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Municipal Finance Law Since 1971

Protect Your Muni Bond Portfolio From A Tornado's Ravages.

I haven't written about natural disasters affecting municipal bonds since 2019. The recent Kentucky tornados jolted me to pen this. When disasters happen, the news feeds hit just the highlights. They skip the detail we bond investors need. They rarely list which specific schools, buildings, court houses, city or county facilities were obliterated.

The recent Kentucky tornados are an example of the lack of information. My clients own several Kentucky munis. Many were not in harm's way when the tornados struck. Bowling Green, Kentucky was not so lucky. We owned their Independent School Building Revenue bonds. The good news is that these bonds are backed by the Kentucky Sate Intercept Program. In simple terms, this is a credit enhancement program where the state pledges to pay bond holders in the event of default. This could occur if the municipality supporting the bonds suffered a catastrophe.

The detailed information for Bowling Green Independent School Building Revenue bond holders comes in the Official Statement:

... the corporation reserves the right, upon 30 days' notice, to call the bonds in whole or in part on any date at par for redemption upon the total destruction by fire, lightning, windstorm, or other hazard of any building constituting the project...

If these bonds are called it would probably be at par. We bond holders would lose the market premium. The premium per bond at that time was around 107.786 or \$1077.86 per \$1000 face value. We didn't want to lose that premium so we sold our bonds, collected the profits and called it a day.

We weren't worried the State Aid Withholding of Kentucky wouldn't pay. We just didn't want to see our market premiums disappear if the bonds were called.

I've studied the State Intercept Programs, State Aid Withholding and State Guarantees for municipal bonds. The problem (if you can call it that) is, there have been so few investment grade municipal bond defaults I have no idea if the coupon and principal payments in a catastrophe would be prompt or if there would be a lag.

Certainly, if Kentucky or any other state with an Intercept or Aid program failed to honor their pledge of financial assistance, they would be taken to the municipal bond woodshed by the capital market.

As the weather patterns continue to be tumultuous, stay on top of your municipal bonds to ensure they are safe should an unthinkable event occur. Having a secondary source of repayment such as a credit enhancement provides a nice safety net. And knowing the call features in a disaster is imperative.

Forbes

by Marilyn Cohen

Jan 4, 2022

Cyber Vulnerabilities Could Impact Municipal Finance.

Municipal bond credit analysts consider governments unprepared for cyberattacks, a recent survey says.

While cybersecurity risk management has long been on the radar of government IT managers, it's also attracting the attention of municipal finance organizations.

In a Dec. 14 <u>survey</u> by Hilltop Securities, municipal bond credit analysts said they felt state and local governments were unprepared for cyberattacks. A full 63% said they thought governments were "hardly prepared" for cyberattacks, and 30% said they were "somewhat prepared." Only 6% considered state and local governments "on the way to being prepared, with none of the analysts considering municipalities "very prepared" or even "prepared."

The growing number of ransomware attacks state and local governments are facing has municipal bond issuers on alert. The ransomware attack on Atlanta was a "watershed moment," Omid Rahmani, associate director for U.S. public finance at Fitch Ratings, said in a Nov. 1 interview with Hilltop.

In March 2018, <u>Atlanta</u> was hit with SamSam ransomware that crippled the city's online systems and brought many city services to a grinding halt. The hackers demanded \$51,000 worth of bitcoin, which the city refused to pay. Estimates of the ultimate recovery cost approached \$17 million.

One of changes since the Atlanta attack, according to Rahmani, is that hackers are no longer using shotgun style attacks where they target a large number of entities and hope one or two of them engages the malware. Now, they are analyzing municipal disclosure documents to find not only potential cyber vulnerabilities but also determining a city's "actual appetite for payment," he said.

The recent breach of the Kronos Cloud Solution platform that many municipalities and health care organizations rely on for payroll and workforce tracking is another attack vector agencies must manage and that finance organizations take into consideration.

These vulnerabilities have driven up premiums for cyber insurance. While nearly 90% of local governments <u>surveyed</u> by Public Technology Institute said they have cyber insurance, up from 78% in 2020, policies are increasingly complex and require agencies to meet stringent cybersecurity controls.

Public sector entities with legacy systems and under-resourced IT departments may find it harder to find affordable coverage – especially as ransomware attackers demand larger payoffs. Those with inadequate coverage could face even "greater financial and reputational risks from cyberattacks, which could have negative credit implications, <u>according to Fitch Ratings</u>.

"The landscape is changing quite rapidly right now, from the cybersecurity insurance and the threat landscape side, which leaves local governments in the middle dealing with issues they traditionally

haven't had to deal with," Rahmani told The Record.

gcn.com

By Susan Miller

JANUARY 3, 2022 03:54 PM ET

Bond Insurance Makes a Comeback - And It Might Be Worth the Cost

The COVID-19 pandemic has put a lot of pressure on municipal bonds. While general obligation bonds remain safe, revenue bonds backed by universities, senior housing, and convention centers are at risk. Fortunately, the resurgence of bond insurance has helped many investors gain peace of mind amid the evolving crisis.

Let's examine the history of muni bond insurance and how it's staging a comeback amid the COVID-19 pandemic.

A Brief History of Bond Insurance

Bond insurance guarantees the payment of principal and interest in the event of a default. In addition, bond insurance is also a form of "credit enhancement" that helps issuers reduce borrowing costs. Insurers essentially lend their high credit rating to issuers by guaranteeing the bonds, making them less risky for investors.

While bond insurance was commonplace before 2007, MBIA, Ambac and other large insurers were hard-hit by exposure to mortgage-backed securities and structured finance. Rating agencies promptly cut their credit ratings in response to their failure to make insured bondholders whole, resulting in less than 5% of bonds insured.

Then, in 2014, the City of Detroit defaulted on \$18.5 billions' worth of municipal debt. Bond insurers redeemed themselves during the crisis by keeping insured bondholders whole. And in 2015, Puerto Rico defaulted on its debt, and bond insurers again kept insured bondholders whole. These events helped restore investor confidence in bond insurance.

Why Bond Insurance Is Coming Back

The COVID-19 crisis further reignited demand for bond insurance. With the unpredictability of lockdowns, many investors sought insurance to protect them against default risks. Bond insurance has been particularly valuable for revenue bonds backed by COVID-19-hit assets, such as convention centers or amusement parks.

Bond insurance may also offer alpha to active investors. The spread between insured bonds and 10-year Treasuries rose from 20 to 190 basis points during the height of the crisis. Since then, they've come down from their highs, but they remain above pre-crisis levels, suggesting that yields could fall and prices could rise over time.

As of December 2020, insured munis represented about 10% of all muni bond issues, with more high-quality issuers offering insurance as a way to reassure investors concerned about ratings downgrades and defaults. And, the insurance costs just an average of just 20 basis points, making it

an extremely affordable way to achieve peace of mind.

The Bottom Line

Bond insurance may not be as popular as before the 2008 financial crisis, but the COVID-19 pandemic is increasing demand for safety. Given the unpredictability of the pandemic and the low cost of insurance, many high-quality issuers are offering insurance to reassure investors and draw in capital at the lowest possible rates.

dividend.com

by Justin Kuepper

Dec 28, 2021

JPMorgan Sees Muni Housing Bonds Besting Other Sectors Next Year.

- Muni housing bonds outperform during rising-rate environment
- Debt offers higher yields, less volatility, says strategist

Municipal-bond investors seeking shelter from rising rates in 2022 should look to housing bonds, according to JPMorgan Chase & Co.'s lead muni strategist.

Debt issued by states to finance low-interest loans for first-time home-buyers or build affordable housing carry higher yields and are less volatile, so they typically perform better than other muni sectors when rates rise, said Peter DeGroot, head of municipal research and strategy at the biggest U.S. bank.

Housing bonds rated AA and A provide an average extra yield of 11 to 35 basis points over similarly rated revenue bonds to compensate for uncertainty about how quickly homeowners will pay off their mortgages and because investors demand a premium for liquidity, according to JPMorgan. The relatively higher yields of housing bonds and their propensity to trade less frequently reduces the securities' volatility.

Planned Amortization Class bonds, debt with structural features that reduce the likelihood of early principal payments and price like shorter-dated securities, are the best candidates to outperform, DeGroot said.

"Housing bonds have performed extraordinarily well in rising rate environments," he said.

To cool the hottest inflation in a generation, Federal Reserve officials could raise interest three times next year, and many investors are anticipating the first hike around midyear. The rapid spread of the omicron variant and the risk that sustained inflation could bring faster-than-expected interest rate hikes could make the new year volatile.

DeGroot's research found that housing bonds outperformed the overall market during four cycles when investors pulled cash out of bonds: the pandemic shock of March 2020; a protected period of rising long-term Treasury yields in 2018; the "Taper Tantrum" in 2013; and Meredith Whitney's prediction of "hundreds of billions of dollars" of municipal bond defaults in 2010.

From May 22, 2013, when former Fed Chair Ben Bernanke jarred bond buyers by saying the Fed

would start scaling back asset purchases — to when yields peaked on Sept. 6, investment grade municipal bonds lost 6.2%, according to the Bloomberg Municipal Bond Index. By contrast, muni housing bonds lost 4.6% over that period.

Bloomberg Markets

By Martin Z Braun

December 27, 2021, 6:47 AM PST

Why More Public Pension Funds Are Investing in Cryptocurrencies.

The barriers for state and local institutional investors entering the crypto market are come down, including a clearer regulatory framework and more industry scrutiny.

Cryptocurrency has been around for more than a decade, although it has yet to become the financial industry disrupter that tech enthusiasts were predicting. But one big signal that cryptocurrency is on its way to becoming more mainstream is that some public pension funds are investing in the industry.

At least two pension funds in the past three years—California Public Employees' Retirement System and New Jersey's Common Pension Fund—have invested in companies that make money by mining for Bitcoin, a digital currency created and exchanged independent of banks or governments. Late this summer, Fairfax County, Virginia's employee fund and its police officers pension both invested in a fund that tracks blockchain, the technology that underpins Bitcoin. And this past fall, the Houston Firefighters' Relief and Retirement Fund became the first public pension fund to invest directly in Bitcoin and Ethereum, another platform powered by blockchain technology.

Continue reading.

ROUTE FIFTY

by LIZ FARMER

DECEMBER 30, 2021

Cash Floods Municipal-Bond Market.

Tax breaks and stimulus help investors leave behind worries about Covid-19-related defaults

Investors poured more money into municipal bond funds through mid-December last year than they had in decades, providing the fuel for borrowing by states and cities to fund new bridges, sewers and other state and local projects to a second-straight 10-year high.

Municipal bond funds now hold an unprecedented 24% of outstanding debt compared with 16% five years ago, according to Federal Reserve data. The move marks the latest step in a fundamental shift away from a buy-and-hold market in which individual investors quietly collect interest year after

year.

The record levels of borrowing and investing in 2021 are evidence that investors have moved well past their early worries the pandemic would drive a wave of municipal defaults and bankruptcies. Buoyed by stimulus funds, state and local governments issued \$302.3 billion of debt for new projects as of Dec. 29, the most in at least a decade.

Meanwhile, investors plowed \$64 billion into muni mutual and exchange-traded funds through Dec. 15, according to data from Refinitiv Lipper, more than they ever have during that period since tracking began in 1992. That includes \$22 billion into high-yield funds that hemorrhaged cash in 2020.

"Generally there's a better credit environment, you have lower supply [and] more demand, and then you just have investors who are willing to take on more risk to replace the yield that they previously got on their high-grade bonds," said Eric Friedland, director of municipal-bond research at asset manager Lord Abbett.

Bonds issued by state and local governments are particularly precious to investors because they carry interest payments usually free from federal, and often state, taxes. Expectations for possible tax increases under a Democratic administration likely stoked investors' appetites, Mr. Friedland said.

The S&P Municipal Bond Index had a total 2021 return of 1.76%, including price changes and interest payments through Dec. 30. That compares with minus 2.13% for the S&P U.S. Treasury Bond Index and minus 1.79% for the S&P U.S. Investment Grade Corporate Bond A Index.

High-yield municipal bonds racked up more-substantial gains as investors abandoned their fears of default, with the S&P Municipal Bond High Yield Index returning 6.77% through Dec. 30.

The government and nonprofit borrowers that issue bonds in the nearly \$4 trillion municipal market are generally in better financial shape than they were in 2020, according to analysts and financial reports. Tax collections and stimulus funds have buoyed municipal balance sheets. The federal infrastructure package recently signed into law could lead to additional money for capital projects.

The median number of days worth of cash on hand was up 11% in 2021 for 173 nonprofit hospitals that have filed their 2021 financial statements, according to Merritt Research Services. For airports that have filed statements, median days cash on hand increased by 22% and for private colleges and universities, a similar cash metric increased 12%.

"These sectors have built up significant cash and reserves that they didn't have at the onset of the virus in 2020," said Richard Ciccarone, Merritt's president and chief executive. Still, he said, "Not everybody's coming back in good shape."

Defaults, a rarity in the muni market, remain higher than during the pre-pandemic period, though they have fallen from 2020, according to Municipal Market Analytics. Some borrowers have fared particularly badly. There were 33 defaults in 2021 among assisted-living and other senior-housing borrowers, the most since the firm's record-keeping began in 2009.

Some state and local governments also remain on shaky ground, using bond money to plug budget gaps or relying on stimulus funds to paper over financial problems. Towns across the U.S. in 2021 resorted to pension-obligation borrowing, using a record-breaking amount of debt to top up retirement funds in the hopes that market returns will outpace interest costs.

Even with borrowing for new projects at a 10-year record, total debt issuance fell short of some expectations. Citigroup twice revised its forecast for total 2021 issuance downward, after Congress declined to include two bond programs in the infrastructure bill. "We could not convince our policy makers," said Vikram Rai, Citigroup's head of municipal strategy.

Including refinancing deals, municipal borrowers had sold a total of \$454 billion as of Dec. 21, also at least a 10-year record.

Cities and states could probably sell roughly \$100 billion more of bonds without driving down prices, according to an analysis of lending capacity by Municipal Market Analytics. The mismatch between supply and demand grew after the 2017 tax overhaul prohibited the use of tax-exempt borrowing for early refinancing while simultaneously making tax-free yield more precious to some investors by capping the state and local tax deduction.

The Wall Street Journal

By Heather Gillers

Updated Jan. 2, 2022 10:57 am ET

The \$1.2T Infrastructure Bill is 'A Positive for the Municipal Market,' Analyst Says.

Jennifer Johnson, Senior Vice President and Director of Municipal Bond Research at Franklin Templeton, joins Yahoo Finance Live to discuss the impact the President Biden-backed infrastructure bill will have on the municipal bonds market, the 2022 outlook for bonds, and the rising prominence of ETF in the market.

Watch video.

Yahoo Finance Video

Wed, December 29

Congress Provides Substantial Funding for Variety of Water Projects in Infrastructure Law With Emphasis on Low Income Communities.

The Infrastructure Investment and Jobs Act (IIJA) contains significant water-related provisions, amounting to \$82.5 billion in spending.[1] Areas addressed by these provisions include drinking water safety, clean water more generally, access to water, and research.

Background

America faces many serious problems involving water. People in rural areas remain dependent on often unreliable wells, and the water infrastructure of many U.S. cities has deteriorated as many existing pipes remain contaminated by lead. Meanwhile, from 1996 to 2018, the cost of water and wastewater has increased at annual rates of 5.09% and 5.64%, respectively, compared to an annual

increase in the Consumer Price Index of only 2.1%.[2]

In Flint, Michigan, the city's drinking water was contaminated with lead in 2014, beginning a crisis that lasted until at least 2019. Between 6,000 and 12,000 children were exposed to high levels of lead.[3] The Flint disaster provides examples of many of the problems the water provisions of the IIJA seek to confront: environmental injustice, the continued use of lead service pipes, and failures of local, state, and federal governments.

Threats to clean drinking water go beyond lead, however, and in many ways, regulation has failed to keep up with new risks. For example, the Environmental Protection Agency has not issued National Primary Drinking Water Regulations for new contaminants since 1996, although it announced its final determination to regulate perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) in March 2021.[4] PFOS, PFOA, and other per- and polyfluoroalkyl substances (PFAS) have contaminated water supplies in many places across the country, and because they remain in the environment for a long time and do not easily degrade, pose particular problems to remediate.

These water-related problems were part of a broader set of infrastructure-related problems the IIJA sought to address. The law grew out of the \$2.3 trillion American Jobs Plan announced by President Biden on March 31, 2021, amounting to \$4 trillion in combination with the American Families Plan announced in April.[5] The plans' "human infrastructure" provisions were split off into the still-unpassed Build Back Better Act to seek bipartisan support for the IIJA, and the IIJA itself was cut considerably. The final version of the IIJA authorizes a total of \$1.2 trillion in spending over several years. The bill finally became law on November 15, 2021.

Safe Drinking Water

The largest category of water-related investments in the Act involves improvements in drinking water safety and sanitation, including around \$24 billion in grants to states over five years under the existing Safe Drinking Water Act and Federal Water Pollution Control Act. The Infrastructure Investment and Jobs Act also provides \$15 billion for projects to replace lead water pipes and service lines, and \$9 billion for addressing PFAS and other "emerging contaminants."[6] Section 50101's amendments to the Safe Drinking Water Act, in addition to authorizing new spending, clarify that SDWA grants "to assist in responding to and alleviating any emergency situation" can include responses to cybersecurity events and heightened lead exposure. (Section 50113 also concerns cybersecurity support for public water systems.) These amendments also provide that "State-based nonprofit organizations that are governed by community water systems" are eligible for technical assistance under Section 1442(e).

Section 50102 reauthorizes the Safe Drinking Water Act's Drinking Water State Revolving Loan Funds and appropriations for their capitalization grants. It also amends SDWA Section 1452(d) to give states more ways of subsidizing projects serving disadvantaged communities: "grants, negative interest loans, other loan forgiveness, and through buying, refinancing, or restructuring debt."

Section 50103 authorizes appropriations for the SDWA's source water quality protection partnership petition program and allows counties to form such partnerships on behalf of unincorporated areas.

Section 50104 expands the projects eligible for grants to small and disadvantaged communities under the Safe Drinking Water Act to include "the purchase of point-of-entry or point-of-use filters and filtration systems that are certified by a third party using science-based test methods for the removal of contaminants of concern." (This is the only reference to point-of-use systems in the IIJA.) It also requires the EPA to "establish a competitive grant program" through which eligible entities would "assist eligible individuals in covering the costs incurred by the eligible individual in

connecting the household of the eligible individual to a public water system."

Section 50105 includes several measures to reduce lead in drinking water. It increases and extends appropriations for lead reduction grants, and allows them to be used to replace privately-owned lead service lines, "with priority for disadvantaged communities based on the affordability criteria established by the applicable State under [SDWA] section 1452(d)(3), low-income homeowners, and landlords or property owners providing housing to low-income renters." It also requires water systems to replace privately-owned lead service lines without cost to low-income customers, and to notify state governments of planned lead service line replacements.

Section 50110 requires the EPA to "establish a voluntary school and child care program lead testing, compliance monitoring, and lead reduction grant program" and to publish school lead testing guidance for public water systems. It also reauthorizes appropriations for SDWA Section 1464(d)'s existing Voluntary School and Child Care Program Lead Testing Grant Program.

Another grant program, for state responses to contaminants, authorized by SDWA section 1459A(j), is expanded by IIJA section 50114 beyond its previous definition of "underserved communities" to include, for example, communities "with a population of less than 10,000 individuals that the Administrator determines does not have the capacity to incur debt sufficient to finance a project or activity."[7]

Water Systems

Section 50106 requires the EPA to establish a grant program for "Operational Sustainability of Small Public Water Systems," while section 50107 requires it to establish a "Midsize and Large Drinking Water System Infrastructure Resilience and Sustainability Program." Section 50109 requires the EPA to establish another grant program "to assist qualifying households with need in maintaining access to drinking water and wastewater treatment," based on the results on a study required by Section 50108. The Indian Reservation Drinking Water Grant Program will be expanded under section 50111 to include wastewater system improvements as well as drinking water system improvements.

Research

The law funds water-related research by several entities – both scientific research into new technologies and studies of social problems. Section 50201 provides \$75 million annually through fiscal year 2026 for research, investigations, training, and information grants, including to state water pollution control agencies and nonprofit organizations. Section 50222 revises the Federal Water Pollution Control Act to provide "funding to carry out groundwater research on enhanced aquifer use and recharge in support of sole-source aquifers" to state, local, and tribal governments jointly with research institutions. Section 50115 requires the EPA to conduct annual studies on the prevalence of boil water advisories, while section 50112 requires it to report on advanced drinking-water-related technologies. Section 50108 requires it to conduct a "Needs assessment for nationwide rural and urban low-income community water assistance," while 50216 requires it to "identify historical distributions of funds to small and disadvantaged communities and new opportunities and methods to improve on the distribution of funds under" the Clean Water State Revolving Funds and Drinking Water State Revolving Funds.

Section 50213 requires the EPA to establish a competitive grant pilot program for the sharing of water data. The EPA is directed by section 50217 to establish "centers of excellence for stormwater control infrastructure technologies" at universities, other research institutions, and nonprofit organizations (as well as grants to state, local, and tribal governments for stormwater infrastructure

projects involving new technologies). Under section 50218, the EPA must establish a Water Reuse Interagency Working Group "to develop and coordinate actions, tools, and resources to advance water reuse across the United States, including through the implementation of the February 2020 National Water Reuse Action Plan."

Sections 50219 and 50220 require studies by the EPA of advanced clean water technologies and capital improvement needs for Clean Water State Revolving Fund-eligible projects, respectively. Section 50221 funds the Water Resource Research Act's Water Resource Research Institutes but puts tighter controls on the funding, such as Department of the Interior evaluations of each Institute every five years. Finally, section 50222 directs the EPA to "provide funding to carry out groundwater research on enhanced aquifer use and recharge in support of sole-source aquifers."

Clean Water

Beyond drinking water provisions, other provisions of the IIJA concern wastewater and other clean water issues. Section 50202 establishes the Wastewater Efficiency Grant Pilot Program for publicly-owned treatment works, while Section 50203 funds the Clean Water Act's Pilot Program for Alternative Water Source Projects and makes stormwater projects eligible for it. Similarly, section 50204 funds Sewer Overflow and Stormwater Reuse Municipal Grants and expands their scope to include "notification systems to inform the public of combined sewer or sanitary overflows that result in sewage being released into rivers and other waters." Sections 50205 through 50209 create new grant programs: the Clean Water Infrastructure Resiliency and Sustainability Program; the Small and Medium Publicly Owned Treatment Works Circuit Rider Program; the Small Publicly Owned Treatment Works Efficiency Grant Program; Grants for Construction and Refurbishing of Individual Household Decentralized Wastewater Systems for Individuals with Low or Moderate Income; and, finally, a program of grants to publicly-owned water treatment works (POTWs) and nonprofit entities, to cover the cost of connecting low-income individuals to POTWs.

The next few sections revise and fund existing programs. Section 50210 funds the Clean Water State Revolving Funds at a rate of \$2.40 billion for FY2020, \$2.75 billion for FY2023, \$3.00 billion for FY2024, and \$3.25 billion for each of FY2025 and FY2026. Section 50211 funds the Innovative Water Infrastructure Workforce Development program and expands the use of grants under the program. Section 50212 funds grants to Alaska to improve sanitation in rural and native villages. Section 50215 reauthorizes Water Infrastructure Finance and Innovation Act (WIFIA) funding, while section 50214 requires WIFIA loan applicants to submit only one final rating option letter instead of two.

Water Rights

Section 70101 establishes the \$2.5 billion Indian Water Rights Settlement Completion Fund to pay for "obligations identified by the Secretary of the Interior, under an Indian water settlement approved and authorized by an Act of Congress before the date of enactment of this Act."

Conclusion

The IIJA greatly expands funding for, and revises rules regarding, such areas as lead pipe replacement, filtration systems, and general water and sewer infrastructure. It remains to be seen whether even this additional spending is sufficient for the nation's water problems.

Sullivan & Worcester LLP - Jeffrey M. Karp

December 27 2021

- [1] https://pacinst.org/wp-content/uploads/2021/11/US Infrastructure Brief.pdf.
- [2] https://www.awwa.org/AWWA-Articles/awwas-2019-water-and-wastewater-rate-survey-reveals-increasing-utility-costs-boosting-rates.
- [4] 86 FR 12272.
- [5] https://www.politico.com/news/2021/05/24/infrastructure-talks-near-collapse-490637.
- [6] https://pacinst.org/wp-content/uploads/2021/11/US Infrastructure Brief.pdf.
- [7] SDWA § 1459A(c)(2) (42 U.S.C. 300j-19a).

Retirement Communities Lose Residents, Attract Muni Investors.

Senior-living developments weakened by the Covid-19 pandemic hold appeal for bondholders in search of yield

Investors are snapping up municipal debt sold by senior-living facilities despite record default rates, pandemic-related revenue losses and costly labor shortages.

Covid-19's rapid spread through eldercare facilities, along with the pandemic's lockdowns, deterred many older Americans from moving into senior communities. Nearly 8% of the \$41 billion in outstanding senior-living bonds are in default as of December, according to Municipal Market Analytics, the most since tracking began in 2009. The sector now accounts for almost one-quarter of defaulted debt in the muni market, not including bonds caught up in Puerto Rico's bankruptcy.

Yet investors remain bullish. After a fall in debt issuance in 2020, senior-living facilities sold \$7.4 billion in new bonds in 2021 through Dec. 13, 21% more than they did in 2019, according to an analysis by ICE Data Services.

"The operations have not yet fully recovered, even though, in some places, bond prices have," said David Hammer, head of municipal-bond portfolio management at Pacific Investment Management Co. He said he has reduced his exposure to senior-living facilities.

The robust appetite for senior-living bonds is a window into investors' willingness to put aside worries about Covid-19-related financial weakness as the pandemic grinds on into its third year. Retirement communities are among the municipal borrowers hardest hit financially, with Covid-19 driving away prospective residents and adding costs for protective equipment. But with rock-bottom yields, demand for new bonds outstripping supply and the potential for tax increases, the pickings are slim for investors in search of tax-exempt income.

Yields on risky municipal bonds fell in 2021, with investors plowing a record \$22 billion into high-yield municipal-bond funds through Dec. 15, according to Refinitiv Lipper. Borrowers rated BAA were paying 2.12% on 30-year bonds as of Dec. 31, according to data from Refinitiv, down 14% from a year earlier.

Meanwhile, 10-year senior-living bonds sold over the past six months yielded 6.6% for taxable debt

financing the purchase of retirement facilities in Texas and Oklahoma and 4.4% for tax-exempt debt to buy and refinance a retirement facility in Kentucky, bond documents show. For an investor in the top tax bracket, a 4.4% tax-free yield equates to roughly 7.6%, according to data from Nuveen.

Several senior-living borrowers that considered issuing debt in 2020 and then opted against it, moved forward with selling bonds in 2021 after finding the market more receptive, said Seth Brumby of Reorg, a credit-research firm. The risky debt is a welcome addition for many high-yield funds trying to put investor cash to work.

"Senior-living deals were well-received with strong investor interest," said Jon Barasch, director of municipal evaluations at ICE Data Services.

Senior-living facilities include nursing homes as well as assisted-living and continuing-care retirement communities, whose offerings range from independent living to medical care and assistance with daily activities. These facilities are permitted by federal law to sell tax-exempt debt the same way that state and local governments do because they are perceived to have a public benefit.

Any individual facility's default or drop in bond prices would have limited impact on high-yield mutual funds, which mix senior-living bonds with those of other low-rated borrowers such as charter schools and college dormitories. And some recent trends have benefited senior-living facilities, including the graying of the baby boomers and a hot housing market for prospective residents looking to sell their homes.

Still several indicators point to more trouble ahead for the sector. Much of the revenue to pay back bondholders comes from entrance fees residents pay when they move into senior communities. But move-ins remain well below pre-Covid-19 levels. Nonprofit continuing-care retirement communities had an 87% occupancy rate in the third quarter of 2021, down from 93% in the first quarter of 2020, according to the NIC MAP Data Service.

Median net operating margins, including entrance fees, at 151 facilities tracked by Fitch Ratings fell to 18% in 2020 from 23% in 2019 for investment-grade borrowers and to 14% from 18% for those below investment-grade.

A tight labor market is also pressuring expenses, analysts said.

In addition to the \$3.2 billion in senior-living muni debt currently in default, borrowers of a further \$3.7 billion have reported impairments, such as having to dip into reserves, according to Municipal Market Analytics. MMA partner Matt Fabian said high investor demand has helped prop up struggling facilities by providing access to rescue cash.

"So the record default number understates the amount of disruption the pandemic has created," Mr. Fabian said.

The Wall Street Journal

By Heather Gillers

Jan. 4, 2022 7:00 am ET

Municipal Sector Market Review.

Summary

- The municipal sector continues to benefit from a strengthening credit environment and a supportive technical backdrop.
- We discuss some of the key themes of the sector such as the impact of rising short-term rates on leverage costs, a low level of underlying yields and more.
- We discuss the performance of the sector across different credit sub-sectors, investment vehicles and fund houses.
- And highlight our stance in this sector via our Municipal Income Portfolio.

Continue reading.

Seeking Alpha

Jan. 03, 2022

How Private Capital Strangled Our Cities.

By following the money, a new history of urban inequality turns our attention away from federal malfeasance and toward capital markets and financial instruments.

Credit and debt, two sides of the same proverbial coin, place a bet on time. Credit makes money mobile and funds the future. Soon enough, however, it becomes debt, with the lender demanding from the borrower returns with interest that threaten to constrict the possibility of further credit. Personal debt masquerades as moral obligation, a contract freely chosen, yet at the heart of the promise debt creates is not social reciprocity, as the late David Graeber wrote in *Debt: The First 5000 Years*, but a "simple, cold, and impersonal" market transaction. As nothing more than a "matter of impersonal arithmetic," debt requires shame and ultimately the threat of force to fulfill its terms and realize the returns for creditors it promises. It lodges coercion at the heart of the supposedly "free" market.

The squeeze is only intensified in the seemingly impersonal world of institutional finance. If debt ensures stability and solvency for some, the economic growth it propels fuels dependency and inequality for others, not only between creditor and debtor but also further down the line, as the borrower passes on the costs of debt to those with less power to control the terms of the deal. This devil's bargain is particularly true when it comes to municipal debt, argues the Stanford University historian Destin Jenkins in *The Bonds of Inequality*, his new book on the power the bond market has leveraged over San Francisco and other US cities. The debt-financed spending that cities have long used to spur growth, Jenkins contends, has also underwritten the racial and income inequality of the post-World War II metropolis, while funneling profits to bankers and reinforcing city dependency on finance capitalism. This unequal compact hid in plain sight until the 1970s, when the urban fiscal crises of the era revealed that cities were deeply in hock to financial institutions. But debt was just the way business was done, and banks and other lenders saw no reason to ease the terms of this deal, preferring instead to underwrite the continued hollowing-out of the American metropolitan landscape.

Continue reading.

The Nation

By Samuel Zipp

Jan 4, 2022

Over \$60 Billion Flowed Into Municipal Bond Funds in 2021.

Infrastructure focus and investors looking to curb higher taxes have helped municipal bonds see over \$60 billion in fund flows during 2021.

Municipal bonds offer a way for investors to help stymie the effects of higher taxes. That's certainly the case heading into 2022 after the trillion-dollar infrastructure package got signed into law by President Biden.

"Investors have poured more money into municipal bond funds so far this year than they have in decades, providing the fuel for borrowing by states and cities to fund new bridges, sewers and other state and local projects to a second-straight 10-year high," Wall Street Journal reports.

That influx of funds is translating into municipal bonds capturing a larger share of the debt market. Investor habits are also changing with more investors looking to hold munis temporarily as opposed to holding for the long-term horizon.

"Municipal bond funds now hold an unprecedented 24% of outstanding debt compared with 16% five years ago, according to Federal Reserve data," WSJ adds further. "The move marks the latest step in a fundamental shift away from a buy-and-hold market where individual investors quietly collect interest year after year."

Additionally, the fundamentals of supply and demand are also affecting the municipal bond market. More demand for munis is happening at a time when supply is slow, pushing bond prices higher as investors swap yield for the quality that munis can offer.

"Generally there's a better credit environment, you have lower supply [and] more demand, and then you just have investors who are willing to take on more risk to replace the yield that they previously got on their high-grade bonds," said Eric Friedland, director of municipal-bond research at asset manager Lord Abbett.

ETF TRENDS

by BEN HERNANDEZ

JANUARY 3, 2022

Looking Back at 2021 in State and Local Government.

States and localities demonstrated their resilience as they navigated a second year marked by the pandemic. There are plenty of pressing issues on the horizon heading into 2022.

