

March 8, 2022

Mark T. Kim Chief Executive Officer Municipal Securities Rulemaking Board 1300 I Street NW, Suite 1000 Washington, DC 20005

Ronald W. Smith Corporate Secretary Municipal Securities Rulemaking Board 1300 I Street NW, Suite 1000 Washington, DC 20005

Re: MSRB Notice 2021-17, Request for Information on Environmental, Social and Governance (ESG) Practices in the Municipal Securities Market

Dear Mr. Kim and Mr. Smith:

We are writing regarding the Municipal Securities Rulemaking Board (MSRB) Request for Information on Environmental, Social and Governance (ESG) Practices in the Municipal Securities Market. As the principal regulator of the \$4 trillion municipal securities market, the MSRB plays a vital role for municipal securities across the country.

It is a pleasure to submit comments on behalf of ISS ESG and with reference to our ISS ESG Muni QualityScore offering. Our comments represent our views in our capacity as a provider of ESG Scoring for over 51,000 Obligors and 1,100,000 CUSIPs in the U.S. municipal marketplace, and as a thought leader in the areas of corporate governance and responsible investment, and not necessarily the views of our clients. Our response is limited to the RFI questions pertaining to section (E) All Municipal Market Participants.

Background

ISS ESG is the responsible investment arm of Institutional Shareholder Services Inc. (ISS), a leading provider of corporate governance and sustainable investing solutions, market intelligence and fund services, and events and editorial content for institutional investors and corporations.

ISS ESG solutions enable investors to develop and integrate responsible investing policies and practices, engage on responsible investment issues, and monitor portfolio company practices through screening solutions. ISS ESG solutions

include corporate and country ESG research, municipal ESG research, climate data, analytics and advisory, governance data and screening and controversies.

ISS ESG also provides climate data, analytics, and advisory services to help asset owners, asset managers, hedge funds, and other financial market participants understand, measure, and act on climate-related risks across all asset classes. In addition, ESG solutions cover corporate and country ESG research and ratings enabling its clients to identify material social and environmental risks and opportunities.

MuniQuality Score is a product offering by the ISS ESG group that calculates ESG Scoring for over 51,000 obligors and 1,100,000 CUSIPs in the U.S. municipal marketplace. ISS ESG and its Muni QualityScore, endorse broad transparency for ESG in the municipal marketplace. The methodology for the calculation of Muni QualityScore was first published on our website in April 2020, and consists of an equal weighted methodology, with all datasets and inputs clearly detailed in the published methodology. Additionally, clients who license the Muni QualityScore feed not only receive the quarterly updated Muni QualityScore and rankings, but also all underlying datasets utilised in the calculation of the score.

The Muni QualityScore, and all underlying datasets are built to one index key – the census provided GEOID. datasets and ESG scoring as compiled for all locations in America (29, 500 towns / cities – 3,141 counties – 13,500 school districts, and 50 states plus DC). A total of over 45,000 GEOIDs / locations are scored.

All CUSIPs and Bloomberg IDs for the municipal marketplace are then mapped by ISS ESG to the respective GEOID. This enables ISS ESG to provide Muni Quality scoring for the location(s) of all operations of U.S. municipal issuers.

For clarity, where the municipal issuer has operations in multiple locations (e.g., a gas district that serves five differing counties), ISS ESG maps all five of these counties to the one Issue (CUSIP) and provides a blended ESG score for each county by utilizing the data and scoring for the specific five counties in question.

By utilizing this unique scoring mapping, ISS ESG is able to provide in-depth ESG risk measurement for both general obligation and revenue bond issuances throughout the entire U.S. municipal marketplace.

All underlying datasets utilized by the Muni QualityScore are publicly available datasets and are sourced from government sources, NGO's, or environmental awareness entities.

The datasets currently utilized in the calculation of Muni QualityScore ESG scores for the U.S. municipal marketplace are included in the Appendix.

We would like to thank the MSRB for seeking our input to its Request for Information (RFI) and would be pleased to discuss any questions you may have on our comments.

Sincerely,

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MSRB RFI as it pertains to:

(E) All Municipal Market Participants. The MSRB seeks input from all municipal market participants, including input on the following questions.

