

Nos. 18-1165 & 18-1166 (Consolidated)

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**United States Court of Appeals  
for the First Circuit**

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IN RE: THE FINANCIAL OVERSIGHT AND MANAGEMENT BOARD FOR PUERTO RICO, AS  
REPRESENTATIVE FOR THE COMMONWEALTH OF PUERTO RICO; THE FINANCIAL  
OVERSIGHT AND MANAGEMENT BOARD FOR PUERTO RICO, AS REPRESENTATIVE FOR  
THE PUERTO RICO HIGHWAYS & TRANSPORTATION AUTHORITY

*Debtors,*

*(For Continuation of Caption, See Inside Cover)*

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On Appeal from the United States District Court for the District  
of Puerto Rico, San Juan in Nos. 3:17-ap-00155-LTS & 3:17-ap-00156-LTS  
Before the Honorable Laura Taylor Swain

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**MOTION OF THE NATIONAL FEDERATION OF MUNICIPAL  
ANALYSTS FOR LEAVE TO FILE A BRIEF AS AMICUS CURIAE IN  
SUPPORT OF APPELLANTS AND REVERSAL**

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May 16, 2018

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ASSURED GUARANTY CORPORATION; ASSURED GUARANTY MUNICIPAL CORPORATION; FINANCIAL GUARANTY INSURANCE COMPANY; AND NATIONAL PUBLIC FINANCE GUARANTEE CORPORATION,

*Plaintiffs/Appellants,*

v.

THE FINANCIAL OVERSIGHT AND MANAGEMENT BOARD FOR PUERTO RICO, AS REPRESENTATIVE FOR THE COMMONWEALTH OF PUERTO RICO; FINANCIAL OVERSIGHT AND MANAGEMENT BOARD FOR PUERTO RICO; PUERTO RICO FISCAL AGENCY AND FINANCIAL ADVISORY AUTHORITY; THE FINANCIAL OVERSIGHT AND MANAGEMENT BOARD FOR PUERTO RICO, AS REPRESENTATIVE FOR THE PUERTO RICO HIGHWAYS & TRANSPORTATION AUTHORITY; HON. RICARDO ANTONIO ROSSELLÓ NEVARES; GERARDO JOSE PORTELA FRANCO; CARLOS CONTRERAS-APONTE; JOSÉ IVÁN MARRERO-ROSADO; HON. RAÚL MALDONADO GAUTIER; AND NATALIE A. JARESKO,

*Defendants/Appellees,*

JOSÉ B. CARRION, III; ANDREW G. BRIGGS; CARLOS M. GARCIA; ARTHUR J. GONZALEZ; JOSÉ R. GONZALEZ; ANA J. MATASANTOS; DAVID A. SKEEL, JR.; CHRISTIAN SOBRINO

*Defendants.*

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Pursuant to Federal Rule of Appellate Procedure 29(b), the National Federation of Municipal Analysts (“NFMA”) respectfully moves for leave to file the accompanying brief amicus curae in support of Plaintiffs/Appellants and urging a reversal of the district court’s grant of the motion to dismiss in the adversary proceeding captioned *Assured Guaranty Corp. v. Puerto Rico (In re Puerto Rico)*, Adv. Proc. Nos. 17-155 & 17-156, Case No. 17-3283 (D.P.R. June 30, 2018) (“Assured Guaranty”). Assured Guaranty Corporation, Assured Guaranty Municipal Corporation, National Public Finance Guarantee Corporation and Hon. Carlos Contreras-Aponte consent to the filing of the brief amicus curae. The Financial Oversight and Management Board for Puerto Rico does not object to the filing of the brief amicus curae. NFMA has sought concurrence from the Puerto Rico Fiscal Agency and Financial Advisory Authority, Gerardo Jose Portela Franco, in his capacity as Executive Director, Hon. Ricardo Antonio Rossello Nevares, Hon. Raul Maldonado Gautier, and Hon. Jose Ivan Marrero Rosado and has received no response.

NFMA is a not-for-profit association, incorporated under the laws of Illinois, with more than 1,300 members in the United States. Established in 1983, NFMA comprises municipal bond analysts from all facets of the industry, including the buy-side, sell-side, rating agencies, and bond insurers, with the majority coming from the investment management side of the business. The members of NFMA, in

their capacities as municipal market analysts, understand and work daily with the financial models and risk factors used and considered by investors and rating agencies in pricing and rating municipal issues.

NFMA's goals are to promote professionalism in municipal credit analysis, to conduct educational programs for its members and other interested parties, to promote better disclosure by issuers, and to advocate for best practices in the municipal marketplace. NFMA educates its members, and by extension, the municipal bond market about municipal bonds through its Recommended Best Practices in Disclosure and White Papers, which are available on its website, [www.nfma.org](http://www.nfma.org). As municipal market analysts, the members of NFMA have an institutional interest in the uniform treatment of municipal bonds.

NFMA has submitted amicus briefs in cases, such as here, where issues of importance to municipal credit analysis and the municipal markets generally were being considered. NFMA seeks leave to file its amicus brief based on concerns for the impact that the district court's decision might have on the municipal bond market and municipalities that seek funding in that market. *Assured Guaranty* implicates the treatment under Title III of the Puerto Rico Oversight, Management, and Economic Stability Act 48 U.S.C. §§ 2101-2241 and, more generally, the United States Bankruptcy Code, 11 U.S.C. §§ 101 *et seq.*, of what are known in the municipal finance market as revenue bonds, which can be a critical source of

financing for the construction and operation of essential municipal infrastructure projects and enterprises, such as water, sewer, energy, transportation, and other systems.

The district court's decision in *Assured Guaranty* threatens to increase the risks faced by purchasers of revenue bonds, which will result in an increase in revenue bond pricing, and hence the cost to municipalities of funding infrastructure projects. This cost increase will be borne by the municipal issuers themselves and their citizens, at a time when municipalities are confronting both infrastructure and financial challenges, the need for affordable revenue bond financing is acute, and in the absence of such financing critical infrastructure projects may be cancelled or delayed. As a result, NFMA has a strong interest in having the decision reversed.

NFMA members' experience with and knowledge of the municipal finance market can contribute to the Court's understanding of the municipal bond industry. NFMA is well situated to explain why the district court's flawed decision to grant the motion to dismiss in *Assured Guaranty* is so damaging to the municipal bond market and hence to municipalities generally.

*[signature page follows]*

Respectfully submitted,

Dated: May 16, 2018

/s/ Chantelle D. McClamb

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**CERTIFICATE OF COMPLIANCE**

According to the word-processing system used to prepare the foregoing motion (Microsoft Word 2010), the motion complies with Federal Rule of Appellate Procedure 27(d)(2)(A) because it contains 638 words, excluding the portions exempted by Federal Rule of Appellate Procedure 32(f).

*/s/ Chantelle D. McClamb*

\_\_\_\_\_  
Chantelle D. McClamb

**CERTIFICATE OF SERVICE**

On May 16, 2018, a copy of the foregoing motion was electronically filed with the Clerk of the Court for the United States Court of Appeals for the First Circuit by using the Court's appellate CM/ECF system, and that service will be accomplished by the appellate CM/ECF system.

*/s/ Chantelle D. McClamb*

\_\_\_\_\_  
Chantelle D. McClamb



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OF MUNICIPAL ANALYSTS AS AMICUS CURIAE IN SUPPORT OF  
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May 16, 2018

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*Defendants.*

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**CORPORATE DISCLOSURE STATEMENT**

Pursuant to Federal Rule of Appellate Procedure 26.1, the National Federation of Municipal Analysts is a not-for-profit association incorporated under the laws of Illinois in 1983. The National Federation of Municipal Analysts has no parent company and no publicly held corporation has an ownership interest in the National Federation of Municipal Analysts.