It's been another eventful and challenging year for states and localities across the U.S., as Covid-19 and the fallout it is causing for public health systems and the nation's economy continue to dominate government affairs at all levels. There was a glimmer of hope heading into the summer that the pandemic might finally be waning as vaccines became widely available and case counts fell. But that moment gave way to the rise of the delta variant and, now, omicron and another wave of infections. The new variant and skyrocketing case counts amid the winter holiday season mean that America will face more pandemic-driven sickness and disruption as 2022 begins and that state and local governments will continue to be occupied with responding to the crisis.

This year has also been a notable one for federal legislation with major implications for states and localities. First, there was the American Rescue Plan Act, which provided \$350 billion in direct aid to states and local governments—a historic amount of funding. Then, in November, President Biden signed a bipartisan infrastructure law that boosted the amount of federal funding for public works by about \$550 billion. For many state, city and county leaders, getting infrastructure legislation like this passed has been a longstanding priority. In the coming year, how states and localities are beginning to use their ARPA funds and the added infrastructure dollars will be a major storyline to watch.

Continue reading.

ROUTE FIFTY

by BILL LUCIA

DECEMBER 29, 2021

2021: The Year in Bond Funds

Credit risk prevails in a rocky year for bond markets.

Bond markets had to contend with a rocky 2021 characterized by rising inflation, a bumpier economic recovery, and the start of tighter monetary policy. The threat of inflation gathered pace over the year, unnerving government-bond markets in the process and culminating in the Federal Reserve's hawkish pivot in the fourth quarter. Meanwhile, the stretch for yield that began in 2020 continued, with lower-quality credit surging for much of the year.

As a result, performance across fixed-income Morningstar Categories was mixed as more-credisensitive strategies outpaced most of the pack, while interest-rate-sensitive and non-U.S. dollar-denominated bond funds posted losses. High-yield municipal funds led the way, with an average return of 5.7%, while emerging-markets local-currency bond funds plunged 7.3% on average. The Morningstar U.S. Core Bond Index, a proxy for typical U.S. bond exposure, fell 1.6% for the year, posting its worst calendar-year return since the taper tantrum roiled fixed-income markets in 2013.

Fed Tightens Policy Amid Rising Inflation

Driven by a first-quarter spike, interest rates rose in 2021, causing notable volatility at times as investors got to grips with rising inflation, a changing economic outlook, and new coronavirus variants. The year began with a significant steepening of the yield curve as the market reacted to the potential for both higher economic growth and inflation. The 10-year U.S. Treasury yield spiked 81 basis points over the first quarter to end the period at 1.74%. However, as the economic recovery became bumpier and inflation continued to rise, the yield curve partly retraced the first quarter's

steepening over the remainder of the year. Short-term yields modestly rose, while the 10-year yield declined to 1.52% by the end of 2021.

The Fed characterized inflation as transitory for much of the year but abandoned that tag in November as core price inflation prints continued to rise. At the most recent reading, CPI rose 6.8% over the trailing 12 months through November 2021. In response to the growing threat of inflation and an improved job market, the Fed pivoted to a more hawkish stance in the fourth quarter. The Fed began tapering asset purchases in November, aiming to complete the wind-down by mid-2022. However, in December, the Fed doubled the pace of the tapering, speeding up the timeline to an expected finish in March 2022. Fed officials also increased their expectations for rate hikes in recent meetings, with the latest projections now indicating three rake hikes in 2022.

As inflation expectations rose, U.S. Treasury Inflation-Protected Securities outperformed nominal Treasuries; the Morningstar U.S. TIPS Index returned 5.7% for 2021, while the Morningstar U.S. Treasury Bond Index posted a 2.3% loss. Within the inflation-protected bond category, strategies that added credit exposure alongside TIPS led the way. One such offering was Lord Abbett Inflation Focused (LIFIX), which rallied 10.4% and bested all but one of its peers. Meanwhile, short-term Treasuries fared better than longer-term issues given the first-quarter yield-curve steepening. Tracking one- to three-year maturity issues resulted in a modest 0.7% fall for Vanguard Short-Term Treasury Index (VSBSX).

Within the intermediate core and core-plus bond categories, strategies that held elevated allocations to securitized sectors and/or high-yield debt, both of which have less interest-rate sensitivity than Treasuries and investment-grade corporates, were among the top performers, though gains were modest. Pioneer Bond (PICYX) posted a 0.7% return, which outpaced its typical core-plus category peer by 140 basis points thanks to its elevated allocations to securitized and junk-rated credits.

Credit Investors Hunt for Yield

Alongside rising inflation, credit-sensitive assets continued to outperform. Within corporate credit, junk-rated bonds outperformed investment-grade issues over 2021 as investors stretched for yield, though there was a brief period of risk-off sentiment in the fourth quarter driven by the emergence of the omicron coronavirus variant and the Fed's more hawkish stance. The Morningstar U.S. High Yield Bond Index rose 5.2%, while the Morningstar U.S Corporate Bond Index (which tracks investment-grade issues) posted a 1.1% loss. Energy credits gained a significant boost from a surge in the price of oil due to robust demand. Crude Oil (WTI) began the year just under \$50 dollars a barrel and ended it at \$75, having pared back some of its substantial gains in the fourth guarter.

The U.S. high-yield default rate fell below 1% in 2021, and positive credit trends helped the lowest-rated credits outperform. The Bloomberg index for credits rated CC to D rocketed 12.5%, with the highest returns at the lower end of the credit-quality spectrum. The best performers in the high-yield category were typically funds that tilted toward lower-quality bonds and/or had a hefty allocation to equities. Fidelity Capital & Income (FAGIX) held roughly one fifth of assets in equities for most of the year and profited from the continued rally in stocks to return 11.7% for the year, besting nearly all comers in the category.

Convertible bonds, hybrid securities that combine debt and equity characteristics, also benefited from the continued upswing in equities. MainStay MacKay Convertible (MCNVX) returned 10.1% and landed in the convertibles category's best decile over the period. Meanwhile, bank loans were back in vogue. The S&P/LSTA Leveraged Loan Index added 5.2% for the year as investors eyed the sector's floating-rate coupons, which increase as interest rates rise. Similar to the theme across corporate bonds, lower-rated loans outperformed. Invesco Senior Floating Rate (OOSYX) gained 9.1% and beat all bank-loan category peers thanks to its sizable stake in loans rated below B.

Strong Dollar Weighs Down Global Returns

Alongside the Fed, central banks across the globe began to tighten monetary policy in late 2021, though they did so to varying degrees. The Bank of England unexpectedly hiked rates to 0.25% in December 2021, becoming the first G7 central bank to raise rates since the onset of the coronavirus pandemic. The European Central Bank took a more gradual approach, electing to taper its bond purchases but to continue them for at least the first 10 months of 2022. Meanwhile, the Bank of Japan remained among the most dovish central banks by dialing back some emergency funding while pledging to keep monetary policy ultra-loose.

The U.S. dollar enjoyed a strong 2021, gaining 6.7% for the year against a basket of developed-markets currencies, driven by the American economy's relative strength and the Fed's tighter policy outlook. That backdrop helped the U.S.-dollar-hedged version of the Morningstar Global Core Bond Index limit its slide to 1.7%, while the unhedged version dropped 5.7%. Across world bond funds, those that ventured further outside of sovereign debt into corporate and securitized credit fared better in 2021. AB Global Bond (ANAIX) did just that, which helped limit its slide to 0.8% and placed it among the world bond USD hedged category's top performers.

Emerging markets were also weighed down by the strength of the U.S. dollar along with a weaker outlook for growth. Local-currency-denominated emerging-markets debt materially lagged hard-currency fare, with the J.P. Morgan Index for the former plunging 8.8%, while the latter slid 1.8% for the year. Here, too, corporates outperformed; the J.P. Morgan CEMBI Diversified Index gained 0.5%. Avoiding local-currency debt and adding a dose of corporate credit helped limit Fidelity New Markets Income's (FNMIX) fall to 1.8%, while its typical emerging-markets bond category peer declined 2.4%.

Demand for Munis Continues

Municipal debt continued to see robust demand in 2021 as further fiscal stimulus, particularly March 2021's \$1.9 trillion American Rescue Plan, along with the potential for higher income taxes, helped fuel investor appetite. Long-term muni sales exceeded \$450 billion in 2021, roughly in line with 2020's record-breaking numbers. That backdrop helped the Bloomberg Municipal Bond Index gain 1.5% for the year, outpacing U.S. Treasuries by over 3 percentage points in the process.

The general fixed-income theme of lower-quality credit outperforming over the year also extended to the muni market. The Bloomberg High Yield Municipal Bond Index surged 7.8% as the hunt for yield and munis' lower default rate compared with corporates helped drive demand. BlackRock High Yield Municipal (MAYHX) was one of the strongest performers over the year in the high-yield muni category, rocketing 9.2% in part because of its overweighting in lower-rated bonds.

morningstar.com

Sam Kulahan, CFA

Jan 3, 2022

Municipal Bond ETFs Have Enjoyed a Stellar Year.

Municipal bond exchange traded funds are attracting huge inflows as investors diversify their fixed income portfolios with tax-exempt muni offerings.

Municipal bond funds now make up an unprecedented 24% of outstanding total debt circulating in

the markets, compared to just 16% five years ago, marking a shift in investor habits away from buyand-hold individual securities until maturity, the Wall Street Journal reports.

The record levels of borrowing and investing in 2021 also reflect investors' improving risk outlook as we move pass the pandemic-era uncertainty as many previously feared that the downturn would trigger a wave of municipal defaults and bankruptcies.

However, after finding support from stimulus funds, state and local governments have issued \$301.9 billion in debt for new projects as of December 21, the most amount of new debt in at least a decade.

Meanwhile, investors have funneled \$64 billion into municipal bond-related mutual funds and ETFs through December 15, according Refinitiv Lipper data, marking the largest inflows for that that period since tracking began in 1992. The figure also includes \$22 million into high-yield muni funds that bled cash last year.

"Generally there's a better credit environment, you have lower supply [and] more demand, and then you just have investors who are willing to take on more risk to replace the yield that they previously got on their high-grade bonds," Eric Friedland, director of municipal bond research at asset manager Lord Abbett, told the WSJ.

Many have also turned to debts issued by state and local governments because they carry interest payments free from federal, and often state, taxes. This preferential tax treatment has seen greater demand on increased expectations for potential tax hikes under a Democratic administration to make up for tremendous fiscal spending measures.

ETF TRENDS

by MAX CHEN

DECEMBER 29, 2021

How States and Localities Can Use Data to Spend Federal Funds Wisely.

Applying an evidence-based approach to funding new infrastructure problems can ensure communities get the biggest bang for each federal buck.

The \$1.2 trillion Infrastructure Investment and Jobs Act will deliver the nation's largest investment in roads, bridges, clean water, broadband, electric vehicles and rail in more than half a century. Now, state, city and county policymakers will have to decide how to prioritize, allocate and monitor the effectiveness of these infrastructure investments.

The challenges that state and local leaders face in managing this influx of federal funds are considerable and elicit many questions like: How will lawmakers allocate the record \$1.2 trillion investment? What guidelines and requirements will accompany these new resources? How do states make sure that these funds are directed in equitable and inclusive ways? And how can states approach these decisions in ways that deliver long-term fiscal responsibility and benefits—even when the money runs out?

For many years, The Pew Charitable Trusts has worked with state leaders on developing best practices for spending taxpayer dollars prudently, maintaining balanced budgets, investing in

evidence-based policies, and planning for and mitigating other fiscal risks. Through our experience, we've learned a great deal about how states can use data and evidence to spend funds wisely. These experiences offer valuable and replicable lessons for state policymakers as they make decisions about the incoming infrastructure funds.

Continue reading.

Route Fifty

By Michael Caudell-Feagan, Executive Vice President & Chief Program Officer, The Pew Charitable Trusts

DEC 22, 2021

Infrastructure Investment and Jobs Act: Orrick

In November, the bipartisan Infrastructure Investment and Jobs Act (the "Act") was enacted into law. In addition to reauthorizing existing programs, the Act adds \$550 billion in funding for new infrastructure investments, including for transportation, water, power, renewable energy and broadband.

This summary discusses provisions of the Act of particular interest to the municipal finance industry, organized into two parts. First, a summary of provisions related to tax-exempt financing by state and local governments. The Act authorizes two new categories of tax-exempt bonds for broadband projects and carbon capture facilities, and also increases the national volume cap available for tax-exempt bonds issued for certain transportation projects, which are often used for projects involving public-private partnerships ("P3"). And second, a highlight of various provisions that provide funding to state, local and tribal governments for particular types of infrastructure. Since many of these provisions relate to new programs, federal agencies will be working through the rulemaking process to implement these new programs over the coming months.

Tax-Exempt Financing Provisions

The Act adds two new types of "exempt facility" bonds, and increases the federal volume cap for a third type. Most tax-exempt bonds are issued as "governmental" bonds subject to the private activity limitations imposed by Section 141 of the Code, which generally limit the amount of involvement of a private entity in the financed projects (i.e., limitations on private business use of the projects). Exempt facility bonds are a separate category of tax-exempt bonds, which are generally not subject to private business use or other private activity limitations, but can only be used to finance qualifying facilities, such as airports, solid waste, and multifamily housing, and are subject to additional requirements and restrictions, such as TEFRA approval and costs of issuance limitations. Several types of exempt facility bonds, including the new types authorized by the Act, may be issued to finance projects owned by a private entity.

Qualified Broadband Projects. The Act adds a new type of exempt facility bonds for qualified broadband projects. A qualified project must provide access to residential and/or commercial locations at speeds of not less than 100 megabits per second ("mbps") downstream and 20 mbps upstream, and must provide access to locations that are currently underserved by broadband service. The project must be designed to provide service to one or more census block groups where more than 50% of residential households do not currently have access to fixed terrestrial broadband service delivering at least 25 mbps downstream and at least 3 mbps upstream, and at least 90% of

the locations (residential or commercial) at which access will be provided are locations where a broadband service provider did not previously provide service of at least 25 mbps downstream and at least 3mbps upstream. In addition, before bonds are issued, the issuer must (i) notify all broadband service providers in the area of the planned project, (ii) request information from them on their ability to provide gigabit capable Internet access (1,000 mbps), and (iii) allow each provider at least 90 days to respond to the notice and request. These requirements have some interpretive questions that may require guidance from Treasury, but in advance of any guidance, it appears that these bonds would work well to finance land-based broadband infrastructure in geographic areas in which no broadband service is currently available.

Exempt facility bonds are usually subject to state volume cap limitations, but the Act provides for a 75% exemption from volume cap for privately owned broadband projects, such that only 25% of the volume cap is required, and a 100% exemption for governmentally owned projects, such that no volume cap is required.

Qualified Carbon Dioxide Capture Facilities. The Act adds a second new type of exempt facility bonds for qualified carbon dioxide capture facilities. Qualifying facilities can either be (i) components of an industrial carbon dioxide facility, or (ii) a direct air capture facility. The Act has a number of detailed requirements for qualifying facilities, some of which may require guidance from the Treasury Department to interpret.

An industrial carbon dioxide facility means a facility that emits carbon dioxide as a result of combustion, gasification, bioindustrial processes, fermentation, or certain types of manufacturing processes (but not including natural gas extraction and transportation). Eligible components for financing with these bonds include equipment used for the capture, treatment, purification, compression, transportation or storage of produced carbon dioxide, or certain components that are used to convert solid or liquid products made from coal, petroleum residue, biomass or other materials into a synthesis gas composed of primarily carbon dioxide and hydrogen for direct use or a subsequent chemical or physical conversion. The Act generally requires that eligible components of an industrial carbon dioxide facility must be at least 65% efficient in capturing and storing carbon dioxide, and for this purpose, storing carbon dioxide means injection into a facility for geologic storage, or injection into an enhanced oil or gas recovery well followed by geologic storage. To the extent the efficiency is less than 65%, only the corresponding percentage of the costs are eligible for financing (i.e., components that are 40% efficient can only have 40% of the costs financed with these exempt facility bonds).

Direct air capture facilities are defined by reference to Section 45Q(e)(1) of the Internal Revenue Code of 1986, which currently provides for a business income tax credit for certain of such facilities. A direct air capture facility for this purpose is a facility that captures carbon dioxide from the ambient air—not including capturing carbon dioxide deliberately released from subsurface springs and not including facilities that use natural photosynthesis to capture carbon dioxide. To the extent that a facility receives tax-exempt financing for a portion of the eligible costs and is also eligible for the Section 45Q tax credit, the eligible tax credit will be reduced by the proportional amount of tax-exempt financing, but with a cap of a 50% reduction.

Exempt facility bonds for qualified carbon dioxide capture facilities are subject to a 75% exemption from volume cap, such that only 25% of the volume cap amount is required.

Qualified Highway and Surface Freight National Volume Cap Increase. Existing law allowed the issuance of exempt facility bonds for certain transportation projects that receive federal funding, but only with an allocation of volume cap from the Secretary of Transportation. These types of exempt facility bonds were often used for P3 transportation projects, as these bonds are not subject

to the private business use or other private activity limitations. The national volume cap limit for these bonds was set at \$15 billion in 2005, and as of November 2021, approximately \$13.8 billion had been used, and another \$934 million has been allocated to projects but not yet issued. The Act increases the national volume cap limitation to \$30 billion, providing a significant increase for potential financing of additional P3 transportation projects.

New and Notable Infrastructure Programs

The Act provides an enormous amount of funding for a broad range of infrastructure projects. Below is a summary of particular provisions, focused by sector, that may be of interest to state and local governments, tribal governments, and other participants in particular infrastructure sectors. This is not comprehensive, but focuses on some of the larger programs that relate to capital infrastructure projects. Numerous other provisions of the Act may be of interest to particular participants in the municipal finance industry, including grant funding for cybersecurity initiatives, brownfield development, energy efficiency assessments, and job training and technical assistance related to climate resilience or infrastructure projects.

Airports. The Act provides \$15 billion over the next five years in formula-based grants to airports for the Airport Improvement Program, which generally allows flexibility in funding improvements to runways, taxiways, terminals and other projects. There is also \$5 billion available in the Airport Terminal Program for discretionary grants for terminal improvements and other landside projects.

The Act also makes airport-related projects eligible for loans and other credit support pursuant to the Transportation Infrastructure Finance and Innovation Act ("TIFIA"). TIFIA loans have been used as a source of low-interest, long-term funding for various highway and surface transportation projects. In addition to expanding the eligibility to include airport-related projects, the Act further extends the repayment terms on TIFIA loans for up to 75 years for certain infrastructure projects.

Broadband Projects. The Act authorizes a total of \$65 billion in funding for broadband infrastructure. This includes \$42.45 billion in grant programs for states, territories, and the District of Columbia to develop broadband projects, as well as \$2 billion in grant and loan programs to provide broadband service in rural areas. The Act also provides \$2.75 billion in new grant programs to promote digital inclusion and equity. An additional \$1 billion is available for grants to various entities, including electrical utilities and cooperatives, for "middle mile" infrastructure to expand broadband to unserved areas.

Energy Infrastructure. The Act includes \$65 billion for a range of energy infrastructure programs, including \$5 billion for a new grant program to make electrical grids more resilient to weather, wildfire and natural disasters, \$5 billion for federal assistance for innovative approaches to making transmission, storage, and distribution infrastructure more resilient (plus another \$1 billion for remote or rural areas), and \$3 billion for a matching grant program for smart grid investments.

The Act creates a \$2.5 billion revolving loan fund program for new or upgraded transmission lines, and allows the Department of Energy to acquire a portion of the capacity of the line in order to serve as an "anchor-tenant" for the line to promote economic viability. The Act also authorizes more than \$500 million in incentive payments to owners of hydroelectric facilities for capital improvements that improve grid resiliency, improve dam safety, or are environmental improvements.

Ports, Waterways and Ferries. The Act expands the scope of eligible projects for the Department of Transportation's Port Infrastructure Development Program, and provides \$2.25 billion over the next five years in funding for competitive grants pursuant to that program. In addition to the types of projects previously authorized, the Act authorizes projects that improve resilience to climate change or reduce greenhouse gas emissions at ports, such as electrification, vehicle charging

infrastructure, and equipment replacements or retrofits. The Act also provides additional funding for grants pursuant to the Marine Highways Program, and for grants to reduce truck emissions at ports.

The Act provides \$1.25 billion in grants for passenger ferries, and establishes a \$1 billion program for ferry service in rural areas, which also allows use of these funds for operating costs.

Public Schools. Although not often thought of as an infrastructure sector, the Act provides \$500 million in competitive grants to public schools for energy efficiency improvements, renewable energy, or alternative fuel infrastructure for vehicles. The Act also provides \$5 billion in funding for the replacement of school buses with zero emission or alternative fuel buses, and \$200 million in funding for grants to address lead contamination in school drinking water.

Public Transit and Rail. Numerous provisions of the Act provide funding for public transit and rail projects, including \$8 billion in grants for new and expanded bus and rail service, \$4.75 billion in grants for maintenance, replacement and rehabilitation of buses and rail assets, \$5.25 billion in grants for low- and no-emission buses, including supporting facilities and workforce training, and \$2 billion in certain grant programs to help make public transit systems more accessible to seniors and persons with disabilities. The Act also includes several programs addressing maintenance backlogs for passenger and freight rail, as well as capital projects that improve intercity passenger rail.

The Act also expands eligibility for TIFIA loans to (i) public infrastructure projects located within walking distance of, and accessible to certain public transit facilities, (ii) economic development projects that incorporate private investment and are physically or functionally related to passenger rail.

Roads and Bridges. The largest area of new spending in the Act is directed towards highways, roads, and bridges. In addition to reauthorizing existing highway programs, the Act provides more than \$36 billion in competitive and formula grants for bridge repairs and replacement, as well as \$7.5 billion in grants for surface transportation projects of local and/or regional significance, \$5 billion for multi-modal, multi-jurisdictional projects of national or regional significance, and a \$3.2 billion increase in grant funding for highway and rail projects of national and regional significance. The Act also provides funding for certain specific highway transportation projects, creates a grant program for both formula and competitive grants for transportation resiliency projects, and another grant program for replacing culverts under roads, bridges, railroad tracks, and trails.

Tribal Governments. Indian tribes are eligible recipients for many of the new programs in the Act that are otherwise described in this summary, such as the grants for vehicle charging and alternative fuel infrastructure and grants for electric grid resiliency projects. The Act also expands the eligibility for certain existing programs to include Indian tribes, such as for grants for certain rail projects, and sets aside funds for tribes, such as a 5% set aside in rural public transportation formula grants for public transportation projects on Indian reservations.

Vehicle Charging and Alternative Fuel Infrastructure. This is not exclusive to a particular infrastructure sector, but instead a particular category of projects that affects multiple sectors. The Act provides \$7.5 billion in grants to states, local governments, tribes, and territories for publicly accessible electric vehicle charging infrastructure, as well as infrastructure for hydrogen, propane, or natural gas fueled vehicles. The goal of these grants is to create alternative fuel corridors, which can either be corridors designated by the Department of Transportation, or by a state or group of states in certain cases. These grants will be prioritized for rural areas, low and moderate income neighborhoods, and areas with low amounts of private parking or with high-density housing. These funds will be available for up to 80% of the costs of projects, with a maximum grant amount of \$15 million, and in order to require private participation, the grants are to be used to contract with a

private entity for acquisition and installation of the infrastructure, and the private entity must agree to pay the portion of the project costs not funded with federal grants.

In addition to that particular grant program, there are multiple other provisions in the Act providing funding for electric vehicle or alternative fuel infrastructure, either by expanding the eligibility of such infrastructure for funding from existing programs (e.g., the Surface Transportation Block Grant Program), or as part of new programs targeted at particular sectors as discussed elsewhere in this summary (e.g., schools and ports).

Water and Wastewater. The Act provides \$55 billion in new funding for water and wastewater projects, primarily through programs pursuant to the existing Drinking Water and Clean Water State Revolving Loan Funds ("SRFs"). \$15 billion will be made available through the Drinking Water SRF for grants, loans, and forgivable loans for lead pipe replacement in service lines, without any state cost-share requirement. \$10 billion is being made available through both SRF programs as grants to states and water/wastewater utilities to treat perfluoroalkyl or polyfluoroalkyl substances or other identified contaminants of emerging concern.

by John Stanley

December 27, 2021

Orrick, Herrington & Sutcliffe LLP

Cyber Threat Brief: A Log (4j) Has Been Added To The Fire

Key Takeaways

- The recently discovered vulnerability in the widely used software library Apache Log4j highlights the increasing risk that cyber events pose to credit.
- We think cyber governance will play a central role in determining the magnitude of the impact on entities from this security flaw over the coming weeks and months.
- Entities that are badly prepared, handle the event poorly, have weaker balance sheets, and lack adequate cyber insurance or other means to address the potential financial impact will be most exposed.

<u>Continue reading.</u> [Free registration required.]

17 Dec, 2021

9 Big Public Finance Surprises in 2021.

This year taught us to humbly expect the unexpected, from hundreds of billions in federal "helicopter money" to \$35,000 bonuses to lure back retired transit workers. And how is your public pension fund doing on something called ESG?

Americans entered this year with hopes that COVID-19 would be vanquished and life would return to normal, but that didn't happen. Plenty of unexpected things did happen, as they always do of course, and much of it was felt by government, from insurrectionists storming the U.S. Capitol in January to

some surprise upsets (and near-upsets) in last month's state and local elections. The world of public finance experienced its own twists and turns: Congress finally funded infrastructure, for example, but then stalled on tax provisions favorable to municipalities. Here's where the year brought results that few had predicted:

- 1. Budget surpluses. Economists almost universally expected that states and local governments would suffer revenue shortfalls as a result of the pandemic. Congress approved megabillion-dollar aid packages to bail them out from a pandemic recession that nobody had ever experienced. But a "fiscal trifecta" materialized: The federal helicopter money sent directly to households provided billions for spending that supported sales taxes. The stock market surged, which brought record income-tax receipts from investors' capital gains. And real estate prices zoomed, boosting property tax rolls. Most states ended fiscal 2021 with a budget surplus, not a deficit. One exception: Petroleum-producing states saw lower extraction revenues until oil prices rebounded late in the year.
- 2. A property tax bonanza. There is much ado in professional circles these days about "reimagining local government revenues." Some of the targets for reform are fines and fees, which tend to burden lower-income residents disproportionately, and sales taxes are deemed regressive as well. But the big money driver across the municipal sector is in the property tax, which is also disliked by advocates of progressive taxation. Nevertheless, whether reformers like it or not, the stability and reliability of the property tax is now buttressed by surging home prices, which make it an unheralded growth engine in the local government revenue base. Although there will be some jurisdictions that now face property tax backlash if they don't cut tax rates to compensate for surging parcel assessments, reform advocates will face an uphill battle if they seek to displace reliance on today's power train in municipal budgets.
- **3. The return of inflation.** Despite midyear assurances from federal officials and central bankers that inflation would be transitory, rising costs have persisted and worsened. November's consumer price index (CPI) readout of 6.8 percent was the highest in 39 years. Government purchasing departments have strained all year to outwit the pressures of sticker shock: The costs of everything from police cars to highway de-icing supplies went up and stayed up. A surging CPI also triggers higher salaries and pension costs. Even when supply chain snags are worked out, the costs of housing and rents continue skyward, and that will keep pressuring the inflation indexes in coming months because of lag effects in those data series. November's producer prices jumped 9 percent over last year, which will likewise pressure consumer prices early in 2022. Right now, inflation looks to be the top issue and biggest unknown in state and local finance next year.
- 4. Resignation nation. Pundits predicted that the workforce would change forever with remote work and hybrid office/home employment patterns becoming more prevalent, but nobody expected to see the level of job-jumping and "time out" workforce departures that are now driving human resources departments and municipal managers batty. Although some public services professions continue to draw new recruits, and have been more stable than the fickle hospitality industry workforce, the ground has shifted. Governments are no longer employers of last resort as the unemployment rate shrinks. Employee retention has become a nationwide challenge, and government employers are hardly immune. Inducements like child care and flexible work schedules must be accompanied by top-down efforts to make public agencies a happier place to work, because that is what more employees are demanding. Psychic income from public service alone is not a sufficient motivator anymore, unless it's backed up by team engagement and higher pay. New York has been paying \$35,000 rehiring bonuses for retired transit workers who fill vacancies, and the Big Apple is not alone. Some public employers are even using federal COVID-19 aid, directly or indirectly, to pay bonuses.

- **5. Labor in the catbird seat.** With inflation and tight employment markets now the prevailing environment for labor negotiations, public-sector unions have more clout than they have seen since before the Great Recession. On the fiscal side, budgeters must now expect to see contract demands for "CPI plus X percent" and catch-up salary increases to compensate for a decade of frugality. As services-sector employers, state and local governments will now face mounting cost pressures. With all that (nonrecurring) federal fiscal assistance sloshing and swishing around, some of it will be expected to take the form of permanent wage increases. Next year looks to be a contentious one for public-sector labor negotiators and their budgeting sidekicks who run the numbers. Expect more compensation dispute arbitration in jurisdictions where rocks hit hard places.
- **6.** The muni bond market that Dems left at the altar. Almost everybody in the public finance community who works in Washington, D.C., had high hopes that Congress' tortured budget reconciliation bill would ultimately include goodies for the municipal bond market. Build America Bonds revival, advance refunding and enhanced bank eligibility for muni investments were all included in earlier drafts in the House, but they got scuttled when Senate centrists took the upper hand and sliced the size of the package, which in turn forced the tax committees to cut them out as revenue-losers. Like Detroit Lions and Seattle Mariners fans, it now looks like we'll just have to wait for next year unless Christmas magic arrives on the Senate floor in coming days. In retrospect, the sad and inexplicable surprise here was that these low-cost muni bond market incentives were not embedded in the bipartisan infrastructure bill, to leverage and optimize federal outlays.
- 7. Jerry-rigged SALT relief. Rather than wait for Congress, 20 states crafted workaround schemes for business owners to get credits for their state and local taxes at the state level. However, such Rube Goldberg schemes don't help working middle-class households. Congressional SALT relief remains in "placeholder" status. Until and unless President Biden's Build Back Better taxing-an-spending package clears the Senate, we won't know for sure which, if any, federal taxpayers will see higher SALT deduction caps, and who gets left with coal in their stockings. (At this writing the SALT elves were still nagging Santa, but Beltway insiders now doubt a breakthrough this month.)
- **8. Pensions:** big wins for ESG. Public pension plan trustees and advocacy groups had been increasingly focused on environmental, social and governance (ESG) considerations in their investment policies, but 2021 overshot most proponents' expectations. European leaders, shareholders and courts successfully pressured Big Oil companies like Shell to migrate to a lower-carbon business model, and American activists won board seats at Exxon. Even the New York Stock Exchange now has a high-priority ESG initiative. As the tide turned, U.S. portfolio managers quickly gussied up their profiles and marketing pitches: ESG has become a hot strategy for mutual fund and pension managers as younger investors increasingly demand that their investments align with their values. Proof of the pudding is that "zero-carbon offsets" are now trading on global financial exchanges and Big Money is buying them at scale. Expect to see ESG become a recurring agenda topic in pension-land as ESG mutual funds now quickly creep into 457, 403(b) and 401(a) retirement plan menus as the products du jour.
- 9. And a leveraged CalPERS. It's still just top of their first inning in this new game, but a summary of surprises in 2021 cannot overlook the recent decision by the nation's largest public pension fund to leverage its assets by borrowing about \$25 billion for investments aimed at increasing the portfolio's returns. Critics say the California Public Employees' Retirement System's 6.8 percent target for compounding annual investment returns with this leveraging initiative is wishful and that trustees would rather play with fire than raise contribution rates. Although supporters claim it's "diversification," others would say this strategy is even more risky than issuing pension funding bonds. Would you take out a home equity loan to fund your IRA, in a year when stocks gained 20 percent and now trade near peak levels with lofty valuations? Or is this really just a savvy CalPERS

shortcut to bigger positions in high-yielding asset categories like private lending as interest rates increase? Time will tell.

governing.com

Dec. 21, 2021 • Girard Miller

What the Stalled Infrastructure Bill Means for Munis.

In this edition of "Muni Moment," Fitch Ratings Senior Director Eric Kim discusses what the stalled infrastructure legislation could mean for the municipal bond market. He speaks with Bloomberg's Taylor Riggs on "Bloomberg Markets: The Close."

Watch video.

Bloomberg Markets: The Close

December 22nd, 2021, 12:18 PM PST

Congress Provides Substantial Funding for Variety of Water Projects in Infrastructure Law With Emphasis on Low Income Communities.

The Infrastructure Investment and Jobs Act (IIJA) contains significant water-related provisions, amounting to \$82.5 billion in spending.[1] Areas addressed by these provisions include drinking water safety, clean water more generally, access to water, and research.

