NR	A+	3.33x
Kentucky	A2	AA	A+	4.0x
Maine	A2	NR	A+	3.0x
Michigan	A2	AA	NR	3.0x
Mississippi	Aa3	AA-	NR	\$375mm
Montana	A2	AA	NR	3.0x
New Hampshire	A2	AA	NR	3.0x
New Jersey	A3	A-	NR	Closed
North Carolina	A2	AA	A+	3.0x
Ohio	Aa2	AA	NR	5.0x
Oklahoma	A2	NR	A+	3.0x
Washington	A2	AA	NR	3.5x
West Virginia	A2	AA	NR	3.0x

	Fitch Ratings	Moody’s Investors Service	Standard & Poor’s
Portfolio Analysis	<p>Assess Weighted Average Default Rate (WADR) and calculates a Portfolio Stress Calculator (PSC) based on long-term default rates of corporate entities.</p> <p>Assess credit quality of underlying borrowers:</p> <ul style="list-style-type: none"> <li>• AAA Median investment grade borrowers: 70%</li> </ul> <p>Calculate Pool Concentration:</p> <ul style="list-style-type: none"> <li>• AAA Median single-borrower concentration: 18%</li> <li>• AAA Median for top 10 borrowers: 55%</li> </ul> <p>Liability Rating Stress Hurdle Portfolio Stress Calculator</p>	<p>Pool financings: Debt obligations secured by loan repayments from a small group of obligors</p> <p>Evaluate underlying credit quality of pool participants and nature of obligation.</p> <p>Employ Weighted Average Probability of Default or Weak Link Plus approach.</p> <p>Determine weighted average credit quality of pool participants.</p> <hr/> <p>State Revolving Funds: Evaluate Portfolio Credit Quality and Default Tolerance Score:</p> <ul style="list-style-type: none"> <li>• Portfolio size and diversity (size, percentage of borrowers with less than 1% of the portfolio, percentage of loans to the top five borrowers)</li> </ul>	<p>Calculate <b>Enterprise Risk Score</b></p> <ul style="list-style-type: none"> <li>• Industry risk for government and not-for-profit municipal pool programs equates to low risk</li> <li>• Market position reflects level of government support received, existence of legislative authorization and presence of any significant challenges that could affect demand.</li> <li>• Geographic concentration – programs that target only one metropolitan area receive a one-notch negative adjustment</li> </ul> <p>Calculate Financial Risk Score</p> <ul style="list-style-type: none"> <li>• Determine relative default rates given credit quality of underlying loan portfolio</li> <li>• Review operating performance</li> <li>• Review financial policies and practices</li> </ul>
Program Management	<p>Evaluate management’s processes and procedures, including underwriting criteria, loan monitoring procedures, technology, program goals and requirements, historical loan delinquencies and defaults</p>	<p>Review program and portfolio management: loan underwriting standards, portfolio monitoring</p>	<p>Review Loan Origination Policies, Loan Monitoring Policies, Default and Delinquencies Policies, Long-term Planning, Investment Policies</p>
Legal Review	<p>State aid intercept mechanisms</p> <p>Required program-level reserves</p> <p>Moral obligation to fund debt service reserve funds may benefit from one to three notch rating improvement</p> <p>Surplus Reserve Fund release requirements (cash flow coverage test must be met before surplus is released or de-allocated)</p> <p>Review Additional Bonds Test</p> <p>Review other credit enhancements (debt service fund, additional local reserve requirements, higher interest rate on a delinquent loan)</p> <p>Review any provisions for cross-collateralization.</p>	<p>Requirement for debt service reserve fund.</p> <p>Provision for obligating pool participants to make up any funding shortfall or refill a DSRF.</p> <p>Restrictions on removing surplus funds from the program.</p> <hr/> <p>SRF: Review rate covenants, pledged reserves at borrower level; presence of state aid intercept or moral obligation; presence of step-provisions.</p> <p>Review assets pledged, cross-collateralization.</p> <p>Surplus Reserve Fund release requirements (cash flow coverage test must be met before surplus is released or de-allocated)</p> <p>Review additional bonds test, reserve requirements.</p>	<p>Examine state sponsored programs for power to influence local borrower behavior:</p> <ul style="list-style-type: none"> <li>• Regulatory or oversight authority</li> <li>• State intercept provisions</li> <li>• Reserve balances</li> </ul>
Cash Flow Sufficiency	<p>Review cash sources (loan repayments, subsidies, reserves and surplus fund balances)</p> <p>Coverage requirements of at least 1.25x viewed as strong; 1.1x or less viewed as weaker</p> <p>Program Asset Strength Ratio: Aggregate Pledged Assets (loan repayments plus reserve funds, account earnings) divided by aggregate outstanding debt service. 2016 Median of 1.9x</p>	<p>Review cash flow structure and over-collateralization of loans to bonds.</p>	<p>Loss Coverage:</p> <p>Leverage Test for AAA rated programs : Review leverage level - Total loan revenue receivable plus pledged reserves divided by total bond debt service payable</p> <p>Operating Performance: Number of non-performing loans as a percent of total loans and percent of payments more than five days late in the past 12 months</p>