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**RULE 29(a)(4)(E) STATEMENT**

No party's counsel authored this brief in whole or in part. No party contributed money that was intended to fund preparing or submitting this brief. Only the National Federation of Municipal Analysts or its counsel contributed money that was intended to fund preparing or submitting this brief.



## **INTRODUCTION AND ARGUMENT SUMMARY**

### ***A. National Federation of Municipal Analysts***

This amicus brief is being submitted by the National Federation of Municipal Analysts (“NFMA”), which is a not-for-profit Illinois corporation with more than 1,300 members in the United States, and is essentially a volunteer-run organization. Incorporated in 1983, NFMA comprises municipal bond analysts from all facets of the industry, including the buy-side, sell-side, rating agencies, and bond insurers, with the majority coming from the investment management side of the business. The members of NFMA, in their capacities as municipal market analysts, understand and work daily with the financial models and risk factors used and considered by investors and rating agencies in pricing and rating municipal issues.

NFMA’s goals are to promote professionalism in municipal credit analysis, to conduct educational programs for its members and other interested parties, to promote better disclosure by issuers, and to advocate for best practices in the municipal marketplace. NFMA seeks to educate its members, and by extension, the municipal bond market at large, about municipal bonds through its Recommended Best Practices in Disclosure and White Papers, which are available on its website, [www.nfma.org](http://www.nfma.org). NFMA has also submitted amicus briefs in cases where issues of importance to municipal credit analysis were being considered.

## **B. Summary Statement of Argument**

NFMA supports the position of Appellants in this appeal, and urges the reversal of the grant of Defendants/Appellees' motion to dismiss (the "Motion to Dismiss") filed in the adversary proceeding captioned *Assured Guaranty Corp. v. Puerto Rico (In re Puerto Rico)*, Adv. Proc. Nos. 17-155 & 17-156, Case No. 17-3283 (D.P.R. June 30, 2018) ( "Assured Guaranty"). In its opinion granting the motion to dismiss (the "Opinion"),<sup>1</sup> the district court addressed the treatment in a proceeding under Title III of the Puerto Rico Oversight, Management, and Economic Stability Act 48 U.S.C. §§ 2101-2241. ("PROMESA") of certain bonds (the "Highway Bonds") issued by the Puerto Rico Highway and Transportation Authority (the "HTA") and secured by certain revenue streams, including tolls and certain excise tax revenues (the "Highway Revenues"), generated by or in connection with road systems operated and maintained by the HTA. ABADD-5. The Highway Bonds are what are known in the municipal finance market as revenue bonds, a critical source of financing for the construction and operation of essential municipal infrastructure projects and enterprises, such as water, sewer, energy, transportation, and other systems.

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<sup>1</sup> The Opinion was filed in the Addendum to the Appellants' Brief (defined herein). "ABADD-\_\_" refers to the Appellants' Addendum. "ADD-\_\_" refers to the NMFA's Addendum.

The key structural feature of infrastructure revenue bond financing is that revenue bonds—unlike general obligation bonds, for which a municipality’s full faith and credit are pledged—are secured by and payable only from the revenues (or sometimes specific taxes) generated by (or dedicated to) the associated project or enterprise (a “Project”), and recourse cannot be had to the general revenues of the issuer. Accordingly, pricing in the market for revenue bonds (*i.e.* the interest rate that must be paid by the issuing municipality), is driven in large part by the level of risk associated with (a) whether sufficient revenues will be generated by the Project, and (b) whether such revenues *will actually be applied to the bonds*, so as to assure timely payment of debt service and ultimate repayment. The application risk is typically mitigated by state statutes, local ordinances, and the terms of the documents under which revenue bonds are issued, any or all of which will typically (a) provide for the grant of a lien on Project revenues to secure the bonds, and (b) specify that such revenues *must* be applied to payment of the bonds in accordance with a specific flow of funds structure, and may not be used for any purpose not permitted by such flow of funds structure. It has been an underlying premise and expectation of the municipal markets that this requirement would be honored in *all* circumstances, including, by virtue of Sections 922 and 928 of the United States Bankruptcy Code, 11 U.S.C §§ 101 *et seq.* (the “Bankruptcy Code”), in connection with insolvency proceedings under the Bankruptcy Code.

The Opinion in *Assured Guaranty* has upended this premise and expectation, and thereby increased the market risks associated with revenue bonds.<sup>2</sup> The court in *Assured Guaranty* held, to the surprise of participants in the municipal markets,<sup>3</sup> that the provisions of 11 U.S.C. §§ 922 and 928, incorporated into PROMESA by 48 U.S.C. § 2161(a), do not, as had been previously understood, operate to require the continued application of Project revenues to revenue bonds secured thereby (net of necessary operating expenses of the relevant Project), nor permit the enforcement of a lien on such revenues without first obtaining relief from the automatic stay of 11 U.S.C. § 362(a). ABADD-24. To the contrary, the decision permits a diversion of Project revenues away from payment of any associated revenue bonds, allowing application of such revenues to any other expense or obligation of the issuer, whether or not Project related, and cloaks such diversion with the protection of the automatic stay. This result is contrary to the terms of the statute and the purpose for which Sections 922 and 928 were enacted. The

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<sup>2</sup> Although the *Assured Guaranty* decision was issued in a proceeding under Title III of PROMESA, it is applicable more broadly to proceedings under Chapter 9 of the Bankruptcy Code. Sections 922-928, 942, 944, 945, and 946 of the Bankruptcy Code were incorporated verbatim into PROMESA 48 U.S.C. § 2161(a), and the *Assured Guaranty* Opinion was not based on any interpretation of such sections that was unique to their application in PROMESA.

<sup>3</sup> See, e.g., Press Release, Fitch Ratings, Fitch: Puerto Rico Ruling Could Have Wide-Ranging Impact on Municipal Debt (Feb. 6, 2018) (*available at* <https://www.fitchratings.com/site/pr/10019782>)

legislative history of such provisions demonstrates that Congress intended to explicitly align the treatment of Project revenues and revenue bondholders in an insolvency proceeding with the treatment that would occur outside of such a proceeding.

Most importantly, the *Assured Guaranty* Opinion does not exist in a vacuum, and will harm the vast majority of municipalities that will never commence an insolvency proceeding. By increasing the risks faced by revenue bondholders, the decision below will result in an increase in revenue bond pricing, and even small pricing increases can have a major impact on the overall cost of revenue bond financing because of the size of the revenue bond market—tens of billions of dollars in new issues each year for infrastructure Projects. This cost increase will be borne by the municipal issuers themselves and their citizens, at a time when municipalities are confronting both infrastructure and financial challenges, the need for affordable revenue bond financing is acute, and in the absence of such financing critical infrastructure Projects may be cancelled or delayed.

Accordingly, NFMA urges reversal of the Opinion.

## ARGUMENT

### A. *The Revenue Bond Market*

#### 1. Purpose, Size, and Scope of Revenue Bond Market

Municipal revenue bonds generally are issued to finance infrastructure Projects that provide services that are paid for by Project users, as opposed to taxpayers (although there is often significant overlap). These Projects can include water, sewer, energy, transportation, parking, telecommunications, or recreation facilities. The need for such Projects in the United States has become acute. The American Society of Civil Engineers (“ASCE”) has stated that:

America’s infrastructure bill is long overdue. . . . The most recent analysis reveals the U.S. has only been paying half of its infrastructure bill for some time and failing to close that gap risks rising costs, falling business productivity, plummeting GDP, lost jobs, and ultimately, reduced disposable income for every American family.