Background

America faces many serious problems involving water. People in rural areas remain dependent on often unreliable wells, and the water infrastructure of many U.S. cities has deteriorated as many existing pipes remain contaminated by lead. Meanwhile, from 1996 to 2018, the cost of water and wastewater has increased at annual rates of 5.09% and 5.64%, respectively, compared to an annual increase in the Consumer Price Index of only 2.1%.[2]

In Flint, Michigan, the city's drinking water was contaminated with lead in 2014, beginning a crisis that lasted until at least 2019. Between 6,000 and 12,000 children were exposed to high levels of lead.[3] The Flint disaster provides examples of many of the problems the water provisions of the IIJA seek to confront: environmental injustice, the continued use of lead service pipes, and failures of local, state, and federal governments.

Threats to clean drinking water go beyond lead, however, and in many ways, regulation has failed to keep up with new risks. For example, the Environmental Protection Agency has not issued National Primary Drinking Water Regulations for new contaminants since 1996, although it announced its final determination to regulate perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) in March 2021.[4] PFOS, PFOA, and other per- and polyfluoroalkyl substances (PFAS) have contaminated water supplies in many places across the country, and because they remain in the environment for a long time and do not easily degrade, pose particular problems to remediate.

These water-related problems were part of a broader set of infrastructure-related problems the IIJA sought to address. The law grew out of the \$2.3 trillion American Jobs Plan announced by President Biden on March 31, 2021, amounting to \$4 trillion in combination with the American Families Plan announced in April.[5] The plans' "human infrastructure" provisions were split off into the still-unpassed Build Back Better Act to seek bipartisan support for the IIJA, and the IIJA itself was cut considerably. The final version of the IIJA authorizes a total of \$1.2 trillion in spending over several years. The bill finally became law on November 15, 2021.

Safe Drinking Water

The largest category of water-related investments in the Act involves improvements in drinking water safety and sanitation, including around \$24 billion in grants to states over five years under the existing Safe Drinking Water Act and Federal Water Pollution Control Act. The Infrastructure Investment and Jobs Act also provides \$15 billion for projects to replace lead water pipes and service lines, and \$9 billion for addressing PFAS and other "emerging contaminants."[6] Section 50101's amendments to the Safe Drinking Water Act, in addition to authorizing new spending, clarify that SDWA grants "to assist in responding to and alleviating any emergency situation" can include responses to cybersecurity events and heightened lead exposure. (Section 50113 also concerns cybersecurity support for public water systems.) These amendments also provide that "State-based nonprofit organizations that are governed by community water systems" are eligible for technical assistance under Section 1442(e).

Section 50102 reauthorizes the Safe Drinking Water Act's Drinking Water State Revolving Loan Funds and appropriations for their capitalization grants. It also amends SDWA Section 1452(d) to give states more ways of subsidizing projects serving disadvantaged communities: "grants, negative interest loans, other loan forgiveness, and through buying, refinancing, or restructuring debt."

Section 50103 authorizes appropriations for the SDWA's source water quality protection partnership petition program and allows counties to form such partnerships on behalf of unincorporated areas.

Section 50104 expands the projects eligible for grants to small and disadvantaged communities under the Safe Drinking Water Act to include "the purchase of point-of-entry or point-of-use filters and filtration systems that are certified by a third party using science-based test methods for the removal of contaminants of concern." (This is the only reference to point-of-use systems in the IIJA.) It also requires the EPA to "establish a competitive grant program" through which eligible entities would "assist eligible individuals in covering the costs incurred by the eligible individual in connecting the household of the eligible individual to a public water system."

Section 50105 includes several measures to reduce lead in drinking water. It increases and extends appropriations for lead reduction grants, and allows them to be used to replace privately-owned lead service lines, "with priority for disadvantaged communities based on the affordability criteria established by the applicable State under [SDWA] section 1452(d)(3), low-income homeowners, and landlords or property owners providing housing to low-income renters." It also requires water systems to replace privately-owned lead service lines without cost to low-income customers, and to notify state governments of planned lead service line replacements.

Section 50110 requires the EPA to "establish a voluntary school and child care program lead testing, compliance monitoring, and lead reduction grant program" and to publish school lead testing guidance for public water systems. It also reauthorizes appropriations for SDWA Section 1464(d)'s existing Voluntary School and Child Care Program Lead Testing Grant Program.

Another grant program, for state responses to contaminants, authorized by SDWA section 1459A(j),

is expanded by IIJA section 50114 beyond its previous definition of "underserved communities" to include, for example, communities "with a population of less than 10,000 individuals that the Administrator determines does not have the capacity to incur debt sufficient to finance a project or activity."[7]

Water Systems

Section 50106 requires the EPA to establish a grant program for "Operational Sustainability of Small Public Water Systems," while section 50107 requires it to establish a "Midsize and Large Drinking Water System Infrastructure Resilience and Sustainability Program." Section 50109 requires the EPA to establish another grant program "to assist qualifying households with need in maintaining access to drinking water and wastewater treatment," based on the results on a study required by Section 50108. The Indian Reservation Drinking Water Grant Program will be expanded under section 50111 to include wastewater system improvements as well as drinking water system improvements.

Research

The law funds water-related research by several entities – both scientific research into new technologies and studies of social problems. Section 50201 provides \$75 million annually through fiscal year 2026 for research, investigations, training, and information grants, including to state water pollution control agencies and nonprofit organizations. Section 50222 revises the Federal Water Pollution Control Act to provide "funding to carry out groundwater research on enhanced aquifer use and recharge in support of sole-source aquifers" to state, local, and tribal governments jointly with research institutions. Section 50115 requires the EPA to conduct annual studies on the prevalence of boil water advisories, while section 50112 requires it to report on advanced drinking-water-related technologies. Section 50108 requires it to conduct a "Needs assessment for nationwide rural and urban low-income community water assistance," while 50216 requires it to "identify historical distributions of funds to small and disadvantaged communities and new opportunities and methods to improve on the distribution of funds under" the Clean Water State Revolving Funds and Drinking Water State Revolving Funds.

Section 50213 requires the EPA to establish a competitive grant pilot program for the sharing of water data. The EPA is directed by section 50217 to establish "centers of excellence for stormwater control infrastructure technologies" at universities, other research institutions, and nonprofit organizations (as well as grants to state, local, and tribal governments for stormwater infrastructure projects involving new technologies). Under section 50218, the EPA must establish a Water Reuse Interagency Working Group "to develop and coordinate actions, tools, and resources to advance water reuse across the United States, including through the implementation of the February 2020 National Water Reuse Action Plan."

Sections 50219 and 50220 require studies by the EPA of advanced clean water technologies and capital improvement needs for Clean Water State Revolving Fund-eligible projects, respectively. Section 50221 funds the Water Resource Research Act's Water Resource Research Institutes but puts tighter controls on the funding, such as Department of the Interior evaluations of each Institute every five years. Finally, section 50222 directs the EPA to "provide funding to carry out groundwater research on enhanced aguifer use and recharge in support of sole-source aguifers."

Clean Water

Beyond drinking water provisions, other provisions of the IIJA concern wastewater and other clean water issues. Section 50202 establishes the Wastewater Efficiency Grant Pilot Program for publicly-

owned treatment works, while Section 50203 funds the Clean Water Act's Pilot Program for Alternative Water Source Projects and makes stormwater projects eligible for it. Similarly, section 50204 funds Sewer Overflow and Stormwater Reuse Municipal Grants and expands their scope to include "notification systems to inform the public of combined sewer or sanitary overflows that result in sewage being released into rivers and other waters." Sections 50205 through 50209 create new grant programs: the Clean Water Infrastructure Resiliency and Sustainability Program; the Small and Medium Publicly Owned Treatment Works Circuit Rider Program; the Small Publicly Owned Treatment Works Efficiency Grant Program; Grants for Construction and Refurbishing of Individual Household Decentralized Wastewater Systems for Individuals with Low or Moderate Income; and, finally, a program of grants to publicly-owned water treatment works (POTWs) and nonprofit entities, to cover the cost of connecting low-income individuals to POTWs.

The next few sections revise and fund existing programs. Section 50210 funds the Clean Water State Revolving Funds at a rate of \$2.40 billion for FY2020, \$2.75 billion for FY2023, \$3.00 billion for FY2024, and \$3.25 billion for each of FY2025 and FY2026. Section 50211 funds the Innovative Water Infrastructure Workforce Development program and expands the use of grants under the program. Section 50212 funds grants to Alaska to improve sanitation in rural and native villages. Section 50215 reauthorizes Water Infrastructure Finance and Innovation Act (WIFIA) funding, while section 50214 requires WIFIA loan applicants to submit only one final rating option letter instead of two.

Water Rights

Section 70101 establishes the \$2.5 billion Indian Water Rights Settlement Completion Fund to pay for "obligations identified by the Secretary of the Interior, under an Indian water settlement approved and authorized by an Act of Congress before the date of enactment of this Act."

Conclusion

The IIJA greatly expands funding for, and revises rules regarding, such areas as lead pipe replacement, filtration systems, and general water and sewer infrastructure. It remains to be seen whether even this additional spending is sufficient for the nation's water problems.

[1] https://pacinst.org/wp-content/uploads/2021/11/US Infrastructure Brief.pdf.

- [2] https://www.awwa.org/AWWA-Articles/awwas-2019-water-and-wastewater-rate-survey-reveals-increasing-utility-costs-boosting-rates.
- [3] https://web.archive.org/web/20160203004456/http://www.wnem.com/story/30995770/united-way-estimates-cost-of-helping-children-100m.
- [4] 86 FR 12272.
- [5] https://www.politico.com/news/2021/05/24/infrastructure-talks-near-collapse-490637.
- [6] https://pacinst.org/wp-content/uploads/2021/11/US Infrastructure Brief.pdf.
- [7] SDWA § 1459A(c)(2) (42 U.S.C. 300j-19a).

Sullivan & Worcester LLP

Jeffrey M. Karp

S&P U.S. Public Finance Rating Activity, November 2021

View the S&P Report.

21 Dec. 2021

Recyclers Are Lining Up for the Municipal Market's Cash.

- Turning plastic into petrochemicals, sugarcane waste into fuel
- Debt for wood-chip-to-insulation plant sells at 8% in 2051

In Washington state, municipal bonds are financing a project to convert plastic waste into petrochemical ingredients. In Louisiana, municipal debt is paying for a biorefinery to turn sugarcane waste into fuel pellets and soil additives.

These are only two of what promises to be another robust calendar of borrowers in the recycling field in 2022, assuming this next stage of the pandemic doesn't completely quash investors' risk appetite. I base that expectation on several things: the apparent momentum behind such projects nationwide; the pace of deals I've observed this year, with at least three this month alone; and the unrelenting appetite for speculative offerings with long-term yields still historically low.

This is the high-risk, high-reward part of the municipal market. As we've seen time and again, it's hard to take one thing and turn it into something else, which is why \$1 billion in recycler bonds are in the Bloomberg Default/Distress Report.

We only got a glimpse into the plans of these latest entrants — from Washington and Louisiana — because they each sold bonds whose proceeds will be held in escrow and invested in securities backed by the U.S. government. The newly sold debt earned top ratings, with the companies planning a mandatory tender and remarketing in 2022. Companies typically do this to avoid losing their allocation of private activity bonds.

Offering documents gave no indication of a likely rating for the next round of borrowing. But the typical recycling deal is most often unrated or speculative grade.

Coming Attractions

Prospective buyers for these two issues got preliminary limited offering memoranda that were more like coming attractions.

The Washington Economic Development Finance Authority sold \$50.8 million in environmental facilities revenue bonds for the Mura Cascade ELP LLC project in late November. The project aims to convert 130,000 tons of plastic waste into about 100,000 tons of petrochemical ingredients.

The accompanying document was 56 pages, with an appendix on the company that was only five pages, but was promising: "Mura is seeking to change the way that society views end-of-life plastics, in that it should be looked at as a valuable resource and not as a waste product."

And this: "It is Mura's ambition to be the largest producer of renewable petrochemicals globally with a production capacity of one million tons per annum by 2025."

Last week, the Louisiana Local Government Environmental Facilities and Community Development Authority sold \$60 million in revenue bonds for the American Biocarbon CT, LLC project, to be located at the Cora Texas Sugar Mill in White Castle, Louisiana.

The preliminary official statement is a mere 80 pages, the description of the project a few sentences. This included the statement that the company already operates a "demonstration scale plant with similar equipment configuration, but less product quantities. This demonstration scale plant is capable of producing approximately 10,000 tons per year of pellets and up to 5,000 tons per year of biochar, consuming 30,000 tons per year of bagasse when at full operation."

Sugarcane Waste

This is at least the second plant contemplated or under construction to recycle bagasse, which is what they call sugarcane waste. In 2019, I wrote about Southeast Renewable Fuels LLC, which wanted to sell \$190 million in bonds to finance a mill to turn bagasse into pulp. The company's website says it has obtained approval from the state of Florida to sell industrial revenue bonds, but it doesn't seem to have done so yet, so we may see two bagasse recyclers financed in the muni market in 2022.

A previous bagasse recycler came to grief. Back in the early 1990s, Flo-Sun Inc., one of Florida's largest sugar companies, borrowed almost \$300 million to build two power plants to burn bagasse and, after sugarcane-grinding season, wood. This was to produce steam and electricity.

The plants eventually went bust and the debt defaulted. But the recycling sector's unpromising history hasn't deterred new entrants, and buyers continue to line up if the price is right.

Just last week the Finance Authority of Maine sold \$85 million in unrated bonds for a company that wants to recycle wood chips into insulation material. The bonds, sold in minimum denominations of \$100,000, were priced at par to yield 8% to their 2051 maturity, or 651 basis points over the benchmark.

Bloomberg Markets

By Joseph Mysak Jr

December 21, 2021, 10:16 AM PST

— With assistance by Marisa Gertz

Muni Housing Bonds Set to Outperform in 2022 Amid Rising Rates, Analyst Says.

- Municipal housing bonds will perform better than other muni sectors next year as interest rates are set to rise amid the Federal Reserve's tapering of its asset purchases, JPMorgan Head of Municipal Research and Strategy Peter DeGroot told Bloomberg.
- Keep in mind the 10-year U.S. Treasury yield is up more than 50% on a Y/Y basis, now changing hands at sub 1.48%.

- Meanwhile, the iShares Trust National Muni exchange-traded fund (NYSEARCA:MUB) is off nearly 1% in the past year.
- DeGroot highlights that debt issued by states to finance low-interest loans for first-time homebuyers or develop affordable housing carry higher yields and are less volatile.
- "Housing bonds have performed extraordinarily well in rising rate environments," DeGroot told Bloomberg.
- Specifically, planned amortization class bonds, which is a way to protect investors from prepayment risk, are the best candidates to outperform, DeGroot added.
- Towards the end of November, muni bonds were about to snap a three-month losing streak.

Seeking Alpha

Dec. 27, 2021

How Waterfront States and Cities are Harnessing Their Blue Economies.

Communities are becoming strategic about planning the use of their shorelines rather than relying solely on tourism and recreation to generate water-related revenue.

A growing handful of coastal states, cities and counties are focusing their economic development efforts on industries that rely on the ocean.

Participants in the so-called "blue economy," shoreside communities contributed \$385 billion to the gross domestic product in 2019 and supported 3 million jobs in more than 20 marine industries, including fishing, tourism, off-shore oil drilling and boat building, according to the Center for the Blue Economy in Monterey, California.

Although 30 states and 1,000 counties abut an ocean or another major body of water, some states, including Massachusetts, Rhode Island, Washington and Alaska, along with coastal cities like Gulfport, Mississippi and San Diego, have, over the past few years, become strategic about planning the use of their shorelines rather than relying solely on tourism and recreation to generate water-related revenue.

Continue reading.

Route Fifty

By Sharon O'Malley

DEC 24, 2021

Fitch: Media Contracts Limit Impact of Postponed Games on Sports Ratings

Fitch Ratings-Chicago/New York-22 December 2021: National media contracts will limit the near-term ratings impact on sports leagues of the recent postponement of North American professional sports games following the sharp uptick in Covid-19 infections caused by the delta and omicron variants among players, says Fitch Ratings. The credit profiles of sports facilities with a high proportion of attendance-driven revenues could be more impacted by the postponement of games in

the near term, compared with facilities with a high mix of contractual revenue such as that associated with premium seating and sponsorships, whose credit profiles are expected to be more stable.

The NBA, NHL and NFL have all observed a sudden increase in positive coronavirus tests afflicting players since mid-December. This has led, in some cases, to roster shortages and teams' inability to compete. Earlier this week, the NHL and NHL Players' Association announced that five additional games will be postponed this week, bringing the total number of games postponed this season to 50. Meanwhile, the NBA postponed five games this week, resulting in a total of seven games postponed this season so far, and the NFL announced its first three schedule changes for the season last week.

League-level debt is secured by national media contracts, with payment in full linked to a league's ability to deliver a full schedule of games under the terms of the contracts. US sports leagues were able to reschedule a significant number of regular season games in 2020 and still hold playoffs, enabling most of them to realize the full value of their national media contracts.

Leagues are taking extraordinary measures to continue operations amid the recent outbreak of cases and retain the flexibility to reschedule games, including potentially extending the season beyond the normal timeframe. The return to a bubble format is viewed as unlikely at this stage, given the high costs associated with operating under such conditions. An entire suspension of the season is also viewed as unlikely, unless there is a continued surge in infections among players.

A material disruption to the flow of national media contract revenue that could negatively affect league ratings is viewed as unlikely at this time. However, if leagues are unable to complete the season in order to deliver the full value of these contracts to their media partners, broadcasters may look to receive credits for lost content in current or future years.

Future contractual broadcast revenues could also be reduced or spread across future years as a form of credit for lost value. In 2020, amid greater uncertainty around the successful completion of their seasons, the leagues' full delivery on national media contracts illustrated the ability of leagues to navigate through a challenging environment and mitigate the impact to credit profiles.

For facilities, rescheduled games, particularly to nonprime hours or "off-days," could have a negative impact on attendance and per-cap spending trends during the season. Government mandated capacity restrictions or the inability of marquee players to play due to league health and safety protocols could also adversely impact attendance and the cash flows that service facilities' debt.

Fitch is closely monitoring developments related to the coronavirus pandemic and its impact on professional sports. There are a wide range of potential outcomes on the length of the disruption, depending on the severity of this Covid-19 wave. Player salaries, the largest expense item for leagues, may have flexibility through existing collective bargaining agreements or future negotiations with player unions to adjust for changing revenues if leagues and franchises face further financial pressures

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The above article originally appeared as a post on the Fitch Wire credit market commentary page. The original article can be accessed at www.fitchratings.com. All opinions expressed are those of Fitch Ratings.

Taxable Municipal Supply Has Staying Power: 2022 Outlook

Summary

- We believe taxable muni supply could exceed \$100 billion again in 2022 and total 25% of expected new issue supply.
- New money supply is expected to be higher, whereas debt used to "advance refund" tax-exempt munis by issuing taxable munis may decline slightly year over year.
- However, it appears that infrastructure legislation will be neutral for the muni market. The bill passed by the House of Representatives in November excludes municipal bond-friendly provisions. It's unlikely that Senate Democrats will include these provisions in their version of the bill.

Continue reading.

Seeking Alpha

Dec. 22, 2021

What Does Fed's Recent Indication on Rate Hikes Mean for Fixed Income Markets?

During the recently held Federal Open Market Committee (FOMC) meeting on December 15, the Federal Reserve Chair provided multiple indications toward taking some aggressive actions to address the historic high inflation in the United States that included reducing the Fed's bond purchases and the possibility of three interest rate hikes in 2022.

These actions come at a time when the prices of goods and services are rising at historic rates, primarily due to the relatively relaxed monetary policy, to combat the effects of the COVID-19 pandemic, along with supply chain imbalances, which have contributed to the elevated levels of inflation. In the recent FOMC meeting, the committee increased its inflation outlook for 2021 from 4.2% to 5.3% for all items. In addition to tapering its bond purchase program, the Fed chairman also indicated increasing the interest rate three times in 2022, which will be an aggressive yet warranted move to address economic forces.

In this article, we will take a closer look at the recent indications from the FOMC and how these decisions will likely impact the capital markets and, more importantly, fixed income portfolios.

Continue reading.

municipalbonds.com

by Jayden Sangha

Dec 22, 2021

2022 Is Gearing Up to Be a Record Year for Municipal Bonds.

2021 was already a strong year, and it's going to be another busy year in 2022 for municipal bonds with record issuance in the already \$4 trillion dollar market.

According to a Bloomberg article, sales predictions based on data "collected from almost a dozen firms range from about \$420 billion to \$495 billion. A notable outlier is the projection from researchers at Bank of America, the market's largest underwriter, who expect a record year of sales totaling \$550 billion."

Those projections come after the trillion-dollar infrastructure package was signed into law this year. The expectation is that local governments will issue a record number of bonds to help fund a wide swathe of infrastructure packages.

Continue reading.

ETF TRENDS

by BEN HERNANDEZ

DECEMBER 27, 2021

ETFs Claim More of Muni Market.

Low costs lure bond investors, but using the funds to navigate market turmoil can be tricky

Municipal bond investors are piling into exchange-traded funds, attracted by low costs and the ability to trade quickly.

Muni ETFs held \$80 billion as of the end of the third quarter, up from less than \$50 billion two years ago, Federal Reserve data shows. Citigroup projects they will hold \$125 billion by December 2022.

Investors this year spent record amounts of cash buying shares in all types of ETFs, baskets of securities that trade as easily as stocks and typically track indexes. They are drawn to muni ETFs for their easy access to tax-exempt yield at low cost under flexible trading conditions, especially with concerns about new taxes under a Democratic administration. ETF sponsors such as BlackRock Inc. report that muni ETFs have helped bring in client cash and fee revenue.

But trying to track prices in real time can be tricky in a market where about 50,000 state and local governments sell debt and some bonds go years without changing hands.

The proliferation of ETFs is part of a continuing shift in the nearly \$4 trillion municipal market, where the typical investor once bought individual bonds and clipped coupons until maturity. For decades, retail investors have been moving to mutual funds, which they can trade once a day at the closing price.

ETFs allow investors to watch prices move in real time and trade whenever they want as often as they want, an appealing feature for work-from-home investors accustomed to watching meme-stock dramas in the corner of their screens.

"Newer investors tend to be more comfortable with the ETF structure," said Steve Laipply, U.S. head of Bond ETFs at BlackRock Inc., which controls \$36 billion in muni bond ETFs. "It's this desire for transparency and nimbleness in trading."

As a group, muni ETFs charge about a quarter of a percentage point less—as a share of assets—than open-ended muni bond mutual funds, according to a weighted average calculated by Morningstar Direct. For passive funds that track indexes, that difference is 0.03 percentage points. After-fee yields on investment-grade muni ETFs and mutual funds in 2021 through November were almost exactly the same.

Investment adviser Paul Winter of Five Seasons Financial Planning in Salt Lake City, Utah, keeps most of the roughly \$3 million in municipal debt he manages in passive ETFs, after shifting his clients from mutual funds over the past decade. He said he appreciates not having to worry after making a trade that a late breaking headline will impact the share price.

"When you enter the order you know exactly what the price is going to be," Mr. Winter said, adding that the speed helps him jump on bargains in equities or commodities.

Advisers aren't the only fans. "There certainly has been a good adoption by the individual do-i--yourself-ers on our platform," said Rich Powers, Head of ETF and Index Product Management at Vanguard Group.

But while muni ETFs trade like stocks, the underlying bonds don't, a reality that can contribute to losses during market turmoil.

Since many munis trade infrequently, valuation services parse through trade data and estimate bond values. In normal times, ETF share prices and the estimated values of the underlying bonds move in lockstep in part because financial firms take advantage of any mismatch by buying up falling shares, exchanging them with the ETF sponsor for the underlying bonds and selling those bonds.

But during the March 2020 liquidity crisis triggered by the Covid-19 pandemic, many firms opted not sell the underlying bonds. That led to fewer data points available to help calculate the valuation,

according to a study by the Municipal Securities Rulemaking Board, the muni bond industry's self-regulatory organization.

For more than a week, share prices of investment grade municipal bond ETFs run by BlackRock and Vanguard trailed the estimated value of the underlying bonds, according to Refinitiv data. At a VanEck ETF that tracks the even less liquid high-yield municipal market, the gap lasted more than two months.

"If you bought (during that period) I guess that's good," said MSRB Chief Economist Simon Wu. "If you sold I guess that's not good." In contrast, investors who bought or sold muni mutual fund shares during that time got a higher price based on valuation service estimates.

Mr. Powers said the episode showed ETFs could recover quickly even under intense strain. "Fixed-income ETFs stood up to the test," he said. Jim Colby, senior portfolio manager at Van Eck noted that the high-yield ETF has generally tracked the estimated value since last summer.

Still the episode helped convince Erin Hadary, a financial adviser with Denver-based Moneta Group, to guide clients interested in munis into mutual funds.

"I think bond ETFs for governments or investment grade corporate bonds are fine," Ms. Hadary said. "I worry in the municipal space if there is enough liquidity."

The Wall Street Journal

By Heather Gillers

Dec. 23, 2021 5:30 am ET

Municipal Bond ETFs Are Turning Heads.

Fixed income investors are jumping into municipal bond exchange traded funds to capitalize on the nifty investment tool's easy use and low costs.

Muni ETFs held \$80 billion in assets under management as of the end of the third quarter, compared to some \$50 billion two years ago, the Wall Street Journal reports. Looking ahead, Citigroup predicts that muni ETFs will accumulate \$125 billion by December of 2022.

Investors have funneled record amounts of cash into all types of ETFs in 2021. Many have been drawn to muni ETFs for their easy access to broad swaths of tax-exempt yield at low costs under flexible trading conditions throughout the day, similar to regular stocks. Many have also favored the tax-exempt status of the fixed income category, especially with concerns over potential new tax laws.

The proliferation of ETFs has helped contribute to the ongoing shift in the nearly \$4 trillion municipal market. For decades, retail investors have been shifting to mutual funds, which trade once per day at the closing price, to access a broad, diverse portfolio of municipal bonds exposure. On the other hand, ETFs trade in real time through normal trading hours, which has generally been more appealing to investors who have been stuck at home during the pandemic.

"Newer investors tend to be more comfortable with the ETF structure," Steve Laipply, U.S. head of bond ETFs at BlackRock Inc., which controls \$36 billion in muni bond ETFs, told the WSJ. "It's this

desire for transparency and nimbleness in trading."

Furthermore, the ETF structure is taking a bigger slice from the traditional mutual fund space due to cheaper costs. Muni ETFs charge about a quarter of a percentage point less as a share of assets than their open-ended muni bond mutual funds counterparts, according to Morningstar Direct data. Among passive funds that try to reflect a benchmark index, the difference is 0.03%.

ETF investors who are interested in the munis space can also consider targeted ETF strategies, such as the popular iShares National Muni Bond ETF (NYSEArca: MUB), the Vanguard Tax-Exempt Bond ETF (NYSEArca: VTEB), and the SPDR Nuveen Bloomberg Municipal Bond ETF (NYSEArca: TFI).

ETF TRENDS

by MAX CHEN

DECEMBER 23, 202

Investors Flock To Muni Bond ETFs On Fundamentals

Morningstar gives Vanguard Tax-Exempt Bond ETF, the second biggest muni ETF, a gold rating, the research firm's highest.

Money is pouring into municipal bond exchange-traded funds, as the improved financial condition of municipalities, sparked by monetary and fiscal stimulus, has investors enthusiastic.

Muni ETF assets totaled \$80 billion as of Sept. 30, up from less than \$50 billion two years ago, according to Federal Reserve. Citigroup forecasts that total will grow more than 50%, to \$125 billion by the end of next year, the Wall Street Journal reports.

iShares National Muni Bond ETF (MUB) – Get iShares National Muni Bond ETF Report is the largest muni bond ETF, with \$24.9 billion in assets, according to ETF Data Base. Morningstar analyst Neal Kosciulek gives the fund a silver rating, the research firm's second highest after gold.

"iShares National Muni Bond ETF is a good choice for low-cost exposure to the investment-grade, tax-exempt bond market," he wrote.

"The fund provides broad, market-value weighted exposure to the municipal-bond market. It tracks the S&P National AMT-Free Municipal Bond Index, which includes investment-grade municipal bonds with at least one month until maturity and \$25 million in face value ... The strategy's best feature is its modest fee. At 0.07% the fund's expense ratio is 49 basis points lower than the category average."

Vanguard Tax-Exempt Bond ETF (VTEB) – Get Vanguard Tax-Exempt Bond ETF Report is the second largest muni bond ETF, with \$14.9 billion in assets. Kosciulek rates it gold.

"Vanguard Tax-Exempt Bond is a great option for low-cost exposure to the investment-grade, tax-exempt bond market," he wrote.

"The fund provides broad, market-value-weighted exposure to the municipal-bond market. It tracks the S&P National AMT-Free Municipal Bond Index, which includes investment-grade municipal bonds with at least one month until maturity and \$25 million in face value."

Its fee is only 0.06%.

etftrends.com

by Dan Weil

DEC 23, 2021

2022 State Bond Caps and Deadlines: Novogradac

Listed below are the scheduled deadlines for submitting tax-exempt bond applications and related information. We will continually update this list as new information becomes available.

View the caps and deadlines.

Infrastructure And The Outlook For Municipal Bonds In 2022.

Summary

- The Infrastructure Investment and Jobs Act is one of several positive drivers for municipal bonds in the new year.
- The most significant impact of the IIJA for municipal bond investors is likely to be incremental supply of muni bonds.
- Heading into 2022, the municipal market finds itself on solid fundamental footing.

Continue reading.

Seeking Alpha

Dec. 16, 2021

Record-Breaking or Austere? What to Expect from the Municipal Bond Market in 2022.

Everyone agrees: the 'real question' is the Fed

Municipal bond market experts have different takes on what 2022 will bring, although there's one constant: demand for the debt issued by state and local governments is likely to remain exceptionally strong.

"Big picture, the municipal market is fundamentally as strong as it's been in a number of years," said Paul Malloy, head of municipal investments at Vanguard.

"There was a significant amount of federal aid in 2021, tax receipts are up, market returns SPX, - 1.03% have been strong, and that's aiding pension funds," Malloy told MarketWatch. "The real

question mark into 2022 is the level of interest rates and their impact."

Malloy believes the federal aid doled out over the past two years in response to the COVID-19 pandemic will keep municipalities "flush with cash" and less likely to sell bonds in 2022. His forecast of \$400 billion worth of new issuance would make 2022 one of the leanest years of the past decade. Through November of this year, \$432 billion has been issued, according to SIFMA.

In contrast, Tom Kozlik, head of municipal research for Hilltop Securities, expects a record-breaking 2022, with \$495 billion in issuance. Kozlik has deemed the current moment "a golden age of public finance" because of the possibilities for spending that have been opened up by federal largesse.

While there's no precise way to predict how the municipal market — tens of thousands of state and local governments, transportation agencies, universities, and more across the country — will behave, it's worth noting that several sources who spoke with MarketWatch in November universally appreciated the fact that federal aid would allow them to avoid the expense — and administrative headache — of issuing bonds.

One thing is certain: relatively lean supply will continue to support bond prices. Eric Kazatsky, head of municipal strategy for Bloomberg Intelligence, reckons that the market could support \$475 billion of issuance.

That will continue a stretch of outsize demand. Throughout 2021, multiple weeks in a row have seen inflows to municipal-bond funds smash records. A closely-watched metric, the ratio of 10-year muni yields to those of comparable U.S. Treasurys was at about 64% at the end of November, according to IHS Markit data, below the long-term average of about 80%, and suggesting investors have been willing to pay more for the tax advantages munis bring.

That's Kazatsky's premise for 2022: "buyers of municipals will still be motivated by tax avoidance, absent a large individual tax cut," he wrote in an outlook piece, "while the bonds' low correlation to other asset classes could prove their 'safer'-haven status should the economy struggle in an era of rising rates."

The question of how the economy might do – whether in the face of monetary policy normalization or just the tail end of the global pandemic – also sets up some differences among muni experts on just how to invest.

Vanguard's Malloy thinks there are pockets of value in areas that "haven't completely come back from the pandemic," including higher education and some student housing deals. But others are more wary: Kozlik has a cautious to negative view on higher education, noting that "college campuses are not as safe as we expected from virus spread."

And despite the fact that municipalities are in strong shape now, Kazatsky writes that he continues to favor bonds "with identifiable revenue streams vs. stand-alone general-obligation pledges" – that is, those backed by taxes. What's more, he added, if stocks pull back or interest rates spike, it could exacerbate legacy fixed costs for those governments, such as public pensions.

MarketWatch

By Andrea Riquier

Dec. 15, 2021

Top Muni Bankers Say Huge Deals, ESG Will Be 2022 Highlights.

- Federal infrastructure plan underpins market, spurs bond sales
- Public-private projects, hedging products also on the agenda

For the municipal finance professional, the new year holds the promise of elephant-sized debt deals, a potential premium for environmentally friendly bonds and a bounty of securities sales spurred by the U.S. infrastructure bill.

So say some of the top bankers in the \$4 trillion market, where debt offerings have shown remarkable resilience in the second year of the coronavirus pandemic as state and local government coffers quickly recovered.