(1) Are there any ESG-related factors that could pose a systemic risk to the municipal securities market? If so, how might the MSRB approach such systemic risks from a regulatory perspective? Are there non-regulatory approaches the MSRB could take that would advance issuer protection, investor protection, and the overall fairness and efficiency of the market?

There are many risks that face the municipal marketplace but for the purposes of this RFI we will limit our items of concern to what we view as the three (a-c) largest systemic risks:

a. Sea Level Rise / Coastal Flooding and Climate Change-impacted Weather-related Events1:

The table below, created by ISS ESG Muni QualityScore, represents a state-by-state estimate of U.S. dollar "value at risk" for both real property and separately for municipal bonds given a widely recognized and accepted likelihood of a 1ft rise in sea level / coastal flooding by the year 2050.

These figures, broken down by state, reflect a total **\$161 billion** estimated property risk, as well as a **\$18.4 billion** municipal bond risk associated with this particular scenario.

In addition, we also calculated the annual dollar value for property risk and again municipal bond risk that is possible due to the following climate change impacted events from the FEMA National Risk Index: wild fire, hail, flooding (pluvial and fluvial), drought, heat index, strong wind, ice storm, winter weather.

The annual dollar value at risk figures associated with these events from the FEMA National Index reflect an annual \$19.1 billion property risk and \$2.3 Billion municipal bond risk. When summarizing these risks from 2022 to 2050 (multiplying the annual figure by the 28 years between now and then), the dollar value at risk by 2050 for these Climate Change Impacted events is estimated to be \$536.7 billion (?) for property risk, and \$66.8 billion for Municipal Bond Risk.

¹ US dollar value risks were built at the county level and rolled up to each respective state level. One foot risk data was sourced from SurgingSeas / Climatechange.org. Six foot risk data was sourced from the FEMA National Risk Index. Annual climate change impacted risks were sourced from the FEMA National Risk Index. Notional Municipal Bond outstanding amounts were sourced from Cusip Global Services and mapped to location of operation by ISS ESG.