AMERICAN SOCIETY OF CIVIL ENGINEERS, REPORT CARD FOR AMERICA’S INFRASTRUCTURE (2017), *available at* <http://www.infrastructurereportcard.org/the-impact/economic-impact/>; ADD-1. Indeed, the overall infrastructure “grade” given by ASCE to the state of the infrastructure in this country is D+. *Id.*, *available at* <http://www.infrastructurereportcard.org/>; ADD-5. “D” grade means:

The infrastructure is in poor to fair condition and mostly below standard, with many elements approaching the end of their service life. A large portion of the system exhibits significant deterioration. Condition and capacity are of serious concern with strong risk of failure.

*Id.*, available at <http://www.infrastructurereportcard.org/making-the-grade/what-makes-a-grade/>; ADD-8. ASCE estimates that remedying this situation will require expenditures of \$4.5 trillion during the period from 2016–2025. *Id.*, available at <http://www.infrastructurereportcard.org/the-impact/economic-impact/>; ADD-3. Revenue bonds must play a critical role in financing these expenditures.

Infrastructure revenue bonds are typically issued in one of two ways: either as (a) a bond issued by a unit of local government secured solely by dedicated revenues generated by a Project owned and operated by the local government, or (b) a bond issued by a separate instrumentality of local government (*e.g.*, a municipal authority or commission) created by a state or local government to finance, construct, operate, and maintain the Project separate and apart from the local government itself.

There are currently outstanding infrastructure Project revenue bonds in the approximate aggregate principal amount of \$640 billion. Bloomberg (2018) *Bloomberg Professional* [Online], available at: Subscription Service (Accessed: May 11, 2018); ADD-10. Over the last five years, new issuances of revenue bonds to finance infrastructure Projects have averaged approximately \$75 billion per year, broken down by sector as reflected in the Addendum attached hereto. *Id.*; ADD-11.

## 2. Structure of Revenue Bonds

Consistent with their typical nature as Project finance vehicles, revenue bonds, in contrast to general obligation bonds, are not backed by the full faith and credit of the issuer, but rather are supported solely by the revenue stream expected to be generated by (or dedicated to) the Project (for example, in the case of the Highway Bonds, the Highway Revenues). Indeed, not only is the general credit of the municipal issuer not considered in connection with the pricing and issuance of revenue bonds, as a general proposition, assets of the issuer other than the Project revenue stream are *not available* for repayment of revenue bonds, meaning revenue bonds have no recourse for repayment to any other asset of the issuer. Accordingly, if the Project revenues are insufficient or diverted, there is no source of repayment of the associated revenue bonds.

This places paramount importance on the assurance that the revenue stream from a Project is adequate to service and repay associated revenue bonds, and that such revenue stream actually will be applied to the bonds. Such assurance arises from two sources. First, state law often prescribes the procedural requirements for the issuance of municipal revenue bonds. These requirements can include a determination that the revenues from the financed Project will be sufficient to service the bonds, and a limitation on the purposes for which the Project revenues may be expended, limiting such expenditures to the payment of operating expenses



and debt service, *See, e.g.*, Ca. Gov. Code § 26393; N.C. G.S. § 159-13 (2017); Utah Code § 10-5-107.5(2) & (3); NV Rev. Stat. § 354.613. In addition, state law may itself create, or may permit or require the issuer of the bonds to create, a lien on and pledge of the Project revenues to ensure that the revenues are used for the prescribed purposes before application to any other purposes. *See, e.g.*, First Class City Revenue Bond Act, P.L. 955, Act No. 234 of the Commonwealth of Pennsylvania, approved October 18, 1972; Ca. Gov. Code § 6572.

Second, municipal revenue bonds are typically issued pursuant to an indenture of trust or similar instrument, which itself, alone or in conjunction with an authorizing resolution of the issuer, (a) creates an express obligation to establish a revenue stream in an amount sufficient to operate and maintain the Project and pay debt service when due on the Project's revenue bonds, and (b) creates a contractual lien on Project revenues and on certain dedicated funds, typically held by the trustee under the indenture, to secure the revenue bonds. Pursuant to the indenture, the issuer agrees to a flow of funds structure for the application of the Project revenue stream that will normally limit such application to funding operating expenses, administrative fees, debt service, and certain reserves. Diversions of Project revenues for other purposes, including for use by the local government who may have created the Project or the authority, often are prohibited

by the indenture (and, as described above, by state law) until payment obligations are satisfied.

### **3. Pricing of Revenue Bonds**

The popularity of revenue bonds resides in part on the fact that such bonds often are not subject to otherwise applicable statutory municipal debt limits, and therefore offer local governments additional borrowing capacity. *See, e.g.*, Kan. Stat. Ann. § 10-311 (2017). Revenue bonds also allow governments to connect the cost of the borrowing with user benefit. More importantly, however, such debt typically carries a lower interest rate than other types of municipal debt, including general obligation bonds. The advantageous pricing arises from the structural character of revenue bond debt. This structural character, memorialized by statute and by agreement, gives rise to the expectation that there will be a dedicated revenue stream to service the debt, and that such stream will not be subject to diversion. Absent this structural character, pricing of revenue bonds would have to change to reflect a higher level of risk of repayment.

To illustrate the advantageous pricing of revenue bonds over other types of municipal debt, a comparison of recent evaluations of pairs of structurally similar general obligation and revenue bonds from several local governments rated AA or higher reveals that the general obligation bonds of these issuers yielded more than the issuers' revenue bonds by 0.03% to 0.12% (3 to 12 "basis points"). *See, e.g.*,

Bloomberg (2018) *Bloomberg Professional*. [Online], available at: Subscription Service (Accessed: May 14, 2018); ADD-12, ADD-13, ADD-14 & ADD-15. This differential grows meaningfully for fiscally strained governments such as Chicago, Illinois. In April 2018, Chicago’s general obligation bonds traded 1.07% (107 basis points) above Chicago’s special revenue bonds for O’Hare International Airport. *Id.*; ADD-16 & ADD-17. For municipalities in actual fiscal distress, general obligation financing at reasonable interest rates may be simply unavailable, and such municipalities may be totally reliant upon the revenue bond market to finance Project capital expenditures.

**B. *Bankruptcy Code Codification of Revenue Bond Structure***

**1. Summary of Statutory Scheme**

The Bankruptcy Code contains provisions that specifically address the treatment of revenue bonds in the context of an insolvency proceeding to which such provisions apply—*i.e.* a proceeding under Chapter 9 of the Bankruptcy Code, or Title III of PROMESA. The Bankruptcy Code defines “special revenues” in 11 U.S.C. § 902(2) to include, among other things, revenues generated by or dedicated to infrastructure Projects:

(A) receipts derived from the ownership, operation, or disposition of projects or systems of the debtor that are primarily used or intended to be used primarily to provide transportation, utility, or other services;

(B) special excise taxes imposed on particular activities or transactions; [or]

\* \* \*

(E) taxes specifically levied to finance one or more projects or systems.

11 U.S.C. § 902(2)(A), (B), & (E). The Bankruptcy Code goes on to provide certain specific rights and protections to the holders of revenue bonds secured by special revenues.