A global vaccine campaign and a massive federal economic stimulus package helped tax-exempt municipal bonds outperform almost every other fixed-income asset class this year. The market's riskiest corner, junk bonds, was the best-performing muni sector, with returns approaching 8% year to date.

"As the economy continues to grow into 2022, and if the omicron or other variants remain in check via vaccines, we expect to see increased high-yield activity next year," said Peter Hill, head of public finance at UBS Group AG.

Bloomberg News surveyed the heads of public finance at the market's top investment banks on notable trends of 2021 and their outlook for 2022. In the following Q&A, they highlight just how important the historic infrastructure package will be to their industry. And like all bond professionals, they consider the potential effect of the fastest inflation in decades.

What sectors or geographies are you prioritizing next year?

Health care and housing, two areas drastically altered by the pandemic, continue to command attention.

"Affordable housing will be one of the defining subjects of the next decade in municipal finance and will impact our market in ways not yet known," said Charles Peck, head of public finance at Wells Fargo & Co. State and local governments sold about \$35 billion of housing-related debt in 2021, a roughly 80% increase from 2020, Bloomberg data show.

Gary Hall, head of public finance and infrastructure at Siebert Williams Shank & Co., is focused on how to grow his firm's higher ed, health care and housing divisions. He also seeks to expand his firm's presence in the Southeast U.S and other rural areas.

"We're looking to go downstream in k through 12, for broadband expansion and water quality, taking advantage of the infrastructure package and any kind of bridge and tunnel work that needs to be done all throughout some of these states," Hall said.

What will be the biggest themes defining the market?

Bankers overwhelmingly cited the infrastructure package, signed into law by President Joe Biden in November, as a major determinant. Some bankers speculated whether the surge in funding will lead states and cities to pull projects off the shelf.

Jamison Feheley, head of banking for public finance at JPMorgan Chase & Co., said it should be "a

catalyst for new project development against a very positive credit backdrop for states and local governments."

"The infrastructure package, the length of time it took to get enacted, paused a lot of our issuer clients. They said, 'I don't want to go out and use my bond capacity, because I don't know what's going to happen with the federal government. So I'm going to wait and see what they provide," said Hall at Siebert.

He expects the market to see a larger percentage of new-money sales than in the past boosted by "elephant-sized" deals from borrowers that aren't regular bond issuers. He's "bullish" on volume, predicting between \$480 billion and \$490 billion of total sales. Long-term municipal bond sales so far this year total about \$459 billion, according to data compiled by Bloomberg.

What are you pitching your government clients?

"With inflation at 40-year highs, the prospect of higher rates in the future seems quite real." said Bob Spangler, head of municipal finance at RBC Capital Markets. "For new-money projects that are one to three years out, issuers should consider rate locks or other hedging products to reduce their interest rate exposures."

"As our clients return to whatever their new 'normal' is, there's a lot of potential motivators for M&A activity or other public private partnerships," Peck said. "They could be looking for ways to transfer risk that's not core to their mission, monetize assets to diversify revenue streams, or complete projects which will ultimately be owned and managed by a governmental entity."

What are the implications of federal stimulus for the muni-market next year?

In an attempt to blunt the pandemic's impact on the economy, the federal government provided a historic surge of stimulus dollars to state and local governments. Bankers at UBS, Wells Fargo, Stifel Financial Corp. and JPMorgan see a strong outlook for the sector buoyed by higher-than-expected tax receipts and spending increases.

"State and local governments are in good shape. Strong sales tax receipts, income taxes, and federal transfers have bolstered balances," said Betsy Kiehn, head of municipal capital markets at Stifel. "The question now is primarily how they spend it and whether they put in programs which require long term recurring revenue sources that are not identified."

"Increased spending and positive economic indicators should help perpetuate the positive rating trends for issuers of all stripes in 2022," added UBS's Hill.

How is ESG being viewed in the municipal bond market?

Municipals may have been the original impact investing market, with governments selling debt for decades to improve water systems, fund affordable housing and public education. In recent years, bonds specifically branded with a "green" or "social" label have grown in prominence.

Bonds classified as ESG, for environmental, social or governance purposes, are a focus for both issuers and investors. "While there are currently no measurable or consistent pricing benefits, the ability for issuers to diversify their investor base may be beneficial long term," Kiehn said. The impact of climate change could spur more debt sales as the need grows for improvements to water systems, flood control projects and resiliency efforts like seawalls, she said.

Peck at Wells Fargo said they've seen a few instances of a "greenium," that is, a relatively lower cost

of capital, but overall, credit quality, liquidity and relative values are still the biggest price drivers.

"While some transactions have seen a modest pricing benefit, the real advantage to issuers is exposure to a broader, more diverse group of investors," he said. "This can result in an indirect pricing benefit by widening distribution."

What are you most looking forward to in 2022?

Wells Fargo, RBC and JPMorgan head bankers voiced an eagerness to return to normalcy — continued face-to-face meetings with clients and colleagues and progress toward the end of the pandemic.

"The second half of 2021 was great as we moved back to in-person interactions with clients and colleagues and I'm hopeful we can continue to move forward," said Feheley of JPMorgan.

Bloomberg Markets

By Danielle Moran and Nic Querolo

December 17, 2021, 8:59 AM PST

Vanguard Sees Muni Bond Supply Slowing to \$400 Billion in 2022.

- Issuers are flush with revenue and aid, says Vanguard's Malloy
- Forecast on lower end of muni estimates compiled by Bloomberg

Vanguard, one of the largest municipal fund managers, expects states and localities to slow bond sales by at least 11% to about \$400 billion next year because of a faster than anticipated revenue rebound and billions of dollars in federal aid.

"A lot of municipals are flush with cash," Paul Malloy, head of municipal investments at Vanguard, said in an interview. "They don't need to borrow as much." The firm has almost \$267 billion in muni assets.

Vanguard's forecast, including municipal-backed corporate debt, is lower than 2022 forecasts from 11 other strategists compiled by Bloomberg. The 2022 supply estimates ranged from Morgan Stanley's projection of \$420 billion to Bank of America's forecast for \$550 billion.

Last year, municipal issuers sold about \$454 billion in long-term debt as the pandemic shuttered businesses, drove up unemployment and led tax revenue to drop temporarily. With three weeks left in 2021, long-term municipal issuance has reached about \$450 billion, according to data compiled by Bloomberg.

On Credit

Malloy expects lighter sales next year because state and local governments have "a lot of cash" and municipal issuers "are in really great shape" from a fundamental credit perspective, he said. The pandemic's revenue hit has subsided for many.

Texas, among the largest state issuers, is an example of the pull back in debt overall, he said. The state usually borrows to prevent a deficit until more revenue arrives.

The state's total sales tax revenue for the three months ending in November 2021 rose 22% from the same period a year ago and is up almost 16% compared to 2019, according to a statement on the Texas comptroller's website.

In addition to rebounding revenue, state and local governments are getting \$350 billion from President Joe Biden's American Rescue Plan Act.

On Rates and Valuation

Another reason to reduce borrowing next year is the cost may increase for municipal governments, Malloy said. The 10-year AAA muni benchmark could move up by mid-2022 from the current 1.05%, driven by yields in the Treasury market, Malloy said.

Muni issuers have benefited from rates hovering around historical lows partly because supply largely has not kept pace with investor demand this year and the imbalance has kept a lid on yields.

"It's not going to be as cheap to borrow as it has been," Malloy said. "It's the macro story."

One of the biggest questions for 2022 will be valuations, Malloy said. The muni to Treasury ratio is likely to range between 70% and 75% for debt maturing in 10 years, he said. The ratio was about 71.3% at the last close.

The ratio may hover around 80% for 30-year debt and 50% for bonds maturing in two to five years, he said.

On Covid

The pandemic is "an X-factor," Malloy said. "Always out there for the foreseeable future."

The virus and its variants will contribute to volatility in the market but medical advances and improvements in responses globally mean Covid "doesn't have the same potential for scarring" as it did at the outset, he said.

Bloomberg Markets

By Shruti Singh

December 10, 2021, 11:26 AM PST

Sales of Municipal Bonds That Won't Deliver for Months Reach Record.

- State and local forward delivery sales at \$15 billion in 2021
- Issuers look for savings as investors seek yield: Parametric

State and local governments seeking savings from historically low interest rates before a series of expected hikes in 2022 are driving record sales of bonds that won't deliver for several months.

Sales of municipal bonds with a so-called forward delivery structure — meaning borrowers can lock in rates months before accruing interest owed to investors — reached about \$15 billion in 2021, which is more than double the \$6.7 billion this time last year and an-all time high, according to data compiled by Bloomberg.

The type of bond has grown in popularity ever since issuers in the \$4 trillion municipal bond market were barred from a key refinancing tactic known as tax-exempt advance refunding in a 2017 tax change. But issuance this year has reached a fever pitch amid broad anticipation of higher refinancing costs next year. Sales have come from issuers in California, Maine, New Jersey, Maryland, Ohio, Illinois, Oklahoma, Arizona and Hawaii.

"They are looking for more creative ways to lock in savings," said Brian Barney, a managing director and portfolio manager for Parametric Portfolio Associates, which holds \$43 billion in muni assets. "If rates remain relatively low, they will continue to use it potentially to this extent. If they do tick higher, then I expect we see this forward issuance number come down."

The Federal Reserve on Wednesday signaled that a series of interest-rate increases are coming down the pipeline, starting with three hikes in 2022. Barney said the market has already priced in most of the potential rate increases, and if they don't move too much, issuer interest in forward delivery will continue. In the meantime, the bonds should also remain attractive for investors in a low interest environment as they offer some additional yield, Barney said.

"The market has gotten efficient at pricing the per-month spread (discount) based on delayed settlement and buyers have grown more comfortable with the process," Kimberly Olsan, senior vice president of municipal bond trading at FHN Financial, said in an email. "These structures could be expected to continue as long as restoring advance refundings are off the table."

The Maine Turnpike Authority issued \$102.34 million forward delivery bonds to refund \$124.9 million from a 2012 series, according to an emailed statement from Douglas Davidson, the agency's chief financial officer and treasurer. The savings from the sale and redemption will strengthen the authority's financial ratios, and the issuance "freed up" about \$23 million under its legislative bond cap, he said.

"The authority chose to use the forward delivery option in order to lock in savings at the current interest rates," Davidson said. "The authority has been concerned with high inflation and the uncertainty of future interest rates."

Bloomberg Markets

By Shruti Singh

December 16, 2021, 10:05 AM PST

— With assistance by Danielle Moran

The Municipal Market is Getting Riskier. Is Anyone Paying Attention?

There's so little new muni debt coming to market that bondholders snatch anything they can get, and relaxed standards are spreading

When CalPlant, a northern California manufacturer of fiberboard from rice farming waste, filed for bankruptcy in October, it may not have come as a complete surprise.

The company had issued \$344 million of municipal bonds since 2017 in order to build a factory and start manufacturing, but faced construction overruns even before the COVID-19 pandemic hit,

according to various reports. It defaulted on a payment in 2020, but just months later tapped existing bondholders for more cash.

CalPlant is hardly the first specialty project to go bust in the municipal market. A monorail running around Las Vegas has been bankrupt twice, and the American Dream mall in New Jersey has struggled for years to get off the ground. CalPlant's initial bond offering, with an 8% interest rate and investments from high-yield asset managers, make it very different than the tax-backed, tax-exempt bonds sold to wealthy households who simply want to preserve their capital.

Continue reading.

MarketWatch

By Andrea Riquier

Dec. 17, 2021

Defaults Are Quickening in Muni Bonds in Warning Sign for High-Yield Investors.

- Time between issuance, impairment about half 2014 level: MMA
- Trend could blunt demand for riskier issuance, Fabian says

Defaults and impairments are coming at a faster clip in the \$4 trillion municipal-bond market, a potential warning sign for investors in junk munis, the best-performing sector of state and local-government debt.

The trend comes against a backdrop in which riskier issuers have gained more market access and investors awash in cash have grown more comfortable with weaker protections as yields remain well below historical averages. For muni deals that do become impaired, the time between issuance and such an event has tumbled to 32 months on average, less than half the level seen in 2014, Municipal Market Analytics data show.

The phenomenon holds for both risky and safer sectors as asset managers across the spectrum face reinvestment pressure. But weaker issuers have the most at stake, as broadly accelerating impairments could erode the segment's performance, crimping demand and making it harder for troubled borrowers to recover.

"More defaults and impairments, happening faster after issuance, could blunt the tip of high-yield demand," said Matt Fabian, a partner at MMA. "And if high-yield demand pulls back, it means less available rescue financing, so more defaults."

In MMA's definition, impairment refers to bonds in default or those that have tapped emergency means or violated a covenant.

Year to date, Bloomberg Intelligence data show that over \$4.4 billion of securities have faced distress or default. In the week ended Thursday, seven deals totaling \$102 million joined the ranks.

Munis' exceedingly low level of defaults relative to corporate debt, along with the improving U.S. economy, a wave of federal aid and talk of higher income taxes, have helped drive investor interest

in junk offerings.

Muni Haven

In a year when munis overall have offered a haven in fixed income, earning about 1.5%, high-yield has been a standout, earning 7.7% in 2021, Bloomberg index data show.

The cash flowing in "doesn't just intensify demand, it also forces buyers to capitulate on credit conditions that they would normally require," Fabian said.

Those weaker underwriting conditions, such as sufficient reserves, contribute to the shrinking default window, he said. It's also easier for riskier projects to access capital through entities like conduits, and low yields have driven investors into more and more speculative deals.

The rise of passive investing and increased diversification has helped larger funds insulate themselves against defaults and distress. But for smaller asset managers with less liquidity and diversification, struggling deals can carry more weight.

"If you're a small, relatively concentrated asset manager, you have to be more careful than you used to be," Fabian said.

Bloomberg Markets

By Nic Querolo

December 14, 2021, 10:56 AM PST

No Deed, No Taxes, No Problem With These Dirt Bonds.

- Utah, Colorado developers finance with 'cash flow' securities
- In dirt-bond twist, investors have no property to foreclose on

Question: What do you call a dirt bond without any dirt?

Answer: Cash-flow limited-tax general obligation bonds.

"Dirt bonds" are used to help pay for new real estate development, and have been a prominent, if risky, feature of the municipal-bond market for decades, especially in fast-growing states like California, Colorado, Texas and Florida. They may have different names in each of the states, but are typically sold with no or low credit ratings and carry comparatively high yields. The bonds are repaid by property taxes and special assessments, and investors' ultimate security is foreclosure on the property.

But now we have a dirt bond without any property to foreclose on. Bond buyers are still helping to pay for a new real estate development, but they don't get the deed to the land should it stall or never take place.

That's not all the bond buyer doesn't get. Payment dates may come and go, but the issuers of these bonds tell the buyers up front that they won't get paid principal or interest until a date years in the future, and maybe not even then. These payments won't be made until people move in and the cash — property taxes — starts to flow.

Theoretical Maturity

These bonds have a maturity date, but that's only theoretical; it may take even longer to catch up on those accrued debt-service payments. And if you're not caught up by a certain year after that, you're out of luck, because these bonds also have a termination date beyond which the bondholder's claims are worthless.

I hadn't seen such a thing before. I couldn't even have imagined such a thing and called it a municipal bond. Perhaps we are at a certain point in the credit cycle, where investors are willing to absorb increasing amounts of risk. And the risk is undeniable. Land-secured deals account for about \$2.3 billion of munic currently in payment default, or about 18% of the total, excluding Puerto Rico, Municipal Market Analytics data show.

This particular brand of land deal seems to have made its debut in Utah this year, but it's been used in Colorado for a few years. In Utah, the structure appears to have reached perfection, or maybe the vacation-home market there is red hot. Muni-financed development deals appear to be revving up there. Of the 66 that have been sold in the state, three were from 2009, one in 2010, six in 2013, nine in 2020 and 47 this year, data compiled by Bloomberg show.

Consider, for example Pine View Public Infrastructure District No. 1, which in November sold \$13.8 million in cash-flow limited-tax GOs. The unrated deal was sold through a preliminary limited offering memorandum to qualified institutional buyers in minimum denominations of \$500,000.

The proceeds of the deal are going to help pay for a development of 1,202 single-family homes on more than 300 acres in Toquerville, Utah, which had a population of 1,870 in 2020, according to the offering documents, and which is in southwest Utah near Zion National Park.

There's a helpful aerial map of Pine View PID No. 1 in the memorandum and there's not a lot there. It says so numerous times in the memorandum. Home construction hasn't commenced, and isn't expected to until the third quarter of 2022.

And then, these words: "It is not anticipated that there will be any Pledged Revenue available to pay accrued interest on the Bonds until 2025, and it is not anticipated that there will be any Pledged Revenue to pay principal on the bonds until 2042."

'No Guarantee'

The memorandum goes on to state: "These dates represent a forecast and there is no guarantee that any payments will be made on or after such date or, further, that the Bonds will be repaid prior to their discharge date of March 1, 2062."

These are relatively new creatures in MuniLand, "cash flow" securities. There's no definition of "cash flow securities" available in the Municipal Securities Rulemaking Board's Glossary, for example.

And yet, there's a market for such things. These Pine View Public Improvement District No. 1 bonds were priced by underwriter D.A. Davidson at par to yield 6% in 2051, which is 448 basis points above what top-rated issuers expect to pay. The underwriter didn't respond to an email for comment. A call to the developer wasn't immediately returned.

My first reaction to "cash flow securities" was sheer amazement, and my second was "I love these," because they're the ultimate manifestation of dirt bonds.

Why do such things usually default? Because they run out of time. Because the developers can't get the houses built and sold fast enough. Because the fuse is lit the day the bonds are priced. I bet we'll see a lot more such deals.

Bloomberg Markets

By Joseph Mysak Jr

December 13, 2021, 9:25 AM PST

— With assistance by Kenneth Hughes

(Joe Mysak is a municipal market columnist who writes for Bloomberg. His opinions do not necessarily reflect those of Bloomberg LP and its owner, and his observations are not intended as investment advice.)

GFOA 2021 Awards for Excellence Winners Announced.

Learn how this year's award winners provide inspiration, model examples, and provide implementation guidance for others looking to adopt best practices or to develop creative or innovative solutions.

VIEW WINNERS

NASBO Fiscal Survey of States.

Overview - Fall 2021

With data gathered from all 50 state budget offices, this semi-annual report provides a narrative analysis of the fiscal condition of the states and data summaries of state general fund revenues, expenditures, and balances. The spring edition details governors' proposed budgets; the fall edition details enacted budgets.

State general fund spending is projected to grow 9.3 percent in fiscal 2022 compared to fiscal 2021 levels, according to states' enacted budgets. This spending increase is driven by improving revenue outlooks for states as well as a host of one-time factors.

Other key highlights from the report:

- General fund spending grew **4.3 percent** in fiscal 2021 to total \$931.7 billion, above originally enacted levels but still slightly below governors' proposed budget levels pre-COVID-19.
- **47 states** reported fiscal 2021 general fund revenue collections came in above original budget projections.
- Fiscal 2021 general fund revenue grew **14.5 percent** over fiscal 2020 levels, with this increase partially driven by the impact of the tax deadline shift, inclusion of federal funds, borrowing, and other revenue sources in a few states, and a lower baseline in fiscal 2020.
- In the aggregate, combined fiscal 2020 and fiscal 2021 general fund revenues came in **2.2 percent** above pre-COVID-19 projections.

- Fiscal 2022 enacted budgets are based on general fund revenues that are **2.6 percent** below preliminary actual levels for fiscal 2021; revenue forecasts used to build enacted budgets were mostly developed earlier in calendar year 2021, before the most recent uptick in collections.
- **32 states** (out of 42 states able to report early in the fiscal year) indicated that fiscal 2022 collections were coming in ahead of budget forecasts, while 10 states said they were on target.
- States adopted a mix of increases and decreases in taxes and fees, resulting in a projected net revenue change in fiscal 2022 of **-\$2.9 billion** including \$1.7 billion in general fund revenue reductions (representing less than 0.2 percent of total general fund revenues forecasted in enacted budgets for fiscal 2022).
- Rainy day fund balances reached a new record level of nearly **\$113 billion** in fiscal 2021 due mainly to stronger than anticipated revenue growth, with 35 states reporting increases. The median balance as a share of general fund spending is **9.4 percent**.
- Total balances increased in fiscal 2021, nearly doubling from fiscal 2020 levels, and **46 states** reported total year-end balances greater than 10 percent as a share of general fund spending.

Report Summary

Full Report

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Kronos Ransomware Attack Will Challenge Public Finance Issuers.

Fitch Ratings-New York/Chicago/Austin-21 December 2021: The recent breach of Ultimate Kronos Group's (UKG) Kronos Cloud Solutions platform could pose significant, but temporary, management challenges for public finance entities that use the Kronos platform through the holiday season, says Fitch Ratings. While we do not anticipate that the UKG breach will have meaningful credit implications for individual public finance entities that use Kronos, the breach continues to reinforce the necessity of robust third-party risk management strategies and identification of critical dependencies for public finance issuers. The attack further highlights the importance of cyber emergency preparedness and response strategies for the public finance sector.

The breach has already impacted a large number of public finance entities across the country, with some of the most notable the New York Metropolitan Transportation Authority, the City of Cleveland, the state of West Virginia, the Oregon Department of Transportation, the University of California system, and Honolulu's EMS and Board of Water Supply. Though many high-profile public finance organizations have disclosed being impacted, the actual number could be much larger.

UKG is the provider of one of the most popular and widely used payroll and workforce tracking systems for public finance entities. On Monday December 13, UKG announced that it was the victim of an ongoing ransomware attack affecting the Kronos Private Cloud, which hosts UKG Workforce Central, UKG TeleStaff, Healthcare Extensions, and Banking Scheduling Solutions. The company further disclosed that the Kronos Private Cloud solutions systems are currently unavailable and it may take up to several weeks to restore system availability for clients. The breach is forcing many issuers across the spectrum of public finance to resort to manually tracking and estimating employee hours, having to issue paper paychecks and possibly causing paycheck delays during the holidays.

The sector most impacted by the UKG ransomware attack within public finance is healthcare, where

Kronos' payroll and workforce solutions systems have been popular. The breach should not affect clinical outcomes or add meaningful costs, except some added expenses activating contingencies to track hours and pay workers. That said, the timing is especially inopportune for the sector, with hospitals nationwide already grappling with increased Covid-19 cases amid the growth in the Omicron variant. Indeed, the American Hospital Association (AHA) stated that some hospitals and health systems have been impacted by this ransomware attack and urged all third-party providers that serve the healthcare community to examine their cyber readiness, response and resiliency capabilities.

In addition to the near-term challenges posed to public finance entities from the current unavailability of critical payroll systems, some entities have voiced concerns over data privacy associated with the UKG breach. According to a statement released from the City of Cleveland, some of the city data accessed may have included certain employees' first and last names, addresses, last four digits of the social security numbers, and employee ID numbers.

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The above article originally appeared as a post on the Fitch Wire credit market commentary page. The original article can be accessed at www.fitchratings.com. All opinions expressed are those of Fitch Ratings.

Bloomberg Launches U.S. Municipal Bond Impact Index to Track Green, Social, and Sustainability Bonds.

NEW YORK, Dec. 15, 2021 /PRNewswire/ — Bloomberg today announced the launch of the Bloomberg U.S. Municipal Impact Index designed to track the market of municipal bonds categorized as Green, Social, and Sustainability. The index currently tracks over 2,800 securities and is the first such standardized measure of the U.S. municipal tax-exempt investment grade impact bond market.

The index is derived from Bloomberg Index Services Limited's (BISL) flagship Municipal Index (Bloomberg Ticker: I00730) and utilizes Bloomberg's data and its municipal data analysts' research to individually vet and categorize as Green, Social or Sustainability municipal bonds on the Bloomberg Terminal. For inclusion in the index, a bond must either be self-labeled as Green, Social or Sustainability directly from an initial offering, reviewed by independent assurance providers, or use 100% of proceeds for a project in line with the International Capital Market Association (ICMA) Principles. Additional sub-indices dedicated to tracking Green, Social, and Sustainability municipal bonds were also launched as part of a suite of Municipal Index Family.

"Investor demand for municipal impact bonds has been growing and its market value has more than doubled in the last three years, but participants have lacked a standard reference point for ESG-adherent securities," said Nick Gendron, Global Head of Fixed Income Index Product at Bloomberg. "We believe the Bloomberg U.S. Municipal Impact Index will hold broad appeal for both ETF product creation and traditional benchmarking while also providing a useful tool for in-depth research of this growing segment of the municipal bond market."

Eligible bonds within the index are required to have principal and interest denominated in USD, at least one year until final maturity, and hold an investment grade rating. Only fully tax-exempt issues are included, and rebalancing will occur on a monthly basis. Bloomberg provides a suite of green bond market governance, research, data, and analytics to help users identify green securities and assess alignment to the Green Bond Principles developed by the International Capital Markets Association.

The index was launched on December 13, 2021, with history calculated back to January 1, 2019. Bloomberg clients can access the index using the ticker I36676US Index .

Bloomberg provides an independent, transparent approach to indexing for customers across the globe. For more information, please visit <u>Bloomberg Indices</u>. To learn more about Bloomberg's ESG bond data, please visit <u>Bloomberg ESG Data</u>.

Muni Market Record Numbers In 2021 (Radio)

Joe Mysak, Editor of Bloomberg Brief: Municipal Markets, has the latest on municipal bonds. He discusses a record year for municipal markets and Puerto Rico looking to come out of bankruptcy. Hosted by Paul Sweeney and Kailey Leinz.

Listen to audio.

Bloomberg Radio

Dec 17, 2021

Fitch Ratings Updates Criteria for U.S. Public Housing Authority Capital Fund Revenue Bonds.

Fitch Ratings-New York-16 December 2021: Fitch Ratings has published an updated criteria report titled "U.S. Public Housing Authority Capital Fund Housing Revenue Bonds Rating Criteria." The report replaces the prior report of the same title published on Dec. 22, 2020.

Revisions to the criteria include minor editorial changes and clarification of the debt service coverage approach for Capital Fund Program pooled financings that are not cross-collateralized. The key elements of Fitch's US. Public Housing Authority Capital Fund Housing Revenue Bonds Rating criteria remain consistent with those of its prior criteria report.

The updated criteria is not expected to result in changes to the ratings of existing transactions.

The full report is available at www.fitchratings.com.

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Fitch: Job Recovery Picks up Steam for U.S. Metros; Omicron a Concern

Fitch Ratings-New York-21 December 2021: Job recoveries received a jolt for U.S. major metropolitan statistical areas (MSAs) thanks in large part to strong performance in the Midwest and Western parts of the country, according to Fitch Ratings in its latest U.S. Metro Labor Markets Tracker.

The median jobs recovery rate among major MSAs rose to 75% in October 2021 from 72% in September. Additionally, 48 out of 53 major metros experienced employment growth on a month-over-month basis, nine more than the previous month.

Potentially weighing down job growth in the coming months will be the Omicron variant of the coronavirus, with infections becoming more widespread. 'Vaccine mandates continue to be contested in courts, though the availability of vaccines for children ages 5 to 12 should further decrease risk of hospitalization,' said Fitch Senior Director Olu Sonola.

The Midwest's median recovery rate for major metros rose to 80% in October from 77% in September, with Chicago registering the highest recovery rate increase among major Midwestern metros in October at 4.7 pps. Strong growth was also evident in the major metros in the West (75% for October) with San Jose, San Diego and Riverside all standouts.

By contrast, the Northeast continues to be a laggard. New York City, the nation's largest employment center, trails the overall U.S. and broader Northeast recovery rates. Buffalo and Providence saw recovery rate declines in September, while Hartford posted a 3.8-pp recovery improvement for the month.

'U.S. Metro Labor Markets Tracker' is available at 'www.fitchratings.com'.

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How Government Funding Dysfunction Limits Bipartisan Infrastructure Law Implementation: Nossaman

How Government Funding Dysfunction Limits Bipartisan Infrastructure Law ImplementationThe Infrastructure Investment and Jobs Act or "IIJA" (P.L. 117-58) passed on a bipartisan basis in both the House and Senate and was signed by the President one month ago today, on November 15, 2021. One could have assumed that federal agencies would begin allocating the new funding and commence implementation of the IIJA as soon as it became effective. Unfortunately, that is not the case, but for reasons that may not be readily apparent ... Continue

Nossaman LLP

By Shant Boyajian on 12.15.2021

U.S. Bond Funds Post Biggest Weekly Outflow in 20 Months - Lipper

Dec 17 (Reuters) - U.S. bond funds witnessed big outflows in the week to Dec. 15 as a surge in inflation solidified investor expectations that the Federal Reserve would be more aggressive in unwinding its stimulus support to counter soaring prices.

According to Refinitiv Lipper data, U.S. bond funds faced net selling of \$7.48 billion, that marked the biggest outflow since April 8, 2020.

Dec 17, 2021

Muni ETFs Grow Fast as Yield-Starved Investors Seek Cheap Funds.

- Funds see record inflows topping \$19 billion this year
- Citigroup analysts say ETFs' holdings could climb 40% in 2022

Exchange-traded funds for municipal bonds are growing so fast that they're giving more established products for retail investors, like closed-end mutual funds, a run for their money.

This year, muni ETFs have seen record inflows, bringing total holdings to \$83 billion. That's not far off the \$98 billion of assets that muni closed-end funds had at the end of the third quarter.

And the growth isn't over. Citigroup Inc. analysts led by Vikram Rai said in a report this month that muni ETFs could see their holdings jump by another 40% in 2022. The draw for investors is the cheaper management fees, which average around 0.18% for the top funds, about a third of the level for open-end mutual funds, the analysts wrote.

Continue reading.

Bloomberg Markets

By Amanda Albright

December 16, 2021, 8:07 AM PST

Momentum Is on the Side of These Municipal Bond ETFs.

Municipal bonds have been a steady bet in 2021 despite all the volatility, with certain exchange traded funds (ETFs) high on momentum according to their relative strength index (RSI).

The RSI can be a helpful indicator to know if momentum is behind a certain ETF — the closer to a reading of 70, the higher the momentum. It can also indicate an oversold condition, so investors need to be aware of potential sell-offs. Likewise, it's not an end-all-be-all when it comes to choosing a momentous fund, but rather a tool that investors can add to their toolboxes.

Fundamentally, municipal bonds have also been a strong bet in 2021. The trillion-dollar infrastructure package and the prospect of higher taxes are also propping up demand for municipal

bonds.

Continue reading.

ETF TRENDS

by BEN HERNANDEZ

DECEMBER 20, 2021

Municipal Bond Market Outlook: 2022

From serious inflation concerns to the Omicron variant, the fears of the world economy facing more setbacks are very real going into 2022.

The inflation concerns became even more clear recently when Federal Reserve Chair Jerome Powell warned that inflation may persist into 2022 and the central bank is likely to taper its bond-buying program – alluding to the notion that inflation isn't transitory, as most believed throughout 2021. In addition, the 2021 low yield and tight spread environment in the municipal bonds market presented challenges for investors to find attractive returns – which may change coming into 2022 as the interest rates start to rise. We are also likely to see the impacts of the government interventions into 2022, as infrastructure spending starts to take shape for local and state governments.

In this article, we will take a closer look at the trends and forces affecting municipal bond markets going into the year 2022.

Continue reading.

municipalbonds.com

by Jayden Sangha

Dec 08, 2021

S&P U.S. Public Finance 2021 Year In Review: Growth, And Stimulus, Supported Ratings

Key Takeaways

U.S. public finance saw a return to credit stability. Strong economic growth translated to positive revenue performance for most borrowers and expansive federal stimulus had the effect of supporting issuers' finances.

Active management also supported credit quality across all sectors. This will continue to be important as other challenges—many of them also under the environmental, social, and governance (ESG) label—are testing issuers as the frequency and severity of wildfire, hurricane, drought, flooding, and cyber security events accelerate.

As we look ahead to 2022 there are key questions relating to the pandemic and the economy that will matter from a credit standpoint. Will the economic momentum continue? Will new COVID variants undermine confidence and recovery prospects? What will be the lasting implications of the pandemic? How will ESG challenges be met?

Continue reading.

Fitch: Governance, Fiscal Autonomy Insulate U.S. States & Locals from Sovereign Rating

Fitch Ratings-New York-08 December 2021: U.S. state and local governments possess significant autonomy in the U.S. framework, which, according to Fitch Ratings in a new report, limits the federal government's power to affect state and local operations. As a result, most U.S. Public Finance ratings, including all state and local governments, are not explicitly tied to or capped by the U.S. sovereign rating.

"U.S. States are autonomous within the U.S. federal system, and retain the power to make laws covering all matters not pre-empted by the U.S. Constitution, federal statute, or ratified treaties," said Senior Director Karen Krop. "The federal/state relationship stands out from many other sovereign/sub-sovereign relationships globally."

Local governments also have significant, albeit less, autonomy within the U.S. government framework. Elsewhere, most revenue-supported municipal sectors have limited exposure to federal government spending, though not-for-profit healthcare is a notable exception.