**Exhibit C – Comparison of Rating Agency Methodologies for Pooled Programs and State Revolving Funds**

*Draft 12/2/16*

	<b>Fitch Ratings</b>	<b>Moody’s Investors Service</b>	<b>Standard &amp; Poor’s</b>
Stress Tests	Use internal Cash Flow Model to test stress scenarios and find the 4 year default tolerance rate.	Assess cash flow under different interest rates and loan performance scenarios	Largest obligor test – assess possibility of default if largest obligor defaults
Clean Water and Drinking Water SRF	Many have significant enhancement from federal capitalization grants and required state matching grants (typically state appropriations, state revenues, or state bond proceeds), which are usually invested in reserve funds and used to provide overcollateralization.		
	<i>State Revolving Fund and Leveraged Municipal Loan Pool Criteria, October 20, 2016</i>	<i>Public Sector Financings, July 18, 2012</i> <i>U.S. State Revolving Fund Debt, March 20, 2013</i>	<i>U.S. Public Finance Long-Term Municipal Pools: Methodology and Assumptions, March 19, 2012</i>

- [To Come]

**Connecticut**

- Connecticut does not have debt policies for quasi-public agencies.
- There is no formal oversight of quasi-public agencies.
- State Treasurer sits on the board of quasi-public agencies.
- Certain agencies are able to use the Special Capital Reserve Fund (SCRF)
  - A SCRF is a debt service reserve fund set up at the time the bonds are issued, in an amount equal to the lesser of either one year's principal and interest on the bonds or ten percent of the issue.
  - If the borrower makes the scheduled debt service payments, the interest earnings on the reserve fund will pay the interest on the bonds that created it and the principal will go to retire the final maturity of the bond issue.
  - If the borrower is unable to pay all or part of the scheduled debt service payments, the reserve may be drawn upon to pay debt service.
  - The reserve provides up to a year's adjustment time to deal with a revenue shortfall.
  - When the SCRF has been drawn down in part or completely, a draw on the General Fund is authorized and the reserve is fully restored. The draw on the General Fund is deemed to be appropriated and is not subject to the constitutional or statutory appropriations cap. All that is required is a certification by the issuing authority of the amount required. If draws on a SCRF continue, the annual draws on the General Fund required to refill it also continue.
  - State Treasurer conducts a full review and analysis for cash flow sufficiency to ensure that the State will not be making any debt service payments. There are no defined debt affordability measures.
  - Currently, only the South Central Regional Water Authority has debt with SCRF.

**Massachusetts**

- Massachusetts does not have procedures to control debt by quasi-public agencies.
- Treasurer sits on the board of quasi-public agencies.
- Massachusetts does not allow any moral obligation debt.
- Massachusetts has a debt management policy for the state's six bond programs: General Obligation Bonds, Special Obligation Revenue Bonds (motor fuel excise), Special Obligation Dedicated Tax Revenue Bonds (Convention Center), Senior Federal Highway Grant Anticipation Notes (or GANs), Commonwealth Transportation Fund Bonds (CTF for the Accelerated Bridge Program), and Federal Highway Grant Anticipation Notes (Accelerated Bridge Program)

**New Hampshire**

- New Hampshire does not have procedures to control debt by quasi-public agencies.
- Treasurer sits on the board of several quasi-public agencies.
- New Hampshire has various guarantee programs
  - The statutes authorizing the guarantee programs require approval by the Governor and Council of any award of a State guarantee
  - Statutory limitations may be either on the total amount guaranteed or on the total amount guaranteed that remains outstanding at any time (a revolving limit)
  - The statutory dollar limit may represent either the total amount of principal and interest or only the total amount of principal
  - The State has the following guarantee programs: Local Water Pollution Control Bonds; Local School Bonds; Local Superfund Site Bonds; Local Landfill and Waste Site Bonds; Business Finance Authority Bonds, Loans; Pease Development Authority; and Housing Finance Authority Child Care Loans

**Vermont**

- The Vermont Treasurer is responsible for managing all tax-supported debt, which is all State of Vermont issued debt
- Vermont does not have specific procedures to control debt by quasi-public agencies.
- The Vermont Treasurer sits on boards of debt issuing quasi-public agencies and all quasi-public agencies that have moral obligation authority.
- The Vermont Treasurer chairs the Capital Debt Affordability Advisory Committee which has established a target of total moral obligation debt as a percentage of total State tax supported debt as way to have a high-level management of quasi-public agency moral obligation debt.