Section 928 of the Bankruptcy Code specifically provides for the survival of a security interest in special revenues, notwithstanding the provisions of Section 552(a) of the Bankruptcy Code, (11 U.S.C. § 552(a)) which would otherwise cut off such a security interest as of the petition date:

(a) Notwithstanding section 552(a) of this title and subject to subsection (b) of this section, special revenues acquired by the debtor after the commencement of the case shall remain subject to any lien resulting from any security agreement entered into by the debtor before the commencement of the case.

(b) Any such lien on special revenues, other than municipal betterment assessments, derived from a project or system shall be subject to the necessary operating expenses of such project or system, as the case may be.

11 U.S.C. § 928.

Having so preserved the lien, the Bankruptcy Code also provides for the treatment of the revenues subject to the lien in Section 922(d):

Notwithstanding section 362 of this title and subsection (a) of this section, a petition filed under this chapter does

not operate as a stay of application of pledged special revenues in a manner consistent with section 927 of this title to payment of indebtedness secured by such revenues.

11 U.S.C. § 922(d).<sup>4</sup> In short, the Bankruptcy Code provides the statutory framework for the treatment of Project revenues post-commencement of an insolvency proceeding exactly as they are mandated to be treated pre-commencement under state law and by contract: subject to the lien in favor of revenue bondholders, and applied to debt service on the bonds, net only of the necessary operating expenses of the Project from which such special revenues are derived. And this result is precisely what was intended by Congress when the relevant Bankruptcy Code sections were enacted.

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<sup>4</sup> As a consequence of lien preservation, and the inapplicability of the automatic stay to continued application of special revenues to revenue bonds secured thereby, Section 927 in Chapter 9 of the Bankruptcy Code preserves the non-recourse nature of revenue bond obligations, limiting revenue bondholders, as is the case outside of an insolvency proceeding, to repayment from the dedicated Project revenue stream, with no access to other municipal assets. This is in contrast to how non-recourse debt is treated under Chapter 11 of the Bankruptcy Code, where revenue stream security interests are cut off by Section 552(a), and the automatic stay precludes application of collateral to the obligation secured thereby. Under Chapter 11, non-recourse debt is treated as recourse, so that, although the lien on revenues is cut off, the debt holder is entitled to participate in other assets of the debtor. *See* 11 U.S.C. § 1111(b).

## 2. Legislative History of Statutory Scheme

In drafting the Bankruptcy Code in 1978, the potential adverse effects on municipal finance, and in particular revenue bonds, of certain Code provisions drafted in connection with Chapter 11 corporate reorganizations but imported into Chapter 9, was not considered. The result was uncertainty that revenue bond treatment would be consistent with the expectations of the revenue bond market. S. Rep. No. 100-506, at 1 (1988); ABADD-68. From 1978 to 1988, this uncertainty caused a fear that financially distressed municipalities would be unable to borrow at reasonable rates. Robert S. Amdursky, *The 1988 Municipal Bankruptcy Amendments: History, Purposes, and Effects*, 22 *The Urban Lawyer* 1, 1 (1990).

To remedy this, Congress enacted the 1988 Municipal Bankruptcy Amendments, Pub. L. No. 100-597 (1988) (the “1988 Amendments”), which added, among other provisions, Sections 922 and 928 of the Bankruptcy Code, with the specific intention that the Bankruptcy Code “reflect principles that have long been the premise for municipal finance, but that have not been expressly stated in the Bankruptcy Code.” S. Rep. 100-506 at 1; ABADD-68. Congress understood that with respect to revenue bonds secured by Project revenues, these principles included “the continued payment of interest to bondholders . . . [and] the requirement of state law that . . . collected funds be used to pay bondholders.” S. Rep. 100-506 at 6; ABADD-73.

To that end, the 1988 Amendments aimed to provide the capital markets with assurances that “revenue bondholders receive the benefit of their bargain with the municipal issuer, namely, they will have *unimpaired* rights to the project revenue pledged to them.” S. Rep. 100-506 at 12; ABADD-79 (emphasis added). *See also* S. Rep. 100-506 at 13; ABADD-80 (the 1988 Amendments, among other things, were intended to “avoid use by a municipality in a Chapter 9 proceeding of revenues pledged pursuant to a revenue bond issue.”). More specifically, in adding subsection (d) to Section 922 of the Bankruptcy Code, Congress recognized that “[r]easonable assurance of timely payment is essential to the orderly marketing of municipal bonds and notes and continued municipal financing.” S. Rep. 100-506 at 21; ABADD-88. In adding what is now Section 928 to the Bankruptcy Code, Congress sought to remedy the concern that revenues pledged to special revenue bondholders could be diverted to other purposes upon filing a Chapter 9 bankruptcy. S. Rep. 100-506 at 5; ABADD-72.

In sum, the underlying Congressional intent behind the 1988 Amendments was to ensure that the expected treatment of special revenue bonds in a Chapter 9 bankruptcy would remain consistent with their expected treatment outside of bankruptcy proceedings. *See In re Jefferson Cty., Ala.*, 474 B.R. 228, 267 (Bankr. N.D. Ala. 2012).

**3. Consequent Market Expectations of Revenue Bond Treatment in Bankruptcy**

State law, indenture terms, and the statutory provisions regarding special revenues in the Bankruptcy Code, together with Congressional intent in enacting such provisions, combine to support the long-standing understanding and expectation of municipal bond market participants, including issuers, rating agencies, investors, bond insurers, pricing services, and Project users, that Project revenues would be dedicated to support the Project through the payment of the operating and capital expenses of the Project, including debt service, and would not be applied to unrelated purposes, whether outside an insolvency proceeding, or subsequent to its filing. This has allowed pricing decisions for revenue bonds to focus on the underlying credit of the Project itself, insulated from what can be the weaker credit of the local government unit that constructed the Project.



## C. *The Assured Guaranty Opinion*

### 1. Background<sup>5</sup>

As noted above, *Assured Guaranty* involved a dispute arising in connection with the Highway Bonds. The Highway Bonds are revenue bonds issued by the HTA and secured, among other things, by the Highway Revenues. The timely payment of the principal of and interest on certain of the Highway Bonds is insured by Appellants. ABADD-4.

Consistent with their character as revenue bonds, the documentation associated with the Highway Bonds, including resolutions approved by the HTA, as well as certain statutes enacted by the Commonwealth, limited the use to which the Highway Revenues could be put, and required the Highway Revenues to be applied so as to assure timely payment of bond principal and interest (the “Revenue Use Restrictions”). Before the commencement of the proceeding, the Commonwealth and the HTA began to divert the Highway Revenues and use them for purposes not permitted by the Revenue Use Restrictions. After commencement of the proceeding, in addition to continuing to divert Highway Revenues, the

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<sup>5</sup> The background provided herein is a brief summary of certain relevant allegations made in the complaint commencing the *Assured Guaranty* adversary proceeding (the “Complaint”) and Appellants’ initial brief filed in this appeal (“Appellants’ Brief”). As this appeal arises from the granting of the Motion to Dismiss, there are no findings of fact, as the district court was required to (and did) assume the truth of the allegations contained in the Complaint. ABADD-16. Likewise, NFMA assumes the truth of such allegations for purposes of this brief.

Commonwealth, through the Puerto Rico Fiscal Agency Advisory Authority, advised the Bank of New York Mellon (“BNYM”), which held certain pledged bond proceeds deposited to the credit of reserve funds on behalf of the holders of the Highway Bonds, that it would be a violation of the automatic stay to remit such revenues to such holders. As a consequence, BNYM did not remit such revenues. ABADD-8.