The federal government is the largest single payor of healthcare services in the U.S. through Medicare and Medicaid. "With such a large share of providers' revenue streams derived from the government, policy and budgetary considerations can strongly affect revenue and profitability, utilization patterns and employer-based healthcare insurance coverage and financing mechanisms," said Krop.

Nonetheless, Fitch believes that operating within the U.S. economy and legal system is a significant positive rating factor. While not linked or capped at the U.S. rating, public finance ratings are subject to the same macro and structural factors that affect the sovereign rating. Federal policy actions have ramifications for the operating environment of states, local governments, and revenue-supported entities, which over time could influence the risk profile of the sector.

"U.S. Public Finance Ratings and their Relationship to the U.S. Sovereign Rating' is available at www.fitchratings.com.

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Hawkins Advisory: Infrastructure Investment and Jobs Act

The attached Hawkins Advisory describes three provisions included in the Infrastructure Investment and Jobs Act having to do with tax-exempt bonds.

Read the Hawkins Advisory.

Fitch ESG Credit Trends 2022 | Social Issues to Rise in Prominence for ESG Strategies

Investors, regulators and stakeholders in capital markets are paying increasing attention to social issues and this ESG theme will rise in prominence over 2022. In conjunction, the nexus between environmental and social issues will become stronger as ESG integration becomes more sophisticated as more disclosures and data become available. This can manifest in various ways, be it in a greater importance placed on just, or fair, transition issues and the impact of investment strategies have, supply-chain evaluations, or, the issuance of sustainability bonds that encompass social and environmental goals.

Sustainable Fitch's *ESG Credit Trends 2022* identifies and analyses these strengthening interconnections and their impact on credit risks.

DOWNLOAD NOW

Fitch Ratings 2022 Outlook: Community Development and Social Lending

Fitch Ratings views the community development and social lending sector (formerly tax-exempt housing) to be stable with a neutral outlook for 2022. After a globally challenging year in 2020, it was expected that the sector was well positioned financially entering 2021, as the coronavirus pandemic and its impact to many borrowers and renters presented unforeseen circumstances that were deemed to be evolving. State housing finance agencies (HFAs), socially driven lending institutions and developers are expected to continue to successfully navigate an environment of rising barriers for affordable single-family and multifamily housing. In 2021, the sector saw an increase in issuance in lending for affordable housing, from \$19 billion in 2020 to \$24 billion as of October 2021. This trend is expected to continue in 2022. This increase is significant, as these entities are operating in a single-family lending environment whereby low interest rates are offset by the overvaluation of single-family dwellings and rising rental rates that are outpacing U.S. wage growth. HFAs continued to be well poised to respond to liquidity needs that the challenging environment may present, with their balance sheets and loan programs continuing to increase in overall equity.

ACCESS REPORT

Fitch Peer Review of U.S. SRF and MFP Program Sector Highlights Continued Strength.

Fitch Ratings-Austin-09 December 2021: All 26 of the federal state revolving fund (SRF) programs and four other municipal finance pool (MFP) programs monitored by Fitch Ratings are rated 'AAA', reflecting the sector's strong performance. The remaining programs within the sector are rated 'AA'.

"The high credit quality of the Fitch-rated SRF and MFP programs reflects the robust financial structures and generally sound credit quality of the underlying pool participants," said Major Parkhurst, Director, U.S. Public Finance.

The overall median program asset strength ratio, an asset to liability ratio, was 1.9x in 2021, down slightly from 2.1x in the prior year but in-line with historical results. Pool credit quality has shown some incremental improvements over time, as the median percentage of investment-grade obligors has increased form 62% in 2015 to 74% in 2021.

For more information, the full report 'State Revolving Fund and Municipal Finance Pool Program Peer Review: 2021 is available at www.fitchratings.com.

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S&P U.S. Not-For-Profit Health Care Rating Actions, November 2021.

S&P Global Ratings affirmed 22 ratings without revising the outlooks and took 14 rating actions in the U.S. not-for-profit health care sector in November 2021. There were 14 new sales in November, including a rating initially assigned to Cedars-Sinai Health System, California. The 14 rating and outlook actions consisted of the following:

- Six upgrades, including two stand-alone hospitals and four health systems;
- Two downgrades, including one stand-alone hospital and one health system;
- Two unfavorable outlook revisions (one to negative from stable and one to stable from positive); and
- Four favorable outlook revisions (three to stable from negative and one to positive from negative).

The table below summarizes S&P Global Ratings' monthly bond rating actions for U.S. not-for-profit health care providers in November. We based the credit rating affirmations and rating actions on several factors within enterprise and financial profiles, including business position, utilization, financial performance, debt levels, bond-issuance activity, physician relationships, and the external regulatory and reimbursement environment. This also incorporates our stable sector view and our assessment of COVID-19, staffing pressures, economic developments, and market volatility.

Continue reading.

Fitch: Omicron is an Added, but Manageable Risk for NFP Hospitals

Fitch Ratings-New York/Austin-08 December 2021: The Omicron coronavirus variant, while concerning, should not have an outsized effect on not-for-profit (NFP) hospital operations and cash flows, says Fitch Ratings. Coronavirus-related hospitalizations in the US have been increasing since Nov. 14, due in large part to a current surge of the Delta variant, and the Omicron variant may add to that trend, particularly among the unvaccinated. Early data shows Omicron is highly transmissible, so it could become a common strain of the coronavirus but so far there is not a corresponding surge of severe illness or hospitalizations.

There are still many unknowns about Omicron and it could be weeks at the earliest before vaccine effectiveness against the variant and its severity can be discerned. The World Health Organization (WHO) designated Omicron as a variant of concern. Omicron's transmissibility is likely to result in a greater number of cases, particularly if it is better at evading immune responses. The general consensus is that vaccines will still provide some form of protection but it is not yet certain if hospitalizations could increase among the unvaccinated.

Nevertheless, hospitals are preparing for another winter coronavirus surge of the Delta variant, with some hospitals in regions that are currently seeing a spike in cases already stretched thin. US coronavirus hospitalizations are up 17% in the last 14 days with more than 58,000 people hospitalized daily per US Health and Human Services (HHS) data.

Hospitals are remaining vigilant in the midst of an evolving situation but continue to be pressured by a shortage of healthcare workers, high turnover, and, in many areas at the moment, high coronavirus infection and hospitalization rates. Hospitals that are already overwhelmed with coronavirus cases have limited capacity to treat additional patients and some have paused higher reimbursement elective procedures as a result. The risk of severe illness among patients with other

health issues also increases as care is delayed due to the pandemic.

The lost volume from elective procedures delays revenue growth. Operating margins will also be pressured in the near term, as the surge in new infections is postponing the restoration of normal volumes. Should Omicron not be as mild as generally anticipated at this time, additional coronavirus hospital admissions would result, furthering this negative margin effect.

Lower rated, typically smaller hospitals that have full intensive care units are less able than higher-rated hospitals to absorb a decline in reimbursement, lower elective volumes and an increase in expenses caused by the cost of maintaining sufficient healthcare staff. Healthcare job vacancies are the highest of any industry and average hourly hospital wages continue to rise. Highly-rated hospitals generally have enough financial cushion to manage a decline in revenue and an increase in operating costs, given liquidity remains high. However, this liquidity cushion could decline if there are continued pandemic-related shocks to the healthcare system.

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The above article originally appeared as a post on the Fitch Wire credit market commentary page. The original article can be accessed at www.fitchratings.com. All opinions expressed are those of Fitch Ratings.

Fitch: U.S. Water & Sewer Utilities Outlook Neutral in 2022

Fitch Ratings-New York-08 December 2021: U.S. water and sewer utilities remain favorably positioned heading into next year despite the challenges posed by the pandemic, according to Fitch Ratings in its 2022 outlook report.

"Revenue growth is expected to improve from enacted rate increases which will help to offset expense escalation," said Director Audra Dickinson. "Some increase in sector leverage is expected, but by and large balance sheets remain robust and there is more than sufficient headroom to absorb the additional leverage without the sector facing widespread downward rating pressure."

Capital spending is expected to continue to increase as utilities look to address deferred maintenance, growth and inflation pressures. Capital programs are also being influenced by new

and expected regulatory requirements to address lead pipe removal and other drinking water contaminants. "Federal infrastructure and stimulus legislation will help to meet some of these needs although most funding will continue to be borne by local users," said Director Allison Clark. "Consequently, affordability will continue to be a topic of focus for industry stakeholders."

"Fitch Ratings 2022 Outlook: U.S. Water and Sewer Sector" is available at www.fitchratings.com.

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Table Of Contents: S&P Global Ratings Credit Rating Models

An S&P Global Ratings model information document provides a summary description of a Ratings Model (a model that is used in the process of determining a Credit Rating) or a Criteria Model (a complex model that is based on advanced economic, financial, mathematical, or statistical methodologies used in the development of Criteria). A model information document typically includes a summary description of: (i) the model, (ii) assumptions underlying the model, (iii) data used in model development and calibration, and (iv) model limitations. A model information document also includes references to related criteria. Our credit rating models may be global, regional, or local, be specific to an individual industry or subject area, or apply across several industries or subject areas.

Material changes to credit rating models are described within our model information documents, which provide information describing recent material changes to models, where applicable. The publication of an updated model information document to describe material changes to a model typically follows shortly after use of the revised model is approved by S&P Global Ratings. There may be some instances where the description of a material change to a model could potentially reference changes being made by an issuer or a transaction that are confidential until the the issuer or transaction makes those details public. Accordingly, in these instances the publication of updates to a model information document may be timed to ensure that any publication does not communicate confidential information.

This table of contents, which we update continuously as we introduce or enhance models, will direct you to all active model information documents for the groups or instruments listed below. We most recently republished this table of contents on the date shown above.

Continue reading.

S&P U.S. And Canadian Airport Ratings And Outlooks: Current List

View the list.

Infrastructure Law Paves The Way For Transportation GARVEE Bonds' Federal Support And A Stable Sector View: S&P

Key Takeaways

- The Infrastructure Investment and Jobs Act has been signed into law and contains a new five-year surface transportation reauthorization (2022 to 2026) that replaces the previous Fixing America's Surface Transportation (FAST) Act.
- Although the law does not address the Highway Trust Fund's structural deficit, it identifies a transfer between the general fund and the trust fund that should keep this program fully funded for the next five years.
- S&P Global Ratings' view of the federal grant-secured transportation sector is stable, reflecting our expectation of reliability and strong support for transportation infrastructure investment from all levels of government.
- Grant anticipation revenue vehicle programs' debt service coverage could decrease and their leverage increase as states and regional transportation agencies issue more debt to maintain and expand investment in roads and transit; alternatively, debt service coverage could rise if debt remains level or decreases.

Continue reading.

Which States Have Plans for Broadband Funds?

Billions of dollars available to state and local governments might be enough to bring affordable broadband to all Americans. But some states have yet to produce plans for these funds.

The first National Broadband Plan, published in 2010, put forward six goals for the decade ahead. While progress has been made since then, by 2020 most of its long-term targets for affordable, high-speed access had not been achieved. This includes creating the world's fastest wireless networks. As of 2021, the United States is not among the top 10 countries in the world for either mobile or broadband Internet speed.

To change that, the federal government's Infrastructure Investment and Jobs Act includes \$65 billion for broadband. It's a start. A <u>Brookings analysis</u> of the American Rescue Plan identifies more than

\$388 billion for which projects to advance various aspects of digital equity are allowable uses.

The pandemic gave this work new urgency. Disadvantaged Americans who lack affordable, high-speed Internet service suffered from poor access to everything from public health updates and health care to education, social services, jobs, food and family.

Continue reading.

governing.com

December 10, 2021 • Carl Smith

Arizona College's Mega-Borrowing Breaks Bond-Market Ground.

- Grand Canyon University sells \$1.2 billion of junk-rated bonds
- It's first college corporate junk-bond deal: Bloomberg data

A private university in Arizona broke new ground in the fixed-income universe this month with a \$1.2 billion debt sale, in the first junk borrowing to hit the corporate-bond market from the higher-education sector.

The sale by Grand Canyon University, a mostly online college in Phoenix that was founded in 1949, stands out among the pristine school credits that typically bring large corporate deals. Those issuers are often top-rated Ivy League names, with endowments in the billions of dollars. Grand Canyon University is rated Ba1 by Moody's Investors Service, one step below investment grade, and according to Bloomberg data, its bond issue is unprecedented.

The sale, which closed Thursday, comes as returns on junk-rated corporate and municipal debt are outpacing the broader U.S. bond market by a wide margin in 2021 as yields remain historically low. Although the debt went through the corporate market and is taxable, it also drew the attention of muni buyers. They were following it for its novelty and extra yield, and also because of their familiarity with higher-ed borrowers, which often sell tax-exempt securities.

Grand Canyon University is one of the nation's largest Christian universities, with over 113,400 students enrolled as of the end of September, according to bond documents. While many are online, the school has grown its Phoenix campus as well. There are over 23,600 in-person students, almost 10 times the number in 2008. Net revenue in fiscal 2021 totaled \$1.3 billion.

"The uniqueness of the bond structure is reflected in the uniqueness of the university," Brian Mueller, president of the school, said in an interview.

The school was founded as a nonprofit, but after its finances struggled, a group of investors formed a company and turned it into a for-profit university in 2004, bond documents say. According to the documents, in 2018, it transitioned back to a non-profit, and sold senior secured debt that year to finance the \$876.6 million purchase of those assets.

The U.S. Department of Education doesn't recognize the school as a nonprofit. But that doesn't impact the school's ability to attract students, bond documents say. According to Moody's, it's recognized as a nonprofit by the Internal Revenue Service, the Higher Learning Commission — the university's regional accreditor — and the state of Arizona.

The proceeds of this month's sale will be used in part to refinance that 2018 note. Mueller said the move has generated savings, but declined to specify an amount.

Evident Lure

For buyers seeking extra yield and comfortable with the risk, the lure of the deal is evident. A portion that matures in 2028 sold with a 5.125% yield, compared with about 3.5% on a Bloomberg index of similarly rated debt. Seven-year Treasuries yield about 1.45%.

Moody's gives the bonds a stable outlook and says the university benefits from its "clear market niche" of online education. But it also says the school's high debt level compared to its cash and investments weighs on the rating, and added that the competition for online students will intensify over the next decade.

The admission rate for what the school calls traditional students — who take class on campus — was about 80% in fall 2020, when applications climbed to 48,918, from 34,096 in 2016, bond documents show.

Junette West, the vice president of business and finance, said the school conducted about 25 investor calls for the transaction.

"There was quite a bit of interest," she said.

Higher-ed issuers have sold about \$4 billion of corporate debt this year, including offerings from the top-rated Massachusetts Institute of Technology as well as Howard University, which is one step above junk. That's a bit above the \$3.6 billion average since 2010, data compiled by Bloomberg show.

Last year, with long-term borrowing costs near record lows and the pandemic straining finances, such issuance set a record \$11.7 billion.

'Pathbreakers'

That boom, which included sales from well-known issuers, increased corporate investors' comfort with higher-education credits, which benefited Grand Canyon University this month, said John Augustine, who leads higher-ed finance for Barclays Plc, the deal's sole underwriter.

"Those were the pathbreakers for Grand Canyon University," he said in an interview. "People saw the success of those billion-dollar-plus plus higher-ed transactions, both in terms of pandemic needs and refunding needs. That did play to their advantage."

The offering drew interest from investors such as insurers and bond funds, Augustine said in a release from the school.

The university intends to grow in-person enrollment to 40,000 and online enrollment by an average of 5% to 6% per year, bond documents say.

Mueller said the school doesn't have plans to sell debt again to fund that growth. It plans to invest \$500 million to expand its campus, financed from cash, he said. He said he expects its credit rating to rise to investment grade in the next year or two.

"In the past, small and elite has won the day," he said. "And in the future, it's going to be larger and very flexible."

Bloomberg Markets

By Amanda Albright

December 10, 2021, 5:00 AM PST

— With assistance by Jack Pitcher, Gowri Gurumurthy, and Dan Wilchins

Do We Really Need States to Be Bankers?

Populists are once again advocating the creation of state-owned banks to overcome private-sector lending market failures. But market innovations hold a lot of promise for accomplishing the same goal.

In 1919, the state of North Dakota established its own bank as a public institution. It's the only one of its kind in the nation, having operated successfully for a full century through the Great Depression and a dozen recessions. Nine other states tried to follow suit in the following decades, only to fail and close their banks' doors. Founded to provide capital in a farm-centric economy that was underserved by large regional financial institutions that charged double-digit interest rates for ag loans, the Bank of North Dakota has served as an inspiration and touchstone to political populists, anti-bank politicians and easy-money advocates.

Over the past decade lawmakers in more than half the states have rekindled legislation in support of public-owned banks, according to the Public Banking Institute, an advocacy organization. The arguments in favor of these bills are similar: The private-sector banking industry underserves low-income communities, minorities and women; banks only lend to people who don't need the money; bank profits are excessive, so states need to establish a competitive yardstick; public banks can promote economic development opportunities that the private sector ignores; and state banks could make money on their investments and deposits — a win-win for taxpayers. Never mind that today money is cheap and the banking system is flooded with excess reserves.

Continue reading.

governing.com

December 7, 2021 • Girard Miller

New Research: Entrepreneurial Thinking in Local Government

Local governments have opportunities to pursue entrepreneurial activities that take advantage of the assets they have to create more value for the community and financially strengthen the local government. Innovation, along with efficient execution of the idea to create new value for the public, is what we refer to as entrepreneurialism in local government. In this paper, we will illustrate entrepreneurial thinking using the City of Lancaster, California. Lancaster. We show how the city recognized it could parlay its existing assets (physical or otherwise) to create new revenue for the city and value for the public. The lessons from Lancaster's experience are applicable to all local governments.

LEARN MORE

How Governments Can Minimize Harassment of Public Officials.

Complex factors are at play, including polarization, misinformation and social media. But there are safety measures localities can take to protect local leaders, according to the National League of Cities.

Recently, U.S. residents have increasingly resorted to anger, abuse and violence rather than discussing their problems and expressing differences accelerated by the Covid-19 pandemic, according to a report by the National League of Cities.

What should have been a moment of unity to fight against a global pandemic has devolved into a divide over getting vaccinated, wearing facemasks and police enforcement, the report says.

Rather than embracing those with opposing viewpoints, most of society views one another as enemies.

Root Causes of the Problem

The decline in civility and growth of harassment, threats and violence against public officials has been underway for decades, according to the report. There is a complex network of influential factors at play including polarization, the spread of misinformation and social media.

The inability to see those with different views as people has led to a rapid decline in civility, the NLC says.

Since the 2016 election, U.S. residents are more likely to actively endorse the idea of intergroup violence — aggressive behavior committed by one group against another intending to cause physical and/or psychological harm, according to the report.

However, this is not the first time the U.S. has experienced a surge in polarization. For example, in response to the 1960s civil rights movement and 1970s women's rights movement, polarization grew around changing group status.

What Local Governments Can Do

Cities should work with their police departments to develop emergency strategies and improve intervention training for security officers in case an incident arises, the report states.

In the event of harassment, threats or violence, cities must be quick in evaluating and improving public safety measures to prevent violence against local officials and ensure the safety of their staff, the report also says.

To ensure safety, several cities have increased security presence at council meetings, installed metal detectors at entrances and installed ballistic glass in their city halls to protect local leaders from harm, according to the NLC.

Recommendations for Lessening Incidents

Here are recommendations that outline safety measures local leaders can take to address incidences of harassment, threats and violence, according to the report:

• Plan and focus on de-escalation: Improve training for police and security offices focused on de-

escalation.

- Add security measures: Consider having local law enforcement or security present at council meetings and public city events.
- Make infrastructure adjustments: Consider making changes to meeting spaces to keep public officials and municipal staff safe.
- **Conduct debriefings:** Following meetings, make sure that relevant stakeholders engage in conversations.
- **Prioritize mental health:** Connect staff to mental health professionals and resources for individual treatment emphasizing the importance of prioritizing mental health and confidentiality of treatment.
- **Develop guidelines:** Develop a social media guideline or code of conduct for public officials to limit the spread of vitriolic language online and combat the spread of misinformation.

ROUTE FIFTY

By Andre Claudio

DECEMBER 9, 2021

Understanding General Obligation Municipal Bonds.

Given all the municipal bonds to choose from, how do you decide which ones should make up the core of your portfolio? With \$3.9 trillion of muni debt outstanding1 spread among tens of thousands of issuers, the choice may seem daunting, but we'll help you break it down.

Municipal bonds are sold by local and state governments to help fund public projects or municipal government operations, like building new schools or repairing city sewer systems. Their interest payments are usually exempt from federal income taxes, and may be exempt from state income taxes if the bond issuer is located in the investor's home state. For these reasons munis are often attractive to income-oriented investors in higher tax brackets looking to reduce income tax bills.

Munis can generally be classified into two camps—general obligation bonds and revenue bonds. General obligation, or GO, bonds are often backed by the general revenue of the issuing municipality, while revenue bonds are supported by a specific revenue source, such as revenue from a toll road.

Continue reading.

Advisor Perspectives

by Cooper Howard of Charles Schwab, 12/10/21

Impact Investing: Addressing Local Needs with Precision and Purpose

Impact investing, which seeks to make a direct—and measurable—social or environmental impact while generating a financial return, has historically been synonymous with the private debt and equity markets. But that ignores the hugely important public market of municipal finance.

Impact investing and municipal bond investing are a natural fit. Municipalities are uniquely positioned and responsible for building and supporting the physical infrastructure and public goods that better enable all citizens to participate in an inclusive economy. In turn, investors can put muscle behind the political and civic will to make a difference.

The opportunities to fund positive change are deep and broad within state and local governments. But muni impact doesn't need to cast a wide net to make a big difference. In fact, it does its best work in smaller spaces at a grassroots level.

Take America's aging public schools. In thousands of school systems nationwide, facilities are, on average, 70 to 100 years old. These aren't historical landmarks. They're just old buildings suffering from a half century or more of underfunded maintenance and deferred repairs. These inadequate and sometimes dangerous facilities are concentrated in communities of low socioeconomic status, where they have both direct and indirect effects on student achievement. Impact investors can help correct this inequity by injecting modern facilities and resources directly into school systems. Evidence points to significant long-term benefits to student outcomes from improving infrastructure through capital infusion.

The Dallas Independent School District (ISD) is doing exactly this by issuing a bond to fund its efforts toward educational equity. Families in underserved communities in this district lack sufficient access to mental and physical healthcare, after-school programs, job training, healthy food and safer infrastructure. To help close this gap, Dallas ISD plans to locate four student and family resource centers in neighborhoods that have been disproportionately affected by a history of disinvestment, marginalization, segregation, redlining and other inequities. The planning team is currently deliberating the physical layout of the facilities, which are now mandated by the voter-approved bond.

Health is another area where municipal finance can bridge gaps. In Boston, for example, the wealthy Back Bay community has an average life expectancy of 90 years. Yet, just two miles away in the predominantly poor neighborhood of Roxbury, the average life expectancy is just 60 years—a 30-year "death gap."

Much of this gap can be attributed to a grim cycle of socioeconomic instability. From 2016 through 2019, Boston Medical Center enrolled 78 Boston families experiencing housing instability and defined as "medically complex" in a study to determine if the coordination of services addressing housing, financial, legal, social and health needs would lead to improved physical and mental health. The conclusion was clear. In the first six months of the study, not only did parental mental health improve, but also the share of children with fair or poor health fell by 32 percentage points.

Boston Medical Center—a safety-net hospital for which 70% of patients are from underserved areas, including Roxbury—understands the need to address the cycle of instability to improve community health. The hospital is taking measurable steps to reduce the disparity between wealthy and poor communities through population health management that extends beyond simply providing medical care. By supporting institutions such as Boston Medical Center, municipal impact investors can help achieve health equity in historically underresourced communities.

Access to clean water is also a risk for many communities throughout the United States. Dated and potentially toxic lead service lines are still used in far too many systems, the vast majority being low-income communities of color. As the lines corrode, lead leaches directly into each home's tap. Children are at a particularly high risk of cognitive delays, as no amount of lead exposure is safe. Municipal impact investing can directly address this environmental justice issue.

In Newark, New Jersey, residents were endangered by these very conditions beginning in 2015, when a corrosion control system began to fail. To effectively and efficiently address the situation, the Essex County Improvement Authority issued municipal bonds to mandate the replacement of 18,000 lead residential service lines throughout the city. So far, nearly 21,000 lines have been swapped out, marking a clear beginning of the end to lead-contaminated drinking water for the city.

These are some of many examples of how municipal impact investing can measurably improve quality of life for historically marginalized and excluded communities.

Global economies will need to galvanize more than US\$100 trillion to address climate and social justice challenges in the years ahead. A spectrum of responsible investing strategies—including ESG integration and sustainable investing—will be foundational to helping in these areas. But for municipal bond investors, impact investing may deliver the biggest bang—and one a lot closer to home.

The views expressed herein do not constitute research, investment advice or trade recommendations and do not necessarily represent the views of all AB portfolio-management teams. Views are subject to change over time.

Advisor Perspectives

by Marc Uy, Larry Bellinger, Matthew Norton, Erin Bigley of AllianceBernstein

12/6/21

Municipal Bonds Are Going Green, and Investors Can Benefit.

The green bond market is booming — issuance this year will be more than triple what was seen in 2017 — and that's putting a spotlight on exchange traded funds, namely the VanEck Vectors Green Bond ETF (NYSEArca: GRNB).

Something to note about green bonds is that this form of debt can be issued by both companies and governments. To the latter point, the market for green municipal debt is in the early innings of growth, pointing to potential with the VanEck HIP Sustainable Muni ETF (SMI).

The actively managed SMI debuted in September and "seeks current income generally exempt from federal income tax by investing in investment grade municipal debt securities that have been issued to fund operations or projects that support or advance sustainable development, as well as promote positive social and environmental outcomes," according to VanEck.

The HIP Investments methodology that serves as the foundation for SMI is relevant at a time when there are increasing questions regarding environmental, social, and governance (ESG) scoring, particularly when it comes to fixed income.

"HIP Investor's Ratings look deeper into actual results for citizens, beneficiaries and customers of the entities issuing muni bonds, as well as the use of proceeds in issuances. HIP Ratings grade on a 100 point scale. As muni bonds are typically issued by cities, counties, and states, as well as schools, hospitals, road authorities, energy utilities, and water utilities, the mission of these entities benefits citizens," says HIP Investors founder and CEO Paul Herman.

SMI holds just 36 bonds, a concentrated roster that's indicative of the infancy of green municipal bonds. It's also indicative of HIP Investors' rigorous methodology, which ensures that SMI components are legitimately green.

"The 'HIP' in HIP Investor stands for 'Human Impact + Profit.' The HIP ESG ratings provide investors with impact analysis — and a measure of potential future risk. HIP brings 15 years of experience in rating the impact and ESG of 10,000 corporations globally across 85 countries, and nearly 10 years in rating Munis across 122,000 entities, over the U.S. geography of 3,100 counties and 50 states," adds Herman.

SMI yields nearly 1% with an effective duration of 5.71 years, putting it in intermediate-term territory. Munis from California and New York combine for 57.5% of the new ETF's roster.

"SMI offers investors current income that is generally exempt from federal income tax by investing in investment grade municipal debt securities that have been issued to fund operations that support or advance sustainable development, as well as promote positive social and environmental outcomes," concludes Herman.

ETF TRENDS

by TOM LYDON

DECEMBER 7, 2021

For more news, information, and strategy, visit the <u>Beyond Basic Beta Channel</u>.

The opinions and forecasts expressed herein are solely those of Tom Lydon, and may not actually come to pass. Information on this site should not be used or construed as an offer to sell, a solicitation of an offer to buy, or a recommendation for any product.

Historic Decoupling From Treasuries Bodes Well for Munis in 2022.

- Correlation between markets has weakened since pandemic onset
- Suggests munis likely to hold up well if Treasuries decline

Municipal bonds' correlation with Treasuries has broken down since the onset of the pandemic, a phenomenon that's expected to benefit the \$4 trillion state and local debt market in 2022 as Wall Street braces for higher yields.

The historic link between the two asset classes crumbled when the coronavirus outbreak roiled markets early last year. Municipal debt sold off at the time as investors yanked cash out, while Treasuries surged amid a massive flight to safety.

The relationship has recovered since, but munis still aren't following Treasuries the way they used to. The weekly correlation coefficient of the Bloomberg Municipal Bond index to the U.S. Treasury index is about 0.43, compared with around 0.9 before the pandemic struck, and an average of 0.67 since 2000. A reading of 1 means they're moving in lockstep, while -1 would indicate a completely inverse correlation.

The diminished link has key implications for the year ahead. With the Federal Reserve removing policy accommodation and inflation still elevated, the bond market is bracing for higher Treasury

yields. Munis, however, may hold up relatively well in comparison, positioning them as a possible hedge.

"Munis are likely to retain a greater amount of their value compared to other asset classes should there be a selloff in Treasuries" in 2022, said Wesly Pate, a portfolio manager at Income Research & Management.

The municipal market is already outperforming in 2021, in part as lawmaker debate lifting taxes on the wealthy. State and local debt has earned 1.4% this year while Treasuries have lost 2.2%, according to Bloomberg indexes.

In Pate's view, the two markets have decoupled because munis' buyer base has gotten "stickier," meaning individual investors are reluctant to sell because of the "embedded gains" in their portfolios. If they sell, they'd have to pay capital-gains taxes and reinvest that money elsewhere — even though other asset classes aren't offering much incremental yield, he said.

He also says institutional buyers like banks and insurance companies have become less of a force in the municipal market after the 2017 tax overhaul cut the corporate tax rate. As a result of that shift, they aren't moving in and out of the market as much, limiting volatility, Pate said.

"The combination of a stickier retail base coupled with large embedded gains is likely to keep turnover low and volatility much more muted compared to other asset classes," he said.

Bloomberg Markets

By Amanda Albright

December 8, 2021, 9:10 AM PST

— With assistance by Claire Ballentine

<u>Infrastructure Bill Highlights Opportunity for Income ETF Options.</u>

With Congress passing a \$1 trillion investment plan to upgrade and expand U.S. infrastructure, investors can consider exchange traded funds to capture the renewed focus on debt markets.

For instance, municipal bonds rallied over the past two weeks. The iShares National Muni Bond ETF (NYSEArca: MUB), the largest munis-related ETF by assets under management, gained 0.6% since the late October lows.

Meanwhile, according to ICE Data Services, yields on 10-year tax-exempt triple-A muni bonds declined 8% since October 28, the Wall Street Journal reports. Bond yields have an inverse relationship to prices.

While the municipal bond market was largely left out of the infrastructure package waiting on President Joe Biden's signature, along with Democrats' follow-up social spending and climate proposals, the overall infrastructure plans could still help support cities and states indirectly.

"They left out the tried and true mechanism for building local infrastructure in America," Ben Watkins, director of Florida's Division of Bond Finance, told the WSJ.

Nevertheless, investment in roads, sewers, and trains is typically positive for the market over the long term since it helps strengthen municipal credit. The \$1 trillion investment plan could also lead to more debt issuance, as some projects could gain partial federal aid, and states and cities will need to pay for the rest.

"In many cases, the local contribution will come from municipal bonds," Patrick Brett, head of municipal debt capital markets at Citigroup and chair of the Municipal Securities Rulemaking Board, the muni bond industry's self-regulatory organization, told the WSJ.

Additionally, ETF investors can look to something like the Nationwide Risk-Managed Income ETF (NYSE Arca: NUSI) to access current income seeking a measure of downside protection.

NUSI follows a rules-based options trading strategy that seeks to produce high income using the Nasdaq-100 Index, an index of the 100 largest non-financial stocks on the Nasdaq exchange. The ETF may potentially complement traditional equity and fixed income allocations or function as a possible hedge for investors.

The Nationwide Risk-Managed Income ETF establishes a collar strategy to generate monthly income. Collar strategies involve holding shares of the underlying stock while at the same time buying protective put options and writing calls for the same security. A put option gives its owner the right but not the obligation to sell the underlying asset at a specified price and on a specified date. A call option gives its owner the right but not the obligation to buy that asset instead.

ETF TRENDS

by MAX CHEN

DECEMBER 8, 2021

We're Seeing Very Strong Demand for Municipal Bonds in December: Hilltop's Kozlik

Watch video.

Dec 8, 2021

Vanguard Sees Muni Bond Supply Slowing to \$400 Billion in 2022.

- Issuers are flush with revenue and aid, says Vanguard's Malloy
- Forecast on lower end of muni estimates compiled by Bloomberg

Vanguard, one of the largest municipal fund managers, expects states and localities to slow bond sales by at least 11% to about \$400 billion next year because of a faster than anticipated revenue rebound and billions of dollars in federal aid.

"A lot of municipals are flush with cash," Paul Malloy, head of municipal investments at Vanguard, said in an interview. "They don't need to borrow as much." The firm has almost \$267 billion in muni assets.