	Notional Municipal	Property Coastal	Municipal Bond Risk Coastal	Property Coastal	Municipal Bond Risk Coastal	Annual Risk (less	Municipal Bond Annual Risk (less
State	Bonds Outstanding	Flooding 1ft	Flooding Risk 1ft	Flooding Risk 6ft	Flooding Risk 6ft	Coastal Flooding)	Coastal Flooding
	Source: 5	Source: 1,3	Source: 6	Source: 4	Source: 7	Source: 4	Source: 8
Alabama	\$45,671,377,440	\$598,103,737	\$30,291,347	\$15,132,612,868	\$1,097,869,368	\$466,552,700	\$41,977,12
Alaska	\$9,561,386,210	\$11,418,204		\$367,144,835		\$3,559,856	
Arizona	\$65,330,524,250	\$0		\$0		\$170,475,531	
Arkansas	\$35,392,286,650	\$0	\$0	\$0	\$0	\$357,522,554	
California	\$509,298,309,940	\$50,117,334,674	\$6,422,882,600	\$371,650,655,934	\$47,103,158,641	\$916,276,648	\$101,567,04
Colorado	\$71,297,979,620	\$0	\$0	\$0	\$0	\$429,298,302	\$52,096,27
Connecticut	\$44,744,956,030	\$1,861,910,220	\$170,739,218	\$51,799,461,530	\$4,292,549,432	\$37,294,552	
Delaware	\$5,495,300,010	\$229,096,400	\$11,134,955	\$24,136,610,506	\$671,551,945	\$19,612,836	\$906,80
District of Columbia	\$24,131,980,000	\$2,200,841,417	\$564,006,820	\$4,589,549,253	\$1,176,157,928	\$15,975,500	\$4,094,02
Florida	\$202,926,579,340	\$37,127,750,885	\$3,528,548,160	\$928,445,092,357	\$91,714,767,500	\$1,394,243,413	\$106,150,61
Georgia	\$78,996,905,390	\$1,220,875,053	\$58,475,243	\$49,301,693,034	\$2,042,022,649	\$495,406,566	\$32,646,49
Hawaii	\$22,770,200,010	\$1,252,583,843	\$73,908,871	\$23,892,156,483	\$4,288,450,457	\$20,802,329	\$2,242,33
daho	\$2,970,700,170	\$0	\$0	\$0	\$0	\$56,407,309	\$924,04
llinois	\$145,801,715,420	\$0	\$0	\$0		\$672,887,434	\$47,934,03
ndiana	\$45,469,888,390	\$0	\$0	\$0	\$0	\$355,512,713	\$17,323,63
owa	\$35,525,142,480	\$0		\$0		\$376,873,222	
Kansas	\$38,587,333,260	\$0		\$0		\$349,344,358	
Kentucky	\$38,106,236,250	\$0		\$0		\$381,751,139	
Louisiana	\$25,681,522,350	\$24,158,072,403		\$245,375,166,091		\$1,022,925,249	
Maine	\$4,018,112,100	\$402,911,762		\$10,670,589,831		\$29,336,667	
Maryland	\$57,724,601,070	\$2,522,577,965		\$47,569,986,630		\$126,027,345	
Massachusetts	\$78,200,441,790	\$13,358,266,714		\$137,713,077,565		\$83,010,877	
Michigan	\$99,217,306,100	\$0		\$0		\$345,858,867	
Minnesota	\$120,921,866,570	\$0		\$0		\$346,392,668	
Mississippi	\$5,787,165,750	\$107,387,070		\$30,571,115,507		\$518,409,500	
Missouri	\$61,810,688,090	\$107,387,070		\$30,371,113,307		\$694,990,022	
Montana	\$4,609,783,570	\$0		\$0		\$44,949,599	
Violitaria Vebraska		\$0		\$0			
Nevada	\$42,203,182,650 \$49,995,295,060	\$0		\$0		\$272,891,603 \$106,226,930	
		\$0					
New Hampshire	\$2,405,500,030	·		\$3,014,322,634		\$30,514,215	
New Jersey	\$65,177,807,540	\$7,158,182,430		\$227,773,284,482		\$328,047,265	
New Mexico	\$14,507,353,090	\$0		\$0		\$95,422,679	
New York	\$741,621,890,070	\$5,964,086,506		\$441,427,759,981		\$369,605,674	
North Carolina	\$51,204,681,360	\$2,232,560,095		\$75,976,747,665		\$749,804,211	
North Dakota	\$8,541,802,880	\$0		\$0		\$107,023,770	
Ohio	\$112,312,919,910	\$0		\$0		\$405,722,152	
Oklahoma	\$34,296,222,670	\$0		\$0		\$522,170,820	
Oregon	\$45,184,210,280	\$0		\$9,362,515,510		\$68,144,884	
Pennsylvania	\$174,854,858,300	\$148,201,258		\$24,908,057,777		\$341,678,304	
Rhode Island	\$4,709,710,000	\$603,676,764		\$18,359,172,292		\$12,322,125	
South Carolina	\$31,227,740,100	\$4,672,385,193		\$106,924,198,019		\$263,889,951	
South Dakota	\$3,822,687,950	\$0		\$0		\$167,533,042	
Tennessee	\$57,330,085,420	\$0		\$0		\$582,592,901	
Гехаѕ	\$555,950,275,220	\$2,434,641,925		\$204,493,682,087		\$4,259,372,362	
Jtah	\$19,104,270,140	\$0		\$4,152,178,875		\$109,165,976	
Vermont	\$5,319,510,130	\$0		\$0		\$19,822,440	
Virginia	\$64,503,370,390	\$3,594,270,908		\$140,623,147,999		\$225,748,373	
Washington	\$82,911,718,040	\$0		\$11,175,307,367		\$44,164,156	
West Virginia	\$4,797,480,280	\$0		\$0		\$83,898,310	
Nisconsin	\$49,212,272,970	\$0		\$0		\$235,559,117	
Vyoming	\$2,645,020,100	\$0	\$0	\$0	\$0	\$35,188,069	\$1,221,24
Nation Total	\$4,103,890,152,830	\$161,977,135,429	\$18,444,674,625	\$3,209,405,287,110	\$461,759,466,676	\$19,168,207,086	\$2,385,739,42
2050 Acquestion		¢1(4,077,425,420	\$18,444,674,625			\$536,709,798,394	¢66 000 702 0
2050 Assumption		\$101,977,135,429	710,444,074,025			35,067,09,798,394	900,000,703,97

b. Safe Drinking water – both the supply of, and the quality of:

With over 390,000 providers of drinking water to the American public (source EPA), it is imperative to know the risks that exist in this mainstay of community, and life itself.