As a result of the diversion of Highway Revenues and the failure of BNYM to remit special revenues deposited to the credit of the reserve funds that it held, Appellants were required to make certain payments on the Highway Bonds themselves. ABADD-7. Appellants then commenced the *Assured Guaranty* adversary proceeding, seeking, among other things, (a) a declaration that Sections 922 and 928 of the Bankruptcy Code prohibited diversion of Highway Revenues, and required the payment of the Highway Bonds from such Highway Revenues, and (b) an injunction compelling the payment of such Highway Revenues to the holders of the Highway Bonds, consistent with the requirements of Sections 922 and 928. ABADD-16. The Appellees filed the Motion to Dismiss, asserting, among other things, that Appellants had failed to state a claim for the injunctive and declaratory relief they sought. ABADD-8. On January 30, 2018, the district court dismissed the Plaintiffs’ adversary complaint, concluding that there was no statutory support for the relief sought. ABADD-24.

In doing so, the district court engaged in what it described as a “plain language” analysis and read Section 928(a) to preserve only certain prepetition liens on special revenues, not to mandate any action on the part of a debtor, or to limit the use to which a debtor can put pledged special revenues. ABADD-18. Similarly, the district court read section 922(d) to except the application of pledged special revenues from the automatic stay if a debtor chose to voluntarily make such an application, without actually creating an enforceable *right* to seek such application. ABADD-20. In short, the district court decided that Sections 922 and 928 essentially do nothing at all to preserve the expectation of the holders of revenue bonds that pledged Project revenues will be applied only to Project operating expenses and to repayment of the bonds, regardless of whether an insolvency proceeding has been commenced.

Appellants’ Brief comprehensively addresses the substantive deficiencies in the district court’s Opinion. Suffice it to say here that in reaching its conclusion, the district court did not properly apply the plain terms of the statute or engage with the legislative history of Sections 922 and 928 in any meaningful way. As made clear above, such sections were specifically enacted to prevent precisely the result that has occurred here. The district court also failed in its plain meaning analysis to observe the maxim of statutory construction that a statute should be interpreted in such a way as to give meaning and effect to all of its provisions. *See*

*LaSalle Bank Nat'l Ass'n v. Nomura Asset Capital Corp.*, 424 F.3d 195, 206 (2d Cir. 2005). For example, that Section 928(b) expressly subjects a lien on pledged revenues to operating expenses of the associated Project is entirely superfluous if such a lien is in fact subject to *any* expense or obligation to which the debtor should choose to apply such revenues. Finally, the district court was dismissive of decisions that have reached the exact opposite result, while not distinguishing them on a principled basis. *See, e.g., Jefferson Cty., Ala.*, 474 B.R. at 228.<sup>6</sup>

**D. *Impact of the Assured Guaranty Decision***

**1. General Implications**

The Opinion in *Assured Guaranty* is not simply incorrect as a matter of statutory interpretation. It is also bad policy. Allowing diversion of Project revenues in a pending insolvency proceeding for unrelated purposes of the issuer or the governmental entity that created the issuer, and not requiring the payment of such revenues to revenue bondholders, would: (a) erode or even eliminate the important distinction the municipal market makes between Project revenue bonds

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<sup>6</sup> The district court also fails to reconcile its decision with the draconian effect of Section 927 of the Bankruptcy Code if Sections 922 and 928 mean only what the district court says they mean. The non-recourse nature of revenue bonds is premised on substituting a dedicated revenue stream for the full faith and credit of the issuer. The district court's decision allows a debtor to deprive revenue bondholders of the dedicated revenue stream—*i.e.* eliminates the premise for a non-recourse obligation and the sole source of repayment of their bonds—while Section 927 leaves in place the non-recourse character of the revenue bonds.

and general obligation bonds of the same government unit, thereby driving up borrowing costs for Projects; (b) blur the distinction state laws currently draw between revenue bonds and general obligation bonds, causing market participants (and perhaps state legislatures) to consolidate these heretofore different forms of debt for purposes of local government credit and borrowing capacity purposes, in some cases undoubtedly breaching constitutional or statutory caps on outstanding indebtedness; and (c) violate current state laws that prohibit diversions or that limit the application of Project revenues to Project-only purposes; and moreover could incentivize distressed local governments to file Chapter 9 cases specifically to access pledged Project revenues in lieu of raising taxes and other general revenues to address their fiscal challenges.

## **2. Pricing Impact**

As noted above, one of the implications of the *Assured Guaranty* Opinion is that the increased risk of interruption of the Project revenue stream will result in an increase in the pricing of revenue bonds. This increase will be felt by municipal issuers with respect to future revenue bonds issued for critical infrastructure projects. Depending on the credit profile of the issuer and the nature of the applicable Project, NFMA estimates, based on its familiarity with and understanding of the market, that the increase in cost (interest rate) of revenue bond debt could range between 0.05% and 0.10% (5 to 10 basis points) for higher

rated issuers whose revenue bond and general obligation bond debt are similarly rated, and between 0.30% and 0.50% (30 to 50 basis points) for bonds from lower rated municipal issuers, with a likely weighted average in the 0.05% to 0.15% range (5 to 15 basis points).

While these numbers may seem small in isolation, when applied to the anticipated sizable need for future infrastructure revenue bond financing, the economic impact on municipal issuers will be substantial. Assuming an average annual issuance of \$75 Billion in infrastructure revenue bonds for 10 years (\$750 Billion in aggregate), the incremental interest cost to issuers over the next 10-year period would likely fall into the range of \$2.1 Billion to \$6.2 Billion as a result of the *Assured Guaranty* holding:<sup>7</sup>

<b>Incremental Interest Cost to Issuers of Infrastructure Revenue Bonds</b>			
	5 basis points	10 basis points	15 basis points
\$75 Billion of Annual New Issuance for 10 years	\$2,062,500,000	\$4,125,000,000	\$6,187,500,000

<sup>7</sup> Investors holding *existing* infrastructure revenue bonds at lower yields (which would decline in value) would expect to see the present value of their holdings decline by an estimated \$3.2 Billion to \$9.8 Billion, assuming a 10-year average life and a discount rate of 2.43% (both of which NFMA believes to be reasonable for purposes of this impact calculation). Many of these investors, either directly or through mutual fund holdings, are the municipal citizens themselves. In Puerto Rico itself, it has been estimated that *\$12 Billion*, or almost 20%, of Puerto Rico's debt is held by residents of Puerto Rico. Letter from Rafael Rojo, Chairman of the Board of Directors of Bonistas del Patio, to Senator Elizabeth Warren and Representative Nydia Velázquez (Nov. 17, 2017) (on file with Bonistas del Patio), available at [http://www.bonistasdelpatio.com.co/portfolio\\_page/letter-to-congr-velazquez-and-warren/](http://www.bonistasdelpatio.com.co/portfolio_page/letter-to-congr-velazquez-and-warren/).

Even at 10 basis points, the mid-point of the estimated weighted average impact, the increased interest expense to which already challenged municipal issuers will be exposed is significant, raising the very real prospect of additional municipal financial distress and the delay or canceling of critically needed infrastructure Projects and improvements, in each case with the associated negative impact on the resources and facilities for provision of municipal services.