Vanguard's forecast, including municipal-backed corporate debt, is lower than 2022 forecasts from 11 other strategists compiled by Bloomberg. The 2022 supply estimates ranged from Morgan Stanley's projection of \$420 billion to Bank of America's forecast for \$550 billion.

Last year, municipal issuers sold about \$454 billion in long-term debt as the pandemic shuttered businesses, drove up unemployment and led tax revenue to drop temporarily. With three weeks left in 2021, long-term municipal issuance has reached about \$450 billion, according to data compiled by Bloomberg.

On Credit

Malloy expects lighter sales next year because state and local governments have "a lot of cash" and municipal issuers "are in really great shape" from a fundamental credit perspective, he said. The pandemic's revenue hit has subsided for many.

Texas, among the largest state issuers, is an example of the pull back in debt overall, he said. The state usually borrows to prevent a deficit until more revenue arrives.

The state's total sales tax revenue for the three months ending in November 2021 rose 22% from the same period a year ago and is up almost 16% compared to 2019, according to a statement on the Texas comptroller's website.

In addition to rebounding revenue, state and local governments are getting \$350 billion from President Joe Biden's American Rescue Plan Act.

On Rates and Valuation

Another reason to reduce borrowing next year is the cost may increase for municipal governments, Malloy said. The 10-year AAA muni benchmark could move up by mid-2022 from the current 1.05%, driven by yields in the Treasury market, Malloy said.

Muni issuers have benefited from rates hovering around historical lows partly because supply largely has not kept pace with investor demand this year and the imbalance has kept a lid on yields.

"It's not going to be as cheap to borrow as it has been," Malloy said. "It's the macro story."

One of the biggest questions for 2022 will be valuations, Malloy said. The muni to Treasury ratio is likely to range between 70% and 75% for debt maturing in 10 years, he said. The ratio was about 71.3% at the last close.

The ratio may hover around 80% for 30-year debt and 50% for bonds maturing in two to five years, he said.

On Covid

The pandemic is "an X-factor," Malloy said. "Always out there for the foreseeable future."

The virus and its variants will contribute to volatility in the market but medical advances and improvements in responses globally mean Covid "doesn't have the same potential for scarring" as it did at the outset, he said.

Bloomberg Markets

By Shruti Singh

December 10, 2021, 11:26 AM PST

What To Look For In 2022 Muni Markets (Radio)

Eric Kazatsky, Senior US Municipals Strategist for Bloomberg Intelligence, joins the show for the "Focus on Munis" segment and has the latest updates on municipal markets. Hosted by Matt Miller and Sonali Basak.

Listen to audio.

Bloomberg Radio

Dec 10, 2021

Investor Focus On Inflation Drives Year-End Flows.

Summary

- With inflation continuing to rear its ugly head (transitory or not), market participants have pushed inflation-related mutual fund classifications to the top of the charts in 2021 so far.
- Many individuals are continuing to favor fixed income funds and ETFs by injecting \$465 billion of net new money year-to-date into the group over equity funds and ETFs (+\$349.8 billion).
- While the average equity mutual fund has returned a handsome 14.83%, taxable and tax-exempt fixed income funds are up just 0.21% and 1.86%, respectively, year-to-date.

Continue reading.

Seeking Alpha

Dec. 12, 2021

High-Yield Munis Are the Place to Be: Neuberger's Iselin

Neuberger Berman's Head of Municipal Fixed Income Jamie Iselin discusses the outlook for the municipal-bond market in 2022. He speaks with Bloomberg's Taylor Riggs on "Bloomberg Markets: The Close."

Watch video.

Bloomberg Markets: The Close

December 8th, 2021

Income Investors Should Consider Incorporating a Muni ETF Strategy.

As we dive into what people are missing — and what risks they might be accidentally taking — in

traditional approaches, investors can consider an active exchange traded fund municipal bond strategy that looks across the entire market opportunity set instead of being tied to a benchmark's methodology.

In the recent webcast, <u>Hidden Income Your Munis Are Missing: An Expert Perspective</u>, Joseph Gotelli, vice president and portfolio manager at American Century Investments, helped outline the current market environment. For instance, Congress is looking at up to \$9.4 trillion in U.S. fiscal spending since the start of COVID-19. New issuances of tax-exempt munis have been steadily declining over the years. More importantly, we are seeing increased interest for tax-exempt munis as a greater source of value for income-minded investors, especially as the Biden administration eyes higher tax rates to pay for the new government spending plans.

Looking at the municipal bond asset category, Gotelli also noted that munis offer diversification benefits for a traditional bond portfolio mix. Historically, munis have rarely defaulted, with Baarated corporates exhibiting three times more instances of defaults than Baarated munis.

Beyond the rate-risk outlook, Gotelli argued that municipal bond exposure can help further diversify an investor's fixed income portfolio through non-correlated returns. The low correlation to other asset classes makes the muni bond category important in a well-diversified portfolio. Investment-grade municipal bonds exhibit a trailing 10-year correlation of 0.73 to U.S. core bonds, 0.23 to U.S. high-yields, and 0.04 to U.S. equities.

The American Century Diversified Municipal Bond ETF (NYSEArca: TAXF) is an actively managed municipal bond fund that combines investments in thoroughly researched high-yield and investment-grade municipal bonds. Designed for investors seeking current income, the fund dynamically adjusts investment-grade and high-yield exposures based on prevailing market conditions.

TAXF incorporates a top-down and bottom-up selection process to improve risk management and create a well-diversified muni bond portfolio. For example, the ETF's management team takes a macroeconomic outlook that incorporates an economic outlook, duration, rates, and yield curve. The municipal market outlook incorporates sectors, yield curve, and municipal relative value vs. taxable fixed income. The fundamental credit analysis incorporates internal credit review, economic financial strength, debt analysis, assigned internal ratings, and credit committee reviews. The relative value discussion incorporates bond pricing review, portfolio fit, and structure security analysis. The risk budgeting process incorporates position sizing, risk model review, and expected return/tracking error projections. Lastly, the buy/sell order incorporates pre-trade compliance, portfolio managers transact, and best execution prices.

TAXF's management team also follows a fundamental credit analysis process that includes internal credit review; economic, financial strength, debt, and political risk analysis; assigned internal rating; and surveillance of ongoing issuer exposures.

Matt Lewis, vice president and head of ETF implementation and capital markets at American Century Investments, also explained the benefits of the ETF structure as an investment tool that provides more efficient access to the municipal bond market.

Specifically, the on-screen liquidity or current bid/offer spread and size available to trade reflect trading activity that has already transpired and is visible in the secondary market, where ETFs are priced, traded, and settled like stocks. The non-displayed liquidity or market maker's ability to provide liquidity for larger trades reveals that with the assistance of a broker, this level of liquidity may be accessed. Additionally, the underlying basket or creation/redemption process represents how market makers can access the liquidity of the underlying securities to meet investors' demands.

"Our solutions cover a vast array of investment capabilities," Lewis said. "These capabilities allow us to respond to specific client needs and also provides flexibility to offer unique investment solutions. Our ability to deliver a variety of investment solutions has become increasingly important to the various types of clients we serve."

ETF TRENDS

by MAX CHEN

DECEMBER 8, 2021

Inflows into U.S. Bond Funds Dwarf Equity Purchases in 2021 -Lipper

Dec 10 (Reuters) - U.S. bond funds have attracted record inflows this year, despite worries about inflation and expectations the Federal Reserve could roll back its pandemic-era stimulus measures earlier.

According to Refinitiv Lipper data, U.S. bond funds attracted a net \$612 billion in the first eleven months of this year, already surpassing the record inflow of \$486.18 billion recorded in 2019.

Meanwhile, U.S. equity funds saw net inflows of \$248.81 billion after two years of outflows.

The higher inflows into U.S. bond funds, despite a rally in equities, highlights an investor preference for safety and stable returns during the second year of the COVID-19 pandemic.

The Lipper data showed U.S. equity funds have delivered a return of 16.4% on average so far this year, compared with 0.8% for bond funds.

U.S. taxable bond funds drew a record \$465.89 billion in net buying while municipal bond funds secured purchases of \$96.5 billion.

U.S. short/intermediate investment-grade funds saw inflows of \$242.22 billion, a 12% increase over the first 11 months of 2020, U.S. general domestic taxable fixed income funds received \$113.35 billion, a three-fold increase, while inflation protected funds attracted a record \$70.77 billion.

Among equity sector funds, financials are on track for their first annual inflows in four years, totalling \$23.91 billion to the end of November, while investors purchased tech funds worth \$22.22 billion.

Meanwhile, U.S. money market funds are set for a fifth consecutive year of inflows with net inflows of \$266.36 billion so far.

Reporting by Gaurav Dogra and Patturaja Murugaboopathy in Bengaluru; Editing by Kirsten Donovan

Dec. 10, 2021

Fitch Ratings 2022 Outlook: U.S. States and Local Governments

Fitch's Sector Outlook: Neutral Fitch's outlook for U.S. states and local governments in 2022 is neutral relative to surprisingly strong 2021 underlying business conditions. Operating conditions generally link closely to economic trends given the primary reliance on taxes. We anticipate national economic growth will remain ahead of its long-term trend next year, but slow considerably relative to the current year as the recovery from the pandemic matures and the immediate effects of enormous, pandemic-driven federal fiscal policy supports wane. States and local governments will benefit in 2022 and beyond from their share of the \$350 billion in direct aid provided under the March 2021 American Rescue Plan Act's (ARPA) Coronavirus State and Local Fiscal Recovery Funds and \$122 billion under the Elementary and Secondary School Emergency Relief Fund. Fitch anticipates this aid, the vast majority of which remains unspent and even unallocated, will provide cushion in the event of unexpected economic or public health setbacks. However, the aid is not likely to fundamentally improve most governments' operating conditions. The Infrastructure Investment and Jobs Act (IIJA) and additional federal policy measures, if enacted, are likely to benefit entities over the long term.

ACCESS REPORT

Thu 02 Dec, 2021

Fitch: U.S. State & Local Governments Search for Predictability in 2022

Fitch Ratings-New York-02 December 2021: How sustainably Federal stimulus aid is rolled out will be key for both U.S. state and local governments next year amid labor shortages, a new COVID variant and other unforeseen post-pandemic fallout, according to Fitch Ratings in its 2022 outlook report for the sector.

Fitch's outlook for U.S. states and local governments in 2022 is neutral relative to surprisingly strong 2021 underlying business conditions. "Economic growth above trend and a significant boost in resources from federal stimulus will keep states and local government finances on a positive path in 2022," said Senior Director Eric Kim. "Rising inflation and supply constraints will remain challenges."

COVID-19 remains influential and unpredictable as transmission rates and hospital caseloads can shift rapidly. This makes the new Omicron variant a potential area of concern as a new pandemic surge could cause another economic setback, complicating governments' budget outlooks. The largely unspent infusion of federal aid in 2021 provides some fiscal cushion.

The recent return of international travel should improve the outlook for major tourist draws and leisure and hospitality recovery overall in 2022. That said, state and local governments most dependent on business travel, including convention activity, will see the slowest recovery, particularly if Omicron variant infections become more widespread in the U.S.

Another area of note next year is labor shortages, which are beginning to trigger wage pressure for government employees and could in time erode expenditure flexibility for some state and local governments. "Governments with slower or stagnant revenue growth prospects may see an emerging or growing mismatch and increased pressure on budget-balancing tools," said Senior Director Michael Rinaldi.

The full report "Fitch Ratings 2022 Outlook: U.S. States and Local Governments" is available at www.fitchratings.com.

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Additional information is available on www.fitchratings.com

S&P: Pension Pressure Lingers For Largest U.S. Cities Despite Federal Stimulus

Key Takeaways

- Pandemic-related federal stimulus provided funding for the cities surveyed, helping to alleviate immediate budgetary pressure, even if federal stimulus could not be used to fund pension payments.
- Funded ratios remained relatively stable, with the overall median increasing slightly, and we estimate reported funded levels will improve in fiscal 2021 given generally strong market returns to date.
- Fixed debt service and retirement costs remain high for several cities surveyed which could cause downward rating pressures over the long term.
- For most cities surveyed, pension contributions outpaced budgetary growth over the past decade.

Continue reading.

29 Nov, 2021

Valuing Water Rights in Eminent Domain: Nossaman

As water becomes scarcer in California, public agencies are looking for new sources and opportunities to provide water to their communities. When the government identifies those water sources but confronts unwilling sellers, eminent domain sometimes becomes necessary. This is currently taking place in the Antelope Valley, where the Rosamond Community Services District recently approved the <u>adoption of a resolution of necessity</u> to acquire water rights from agricultural

land by eminent domain.

The District is facing shortages in its future water supplies and it is limited in the amount of groundwater it may use to serve its customers. The property identified is near an existing water distribution system, and the District could not locate another willing seller to secure sufficient water rights to meet the shortfall. It appears the owners plan to challenge the District's right to take the property, and if the District is successful, there will be a large fight on the value of the water rights. The District approved financing that would provide up to \$17.5 million to acquire the water rights, which would be repaid through rates passed on to customers.

Valuation of water rights is a complex analysis that depends on a number of factors. In addition to determining the actual water rights in existence and their transferability, appraisers also consider:

- the quality of the water and its suitability for a variety of uses (agricultural, municipal, or drinking water);
- the costs to extract the water, including necessary improvements that must be installed to secure access;
- the reliability of the water source, including its priority in the water basin in the event of low-flow conditions; and
- alternative water supplies in the area, which dictates supply and demand and the price buyers and sellers will pay for water in the geographic vicinity.

Once those factors are established, appraisers typically use methodologies that are applied to traditional real estate valuation, such as the income approach, comparable sales approach, or cost approach. For example, in valuing water rights, an appraiser could consider the anticipated revenue stream of leasing the water, discounted to present value. Alternatively, an appraiser could look at other comparable transactions of water rights and make necessary adjustments to determine the appropriate value of the water rights. Or, under a cost approach, an appraiser could analyze the cost of developing an alternative water supply.

Rights that provide a reliable source of water, provide access to high-quality water, have minimal limits on transferability, and have scarce options for alternative water sources will ultimately fetch the highest price.

Nossaman LLP - Bradford B. Kuhn

November 30 2021

BlackRock on the Power of Public-Private Finance.

The current chapter of the Anthropocene epoch, characterized by a Code Red for humanity, demands an "all of the above" approach to climate solutions. While it is the public sector's role to lead on policy that protects society's broad interests, the recent COP26 in Glasgow, Scotland, was, as GreenBiz's Joel Makower wrote, in many ways the "business COP."

The private sector's commitment to stepping up to lead on climate solutions, or at least purporting to, is not new. But what stood out in Glasgow was the prevalence of public-private initiatives, some of which were seriously substantive.

One that caught my attention was BlackRock's Climate Finance Partnership (CFP), a public-private

fund that will target investments in countries across Asia, South America and Africa that aren't part of the Organization for Cooperation and Economic Development (OECD). The Glasgow Financial Alliance for Net Zero (GFANZ) crowded headlines with its eyebrow-raising \$130 trillion commitment to global transition finance — although that is a figure that Thomas O'Neill, InfluenceMap cofounder and now founder of Universal Owner, says "at best, \$50.7 trillion should be removed from." That position is based on Universal Owner's analysis of the Net Zero Asset Managers Initiative, which found that the group has not committed asset managers to align themselves with climate science.

Continue reading.

greenbiz.com

By Grant Harrison

December 1, 2021

S&P: U.S. Not-For Profit Senior Living Sector's Resilient And Decisive Management Gave Ratings Stability In 2020

Key Takeaways

- Ratings remained stable despite the pandemic, with 21 affirmed and no rating or outlook changes.
- Operating losses increased as the gap between rating categories widened.
- Our rated organizations were resilient largely due to management teams reacting quickly to limit positive COVID-19 cases among both staff and residents as well as implementing other risk mitigating initiatives.

Continue reading.

29 Nov, 2021

Fitch: Inflation Could Disrupt Steadier U.S. Transportation in 2022

Fitch Ratings-New York-01 December 2021: U.S. transportation infrastructure is likely to see a firmer upward trajectory next year, though Fitch Ratings' 2022 outlook report for the sector says the path of inflation could be disruptive for some sectors.

Higher inflation will cause net income to rise as long as revenues grow at the same pace as O&M. This stands to benefit most toll roads in particular as many of them apply automatic annual rate increases indexed to inflation. Conversely, some toll roads that do not have the economic, legal, or political flexibility to raise revenues in line with inflation may experience some financial impairment.

"Seaports and toll roads have benefitted from a rapid and robust recovery in 2021, laying the groundwork for a return to more normalized growth next year," said Lehman. "Airports and cruise-focused ports still have further room for traffic recovery as remaining travel restrictions ease as expected through next year."

Airports continue to see relief of late thanks to improved leisure traffic. However, international traffic is still down by more than half as compared to pre-pandemic, while business travel is also lagging. As a result, full recovery will come quickly in some markets but also remain elusive for a segment of airports until 2024, per Fitch's projections.

Toll roads, by contrast, are much closer to full pre-pandemic recovery. Fitch expects commercial traffic to continue rising, though passenger traffic remains below 2019 levels largely due to telecommuting.

Ports will be contending with congestion challenges well into 2022. Disrupted supply chains continue to challenge operational efficiency at gateway ports, with bottlenecks leading to shipping delays exacerbated by strained logistics networks and ongoing labor shortages.

'2022 Outlook: U.S. Transportation Infrastructure' is available at 'www.fitchratings.com'.

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Additional information is available on www.fitchratings.com

Fitch Ratings 2022 Outlook: U.S. Transportation Infrastructure

Fitch's Sector Outlook: Neutral Fitch Ratings' 2022 sector outlook for U.S. transportation infrastructure is neutral, indicating Fitch's expectation for broadly stable performance in 2022, relative to a mixed profile of recoveries in 2021. Robust pandemic recovery and resiliency in 2021 were especially significant in the toll road and seaport sectors, while airport traffic continues to return to pre-pandemic levels. Fitch anticipates a steadier pattern of upside activity trends in 2022, given transportation infrastructure issuers are operating close to or above pre-pandemic volumes, approaching more normalized long-term growth patterns. Airports, cruise ports and international bridge crossings have yet to recapture all of their pandemic-related losses, primarily due to ongoing travel restrictions that have an outsized impact on these systems. Fitch expects these assets will benefit from an improving operating environment in 2022, as the pandemic wanes and travel restrictions are more fully repealed.

ACCESS REPORT

Wed 01 Dec, 2021

With Ridership Still Down, Transit Agencies Rethink Priorities.

More frequent service in low-income neighborhoods, fewer buses to affluent areas, even fare-free transit, are all on the table as transit agencies try to figure out the future, according to a new report from the Urban Institute.

Transit systems across America are facing an existential moment. Ridership remains dramatically down from its 2019 levels and budgets are only kept afloat by federal subsidies that will not continue indefinitely.

But this moment of peril for public transportation is also an opportunity to break old routines.

"Transit agencies get stuck in their service patterns, without considering the fact that those service patterns may not be reflective of what people want," says Yonah Freemark, senior research associate at the Urban Institute. "They have bus routes, in some cases, that they've had literally since they were running streetcars."

Freemark and his co-authors — Jorge González-Hermoso and Jorge Morales-Burnett — wrote a <u>lengthy report</u> for the American Public Transportation Association (APTA) on how an array of transit agencies are planning for the post-pandemic future.

governing.com

December 3, 2021 • Jake Blumgart

Substantial PFAS Funding in Infrastructure Act Flows Towards Protecting Water and Wastewater Systems.

The Infrastructure Investment and Jobs Act ("IIJA") allocates \$10 billion in new government funding to address per- and polyfluoroalkyl substances ("PFAS") and emerging contaminants that increasingly challenge the nation's water and wastewater systems.[i]

Ordinarily, such funding requires matching or cost-sharing from the state. But the IIJA's PFAS funding is awarded as a grant, loan with the entire principal forgiven, or combination of the two. This grant funding provides states and water systems with additional resources to address PFAS impacts to their water sources

This third article in our series on the IIJA outlines which water providers and other communities are eligible for the Act's new water-focused funds, how they can receive funding, and the implications of such funding.

Public water systems; public, private, and nonprofit entities developing water infrastructure projects; and privately- and publicly-owned community water systems can access this funding through their individual state programs. This funding distribution includes:

- \$5 billion to address emerging contaminants for small and disadvantaged communities, distributed to improve drinking water quality under the Safe Drinking Water Act ("SDWA");
- \$1 billion for wastewater and stormwater infrastructure projects under the Clean Water State

Revolving Funds ("Clean Water Funds") under the Clean Water Act ("CWA"); and

• \$4 billion for community water systems to upgrade drinking water treatment, distribution, and replacement of contaminated sources under the Drinking Water State Revolving Funds ("Drinking Water Funds") of the SDWA.

Continue reading.

Marten Law LLP - Jeff B. Kray, Jessica K. Ferrell, Sara V. Cloon and Martha H. Geyer

December 1 2021

EPA Selects 39 Waterworks Projects to Apply for Billions in Financing.

The agency is teeing up projects for a new round of loans under a low-cost borrowing program for water and sewer infrastructure

Local governments, agencies and utility companies behind 39 major water and sewer projects in states across the U.S. can move ahead applying for billions of dollars in financing through a federal program that provides low-cost loans for waterworks infrastructure, the Environmental Protection Agency said Friday.

The loans would be available under the agency's Water Infrastructure Finance and Innovation Act program, or WIFIA for short. EPA estimates that, as funds become available, \$6.7 billion in financing will flow to projects worth upwards of \$15 billion in 24 states. WIFIA is designed to support regionally and nationally significant projects.

EPA emphasized that 14 of the projects include components meant to help infrastructure better withstand the effects of extreme weather and climate change, and that many also include elements involving cybersecurity and water reuse.

Continue reading.

ROUTE FIFTY

by BILL LUCIA

DECEMBER 3, 2021

How States Can Best Use Federal Fiscal Recovery Funds: Lessons From State Choices So Far

Most states have started using their share of the \$195 billion Fiscal Recovery Funds (FRF), created under the federal American Rescue Plan to help states and localities address the pandemic's harmful effects. Our review of these spending decisions shows that many states are using these funds constructively: to offset declines in their revenue collections, to address the health, economic, and fiscal impacts of the pandemic, and to start new long-term investments to address racial and economic inequities. Decisions in some states are not constructive. All offer important lessons for how states should use the remaining \$90 billion of these funds, which will be critical both to

addressing the pandemic's ongoing damage and to putting states' economies on a path toward a strong recovery.

States are making substantial progress in using FRF, our review shows. As of early November 2021, some 39 states, the District of Columbia, and Puerto Rico have appropriated \$105 billion. (See Figure 1.) That is 53 percent of the full \$198 billion set aside for them, and 68 percent of the \$155 billion distributed to them in 2021 (the rest will be in 2022). Among states that have allocated funds, the median state has committed 53 percent of its full allocation. Of the 11 states that have not — often because funds became available after (or very late in) their legislative session — most are expected to begin making spending decisions next year, as part of their budget process. States have until the end of 2024 to fully obligate their FRF, and until 2026 to complete their spending.

States have tremendous flexibility over how they use FRF. The most substantial use of these funds to date has been to replace state revenues that fell below projected levels as the pandemic pushed state budgets out of balance. This use has been important, because states must balance their budgets every year, even during economic downturns when demands for social services rise and revenue collections decline, for instance through lower sales tax and income tax collections. The FRF used to replace state revenues helped sustain state funding for schools, health care, and other services and avoided deep cuts to these services during the pandemic, including by minimizing layoffs for teachers and other public employees.

Continue reading.

CENTER ON BUDGET AND POLICY PRIORITIES

NOVEMBER 29, 2021 | BY ED LAZERE

Muni Impact of US Infrastructure Bill Could Prove Longer Term.

While the new US infrastructure investment bill didn't have any initiatives directly targeting the municipal bond market, there are still implications for munis in the longer term, according to our Municipal Bond Director of Research Jennifer Johnston. She explains the ramifications for investors in the space.

On November 15, 2021, US President Joe Biden signed into law HR3684, the Infrastructure Investment and Jobs Act. This bipartisan infrastructure bill includes \$1.2 trillion of federal spending over the next five years. Of the \$1.2 trillion, \$550 billion is new spending, while the remainder will fund the reauthorization of the Highway Trust Fund. The final bill did not contain certain municipal bond market-related initiatives such as advance refunding, Build America Bonds (BABs) or elimination of the state-and-local tax (SALT) deduction cap.

The \$550 billion in new spending is spread out over a number of transportation subsectors. The largest spending categories include \$110 billion for roads and bridges, \$73 billion for electric grid infrastructure, \$66 billion for rail, \$65 billion for broadband projects and \$55 billion for water infrastructure. Moneys will be allocated using various formulas and distribution methods to states, local governments and agencies that will ultimately determine how the money is spent.

Continue reading.

advisorperspectives.com

A Look at How 150 Governments are Planning to Use ARPA Funds.

A new online dashboard offers insights into what cities and counties intend to do with the federal pandemic aid.

For those interested in how local governments across the U.S. intend to use billions in pandemic aid provided under the American Rescue Plan Act, a new <u>online tool</u> released Thursday is worth taking a look at.

Good government nonprofit Results for America and policy research firm Mathematica created what they're calling the American Rescue Plan Data and Evidence Dashboard. It presents information gleaned from reports 150 cities, counties and tribes have filed with the federal government outlining their spending plans for ARPA allotments.

"The thing we've heard from our communities, our cities and counties, has been: What are others doing? There's a huge network of people who are committed to using this money effectively to both build out their own capacity and deliver real results for residents," said Zachary Markovits, vice president of local government at Results for America and managing director for the What Works Cities initiative.

Continue reading.

ROUTE FIFTY

by BILL LUCIA

DECEMBER 2, 2021

Cities Tap Federal Relief Aid to Reward Workers With Bonuses.

Tens of thousands of U.S. public employees stand to benefit as local officials use \$350 billion of federal virus aid for extra pay.

U.S. states and cities are tapping an enviable war chest as they fight to stop a four-month slide in public-sector employment and reward workers for their efforts during the pandemic.

From California to Kentucky to Massachusetts, dozens of cities, counties and state governments are using some of the \$350 billion they received from the Biden administration's American Rescue Plan to shower extra pay on workers, especially those on the front lines in areas like public safety, health and education. Tens of thousands of public employees stand to receive a financial boost, at a time when an increasing number of Americans are quitting their jobs.

The bonuses are a bid to combat a wave of retirements and resignations that are complicating municipalities' efforts to rebuild their workforces. Despite an increasingly rosy fiscal outlook, state and local payrolls are still down 951,000 jobs from February 2020, after dropping from August through November, Labor Department figures showed Friday.

Continue reading.

Bloomberg CityLab

By Amanda Albright

December 3, 2021

Rating Muni Bonds on ESG and Impact.

Are all municipal bonds sustainable and impactful? Most investors would say yes.

However, just as all businesses are not profitable, not all muni bond issuers and issues are highly sustainable. Some are leaders, some are laggards. Many achieve their mission, but enough lag to distinguish the overall impact — teaching kids, improving patient health and citizen well-being.

If you got sick right now, would you care which hospital you go to? The best hospitals achieve better patient outcomes, with fewer returns for the same condition, while managing with fewer violations.

Do parents seek out the best schools for your kids? Of course they do — some school districts provide students with more teachers per student, higher allocations to the classroom and free school lunches to serve lower-income students.

Across muni-bond sectors, there are more than 200 data-driven metrics and 5 million annual data points to measure performance. VanEck and HIP Investor have partnered to track the overall impact and sustainability of 122,000 entities that could benefit from muni bonds.

Continue reading.

etftrends.com

By Paul Herman

CEO & Founder HIP Investor

DECEMBER 5, 2021

Separate But Unequal: How Tribes, Unlike States, Face Major Hurdles to Access the Most Basic Public Finance Tools

Economic development benefits communities through job growth, higher standards of living and improved subjective well-being. Fiscal Capacity, which allows governments to deliver programs and services such as health care, education, workforce development and law enforcement, is also a product of growing economies. As a result, state and local governments use an artillery of public finance tools such as subsidized borrowing and tax incentives to spur development. Consistently overlooked and largely underappreciated, the responsibilities of tribal governments mirror those of state and local governments. Yet, unlike these sub-national governments, tribal governments face hurdles when accessing even the most basic forms of public finance tools. This lack of parity is

especially harmful today as recent research shows that the COVID-19 pandemic has crippled tribal government revenues and disproportionately impacted American Indian and Alaska Native age-adjusted mortality and prime-age employment. this short article, we summarize three distinct ways in which tribes have been shut out of tax-based economic development tools that are readily available to state and local governments.

State and local governments use sizable amounts of tax-free debt obligations (i.e, municipal bonds) to supply public goods such as highways, bridges, and parks along with private goods such as hotels, golf courses, and sports stadiums. In addition, these governments can issue non-taxable [i] which let the benefits of low-cost borrowing flow directly to the private sector — provided that these bonds are used on specific projects such as airports, educational facilities, and affordable rental . These bonds benefit the public by building economic infrastructure without raising taxes.

Continue reading.

The Brookings Institution

by Matthew Gregg

December 3, 2021

More Than Fines and Fees: Incorporating Equity into City Revenue Strategies

ABSTRACT

In the wake of the COVID-19 pandemic, city leaders are working to tackle structural inequities in access to wealth and opportunity. An infusion of federal dollars from the Infrastructure Investment and Jobs Act and American Rescue Plan Act provides an opportunity to rethink past budget choices. This brief describes how city leaders are integrating equity into revenue structures. Our review suggests that cities should consider equity in both processes and outcomes, use data- and community-driven strategies to track progress and routinize evaluations, and include in-kind resources in their assessments. Federal, state, and county governments can also design intergovernmental grant and shared-revenue programs to prioritize equity.

Full Report

Tax Policy Center

by Aravind Boddupalli, Tracy Gordon, Lourdes Germán

Dec 1, 2021

The Outlook For Municipal Markets (Bloomberg Radio)

Joe Mysak, Editor of Bloomberg Brief: Municipal Markets, has the latest news on municipal markets around the country. Hosted by Matt Miller and Taylor Riggs.

Listen to audio.

Bloomberg Radio

Dec 03, 2021

Municipal Bonds on Track to Break Three-Month Losing Streak.

- Munis have returned 0.67% this month, beating Treasuries
- Omicron variant shows little impact on muni market so far

Municipal bonds are on track to snap a three-month losing streak as investors continue to pour cash into tax-exempt debt and as yields have stabilized after reaching their highest levels of 2021.

State and local government debt has returned 0.67% month to date, beating a 0.55% gain in Treasuries and the 0.2% decline in U.S. corporate debt, Bloomberg index data show.

November has been busy for fixed-income markets with the Federal Reserve's tapering announcement, passage of President Joe Biden's infrastructure package and the emergence of a new Covid-19 variant that spurred a brief flight to safety Friday in Treasuries. Still, munis have remained expensive, bolstered by generally strong local-government financial performance.

"Municipals were much more resilient during November than their taxable counterparts," said Craig Pernick, senior managing director at Chevy Chase Trust. "Fund flows remain really high, maturities are still heavy and the calendar is fairly light."

While cash has flowed into municipal-bond mutual funds for 38 straight weeks, it had eased to almost a trickle in October. It's surged back since then, with \$720 million put in during the week ended Nov. 24 and \$1.4 billion the week before.

Municipal issuers plan to power ahead with \$16.6 billion of sales in the coming month. Illinois plans to sell \$400 million of general obligation bonds this week. California's Golden State Tobacco Securitization Corp. is scheduled to issue \$4.2 billion of tobacco settlement asset-backed bonds in early December.

CreditSights expects at least \$38 billion of redemptions in December, which would ease pressure on pricing.

"There is a really attractive new issue calendar, and that tends to motivate investors," said Patrick Luby, a municipal strategist at CreditSights. "The market is in fairly good footing for the next couple of weeks."

Bloomberg Markets

By Nic Querolo

November 29, 2021, 10:44 AM PST

Junk to Drive 2022 Muni Supply to Record \$500 Billion.

• Minimum-denomination deals, a proxy for junk, are on the rise

Professionals now dominate market, and they hunger for yield

Here's my call for 2022: U.S. states and local governments will borrow more than \$500 billion in the municipal-bond market for the first time. You can credit investors' taste for junk.

I am presuming here that any new coronavirus variants don't prove to be dangerous enough to trigger further economic restrictions and the kind of severe market volatility that leads governments to rethink borrowing plans.

This year, issuers have sold \$425 billion of long-term municipal debt, and my rough calculation places them on track to sell about \$450 billion, just shy of the record of over \$455 billion in 2020, data compiled by Bloomberg show.

Wall Street forecasts compiled by my colleague Danielle Moran show the average estimate is for about \$470 billion of muni issuance in 2022, although projections range from \$420 billion to \$550 billion. I predict we'll top \$500 billion, and I expect muni junk will move the needle — unrated, speculative deals sold only to qualified investors in minimum denominations of \$100,000, \$250,000 and \$500,000.