- Drinking water health-based violations are not taken into account for credit risk, and these risks and/or
 incidents are usually not well reported and available to the discerning public. Knowing what is in the
 water is critical to support the residents of a community, who in turn support the municipal bond
 issuance through their participation in the local tax base.
- The current LCR (Lead and Copper Rule) focuses on "after the incident reporting" and not prevention.
- Lead service lines (see Newark, New Jersey; Flint, Michigan; Benton Harbour, Michigan) are a widely
 recognized problem and are flagged as a concern to be addressed. Unfortunately, without a national
 repository of the location of all lines, these service lines may not get the priority they require in
 replacement to ensure safety and long-term viability of older communities.
- The ISS ESG Muni QualityScore tracks all health-based safe drinking water violations across the country, and also tracks all reported lead testing and levels in the drinking water systems of America.

c. The Dependence of Pricing Municipal Securities off of Ratings Curves:

As pricing evaluators in the municipal market rely heavily on utilizing the ratings curves as a primary basis for pricing these securities, there can be a disconnect when more ESG related data and risks are available beyond the few relevant datapoints currently used by the credit rating agencies.

As discussed at the Bond Buyer National Outlook conference on March 1st, 2022, S&P and Kroll utilize a small set of focused risks in their ESG considerations, which impact the Credit Risk. This focused view does not incorporate the numerous ESG risk and data elements that exist and can be sourced as data. Hence the credit ratings do not necessarily align with the separate and completed ESG Scoring that is available.

Also widely discussed by participants at the Bond Buyer National Outlook conference is the belief that current municipal bond pricing does not properly incorporate climate change risks (if at all).

While we believe it would serve the market well if the ratings agencies were to incorporate a more fulsome set of ESG risks and datasets, we recommend a bit of caution in moving in that direction so as to avoid severe volatility in the pricing of these assets. We recommend that the fuller incorporation of the available risks be taken up by the credit rating agencies on an incremental basis.

(2) There are a number of organizations establishing voluntary standards for the issuance of ESG-Labeled Bonds, such as the ICMA and CBI. 17 Does the availability of these voluntary, market based standards provide adequate guidance for issuers and transparency for investors in the municipal securities market? If not, what additional guidance or transparency do you believe are warranted with respect to ESG-Labeled Bonds?

Our concern here is that many of these organizations that are establishing standards are not directly involved in either the municipal marketplace or the sourcing and collection of data utilized in ESG scoring construction. The

municipal marketplace is an immense market, not just in the number of issuers, and issues, but also in locations across America.

The data and risk measurements across this vast domain are not limited to the scope of information and measurement often provided by private sector entities. And, notably, with respect to municipal issuers, these risks are often closely tied to their physical locations which typically cannot be altered. Municipal issuers cannot simply relocate their head office or plant of operations and are hence often obligated to manage through physical risks, transitional risks, or legacy infrastructure.

(3) There are a number of industry-led initiatives underway intended to improve the quality of ESG-related information available in the municipal securities market. Does the availability of these voluntary, market-based initiatives enhance the ability of investors and other market participants to make informed decisions in the municipal securities market?

We generally welcome market initiatives, especially ones designed to elicit more disclosure from issuers. We have some concerns, however, that these initiatives will indirectly and perhaps unduly hamper those issuers who do not have the time or resources to provide disclosures to satisfy the initiative or investors' expectations.

ISS ESG currently has the ability to offer to all issuers (should they choose) both their current ISS ESG Muni QualityScore report and all underlying data on an ongoing basis. This would allow municipal issuers, both small and large, to have full access to all datasets utilized in the ISS ESG Muni Qualityscores (with historical data as well) that apply to their location.