### **3. Impact on the Delivery of Municipal Services**

The delivery of adequate municipal services is important to the citizens of every municipality, including the 99% that will never commence a Chapter 9 proceeding.<sup>8</sup> It is this larger perspective—the interests of the 99% in obtaining necessary funding and the policy implications of the Bankruptcy Code acting as an impediment to doing so—that was the impetus for enactment of Sections 922 and 928 of the Bankruptcy Code. As discussed above, in adding subsection (d) to Section 922 of the Bankruptcy Code, Congress specifically recognized that “[r]easonable assurance of timely payment *is essential* to the orderly marketing of municipal bonds and notes *and continued municipal financing.*” S. Rep. 100-506 at

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<sup>8</sup> There are approximately 90,000 governmental units in the United States, of which approximately 39,000 are cities, counties, towns, and townships. U.S. Census Bureau, 2012 Census of Governments, Table 2 (2012), *available at* <http://www.census.gov/data/tables/2012/econ/gus/2012-governments.html>. Since the enactment of the Bankruptcy Code in 1979, there have been 293 chapter 9 filings. National Federation of Municipal Analysts, MuniNet Guide (2015), *available at* <https://muninetguide.com/municipal-finance/municipal-bankruptcy/>.

21; ABADD-88 (emphasis added). Failure to interpret the provisions of Chapter 9, and the parallel sections of PROMESA, with this larger perspective firmly in mind risks providing short-term benefit to a single municipal debtor at the expense of long-term damage to municipalities generally—certainly not the intention of Congress in enacting such provisions.

Such short-term gain at long-term expense is precisely the outcome of the *Assured Guaranty* Opinion, if it is not reversed. The financial impact on all municipalities of the decision would be significant, with the potential to increase municipal financial distress, and to cause cancelation or delay infrastructure Projects. Preserving market expectations regarding the treatment of Project revenues and revenue bondholders, and thereby keeping revenue bond financing an affordable option for municipalities to finance infrastructure Projects, is critical to the delivery of municipal services by all municipalities.

### **CONCLUSION**

The *Assured Guaranty* Opinion is wrong, both as an exercise in statutory construction, and as a matter of public policy. The availability of revenue bond financing at favorable rates is critical to the capital funding needs of municipalities, and to allowing them to meet the service needs of their citizens. In turn, such availability depends upon participants in the market for revenue bonds having the assurance that “revenue bondholders receive the benefit of their bargain with the



municipal issuer, namely, they will have *unimpaired* rights to the project revenue pledged to them.” S. Rep. 100-506 at 12; ABADD-79 (emphasis added). *Assured Guaranty* has deprived revenue bondholders of such assurance, contrary to applicable law and Congressional intent. It should be reversed.

Respectfully submitted,

Dated: May 16, 2018

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**CERTIFICATE OF COMPLIANCE**

According to the word-processing system used to prepare the foregoing brief (Microsoft Word 2010), the brief complies with Federal Rule of Appellate Procedure 27(d)(2)(A) because it contains 5,632 words, excluding the portions exempted by Federal Rule of Appellate Procedure 32(f).

*/s/ Vincent J. Marriott, III*

\_\_\_\_\_  
Vincent J. Marriott, III

**CERTIFICATE OF SERVICE**

On May 16, 2018, a copy of the foregoing brief was electronically filed with the Clerk of the Court for the United States Court of Appeals for the First Circuit by using the Court's appellate CM/ECF system, and that service will be accomplished by the appellate CM/ECF system.

*/s/ Vincent J. Marriott, III*

\_\_\_\_\_  
Vincent J. Marriott, III

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# INFRASTRUCTURE REPORT CARD

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## Economic Impact

Infrastructure is the backbone of the U.S. economy and a necessary input to every economic output. It is critical to the nation's prosperity and the public's health and welfare. Infrastructure's condition has a cascading impact on our nation's economy, impacting business productivity, gross domestic product (GDP), employment, personal income, and international competitiveness.

America's infrastructure bill is long overdue. Every four years, ASCE estimates the investment needed in each infrastructure category to maintain a state of good repair and earn a grade of B. The most recent analysis reveals the U.S. has only been paying half of its infrastructure bill for some time and failing to close that gap risks rising costs, falling business productivity, plummeting GDP, lost jobs, and ultimately, reduced disposable income for every American family.

Even though the U.S. Congress and some states have recently made efforts to invest more in infrastructure, these efforts do not come close to the \$2.0 trillion in needs. The good news is closing America's infrastructure gap is possible if Congress, states, infrastructure owners, and voters commit to increasing our investment. To raise the overall infrastructure grade and maintain our global

**ADD-1**

competitiveness, Congress and the states must invest an additional \$206 billion each year to prevent the economic consequences to families, business, and the economy.

## Cumulative Infrastructure Needs by System Based on Current Trends, Extended to 2025

ALL VALUES IN BILLIONS OF CONSTANT 2015 DOLLARS

### 2016–2025 (10 YEARS)

Infrastructure Systems	Total Needs	Estimated Funding	Funding Gap
Surface Transportation <sup>1</sup>	\$2,042	\$941	\$1,101
Water/Wastewater Infrastructure <sup>1</sup>	\$150	\$45	\$105
Electricity <sup>1</sup>	\$934	\$757	\$177
Airports <sup>1</sup>	\$157	\$115	\$42
Inland Waterways & Marine Ports <sup>1</sup>	\$37	\$22	\$15
Dams <sup>2</sup>	\$45	\$5.6	\$39.4
Hazardous & Solid Waste <sup>3</sup>	\$7	\$4	\$3
Levees <sup>4</sup>	\$80	\$10	\$70
Public Parks & Recreation <sup>5</sup>	\$114.4	\$12.1	\$102.3
Rail <sup>6</sup>	\$154.1	\$124.7	\$29.4
Schools <sup>7</sup>	\$870	\$490	\$380
<b>TOTALS</b>	<b>\$4,590</b>	<b>\$2,526</b>	<b>\$2,064</b>

1 Data taken from ASCE's *Failure to Act: Closing the Infrastructure Investment Gap for America's Economic Future* (2016).

2 Total needs are federal and non-federal high-hazard dams.

3 Funding only includes publicly funded remediation, not funds from private sector.

4 Total needs number based on discussions with the National Committee on Levee Safety

5 Does not include backlog and estimated spending for U.S. Army Corps of Engineers and city parks.

6 Needs and funding estimates based on market projections and current investment trends.

7 Data from *State of Our Schools: America's K-12 Facilities* (2016). 21st Century School Fund, Inc., U.S. Green Building Council, Inc., and the National Council on Schools Facilities.

\*numbers may not add up due to rounding



As ASCE discovered in its 2016 economic study, [\*Failure to Act: Closing the Infrastructure Investment Gap for America's Economic Future\*](#), failing to close this infrastructure investment gap brings serious economic consequences:

- **\$3.9 trillion in losses to the U.S. GDP by 2025;**
- **\$7 trillion in lost business sales by 2025; and**
- **2.5 million lost American jobs in 2025.**

**On top of those costs, hardworking American families will lose upwards of \$3,400 in disposable income each year – about \$9 each day.**

The time to invest in our nation's infrastructure is now. The longer we wait, the more it costs. Investing now will save our country more in the long run while also creating economic opportunity, enhancing quality of life, and ensuring public health and safety.



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## What Makes a Grade?

The [ASCE Committee on America's Infrastructure](#), made up of 28 dedicated civil engineers from across the country with decades of expertise in all categories, volunteers their time to work with ASCE Infrastructure Initiatives staff to prepare the Infrastructure Report Card. The Committee assesses all relevant data and reports, consults with technical and industry experts, and assigns grades using the following key criteria:

- **Capacity:** Does the infrastructure's capacity meet current and future demands?
- **Condition:** What is the infrastructure's existing and near-future physical condition?
- **Funding:** What is the current level of funding from all levels of government for the infrastructure category as compared to the estimated funding need?
- **Future Need:** What is the cost to improve the infrastructure? Will future funding prospects address the need?
- **Operation and Maintenance:** What is the owners' ability to operate and maintain the infrastructure properly? Is the infrastructure in compliance with government regulations?