The key reason I anticipate this boom is because the municipal market is becoming more professional, and those buyers hunger for yield. In 2022, I expect supply to catch up with demand. Again, this assumes the new variant doesn't suppress issuance, a risk Municipal Market Analytics laid out this week.

To get a sense of where we're going, it's useful to see where we've been. The chart above shows the history of the junk muni market through the annual volume of high-denomination transactions. Issuance didn't hit the double-digit billions until the 1990s, and exploded in the 2000s, reaching \$98.2 billion in 2008, or around 27% of the \$362.8 billion in munis sold that year.

The financial crisis quashed demand for risky stuff. Junk issuance ultimately dropped to about \$17 billion in 2015. It started to rebound the next year, and the 2021 tally stands at about \$35 billion. If it finishes the year at \$37 billion, — the most since the 2008 boom — that's only 8% of the total of the \$450 billion that I estimate we were on pace to achieve before the latest market turbulence.

So I expect the market to continue on the current trajectory, assuming no interruption to the present cycle of easy credit, which is emboldening developers to take on all manner of endeavors.

These kinds of deals typically finance risky projects like charter schools, recyclers, hangar operators at airports, minor-league stadiums, hotels, museums, theme parks and real estate projects that are way out there.

Pro Shift

And developers can typically have confidence that they'll find funding in the muni market. As I say, the junk resurgence is happening in large part as the market is becoming more professional.

As Patrick Luby of CreditSights wrote, "individuals have shifted from direct ownership of individual bonds to indirect ownership via mutual funds, ETFs and CEFS," referring to exchange-traded and closed-end funds. He continued, "The nearly stagnant level of individual bond holdings implies that some (perhaps most) growth in muni Separately Managed Accounts has come from the conversion of self-directed portfolios."

Federal Reserve data show that the household sector owned \$1.88 trillion of municipal securities in

the second quarter, down from \$1.92 trillion at the end of 2020. Cumberland Advisors this month cited a Citigroup Inc. estimate that separately managed accounts may comprise almost \$800 billion of this.

Meanwhile, of course, mutual funds continue to grow, controlling \$952 billion of the \$4 trillion in outstanding munis, according to Fed data. Closed-end funds account for \$97 billion and ETFs \$76 billion.

Seeking Yield

These are the customers who want yield, and they're not finding it in the plain-vanilla tax-backed munis so beloved by Mom and Pop investors. The BVAL 10-year top-rated benchmark yields around 1.05%, well below its five-year average.

Professional buyers want quirky, idiosyncratic deals that offer a big yield premium. High-minimum denomination deals offer yields hundreds of basis points over triple-A. The question is: For how long? The offering documents on junk deals usually warn buyers that their entire investment is at stake.

A couple more caveats to my \$500 billion prediction. I'm not counting on tax-exempt advance refundings or a new version of Build America Bonds being restored to the Build Back Better legislation. Nor am I including munis sold with corporate cusips in my total.

Bloomberg Markets

By Joseph Mysak Jr

December 1, 2021, 8:00 AM PST

— With assistance by Danielle Moran

(Joe Mysak is a municipal market columnist who writes for Bloomberg. His opinions do not necessarily reflect those of Bloomberg LP and its owner, and his observations are not intended as investment advice.)

Fortress-Backed Rail Gets Nod to Sell \$1 Billion of Muni Debt.

- Florida agency approves Brightline's request to fund expansion
- Service resumed last month after suspended since March 2020

Brightline Holdings, the train company backed by Fortress Investment Group, on Friday won the authority to sell \$1 billion of tax-exempt private activity bonds to finance an extension of its Florida line that would quadruple its current operating length.

The decision by the board of the Florida Development Finance Corp., the municipal agency that gives private entities access to low-cost financing, clears the way for the company to first issue short-term escrowed debt this month, which won't be based on the project's risks. The company will then remarket the securities after going back to the board for final approval. That offering will test investors' faith in the passenger railroad, which will extend operations to Tampa from Miami for a total of 320 miles (515 kilometers).

The country's first new privately financed intercity passenger rail in a century, launched in 2018 along Florida's east coast, missed passenger and revenue forecasts even before the onset of the Covid-19 outbreak. Service resumed last month between Miami and West Palm Beach after stopping in March 2020 for the pandemic. Construction continued on an expansion to Orlando, which is expected to wrap up at the end of next year.

About 70% of Florida's population will have access to the line once it ends in Tampa, Brightline Chief Executive Officer Michael Reininger told the board Friday. "It will become the most powerful alternative transportation system in the country," he said.

Most of the proceeds of the new debt will go to building capacity for the line to Orlando, with about \$20 million going toward design and engineering for Tampa, Brightline Chief Financial Officer Jeff Swiatek told the board.

Brightline has previously used this financing tactic of issuing escrowed bonds and then converting the debt to fixed-rate bonds. But in what would be a first for the company, a significant portion of the remarketed securities — \$650 million — could receive investment-grade ratings because the debt would be backed by a combination of upfront and annual payments Miami-Dade and Broward counties will make to Brightline in exchange for using the line for their commuter services, according to a report by PFM Financial Advisors LLC.

The smaller amount of the remarketed securities will be unlikely to earn investment-grade ratings because other cash sources such as operating revenue will back the debt, which will be subordinate, the report said.

Wider Range

The securities with an investment-grade rating would draw a wider range of buyers than the unrated debt can attract.

"Given the solid revenue stream, it's a reasonable expectation that the bonds would be attractive to a large number of tax-exempt buyers," Ryan Rosberg, senior research analyst at Nuveen Asset Management, said before the meeting.

Because of concerns raised by board member and Florida's bond finance director Ben Watkins, the board adjusted its resolution on the debt issuance by requiring Brightline to return for approval of the remarketing. Watkins said that while he supported the project, aspects of the permanent financing remain unclear. "I just can't get comfortable signing off on something when I don't know what it looks like," he said.

Brightline had already sold \$2.7 billion of unrated tax-free debt for the \$6 billion project. Some of the bonds have recently traded up in price amid positive developments for the project such as its relaunch. A bond due in 2049 traded Nov. 19 at an average yield of 5.3%, compared with a high of 7.75% in January, according to data compiled by Bloomberg.

Brightline also plans to sell debt for a line connecting Las Vegas to southern California.

Bloomberg Business

By Romy Varghese

December 3, 2021, 9:47 AM PST

U.S. Bond Funds See Higher Outflow in the Week to Dec. 1 -Lipper

(Reuters) – U.S. bond funds witnessed a surge in outflows in the week to Dec. 1 on rising prospects that the U.S. Federal Reserve will ramp up the pace of unwinding its bond purchases and will lift rates as soon as mid-2022. According to Refinitiv Lipper data, investors sold U.S. bond funds worth a net \$2.16 billion, compared with their net selling of \$245 million in the previous week.

Despite concerns over the Omicron coronavirus variant, the two-year U.S. Treasury yield jumped 7 basis points on Wednesday after the Fed chief said that in December the Fed will discuss whether to end their bond purchases a few months earlier than expected.

U.S. taxable bond funds witnessed net selling of \$3.03 billion, that was the largest weekly outflow since early-April 2020. However, municipal bond funds attracted inflows of \$1.14 billion.

U.S. short/intermediate investment-grade funds and loan participation funds witnessed outflows of \$1.84 billion and \$304 million respectively, while weekly inflows into U.S. inflation protected funds also dropped to a four-month low of \$169 million.

However, U.S. equity funds drew \$7.56 billion in net buying, their largest inflow in five weeks. Large cap funds pulled in \$13.09 billion after two straight weeks of net selling, although investors sold small- and mid-cap equity funds worth \$1.96 billion and \$104 million respectively. U.S. growth funds attracted \$621 million in net purchases after four straight weeks of outflows. However, value funds saw net selling of \$2.22 billion, the biggest in six weeks.

Technology funds lured inflows for a third straight week worth \$2.39 billion, although financials and industrials posted outflows of \$1.51 billion and \$481 million respectively.

Meanwhile, U.S. money market funds secured a net \$29.27 billion in net purchases, the biggest inflow in five weeks.

By Reuters

Dec. 3, 2021

(Reporting by Gaurav Dogra and Patturaja Murugaboopathy in Bengaluru; Editing by Shailesh Kuber)

Looking for Bonds? Consider Munis Amidst Volatility.

The \$1.2 trillion infrastructure investment bill didn't contain any provisions for municipal bonds specifically, but the market still looks to benefit in the long term as the spending trickles out over the coming years.

President Biden signed the Infrastructure Investment and Jobs Act into law mid-November, and while it lacked any specific targeted boost to municipal bonds, the government's commitment to repairing bridges and roads and investing in trains and sewers will likely lead to growth for the municipal bond market, reports the Wall Street Journal.

As government spending starts to make its way to city and state legislatures, it often will only be

partial support for a project that will require further funding from local sources. That burden falls onto cities and states, and could lead to greater bond issuance.

"In many cases the local contribution will come from municipal bonds," said Patrick Brett, head of municipal debt capital markets at Citigroup as well as the chair of the muni bond industry's self-regulating organization, the Municipal Securities Rulemaking Board.

With so many varied projects receiving funding, the odds of the need for new municipal bonds in the coming months and years is high, with improvements slated for bridges, roads, railways, water and sewerage, and more.

Seeking Tax-Free Income Amidst Volatility and Rising Rates

With current market volatility and the potential for its persistence well into next year, finding tax-free income from municipal bonds that will potentially see continued growth over the next five years could be a way to pivot for investors. The American Century Diversified Municipal Bond ETF (TAXF) offers actively managed exposure to the space.

TAXF mainly invests in municipal bonds and other debt securities, while sometimes investing in "junk bonds," or high-yield securities. The high-yield securities are rated below investment-grade, including bonds that are in monetary or technical default. The issuers typically have short financial histories or questionable credit, or else have a history of problems making interest and principal payments.

The debt securities purchased can be of any duration, with the average duration of the portfolio varying depending on the interest rate forecast.

The fund primarily seeks current income but also works to increase capital appreciation based on interest rate fluctuations and credit upgrade potentials. When investing in a security, the portfolio manager looks at the current and predicted interest rates, the credit of an issuer, comparable alternatives, the overall market condition, and other factors.

A breakdown of current investments by states includes a 14% allocation to California, a 10% allocation to Texas, 9% to New York, 6% to Florida, and 5% to Illinois.

TAXF carries an expense ratio of 0.29% with monthly distributions.

ETF TRENDS

by KARRIE GORDON

DECEMBER 2, 2021

Enacting President Biden's Infrastructure Bill: Opportunities in The Infrastructure Investment and Jobs Act - Jones Day

The Situation: On November 15, 2021, President Biden signed into law a long-awaited \$1.2 trillion bipartisan infrastructure bill, The Infrastructure Investment and Jobs Act ("IIJA").

The Result: The IIJA will transform the United States' failing infrastructure system with several clean energy initiatives focused on transportation, technology, and updated water systems. The

funds will be distributed through a series of grant programs by the Treasury Department, presenting new funding opportunities for companies engaged in the infrastructure sector.

Looking Ahead: As soon as December 2021, dedicated highway funds will become available through private-public partnerships. However, funds for mass transit, railways, and buses will not be announced until Congress's anticipated Spending Bill for the fiscal year. Businesses engaging with physical infrastructure have many opportunities for funding available through the IIJA that will continue to be allocated over coming months.

The Road Towards Better Infrastructure

On November 15 2021, President Biden signed into the law the long-awaited Bipartisan Infrastructure Framework, The Infrastructure Investment and Jobs Act ("IIJA").

This \$1.2 trillion plan will revitalize America's deteriorating infrastructure system, which leaders on both sides of the aisle have long acknowledged as a key issue. The IIJA only provides funding for physical infrastructure, unlike President Biden's previous proposals, which involved heavy investment in what he deemed "human infrastructure," including childcare, healthcare, and community programs. This bipartisan framework focuses on transportation, technology, and waterways. Businesses in the infrastructure and energy fields will have new opportunities through bonds and public-private partnerships provided by the plan.

This Commentary will review the principal sections of President Biden's agreement and potential opportunities for businesses in infrastructure, energy, and technology.

Transportation Improvements

President Biden's new agreement amounts to \$550 billion in new infrastructure spending, with \$312 billion going towards transportation. The transportation budget will invest \$110 billion in roads and bridges, \$66 billion in passenger and freight rails, and \$49 billion in public transit. Fifteen billion in funds is allocated for electric vehicle infrastructure, including 500,000 electric vehicle chargers nationwide, far less than previous drafts' allocations.

The spending package also includes \$89.9 billion to modernize public transit over the next five years, with \$39 billion to improve accessibility for the elderly and people with disabilities, and \$7.5 billion to replace transit vehicles, such as buses and ferries, with zero-emission vehicles. Significant amounts of these funds will go to major city transit systems, like New York City's, based on federal funding formulas. The package will also invest \$16 billion for major projects that are too large or complex for traditional funding programs, \$11 billion in transportation safety programs, and \$5 billion for street repair, particularly to protect cyclists and pedestrians.

The IIJA goes beyond just cars and roads and allocates significant funds to alternative means of transport. The spending package invests \$22 billion for Amtrak, \$24 billion in grants for Northeast Corridor modernization, \$12 billion for grants for intercity rail service, including high-speed rail, \$5 billion for rail improvement and safety grants, and \$3 billion for grade crossing safety improvements. The goal of these investments is to provide a reliable alternative to flying and driving. Ports will receive \$17 billion and airports will receive \$25 billion to repair existing issues, reduce congestion, and to develop systems that require lower emissions.

Technological Improvements

The plan also provides \$191 billion to upgrade "other" infrastructure. The spending package includes \$65 billion to update and expand the power grid, to expand reliance on renewable energy,

to conduct R&D on advanced electricity transmission technologies, and to implement smart electricity grids. Some of these funds will also be dedicated to research for advanced nuclear, carbon capture, and clean hydrogen projects. The spending package includes \$65 billion for broadband deployment to create universal access to high-speed internet, to require providers to show families cheaper internet service options, and to subsidize access to internet service for low-income households.

Waterway Improvements

The IIJA also provides over \$50 billion to improve water infrastructure in the West and national grid systems susceptible to cyberattacks, as well as \$55 billion to replace lead service lines and national lead pipes that currently carry drinking water throughout the United States. The package includes \$21 billion to remove pollution from soil and groundwater and to clean polluted areas in the United States, including Superfund and brownfield sites, abandoned mine lands, and orphaned gas wells.

Funding

Unlike President Biden's originally-announced plan, entitled "The American Jobs Plan," this bipartisan plan does not include an increased corporate tax rate as a source of funding. Instead, the plan is funded from increased IRS enforcement of pre-existing due taxes, redirection of unused unemployment and other COVID relief funds, state and local investment, and strategic petroleum reserve sales. Most interestingly for the private sector, lawmakers expect to fund \$100 billion from public-private partnerships and direct-pay municipal bonds. This will create new opportunities for businesses interested in construction or electricity.

While the President's original plan detailed a series of tax credits in clean energy investments, a tenyear extension of the federal production tax credit, and an extension of the investment tax credit, the passed bill does not contain such allocations. However, as spending terms are not yet completed by the Senate, business are advised to stay informed as to whether such credits and extensions are added to further updates.

Looking Ahead

It is still somewhat uncertain as to the role that public-private partnerships ("P3s") will play with respect to infrastructure initiatives. The IIJA does, however, recognize the role of private investment in facilitating and implementing P3s and in several instances directs programs to consider P3s. The mere increase in available funds and additional projects that should follow will likely create more opportunities for P3s. The companion human infrastructure bill, the Build Back Better Plan, is still yet to be passed. While Build Back Better proposes increased taxes as a significant source of funding, there is question as to whether the bill can be passed without bipartisan support. Businesses should stay informed as to the status of Build Back Better and whether it will impact any of the new opportunities provided in the IIJA, Additionally, as the Senate releases more spending information, businesses are advised to keep note as to what new tax credits or grants become available in the transportation and clean energy spaces.

Four Key Takeaways

- 1. Transportation: The IIJA provides \$550 billion in new transportation infrastructure funds. While significant portions are allocated to roads, bridges and tunnels, alternative transportation will also receive significant funding including railways, ferries, and airports.
- 2. Technology: The plan also includes \$191 billion to upgrade for "other" infrastructure that is non-transportation based. This includes \$65 billion for universal internet access.

- 3. Water: The bill allocates \$55 billion towards improvements to water infrastructure systems, \$50 billion to protect against cyber-attacks, droughts, floods, and wildfires, and \$21 billion to remove pollution from ground soil.
- 4. Opportunities: The bill will provide new opportunities for businesses through bonds and public-private partnerships allocated by the Department of Transportation. Businesses are also well-advised to watch as the Senate continues to release new spending information, which may include new benefits such as tax credits and exemptions.

Jones Day

by Jeffrey D. Gaulin, Dean E. Griffith, Edward T. Kennedy, Richard P. Puttré, Jeffrey A. Schlegel and Brian L. Sedlak

November 23 2021

<u>Infrastructure Investment and Jobs Act: Selected Changes Impacting Public-Private Partnerships</u>

On November 15, President Biden signed into law the \$1 trillion Infrastructure Investment and Jobs Act (the "IIJA" or the "Act") which cleared the House of Representatives in early November after months of delay. The new law (also known as the Bipartisan Infrastructure Framework or BIF) garnered considerable bipartisan support in the Senate where it was negotiated and crafted over the summer, and a narrow but ultimately determinative slice of crossover votes in the House. The first of two large infrastructure packages promised under the Administration's Build Back Better agenda, the Act allocates \$550 billion in new federal funding in a bold attempt to address decades of underinvestment in America's infrastructure. These funds will go to support investments in highways, passenger and freight rail, public transit, ports, airports, water, broadband, energy efficiency, power and grid resiliency and electric vehicle charging stations, as well as to fund a number of research and pilot programs.

Important to the expansion of the public-private partnership ("PPP") model in the transportation, social infrastructure and broadband sectors, among other things the IIJA provides guidance on the use of PPPs on eligible projects, expands several programs that leverage additional private sector investment in infrastructure, and funds grants to consider asset concessions and PPPs, which we summarize below.

- 1. Transportation Infrastructure Finance and Innovation Act (TIFIA). The Act contains a number of updates to the federal TIFIA loan program, which should help expand the availability of low cost federal loans to projects procured under a PPP delivery method and improve the terms under which the Build America Bureau can commit funding to support projects. The changes include:
- Extending the period for contingent commitments under a TIFIA master credit agreement from three years to five;
- Raising the threshold above which more than one credit rating will be required for an eligible project 's Federal credit instrument from \$75 million to \$150 million;
- Extending the potential maturity of a TIFIA loan for a capital asset with an estimated useful life of more than 50 years to the longer of (a) 75 years after the date of substantial completion and (b) 75% of the estimated usable life of the asset.

- Expanding the types of projects eligible for TIFIA loans to include:
- Transit-Oriented Transportation Projects: A project to improve or construct public infrastructure that either

is located within walking distance from and accessible to a transit, passenger rail, intercity bus or intermodal facility, including a transportation, public utility or capital project; or

is an economic development project, including commercial and residential development and related infrastructure, that (a) incorporates private investment and (b) is physically or functionally related to a passenger rail station or a multimodal station that includes rail service, (c) has a high probability to commence work within 90 days, and (d) has a high probability of reducing Federal funds assistance for the rail station or service by increasing ridership, rental payments or other activities that generate revenue in excess of project costs;

- -Airport-related projects, including terminal development, gate construction and the conversion of vehicles and ground support equipment to low emission technology. (For a Transit-Oriented or Airport-related project to be eligible, a letter of interest must be delivered to the Secretary of Transportation (the "Secretary") and it must receive a determination of eligibility from the Secretary by September 30, 2025. For each fiscal year, qualifying projects will be eligible for up to 15% of TIFIA's total budget authorization for such fiscal year); and
- -Projects to acquire plant and wildlife habitats pursuant to a transportation project environmental mitigation plan that has been approved by the Secretary of Interior in accordance with the Wildlife Protection Act.
- Requiring Payment and Performance Security: Any project making use of the TIFIA program must demonstrate that its design and construction are supported by appropriate payment and performance security, regardless of whether the obligor is a private entity (as is the case in PPP projects) or a State, local authority or any department or instrumentality thereof. If local law requires such security then the Secretary may accept that security if "the Federal interest with respect to Federal funds and other project risk related to design and construction is adequately protected".
- Providing for a Streamlined Application: The Act requires the Secretary to design, within 120 days after enactment of the IIJA, a streamlined application procedure for certain projects that have, among other required elements, a reasonable expectation that the contracting process for the project can commence within 90 days after a Federal credit instrument is obligated for the project under the TIFIA program.
- **2. Private Activity Bonds (PABs).** The Act increases the limit of PABs for qualified highway or surface freight transportation facilities from \$15 billion to \$30 billion and expands the types of projects eligible for funding with PABs to include:
- A Qualified Broadband Project ("QBP"), defined as any project that (a) is designed to provide broadband service solely to one or more census blocks in which 50% of the residents do not have access to residential terrestrial fixed broadband service that delivers at least 25 megabits per second ("mbps") downstream and at least 3 megabits of service upstream, and (b) results in residential or commercial users or a combination of both enjoying speeds of at least 100 mbps

download speed and 20 mbps upload speed. For a project to qualify as a QBP, however, the issuer will need to demonstrate that 90 of the locations that will receive the increased service either did not have any service or their service did not meet the minimum threshold of 25 mbps download/3 mbps upload. To qualify for PABs funding broadband projects, the issuer must also notify every existing broadband service provider in the service area and request information on the ability of each such existing provider to deliver gigabit service, and give such provider 90 days to respond.

• Qualified Carbon Dioxide Capture Facilities, to include funding for[(a) the eligible components of carbon capture facilities; i.e. the equipment included in such facilities used to capture, treat, purify, compress, transport or on-site store industrially produced carbon dioxide, or that is integral to or used for the process to convert coal or petroleum residue or biomass or other materials recovered in the industrial process into a gas to be used for industrial conversion; and (b) certain direct air capture technologies.

Both new categories of eligible PABs projects will enjoy a 75% exemption from the volume cap under per Section 146(g) of the Internal Revenue Code.

The Act does not, however, accommodate an industry request to expand TIFIA and PABs eligibility to certain kinds of social infrastructure such as courthouses or government buildings, although as noted above residential and commercial buildings adjacent to rail stations or similar facilities will become eligible for TIFIA funding.

- **3. Requirements for Transportation Projects Carried Out through PPPs:** The IIJA requires a public partner carrying out a project using Federal financial assistance with an estimated total cost of at least \$100 million to meet certain requirements no later than 3 years after the date of project operations, including:
- Conducting a review of the project, including a review of the compliance of the private partner with the terms of the PPP agreement;
- Certifying to the Secretary that the private party is meeting the terms of the PPP agreement or notifying the Secretary that the private partner has not met one or more of the terms of the PPP agreement by including a brief description of each violation of the PPP agreement; and
- Disclosing the certification or notifying the public without exposing any proprietary or confidential business information.
- **4. Value for Money Analysis:** The entity carrying out a project estimated to cost more than \$750 million and implemented with assistance under the TIFIA program or the Railroad Rehabilitation & Improvement Financing ("RRIF") Program, will be required under the Act to conduct a value for money (VfM) analysis and report the analysis to the Secretary. Requirements include providing (a) an evaluation the life-cycle cost and project delivery schedule, (b) a cost comparison between public funding and private financing for the project, (c) a description of the key assumptions made in developing the analysis, including benefit-cost analysis regarding the allocation of risk, (d) a forecast of user fees and other revenues expected to be generated by the project, and (e) other information that the Secretary of Transportations deems to be appropriate for such VfM analysis; and submitting a report of the VfM analysis results to the Build America Bureau and the Secretary and by uploading the report to the project website.

The Secretary, in coordination with the Build America Bureau, is required to submit the compiled analyses to Congress. The Secretary is also required to coordinate with the Build America Bureau and issue guidance on performance benchmarks, risk premiums, and expected rates of return on private financing.

5. Asset Concessions: The IIIA authorizes certain grants (maximum \$2 million) to eligible entities,

including a state, a unit of local government and an agency of a state or local government, to help them "develop, review, or enter into an asset concession" with a concessionaire, a private individual or corporation. The grants under this section include:

- Technical assistance grants used for (a) identifying assets for potential concessions, (b) soliciting and negotiating asset concessions and hiring staff for these purposes, (c) conducting a VfM analysis to compare benefits of asset concessions with other procurement methods, (d) evaluating options for the structure and use of asset concession payments, (e) assessing the risks and benefits of all contract provisions, (f) identifying best practices to protect the public interest, (g) identifying best practices for managing transportation demand and mobility to facilitate transportation demand management, and (h) integrating pricing, data, and fare collection with other regional operators; and
- Expert services grants where a state or local government agency uses the grants to retain the services of an expert firm to get direct project-related assistance and services, including:
- -Project planning, feasibility studies, revenue forecasting, cost-benefit analysis, other economic assessments, public benefit studies, VfM analyses, business case development, lifecycle cost analyses, risk assessment, financing and funding options analyses, procurement alternative analyses, and statutory and regulatory framework analyses;
- -Financial and legal planning;
- -Early assessment of environmental review and regulatory processes and costs; and
- -Assistance with entering into an asset concession.

The Secretary will be required to ensure that, among other things: (a) the asset concession will not make it more difficult for an eligible entity to construct a new project, (b) the full amount of any asset concession payment will be used to pay infrastructure costs of the eligible entity, and (c) the terms of the asset concession do not result in any burden on taxpayers.

November 24, 2021

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<u>Infrastructure Investment and Jobs Act Supports Broadband Partnerships.</u>

Background

Broadband networks, like electric power systems a century ago,[1] have increasingly become drivers and enablers of simultaneous progress in just about everything that matters to communities. This includes robust economic development, lifelong educational opportunity, homeland security, public safety, affordable modern healthcare, workforce training and retraining, energy efficiency and security, smart transportation, environmental protection, efficient government service, and much more. As a result, a growing number of initiatives across America have sought to facilitate affordable access to broadband by working with willing incumbents, partnering with new entrants, establishing their own communications networks, or by developing creative new alternatives. For many, broadband partnerships have emerged as their most attractive option; for some, partnerships may be their only feasible option.[2]

Depending on the circumstances, partnerships can significantly improve a broadband project's prospects for success. Among other things, they can facilitate pooling of resources available to the partners, enable each partner to perform the tasks for which it is best suited, and allow for asymmetric allocation of benefits. For example, a well-crafted partnership can take advantage of a public or cooperative entity's ability to invest "patient capital" in projects that provide long-term benefits for the community and, at the same time, accommodate a private entity's need to earn more immediate profits. In some cases, partnerships can also enable the parties to comply with State restrictions on purely public broadband initiatives.

Recognizing the attractiveness of broadband partnerships, Congress and several States have sought to encourage them to help accelerate broadband deployment, adoption, and use. To cite some examples at the federal level, Congress appropriated \$300 million in the Consolidated Appropriations Act to be distributed by the National Telecommunications and Information Administration exclusively to P3s.[3] Under the US Department of Agriculture's ReConnect Program, P3s are not only eligible to receive funding, but the USDA Rural Utilities Service's scoring criteria awards 15 points to P3s for doing so.[4] In the same vein, the bill that would become the Build Back Better Act, which the House of Representatives passed last Friday, contains a \$280 million pilot program for urban P3s.[5]

Broadband partnerships are also increasingly popular at the State level. For example, responding with admirable vision to the COVID-19 pandemic, the Arkansas legislature voted unanimously this year to expand the authority of municipalities to engage in broadband initiatives. Among other things, Arkansas authorized municipalities to fund broadband projects through municipal bonds or special taxes, as long as they "partner, contract, or otherwise affiliate with an entity that is experienced in the operation of the facilities to be acquired or constructed."[6] A number of other states have funding programs that encourage or limit eligibility to broadband partnerships.[7]

Broadband Partnerships Under the Infrastructure Investment and Jobs Act

The IIJA does not just favor partnerships in broadband matters. It also does so for transportation[8] and cybersecurity.[9] (See, e.g., Section 40121). With respect to broadband, the Act establishes the \$42.45 BEAD Program to support qualified broadband projects. The Act defines the term "eligible entity" as "a State,"[10] and it contemplates that States will funnel these funds to eligible "Subgrantees." That term is broadly defined as "an entity that receives grant funds from an eligible entity to carry out activities under subsection (f)."[11] Elsewhere, however, the Act makes clear that Congress intended partnerships to be among the favored recipients of IIJA funds (with our emphasis added in italics):

Section 60102(h) BROADBAND NETWORK DEPLOYMENT.—

- (1) ORDER OF AWARDS; PRIORITY.—
- (A) IN GENERAL.—An eligible entity, in awarding subgrants for the deployment of a broadband network using grant funds received under this section, as authorized under subsection (f)(1)—

(iii) may not exclude cooperatives, nonprofit organizations, public-private partnerships, private companies, public or private utilities, public utility districts, or local governments from eligibility for such grant funds ...

Furthermore, Section 60102(e)(1)(D) requires States to submit 5-year Action Plans in accordance with specifications that the Assistant Secretary (the head of NTIA) is required to develop:

(ii) REQUIREMENTS OF ACTION PLANS. The Assistant Secretary shall establish requirements for the 5-year action plan submitted by an eligible entity under clause (i), which may include requirements to—

. .

(VI) ascertain how best to serve unserved locations in the eligible entity, whether through the establishment of cooperatives or public-private partnerships;

As Kathryn de Wit, director of the Pew Charitable Trusts' Broadband Access Initiative, aptly put it in her recent article on the fundamental shifts that the IIJA may spawn,

One thing is certain: The shifts — whether training clinicians on new technology, wiring households to fiber or retraining workers — won't happen without partnerships. That's why the timing of the state five-year action plans is so critical. Research from The Pew Charitable Trusts has found that states have already used planning processes to evaluate need, drive stakeholder engagement and map out a plan for achieving broadband expansion goals.

Now is the time for businesses, research organizations, community partners and others to participate in the continuing state planning efforts, helping to shape state strategies for using federal dollars and developing plans that meet the needs of the state and its communities in ways such as sharing information on skills gaps in the labor force, identifying evidence-based solutions for increasing telehealth usage, or elevating how living on a fixed income may influence aging Americans' ability to access digital resources.[12]

Five or ten years into the future, we may look back on this as "the Age of Partnerships" – viewing that term in its broadest sense. Let's act now to make that happen.

- [1] J. Baller, "The Essential Role of Consumer-Owned Electric Utilities in Developing the National Information Infrastructure (Nov. 1994), https://tinyurl.com/3arcez52.
- [2] Keller and Heckman Partners, "Broadband Partnerships: For Many Communities, A Good Option at a Good Time," IMLA Magazine (Sep-Oct 2021), https://tinyurl.com/4umyt5a3; J. Hovis, et al., "The World of Broadband Public-Private Partnerships: A Business Strategy and Legal Guide," Benton Foundation (May 2017), https://tinyurl.com/5psjsw3e; J. Hovis, et al, "Public Investment/Private Service: A Shared Risk Partnership Model for the 21st Century, Benton Institute (Oct 2020), https://tinyurl.com/cejddhyp.
- [3] NTIA, "Commerce Department's NTIA Announces \$288 Million in Funding Available to States to Build Broadband Infrastructure," May 19, 2021, https://tinyurl.com/aejt5k7z.
- [4] USDA Rural Utility Service, Funding Opportunity Announcement, Oct. 25, 2021, https://tinyurl.com/c8ra38pa ("Local governments, non-profits and cooperatives (15 points). Applications submitted by local governments, non-profits or cooperatives (including for projects involving public-private partnerships where the local government, non-profit, or cooperative is the applicant) will be awarded 15 points.")
- [5] House Committee on Energy and Commerce, "Fact Sheet," (November 2021), https://tinyurl.com/crrp8epf.
- [6] J. Baller, "Arkansas State Legislature Significantly Expands Local Broadband Options, February 9, 2021, https://tinyurl.com/4arhtztt.

[7] See, e.g., the Virginia Telecommunications Initiative, https://www.dhcd.virginia.gov/vati; the Maryland Expansion of Existing Broadband Grants Program,

https://dhcd.maryland.gov/Broadband/Pages/default.aspx; the Massachusetts Mass Interconnect Program, https://broadband.masstech.org/recovery-plan-programs/mass-internet-connect; and the Georgia Broadband Deployment Initiative, https://www.gacities.com/Resources/Reference-Articles/Resources-to-Serve-Cities-Georgia-Broadband-Deploy.aspx.

- [8] See, e.g., Section 11508 of the IIJA.
- [9] See, e.g., id., at Section 40121.
- [10] Section 60102(a)(1)(F).
- [11] Section 60102(a)(1)(F). The "subsection (f)" in the definition of "subgrantee" refers to Section 60102(f), the provision specifying the permissible uses of the funds appropriated under the Act.