The availability of this information would allow for an issuers, and investors to have verifiable and timely data covering risks from climate to crime, health to infrastructure. Issuers can use this data to clarify their interest on sustainable or green issuance as they can point to the risks that they are trying to address or abate.

This solution would also be cost effective with pricing being considered for issuers at a negligible level.

(4) There are numerous vendors providing ESG data for the municipal securities market. Does unequal access to ESG data result in disparate impacts to investors and other market participants? Does competing ESG data create investor confusion? How could the MSRB use the EMMA website to reduce information asymmetry or investor confusion?

We believe that there are enough providers of ESG data currently to provide opportunity for both investors and issuers to access ESG data without undue barriers (cost or physical). That said, the most important facet to avoid confusion in the marketplace is transparency around the types of data and analytics available from the various providers. The ISS ESG Muni QualityScore makes available to all subscribing clients <u>all</u> underlying datasets (source and links) utilized in the calculation of the Muni QualityScore for full transparency. The methodology for the calculation of the Muni QualityScore is also provided to ensure clients are informed of how these results are derived.

(5) Does the availability of ESG-related information (or lack thereof) in other financial markets directly or indirectly influence the functioning of the municipal market? If so, how? For example, when evaluating competing investment opportunities, do taxable ESG investors expect the same timeliness and quality of ESG related information for a municipal issuer as for a corporate issuer? And how might the differing expectations of different classes of investors (e.g., foreign versus domestic; retail versus institutional; or tax-exempt versus taxable) regarding ESG-related information affect pricing, underwriting, trading, and other market activities?

Yes, the municipal market has always been and will continue to be a market adjacent to traditional equities and corporate linked fixed income securities. The reporting standards and practices in capital markets have always favored speed and transparency which the municipal market simply does not have nor need. Municipal securities are slow moving, thinly traded, and are often 'set and forget' investments. That said we believe the opportunity exists to change the place that municipal securities have in the marketplace by facilitating ESG related discussions to help investors (and issuers) analyze and evaluate risks and opportunities through a new and important lens.

(6) The MSRB recently incorporated an ESG indicator from an independent data vendor, IHS Markit, into the New Issue Calendar shown on the EMMA website. This ESG indicator denotes when an issuer has self-labeled a bond issue as green, social, or sustainable, or if the issuer includes an independent ESG certification as part of the offering document. Does making this ESG indicator available on the EMMA website enhance market transparency regarding ESG-Labeled Bonds? Specifically, is it valuable to investors, municipal issuers or other market participants?

Yes, we believe that the MSRB's efforts to provide more information to the financial markets and its participants should be, and will be, well received as a positive step forward.

(7) What improvements could the MSRB make to the EMMA website regarding ESG-Related Disclosures, ESG-Labeled Bonds and other ESG-related information? Which improvements to the EMMA website would most enhance access for investors and other market participants to ESG-related information? Which improvements to the EMMA website would most enhance the fairness and efficiency of the municipal market?

We would recommend that the MSRB / EMMA host the Second Party Opinion (and make available) reports that were created as the base for the "Green Verified" or "Impact Verified" issue. This would not cost the firm that created the report, as they are paid by the issue / issuer at the time of the verification and would give comfort and access to needed information to the investing public.

(8) Is there any additional information that you would like to share with the MSRB regarding any other ESG-related activities or trends in the municipal securities market?

ISS ESG would be happy to entertain any further or future discussions with the MSRB about how we can work together to further improve the municipal marketplace

Appendix

In calculating the Muni QualityScore ESG scores for the U.S. municipal marketplace, ISS ESG currently uses the following datasets:

Environmental:	Social:	Governance:		
Climate Change exposure to Air Quality	Population	County Debt per Resident		
Climate Change exposure to Water Quality	Median Income	School District Debt per Student		
Climate Change exposure to Rising Sea Levels	Median Income Pay Gap (M/F)	Industry Concentration Risk		
Climate Change exposure to Heat Index	Gini Index (Income Distribution)	Firm Concentration Risk		
Bridges Deemed Structurally Deficient	Unemployment Rate	Real Estate Taxes as % of Median Housing Value		
Coal Ash pits / landfills	Racial Employment Parity Score	Real Estate Taxes as % of Median Income		
Dams at risk of failure	Gender Employment Parity Score	Broadband (usage)		
Declarations of Disaster	Poverty Rate	Police per capita		
Drought Conditions	Safe Drinking Water Violations	Firefighters per capita		
Flood Plain risk (100 year flood)	Lead Testing - Safe Drinking Water	Teacher / Student ratio		
Fracking Wells	Counties at Risk (CDC) - HIV / Zika	Dentists per capita		
Abandoned Oil & Gas wells	% of Population with Diabetes	Doctors per capita		
Lyme Disease	Opioid Prescriptions			
Power Plant Emissions - CO2	Mortality Overdose Rates			
Power Plant Emissions - SO2	Obesity Rates			
Power Plant Emissions - NOX	Cancer (Incidence Rates)			
Solid Waste Incinerator	Home Ownership			
Superfund Sites	Vacancy Rate			
Water Use	Median Housing Value			
	Median Income as a % of Median			
	Housing Value			
	Homelessness			
	Bachelor's Degree or higher			
	Ransomware / Cyberattack			
	Incidents of Crime (Violent and			
	Property)			
	Cost of Crime (Violent and Property)			

Sources and additional resources

Source:	Data from Source:
Surging Seas: Risk Finder (climatecentral.org)	County based Value of Property at risk 1 Foot Sea Level Rise from Surging Seas / Climatecentral.org Data for Property at risk is consolidated from County level to State for the purposes of this report
Explore Census Data	Median Home Value 2009 to 2019
Derived value from Surging Seas multiplied by Change in Home Value from Census	Consolidated State Value of Property at risk 1 Foot Sea Level Rise from Surging Seas / Climatecentral.org * Change in Median Housing Value (2009 to 2019)
	State level Value of Property at risk at 1 Foot is multiplied by percentage change in ACS Median Housing Value from (2009 to 2019) - to better reflect the current market values of property at risk
Coastal Flooding National Risk Index (fema.gov)	Value of Property at risk 6 Foot Sea Level Rise; and Annual Risk values less Coastal Flooding
FEMA National Risk Index	Annual Risk is the sum of all Climate Change associated risks excluding Coastal Flooding risk
Alaska's Sea Level Rise - Sea Level Rise	NOAA does not list 1ft risk for Alaska so confirmation was sought from additional sources This sources details 1ft risk by 2050 for Alaska coastal communities
CUSIP Global Services S&P Global Market Intelligence (spglobal.com)	Mapping of Notional Amount to each State of operations of Issuer (not where the bond is issued but where the project that funds were issued for, operates)
Notional Bond Amount Outstanding at risk due to 1ft Coastal Flooding / Sea Level Risk	This is derived by multiplying the Notional Amount Outstanding for each State by the percentage calculated by the Property at Risk at 1ft (/) divided by the total "Building Value" from the FEMA National Risk Index
Notional Bond Amount Outstanding at risk due to 6ft Coastal Flooding / Sea Level Risk	This is derived by multiplying the Notional Amount Outstanding for each state by the percentage calculated by the property at Risk at 6ft (/) divided by the total "Building Value" from the FEMA National Risk Index
Sea Level Rise Technical Report: Data (noaa.gov)	NOAA 2022 Sea Level Rise Technical Report Data Files
Sea Level Nise Technical Report. Data (Iloda:gov)	We utilize the NOAA 2050 assumption of 1ft rise in Sea Level / Coastal Flooding
Additional Links	
Alaskan towns at risk from rising seas sound alarm as Trump pulls federal help Alaska The Guardian	Details multiple villages requiring relocation with estimates of up to \$400 million for each village migration
Alaska's Sea Level Rise - Sea Level Rise	Confirmation of 1ft by 2050 in forecasts
Alaska Native Villages: Limited Progress Has Been Made on Relocating Villages Threatened by Flooding and Erosion U.S. GAO	
Interagency Sea Level Rise Scenario Tool – NASA Sea Level Change Portal	
Sea Level Rise Smithsonian Ocean (si.edu)	