**ADD-6**

- **Public Safety:** To what extent is the public's safety jeopardized by the condition of the infrastructure and what could be the consequences of failure?
- **Resilience:** What is the infrastructure system's capability to prevent or protect against significant multi-hazard threats and incidents? How able is it to quickly recover and reconstitute critical services with minimum consequences for public safety and health, the economy, and national security?
- **Innovation:** What new and innovative techniques, materials, technologies, and delivery methods are being implemented to improve the infrastructure?

## Infrastructure Report Card Grading Scale



**EXCEPTIONAL,  
FIT FOR THE FUTURE**

The infrastructure in the system or network is generally in excellent condition, typically new or recently rehabilitated, and meets capacity needs for the future. A few elements show signs of general deterioration that require attention. Facilities meet modern standards for functionality and are resilient to withstand most disasters and severe weather events.



**GOOD,  
ADEQUATE FOR NOW**

The infrastructure in the system or network is in good to excellent condition; some elements show signs of general deterioration that require attention. A few elements exhibit significant deficiencies. Safe and reliable, with minimal capacity issues and minimal risk.



**ADD-7**

**MEDIOCRE,  
REQUIRES ATTENTION**

The infrastructure in the system or network is in fair to good condition; it shows general signs of deterioration and requires attention. Some elements exhibit significant deficiencies in conditions and functionality, with increasing vulnerability to risk.

**POOR,  
AT RISK**

The infrastructure is in poor to fair condition and mostly below standard, with many elements approaching the end of their service life. A large portion of the system exhibits significant deterioration. Condition and capacity are of serious concern with strong risk of failure.

**FAILING/CRITICAL,  
UNFIT FOR PURPOSE**

The infrastructure in the system is in unacceptable condition with widespread advanced signs of deterioration. Many of the components of the system exhibit signs of imminent failure.



In addition to this national Report Card, ASCE's sections and branches prepare [state and regional Infrastructure Report Cards](#) on a rolling basis, following the methodology of the national Report Card.

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Currency USD ▾ (As of Issue Date)

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Issue Da...	Total	Water & Sewer	Municipal Utilities	Airport	Public Power Systems	Toll Roads/Toll Bridges/Toll Tunnels	Port/Marinas	Public Transportation
1) Total	641,819	238,731	49,819	94,996	77,147	109,752	38,899	32,475
2) 2018	14,732	4,954	422	3,522	1,089	2,294	1,365	1,086
3) 2017	80,712	26,687	4,825	12,933	6,510	18,052	4,081	7,624
4) 2016	76,397	35,306	6,800	10,875	7,233	8,517	3,059	4,609
5) 2015	66,640	26,381	6,852	8,349	8,617	8,667	4,466	3,309
6) 2014	59,498	24,649	4,224	6,759	3,915	14,469	3,952	1,529
7) 2013	55,116	21,014	4,640	7,707	5,583	11,881	2,572	1,720
8) 2012	60,993	23,673	6,876	8,919	4,284	8,495	5,182	3,565
9) 2011	30,386	13,855	1,777	4,585	3,282	3,119	3,360	407
10) 2010	71,131	22,831	5,116	11,846	14,685	10,595	2,967	3,091
11) 2009	36,034	12,061	2,008	4,991	4,472	9,314	2,179	1,009
12) 2008	23,546	7,763	1,657	3,925	3,526	4,846	1,194	635
13) 2007	11,024	4,072	464	1,512	3,151	1,461	325	39
14) 2006	5,016	2,359	336	775	690	471	25	359
15) 2005	7,432	1,239	258	3,473	703	1,070	6	681
16) 2004	5,781	2,414	291	661	595	774	831	215
17) 2003	3,575	1,398	277	879	595	--	100	326
18) 2002	5,118	860	94	771	1,256	1,091	487	559
19) 2001	4,594	1,852	70	260	1,202	515	595	100
20) 2000	4,072	461	588	999	335	895	6	788
21) 1999	3,310	922	33	663	298	--	1,295	100
22) 1998	4,756	1,163	372	237	1,953	225	83	724
23) 1997	5,166	1,203	34	105	971	2,789	63	--
24) 1996	728	461	30	3	<1	143	91	--
25) 1995	1,232	438	762	--	32	--	--	--
26) 1994	1,452	284	17	37	1,013	--	100	--
27) 1993	643	199	3	--	305	69	67	--

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Unsaved Search > Issue Date by Industry (Sum of Maturity Size in MM)

Currency USD ▾ (As of Issue Date)

Results Matrix Rank Holders Matrix Holders ⚙

🔍 « 24 Edit Matrix

Issue Date ↓	Total	Water & Sewer	Municipal Utilities	Airport Toll Roads/Toll Bridges/Toll Tun	Public Power Systems	Port/Marinas	Public Transportation
1) Total	374,433	147,583	30,827	48,537	69,361	34,113	24,914
2) 2017	82,515	26,877	4,896	12,967	18,451	6,534	8,679
3) 2016	79,943	36,830	7,349	11,106	8,689	7,346	5,486
4) 2015	72,469	28,427	7,679	8,710	8,603	9,581	4,672
5) 2014	68,789	28,772	5,217	7,175	16,392	4,125	2,946
6) 2013	70,717	26,676	5,686	8,579	17,225	6,528	3,132

Australia 61 2 9777 8600 Brazil 55 11 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000  
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 518 2000 SN 247118 ED1 GMT-4:00 6453-3544-1 11 May 2018 11:41:14  
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041796SN Muni		Settings ▾		Yield and Spread Analysis	
		95 Buy		96 Sell	
1) Yield & Spread		2) Yields			
ARLINGTON TX		CUSIP 041796SN4			
Settle	05/10/18	Ticker	ARL	Cpn	5.000
		Maturity	08/15/2027	Dated	06/01/2017
		State	TX		
Price	119.463	To Maturity		To Worst	
Concession	0.000	08/15/2027		08/15/2027 @	100.00
Price less Concession	119.463				
Spread to Curve	BS1211 ▾	BVAL Muni AAA Curve (Cal...	24 bp	9.3 yr	24 bp 9.3 yr
Yield			2.620		2.620
Percent of Treasury			88.3%		88.3%
After Tax Yield ( Inc	40.80	CG 23.80	OID 0.00 )		2.620
Taxable Equivalent Yield @	40.80				4.425
PV ▾	0.01		0.09082		0.09082
Modified Duration			7.528		7.528
1) OAS	25.63	Vol	0.00	OAS Duration	7.59
		Option Value	0.00		
Invoice		Trade History			
Face	1,000 M	View	Price ▾	Trade Size	All Sizes ▾
Principal	1,194,626.01	Date	Vol(M)	Trds	High Low Avg
Concession	0.00				
Prin less Conc	1,194,626.01				
Accrued (85 Days)	11,805.56				
Total (USD)	1,206,431.57				
<small>                 Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000                  Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000                  Copyright © 2018, Bloomberg Finance L.P.                  SN 247118 ED1 GMT-4:00 H189-1631-1 14 May 2018 19:16:42             </small>					

041838BF Muni		Settings ▾		Yield and Spread Analysis	
		95 Buy		96 Sell	
1) Yield & Spread		2) Yields			
ARLINGTON TX MUNI DRAINAGE UTILITY SYS REVENUE				CUSIP 041838BF9	
Settle	05/10/18	Ticker	ARLUTL	Cpn	4.000
Maturity	06/01/2027	Dated	06/01/2017	State	TX
Price	112.112	To Maturity	To Worst ▾		
Concession	0.000	06/01/2027	06/01/2027 @ 100.00		
Price less Concession	112.112				
Spread to Curve	BS1211 ▾	BVAL Muni AAA Curve (Cal...	12 bp	9.1 yr	12 bp 9.1 yr
Yield			2.498		2.498
Percent of Treasury			84.3%		84.3%
After Tax Yield ( Inc	40.80	CG 23.80	OID 0.00 )		2.498
Taxable Equivalent Yield @	40.80				4.219
PV ▾	0.01		0.08614		0.08614
Modified Duration			7.564		7.564
1) OAS	13.68	Vol	0.00	OAS Duration	7.62
				Option Value	0.00
Invoice			Trade History		
Face	1,000	M	View	Price ▾	Trade Size All Sizes ▾
Principal	1,121,117.02		Date	Vol(M)	Trds
Concession	0.00		High	Low	Avg
Prin less Conc	1,121,117.02				
Accrued (159 Days)	17,666.67				
Total (USD)	1,138,783.69				
<small>                 Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000                  Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000                  Copyright 2018, Bloomberg Finance L.P.                  SN 247118 ED1 GMT-4:00 H189-1631-1 14 May 2018 19:15:37             </small>					

023015XT Muni		Settings ▾		Yield and Spread Analysis	
		95 Buy		96 Sell	
1) Yield & Spread		2) Yields			
AMARILLO TX		CUSIP 023015XT2			
Settle	05/10/18	Ticker	AMA	Cpn	5.000
Maturity	02/15/2027	Dated	04/01/2017	State	TX
Price	119.338	To Maturity	To Worst		
Concession	0.000	02/15/2027	02/15/2027	@	100.00
Price less Concession	119.338				
Spread to Curve	BS1211 ▾	BVAL Muni AAA Curve (Cal...	17 bp	8.8 yr	17 bp 8.8 yr
Yield			2.526	2.526	
Percent of Treasury			85.4%	85.4%	
After Tax Yield ( Inc	40.80	CG	23.80	OID	0.00 )
Taxable Equivalent Yield @	40.80				
PV ▾	0.01			0.08673	0.08673
Modified Duration			7.197	7.197	
1) OAS	18.51	Vol	0.00	OAS Duration	7.25
				Option Value	0.00
Invoice			Trade History		
Face	1,000	M	View	Price ▾	Trade Size All Sizes ▾
Principal	1,193,377.00		Date	Vol(M)	Trds
Concession	0.00		04/24/18	170	2
Prin less Conc	1,193,377.00		High	Low	Avg
Accrued (85 Days)	11,805.56		118.228	118.103	118.166
Total (USD)	1,205,182.56				
<small>                 Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000                  Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000                  Copyright 2018, Bloomberg Finance L.P. SN 247118 ED1 GMT-4:00 6349-1417-0 15-May-2018 14:28:05             </small>					

023108LL Muni		Settings ▾		Yield and Spread Analysis	
		95 Buy		96 Sell	
1) Yield & Spread		2) Yields			
AMARILLO TX WTRWKS & SWR SYS REVENUE				CUSIP 023108LL5	
Settle	05/10/18	Ticker	AMAUTL	Cpn	5.000
Maturity	04/01/2027	Dated	04/01/2017	State	TX
Price	119.885	To Maturity	To Worst		
Concession	0.000	04/01/2027	04/01/2027	@	100.00
Price less Concession	119.885				
Spread to Curve	BS1211 ▾	BVAL Muni AAA Curve (Cal...	13 bp	8.9 yr	13 bp 8.9 yr
Yield			2.492		2.492
Percent of Treasury			84.1%		84.1%
After Tax Yield ( Inc	40.80	CG	23.80	OID	0.00 )
Taxable Equivalent Yield @	40.80		4.210		4.210
PV ▾	0.01		0.08823		0.08823
Modified Duration			7.326		7.326
1) OAS	14.68	Vol	0.00	OAS Duration	7.38
				Option Value	0.00
Invoice			Trade History		
Face	1,000	M	View	Price ▾	Trade Size All Sizes ▾
Principal	1,198,854.98		Date	Vol(M)	Trds
Concession	0.00		01/22/18	50	2
Prin less Conc	1,198,854.98				
Accrued (39 Days)	5,416.67				
Total (USD)	1,204,271.65				
<small>                 Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000                  Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000                  Copyright 2018, Bloomberg Finance L.P. SN 247118 ED1 GMT-4:00 6349-1417-0 15-May-2018 14:29:35             </small>					

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167486ZX Muni 94) Export 99) Disclaimer 97) Settings Trade History

Issuer CHICAGO IL CUSIP 167486ZX0  
 Series REF-SER A Coupon 5.750 Maturity 01/01/34 Issued 02/01/17 State IL  
 Range: 04/11/18 - 04/11/18 Trade Size >= 1000M

1) Bond 2) Series 3) Issuer

View Yield and Spread Spread:  YTW  YTM

Trade Aggregate			Yield			Spread(YTW)			Dealer to Client Volume(M)			D+D
Days	Volume (M)	Trds	High	Low	Avg	High	Low	Avg	Dlr Buy	Dlr Sell	Net	Vol(M)
1	5,000	1	4.250	4.250	4.250	187.1	187.1	187.1	5,000	0	5,000	0

98) Charts

	Date	Vol(M)*	Trds	Yield			Spread(YTW)			Dealer to Client Volume(M)		
				High	Low	Avg	High	Low	Avg	Dlr Buy	Dlr Sell	Net
101)	04/11/18	5,000	1	4.250	4.250	4.250	187.1	187.1	187.1	5,000	0	5,000

\*Volumes of MM+ are considered 5MM until the actual volume is disclosed.

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 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 518 2000 Copyright 2018 Bloomberg Finance L.P.  
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167593A3 Muni 94 Export 99 Disclaimer 97 Settings Trade History

Issuer CHICAGO IL O'HARE INTERNATIONAL  
 Series REF-GEN-SENIOR LIEN-SER B CUSIP 167593A36  
 Coupon 5.000 Maturity 01/01/34 Issued 06/28/17 State IL  
 Range: 04/11/18 - 04/11/18 Trade Size >= 1000M

1) Bond 2) Series 3) Issuer

View Yield and Spread Spread:  YTW  YTM

Trade Aggregate			Yield			Spread(YTw)			Dealer to Client Volume(M)			D+D
Days	Volume (M)	Trds	High	Low	Avg	High	Low	Avg	Dlr Buy	Dlr Sell	Net	Vol(M)
1	2,000	1	3.180	3.180	3.180	80.0	80.0	80.0	2,000	0	2,000	0

98) Charts

	Date	Vol(M)*	Trds	Yield			Spread(YTw)			Dealer to Client Volume(M)		
				High	Low	Avg	High	Low	Avg	Dlr Buy	Dlr Sell	Net
101)	04/11/18	2,000	1	3.180	3.180	3.180	80.0	80.0	80.0	2,000	0	2,000

\*Volumes of MM+ are considered 5MM until the actual volume is disclosed.

Australia 61 2 9777 8600 Brazil 55 11 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000  
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 518 2000  
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