Keller and Heckman LLP

November 29 2021

<u>USDOT Reveals How It's Handing Out Infrastructure Money to the States.</u>

Of course, a bill as huge as the five-year, \$1.2-trillion Infrastructure Investment and Jobs Act signed into law by President Biden Nov. 15 will deliver benefits to every one of the 50 states and the District of Columbia. But how much benefit will vary from state to state. A report in Mass Transit examined the factors the U.S. Department of Transportation used to determine how to divvy up the portion of the \$1.2 trillion devoted to public transit.

For starters, every state will get at least 31 percent more money in the first year of the cycle than it got from the transit portion of the funding bill it replaced, the Fixing America's Surface Transportation Act (FAST Act). The District of Columbia will see the greatest percentage increase, 52 percent, while ten states will see increases of at least 40 percent. From largest to smallest percentage, they are: Vermont, Wyoming, Alaska, Maine, New York, Illinois, North Dakota, Pennsylvania, Massachusetts and New Hampshire.

On average, American transit riders spend 77.5 percent more time commuting by transit than by car. Strategic spending could change that. Today, the five states with the highest time penalty: Wyoming (150.3 percent), Idaho (150.2), Nevada (133.9), Connecticut (130.4) and Rhode Island (120.1). Arkansas transit users spent the least amount of extra time riding (31.3 percent).

Continue reading.

NEXT CITY

SANDY SMITH

NOVEMBER 24, 2021

S&P U.S. Municipal Utilities Credit Brief: Medians Held Strong In 2020 As California Retail Water And Sewer Utilities Prepare For A Dry Future

Overview

Despite the effects of the COVID-19 pandemic on the broader economy, California retail municipal water and sewer utilities demonstrated generally stable credit quality in fiscal year 2020. In fact, most California utilities saw improved revenue growth year-over-year (4.4%). Increased residential water consumption in the region helped offset lower revenues from commercial customers and many utilities scaled back discretionary costs without eroding operating performance. Most key financial median ratios, including available liquidity median metrics, improved modestly, reflecting the financial resilience of California retail municipal utilities. The medians also indicate that California utilities have very strong enterprise and financial risk profiles, which reflect strong demographic and financial characteristics. Although some areas in the state have faced lower levels of economic activity due to social-distancing practices and mandatory business closures because of the pandemic, the influence on utility revenue has been relatively muted, as most serve diverse customer bases that are anchored by steady residential demand, with the exceptions of those with outsize agricultural or tourism and hospitality sector concentration. These utilities also remained operationally resilient in the face of past drought conditions and record-setting wildfires. As a result, we believe California utilities have displayed significant stability in financial performance in recent vears.

S&P Global Ratings maintains water and sewer utility revenue ratings on over 320 retail utilities in California. About 57% of these utilities are in the 'AA' category, 33% are in the 'A' category, 7% are in the 'AAA' category, and fewer than 3% are in the 'BBB' category or lower. The higher rating distribution reflects California utilities' generally stronger enterprise and financial risk profiles than the national medians (see chart 1). In addition, about 90% of the ratings have a stable outlook, while approximately 10% have a negative outlook. Most ratings with a negative outlook have exposure to tourism or agricultural production. We believe that pervasive drought and accelerating water shortages could potentially lead to the permanent idling or conversion of farmland over time, which heightens business risk for water purveyors that serve farming operations or farmworkers. For more information, see "20 California Irrigation District Rating Outlooks Revised To Negative From Stable On Rising Drought Severity," published Oct. 28, 2021, on RatingsDirect.

Continue reading.

17 Nov, 2021

Senior Living Muni Bond Defaults Reach \$1.6B in 2021, With More Pain Coming.

Thirty-one senior living borrowers have missed a payment on their municipal bond debt for the first time in 2021, representing about \$1.6 billion of muni bonds in default and tying the record number of senior housing defaults set last year.

That's according to the latest statistics from Municipal Market Analytics (MMA). The findings build on previous MMA reports, including one last month that <u>showed</u> 27 senior housing muni bond defaults this year.

Distress in the sector is likely to worsen before the sector stabilizes and rebounds, according to MMA Partner Matt Fabian.

"Covid has made labor costs much higher, made staffing much more difficult and made occupancy more volatile," Fabian told Bloomberg. "Longer term it's a sector with good prospects, medium term, we're probably going to see more defaults."

The senior housing bonds in default represent 4.3% of the sector's \$37.6 billion of debt, as of Jan. 1, 2021.

Senior living has been hit harder by Covid-19 than any other U.S. public finance sector, Moody's Investor Service noted in May 2020, predicting a wave of bond defaults.

"No other sector has seen the singular confluence of both revenue and expenditure difficulties as the elder housing sector," Moody's Vice President Dan Seymour wrote in a commentary at the time.

The latest default numbers from MMA indicate that despite recent occupancy gains and the widespread vaccination of residents and staff against Covid-19, the senior living sector is still particularly vulnerable to financial distress, particularly for operations that already were in a tenuous position pre-pandemic. One CCRC that recently defaulted had a 2019 debt service coverage ratio of 0.0x, the MMA report noted.

Labor issues have become especially pressing, with assisted living employment falling by 38,000 workers since the start of the pandemic, according to recent data from the American Health Care Association/National Center for Assisted Living (ACHA/NCAL).

While some senior living providers have expressed confidence that they can raise monthly rates to largely compensate for higher labor costs, operators that are less stable could flounder.

Indeed, more "spectacular failures" are almost certain to occur in the sector, Shankh Mitra, CEO of Welltower (NYSE: WELL), said on the real estate investment trust's most recent quarterly earnings call.

Mitra and other senior living leaders have predicted that as financial distress comes to a head, industry consolidation will occur, with properties moving into the control of more stable owners and operators.

Such consolidation is already coming to pass among providers with muni bond debt. Today, a judge with the U.S. Bankruptcy Court of New Hampshire approved the sale of Hillside Village Keene to Covenant Living.

Faced with Covid-related pressure, Hillside Village Keene — a 222-unit life plan community — was unable to meet its obligations related to long-term tax-exempt bond debt and filed for Chapter 11 bankruptcy protection. Skokie, Illinois-based Covenant in August 2021 agreed to pay \$33 million to acquire the distressed community, if no higher bids emerged through a stalking horse process.

Covenant adds Hillside Village to its existing portfolio of 18 communities in nine states.

Senior Housing News

By Tim Mullaney | November 22, 2021

ESG In U.S. Public Finance Credit Ratings: S&P 2022 Outlook And 2021 Recap

View the S&P Outlook & Recap.

[Free registration required.]

29 Nov, 2021

Muni Strategists See Average of \$470 Billion of Supply in 2022.

- Issuance estimates range from \$420 billion to \$495 billion
- Bank of America differs with estimate of about \$550 billion

Bankers in the \$4 trillion municipal-bond market should prepare for a busy 2022 with issuance that's mostly expected to be on par or more than this year.

Sales forecasts collected from almost a dozen firms range from about \$420 billion to \$495 billion. A notable outlier is the projection from researchers at Bank of America, the market's largest underwriter, who expect a record year of sales totaling \$550 billion.

Averaging the 11 forecasts show municipal issuers are expected sell about \$470 billion of bonds next year.

States and local governments have sold about \$422 billion of long-term debt so far this year, plus another \$20 billion sold with corporate identifiers with about three weeks left before the winter holidays. Including municipal-backed corporates, long-term sales are running at a pace about 5% below 2020, data compiled by Bloomberg show.

For much of the year, investors flooded funds that invest in state and local government debt on the outlook for higher taxes and comfort with the state of municipal credit buoyed by federal stimulus. Overall, investors added about \$81 billion of new cash to municipal mutual funds, according to the Investment Company Institute.

The market would need about \$475 billion of supply next year to meet current demand, according to Bloomberg Intelligence analyst Eric Kazatsky. His outlook is based on the latest muni-fund flows and bondholder reinvestment data.

Key Insights

- Bank of America municipal analysts see a record boom of upcoming sales with governments issuing \$550 billion of bonds in 2022. Yingchen Li and Ian Rogow, co-heads of municipal research, said that governments' balance sheets, flush with federal dollars, will permit them to sell more debt for infrastructure projects.
- That's an opinion shared by Tom Kozlik, head of municipal research and analytics at Hilltop Securities. He said muni-bond sales are poised to "materially rise" next year as "a long-standing aversion to funding infrastructure and other key projects with municipal bonds will begin to abate."
- Strategists at UBS led by Thomas McLoughlin and Kathleen McNamara estimate a "modest supply

contraction" because issuers will have less need to sell debt because of strong finances and because there were fewer bond ballot measures approved by voters. The prospect of higher interest rates also could stymie refinancing sales, they said.

- The group said that total returns for investment-grade municipal bonds will be low, likely between 1% and 2% while those on high-yield debt should perform better.
- The federal infrastructure bill will be "constructive" for municipal supply, said Matt Fabian, a partner at Municipal Market Analytics. He expects sales to reach between \$450 billion and \$475 billion.
- "Governments will want to piggy back their own priorities onto projects being funded with federal dollars, and assuming the federal spending stabilizes or improves areas, it will encourage development, and development brings municipal bonds," Fabian said in an email.
- Peter Block, a managing director at Ramirez & Co. said that because the new federal aid for infrastructure will be spent over the next five- to eight-years he doesn't expect "any sea change" in the amount of bonds sold for public works projects. He forecasts \$476 billion of total sales.
- Erin Ortiz, managing director for municipal credit at Janney Montgomery Scott, expects \$490 billion of new sales bolstered by historically low interest rates and a bevy of infrastructure needs. She expects the debt will be well absorbed into the market.
- "The demand side is still very favorable," she said in a interview. "If a government has a project they are perusing this is a good environment for them."
- Charles Peck, head of public finance at Wells Fargo & Co., estimates new muni sales will be "flat to slightly up" in 2022 compared with this year. He said that governments may borrow for "ancillary infrastructure" projects like broadband and electric vehicles.
- Analysts at Morgan Stanley round out the low end of the forecasts, saying that debt issuance will total about \$420 billion in 2022.
- "Decreased new money issuance may seem counterintuitive given increased federal infrastructure spending, but historically this hasn't reliably boosted muni borrowing," strategists Michael Zezas, Samantha Favis and Barbara Boakye wrote in a research note.

Bloomberg Markets

By Danielle Moran

November 24, 2021

Monetary and Fiscal Policies on Municipal Bond Markets.

As we approach the end of 2021, the big question for all financial markets is how the federal monetary and fiscal policies are going to shift to address various market forces like inflation, economic recovery, supply chain chaos and short- to long-term impacts of COVID-19.

Since the start of the pandemic, the federal government has had numerous interventions in the form of fiscal stimulus for individuals, businesses and local & state governments, which, when paired with the reopening of the U.S. economy, resulted in peak growth for the economy in the 2nd quarter of this year. However, in the upcoming months, the economic growth will likely be tamed and the markets will likely experience a normalized expansion. It's also important to note that the recently signed, bi-partisan, infrastructure bill has a spending plan spread over many years, which will continue to add to the economic growth for years.

In this article, we will take a closer look at some of the market forces and how they are impacting the municipal bond markets; in addition, we will explore the federal government's approach in the current times.

Continue reading.

municipalbonds.com

by Jayden Sangha

Nov 24, 2021

2022 Muni Outlook: Near-Term Pain, Longer-Term Opportunity

Current low yields and tight spreads in the municipal bond market have made it difficult for investors to find opportunities to earn attractive interest income on their investments. We expect that to change in 2022.

Our outlook for 2022 is that both spreads and yields should modestly increase. This may result in near-term price declines, but we expect there will be opportunities for higher yields. Portfolios that are appropriately positioned should benefit from the rise in spreads and yields over time (a spread is the difference in yield between two bonds of comparable maturity, and reflects the additional compensation investors require to own a security relative to a highly rated alternative, such as a U.S. Treasury bond).

Early in 2021, there were concerns that the ongoing pandemic would create waves for the finances of some municipal issuers and lead to downgrades. That didn't happen. Instead, Washington threw a life raft to the muni market. The economy also recovered much quicker and stronger than expected. As a result, credit concerns ebbed and prices on muni bonds didn't fall as much as other fixed income sectors, resulting in munis outperforming most other highly rated fixed income sectors.

Continue reading.

adviserperspectives.com

by Cooper Howard of Charles Schwab, 11/23/21

The New COVID-19 Variant And Municipal Markets (Bloomberg Radio)

Eric Kazatsky, Senior US Municipals Strategist for Bloomberg Intelligence, joins the show for the "Munis in Focus" weekly segment. He talks about how a step backwards for the economy could affect muni markets nationwide.

Hosted by Paul Sweeney and Katie Greifeld.

Listen to audio.

Bloomberg Radio

U.S. States Flush With Aid Spend at Fastest Pace in 35 Years.

- Total spending, including stimulus, rose 16% in fiscal 2021
- States have spent \$427.9 billion in overall Covid-19 aid

Spending by U.S. states in the most recent fiscal year grew at the fastest pace in at least 35 years as the governments deployed a surge of federal relief funds.

Total spending, including stimulus, rose about 16% to an estimated \$2.65 trillion in fiscal 2021, which for most states ended on June 30, according to a report published Friday by The National Association of State Budget Officers. In the past two years, states reported spending \$427.9 billion in federal Covid-19 aid, the report said.

The unprecedented spending clip last fiscal year highlights the sheer scale of pandemic aid the federal government handed to states in an effort to cover the costs of responding to Covid-19 and to ease the hit to the nation's economy. It's part of the backdrop that's helped municipal debt outperform the rest of the U.S. bond market this year.

"We're seeing states use these funds in a continued effort to defeat Covid-19 and invest in the future," said Brian Sigritz, NASBO's director of state fiscal studies. "The amount of aid states and localities have received is higher than prior downturns. Of course, this downturn is different."

Total state expenditures and federal funds to states grew the fastest in the 35-year history of NASBO's report. As federal funding spiked 35.7% in fiscal 2021, general-fund spending grew at just 4.1%, below the historical average of 5.3%, according to the report.

States tapped funds to pay for programs ranging from public assistance to Medicaid, transportation and education. The largest increase was in a category that includes Covid-specific expenditures such as public-health programs, unemployment insurance and emergency management. States have until the end of calendar 2024 to allocate money from their Coronavirus State and Local Fiscal Recovery Funds.

It's still too early to tell what impact the stimulus funds might have on bonding needs, said Sigritz. In fiscal 2021, bonds financed about 1.7% of state expenditures.

Bank of America Corp., for one, expects the influx of cash will lead local governments to take on new projects, helping spur record muni sales next year.

Bloomberg Economics

By Nic Querolo

November 22, 2021

Efforts by Los Angeles' controller to open up city fiscal data took on an added dimension when Covid-19 hit.

Los Angeles Controller Ron Galperin says that by the time he arrived on the job as the city's chief taxpayer watchdog he'd developed something of an obsession with where L.A.'s revenues came from and how they were being spent.

Wanting to understand why the city at times didn't have the money for certain priorities was one factor driving this interest, explained Galperin, who worked as an attorney, small business owner and journalist before being elected to his post in 2013. "I ran for controller because I believed that we had to run our city much more effectively and that data was a key," he said during a recent virtual conference held by the National League of Cities.

One of his priorities since taking office has been opening up the city's financial data so that it's available online for residents and city staff and officials to easily access and scrutinize.

Continue reading.

Route Fifty

by Bill Lucia

NOV 24, 2021

Munis Set for 'Golden Decade' of Credit With Infrastructure Aid.

- However, lack of certain muni provisions seen capping issuance
- Fresh flood of cash may also suppress borrowing needs

U.S. municipalities are set for another massive infusion of cash from the \$550 billion infrastructure package, leaving participants in the muni-bond market to assess the impact on the nation's states and local governments.

In a nutshell, the analysis boils down to a couple big takeaways: It's great for credit quality in the \$4 trillion market. Bank of America Corp., for example, sees a "golden decade" of credit ahead. But on the other hand, all that cash may even suppress bond sales.

The legislation will unleash spending in an array of areas: It allocates around \$110 billion for roads and bridges, \$66 billion for rail, and \$39 billion for public transit. Another \$65 billion is earmarked for connecting Americans to high-speed Internet, while \$65 billion will go to the power grid and \$55 billion for drinking-water systems.

The influx comes as municipalities have already collected a historic infusion of \$350 billion of federal cash from the American Rescue Plan. Here's how investors, bankers and analysts expect the new funding will affect the dynamics and borrowers in the muni market:

Credit Boost

"The passage of the Infrastructure Investment and Jobs Act is broadly credit positive for the muni market as the infrastructure investment will boost economic growth and revenues for market issuers," wrote Yingchen Li and Ian Rogow, co-heads of municipal research at Bank of America, the

market's largest underwriter.

Granted, the aid is a fraction of the \$2.6 trillion U.S. infrastructure-funding gap estimated by the American Society of Civil Engineers. But the money "will likely still allow muni market issuers to address growing deferred maintenance costs," an issue that credit-rating companies have increasingly focused on over the past decade, according to Li and Rogow.

Ann Ferentino, a portfolio manager at Federated Hermes, also pointed to the funding as a "credit positive" given that municipalities typically assume the lion's share of public-infrastructure investment.

"Historically, a portion of those efforts would have gone unaddressed, delayed or been funded through additional debt issuance that strained cash flows and eroded credit quality," she said. The act will "take a load off states and municipalities by addressing decades of underinvestment in physical projects, a positive for investors in the broad muni securities market."

Supply Disappointment

Some market observers initially expected the infrastructure plan and separate legislation would spur a flood of bond sales. Lobbying groups had advocated for the restoration of a debt-refinancing tool known as advance refunding as well as the revival of an Obama-era bond program. But those items didn't make the final bill, dousing expectations for a deluge of issuance.

The infrastructure plan "isn't likely to lead to a major increase in muni issuance," according to Cooper Howard, a fixed-income strategist at Schwab Center for Financial Research.

"The package contains a few muni-friendly elements that could lead to a modest increase in muni issuance, such as the expansion of private-activity bonds, but issuance is unlikely to surge," he wrote in an email.

State and local governments have sold about \$412 billion of long-term bonds this year, around 0.6% less than the same period in 2020, data compiled by Bloomberg show.

Issuance Decline Mulled

There's even the prospect of a decline in borrowing ahead because of the aid.

Charles Peck, head of public finance at Wells Fargo & Co., estimates new muni sales will be "flat to slightly up" in 2022 compared with this year. But he also envision another scenario.

"We could see a decline in issuance because there is so much cash available and some governments have paused as they try to figure out how to best use the money," he said.

However, once issuers figure out those logistics, the infrastructure bill could spur more sales as larger projects get off the ground. He expects more borrowing for "ancillary infrastructure" projects like broadband and electric vehicles.

Mikhail Foux, head of municipal strategy at Barclays Plc, also anticipated a "capping effect" on new bond sales.

"Some of the funds municipalities will be using and would've been funded through the capital markets and now they won't have to bond for it," he said.

Some muni provisions could yet re-emerge in the Build Back Better Act, which is more focused on Democrats' social priorities, said Matt Fabian, a partner at Municipal Market Analytics.

"Since that bill has been sent back for more discussion that means that the muni provisions are not dead, things can always come back as the bill is rethought," Fabian said.

Bloomberg Markets

By Danielle Moran

November 17, 2021, 12:15 PM PST

— With assistance by Amanda Albright

Expansion of Qualified Private Activity Bond Categories Under the Infrastructure Investment and Jobs Act: Ballard Spahr

On November 15, President Biden signed the Infrastructure Investment and Jobs Act (PL 117-58) into law. This Act introduces more than \$550 billion in new infrastructure spending in addition to reauthorizations of existing programs for a total of \$1.2 trillion in federal infrastructure investment in local communities over the next eight years. The spending covers broadband infrastructure; air quality improvements; road, bridge, and tunnel repairs and reconstruction; rail and transit improvements; and clean water infrastructure.

The Act amends the tax-exempt bond provisions of the Internal Revenue Code (Code) to enhance the financing options available to state and local government to address the highlighted infrastructure needs. Specifically, the package adds two new categories of exempt facility private activity bonds (PABs) and additional volume cap for transportation PABs.

Here is what you need to know about the new PAB provisions:

Broadband Projects. The Act introduces qualified broadband projects as a new category of exempt facility PABs under Section 142(a) of the Code. Qualified broadband projects include facilities for the provision of broadband internet access to census tracts in which a majority of households lack broadband access prior to the date of issuance of qualifying bonds. Notably, this new category of PABs enjoys a 75% exemption from the volume cap requirements for privately owned projects and a 100% exemption from volume cap for government-owned projects.

Carbon Capture Facilities. The Act also adds qualified carbon dioxide capture facilities as a new category of exempt facility PABs under Section 142(a) of the Code. Qualified carbon capture facilities include key clean energy technologies such as eligible components of industrial carbon dioxide emitting facilities used to capture and process carbon dioxide, and direct air capture facilities. An eligible component is further defined by the Act as any equipment that is used to capture, treat, or store carbon dioxide produced by industrial carbon dioxide facilities or is related to the conversion of coal and gas byproduct into synthesis gas. Section 45Q(e) of the Code, relating to the business tax credit for carbon capture, defines a direct air capture facility as any facility which uses carbon capture equipment to collect carbon dioxide directly from air. Together, these technologies seek to capture and sequester emissions produced by power plants and industrial facilities that contribute to climate change. This new category of exempt facility PABs also enjoys a 75% exemption from the volume cap requirements for qualifying projects. As a partial offset,

however, any otherwise available carbon capture credit is reduced by up to one-half if bonds are issued under this provision to finance the qualifying assets.

Qualified Transportation PABs. Additionally, the Act adds \$15 billion to the national volume cap limitation available for qualified highway or surface freight transfer facilities. The prior volume cap limitation of \$15 billion had largely been exhausted. The limitation for qualified highway or surface freight facilities is available by application to the U.S. Department of Transportation.

by Marybeth Orsini, Charles S. Henck, Jean S. Everett, Sheila Kles, and Andrew T. Wang

November 15, 2021

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Infrastructure Investment and Jobs Act: Cybersecurity Impacts on the Energy Sector.

The November 15 signing of the Biden administration's bipartisan \$1 trillion Infrastructure Investment and Jobs Act offers a prime opportunity to review the legislation, which brings a significant reinvestment in America's energy infrastructure and an opportunity for many in the energy sector. Unsurprisingly, following the Solarwinds Orion compromise and the ransomware attack on the Colonial Pipeline, cybersecurity features centrally in the act's provisions.

Service providers hoping to benefit from the act's substantial funding must be keenly aware of the cybersecurity requirements it implements, as they offer both potential opportunities for the prepared and potential pitfalls for the unwary. Although it would be impossible to analyze the full impact of the cybersecurity provisions here, we hope to highlight key aspects that warrant your further attention.

Cybersecurity Plans

One of the key cybersecurity provisions of the Infrastructure Investment and Jobs Act is its imposition of cybersecurity requirements as a potential precondition to receive federal funds. These requirements include submission of a cybersecurity plan demonstrating that the applicant has a mature cybersecurity program and a plan for maintaining cybersecurity throughout the life of the project. The plan will require detailed descriptions of how cybersecurity will be maintained, how ongoing risk evaluations will be conducted, how vulnerabilities or compromises will be reported and how Department of Energy cybersecurity programs will be leveraged.

These requirements create an urgent need for utilities, contractors and suppliers to ensure that they have robust cybersecurity mechanisms in place. The best way to do this is through regular risk assessments identifying gaps in technical, administrative and physical security. These assessments should be overseen by outside counsel so that potential security gaps and liabilities can be identified and rectified in a privileged manner before it becomes necessary to demonstrate that cybersecurity maturity to potential clients or funders.

Application of Cybersecurity Standards

The act further cements the centrality of two key cybersecurity models, the DOE's Cybersecurity Capability Maturity Model and the National Institute of Standards and Technology's Framework for

Improving Critical Infrastructure Cybersecurity. Both models provide a procedural framework for evaluating an organization's cybersecurity, conducting risk assessments and targeting future improvements. The act, however, makes these previously voluntary standards the default and requires documentation of any deviations, establishing their central role in discussions of cybersecurity going forward.

Continued Reporting

Perhaps the most significant change that we anticipate is the focus on continued evaluation and patching of cybersecurity risks. The cybersecurity plans potentially required under the act require ongoing evaluation and threat reporting, and the act provides a route to compliance by establishing a "voluntary" reporting program, encompassing:

- 1. Product testing,
- 2. A vulnerability reporting process,
- 3. Technical assistance to close vulnerabilities,
- 4. Biennial reviews of tested products and analysis of how they respond to and mitigate threats, and
- 5. Development of procurement guidance.

These ongoing requirements create an extended service obligation for vendors and contractors, which we anticipate may be filled by the original manufacturers and suppliers of equipment, by operations and maintenance contractors or by other third-party vendors. We also anticipate that, with increased and extended cybersecurity scrutiny, suppliers and contractors will face increased litigation risks as more vulnerabilities are identified and required to be corrected. Such reporting processes will also expose suppliers to potential compromise of intellectual property or the potential harm of inaccurate threat assessments.

Funding Opportunity

Although the Infrastructure Investment and Jobs Act imposes significant additional obligations on the energy industry, it also provides significant opportunities for growth through rate-based cybersecurity incentives, \$250 million in grants and technical assistance for rural and municipal utilities and \$250 million in grants for enhanced power grid security.

This funding creates massive opportunities for those with the cybersecurity infrastructure in place to satisfy the act's requirements. We also note, however, concern that the added requirements connected to this funding may disadvantage smaller businesses, including women- and minority-owned business enterprises, that have not yet developed cybersecurity maturity, potentially forcing partnerships with more mature actors or reliance on external cybersecurity resources.

Key Takeaways

Cybersecurity requirements are not new to the energy sector, but the act significantly expands their application, creating both risks and opportunities for the energy industry. We encourage industry participants to begin thinking proactively about the act's impacts, how best to position themselves to take part in government-funded projects subject to those requirements and what risks might lurk within these provisions.

Duane Morris LLP - Owen Newman and Chris J. Chasin

November 16 2021

Electricity Transmission Provisions in the Bipartisan Infrastructure Bill: Bracewell

On Monday, November 15, 2021, President Biden signed into law the \$1.2 trillion Infrastructure Investment and Jobs Act (the "Act"), commonly referred to as the Bipartisan Infrastructure Bill. The package provides funding opportunities for a variety of traditional infrastructure projects, including approximately \$65 billion for energy and electric grid development. The Act's energy provisions are diverse, and include opportunities for those investing in grid resilience and reliability, research and development for newer and emerging technologies such as battery storage and hydrogen, cybersecurity infrastructure, electric vehicle infrastructure, nuclear power, and emissions reduction technologies, among others. This update focuses on one subset of the energy provisions contained in the Act: direct investment in the nation's electric transmission and distribution facilities.

Excluding portions of the Act related to research and development, the five provisions offering opportunities for transmission developers and owners beginning in fiscal year 2022 are of particular interest.

Transmission Facilitation Program

The Act establishes a Transmission Facilitation Program – funded by a \$2.5 billion revolving loan fund – that allows the Department of Energy ("DOE") to offer loans to, and enter into capacity contracts with, transmission developers in order to provide financial stability to proposed transmission projects. As envisioned, DOE's implementation of the Transmission Facilitation Program will include DOE's contracting with transmission developers for long-term capacity service with contract terms of up to 40 years, and for capacity not to exceed 50 percent of a transmission project's total proposed transmission capacity. In addition to entering into such long-term transmission service contracts, DOE now has statutory authority to be a lender to qualifying transmission projects and provide technical assistance in "designing, developing, construction, operating, maintaining, or owning an eligible project."

The Transmission Facilitation Program is specifically aimed at larger transmission projects – for new projects, only those capable of transmitting at least 1,000 MW qualify. However, upgrade projects may also qualify to participate as long as the upgrade is capable of transmitting at least 500 MW.

The Act funds the program but expects DOE to recover its costs from eligible projects either as a lender to the eligible project or, in the case of a transmission capacity contract, DOE may recover its investment through revenue recovered by the project's ultimate customers. The Act directs DOE to terminate its capacity contracts "as soon as practicable" – i.e., once DOE determines that the project is independently financially viable – by reselling the capacity to third party marketers or relinquishing the capacity back to the developer. The Act also stipulates that DOE's implementation of the Transmission Facilitation Program will provide that any DOE funds that a developer expends on studies for projects that are never constructed need not be repaid.

DOE Competitive Grant Program

The Act provides \$5 billion in funding to DOE to establish a competitive program to fund grid resilience projects. Half of the funds will be awarded by DOE directly to eligible entities (which includes transmission owners and operators) and the other half will be distributed to states and Indian Tribes to fund their own resilience grant programs. Additionally, the Act's small utilities "set aside" provides that at least 30 percent of grant funds must be made available to entities that sell no

more than 4 million megawatt hours of electricity per year. The DOE Competitive Grant program must be initiated by DOE by May 14, 2022.

An interested applicant, in addition to abiding by any rules to be established by DOE, will be required to provide a report detailing its "past, current, and future efforts...to reduce the likelihood and consequences of disruptive events." At least part of the justification for this provision is that entities will be limited to receiving a grant that is no more than the total amount it has spent in the prior three years on "efforts to reduce the likelihood and consequences of disruptive events."

Grant recipients are required to spend proceeds on the any of the following activities:

- (A) weatherization technologies and equipment;
- (B) fire-resistant technologies and fire prevention systems;
- (C) monitoring and control technologies;
- (D) the undergrounding of electrical equipment;
- (E) utility pole management;
- (F) the relocation of power lines or the reconductoring of power lines with low-sag, advanced conductors;
- (G) vegetation and fuel-load management;
- (H) the use or construction of distributed energy resources for enhancing system adaptive capacity during disruptive events, including— (i) microgrids; and (ii) battery storage subcomponents;
- (I) adaptive protection technologies;
- (J) advanced modeling technologies;
- (K) hardening of power lines, facilities, substations, of other systems; and
- (L) the replacement of old overhead conductors and underground cables.

Federal Transmission Siting Authority Reform

The Act amends Section 216 of the Federal Power Act in an attempt to reinvigorate DOE's and the Federal Energy Regulatory Commission's ("FERC") backstop transmission siting authority. Initially established by the Energy Policy Act of 2005, Section 216 allows FERC to issue permits with eminent domain authority to transmission projects located in national interest electric transmission corridors ("National Interest Corridors"). National Interest Corridors are designated by DOE through the issuance of a study and report that it is required to complete every three years. DOE's most recent report, however, issued in 2020, did not designate any National Interest Corridors. Dep't of Energy, National Electric Transmission Congestion Study vi (2020).

FERC's ability to issue permits under Section 216 was limited following a 2009 Fourth Circuit decision that interpreted the language of Section 216 as prohibiting FERC from issuing permits in the event a state agency expressly denied a transmission project's siting application. *Piedmont Env't Council v. FERC*, 558 F.3d 304, 309 (4th Cir. 2009). In other words, following *Piedmont*, FERC could use Section 216 when a state agency failed to act within a certain timeframe but could not issue a permit under Section 216 after a state agency actually denied a siting application.

The Act is intended to "undo" the adverse impact of Piedmont on DOE's backstop authority and includes express language authorizing FERC to issue a permit where a state authority "has denied an application seeking approval" for the siting of electric transmission facilities located within a DOE-designated National Interest Corridor.

In designating National Interest Corridors, DOE must look to a variety of factors, including whether a lack of adequate electricity is imposing economic constraints on a particular region of the country, and non-economic factors such as whether a designation would serve the national interests and whether it would promote energy independence. The Act expands the scope of DOE's review by providing additional factors DOE may consider in providing a National Interest Corridor designation. Specifically, DOE may now review whether a designation will "enhance the ability" of electric generation facilities "to connect to the electric grid," whether the designation will decrease electricity costs for consumers, and also whether the designation will enhance the United States' energy security.

Whether this expansion to the backstop federal transmission siting authority, and additional factors DOE may consider in designating National Interest Corridors, will result in change will depend on how DOE and FERC implement the new provision. DOE is not required to issue a new transmission siting study until 2023. Because there are currently no DOE-designated National Interest Corridors, FERC is unable to issue permits under Section 216 today. Nevertheless, the Act's changes to Section 216 could significantly redefine the federal government's role in the siting of electricity transmission projects – a role that has historically been almost exclusively within the purview of the states.

Smart Grid Investment

The Act provides additional funding – \$3 billion – and expands the scope of qualifying projects under DOE's Smart Grid Investment Matching Grant Program, 42 U.S.C. § 17386. Under this program, DOE may issue grants covering up to 50 percent of the costs associated with qualifying "Smart Grid investments." Transmission owners and developers may now apply for and receive grants to cover expenditures related to the purchase and installation of "advanced transmission technologies such as dynamic line rating, flow control devices, advanced conductors, network topology optimization, or other hardware, software, and associated protocols applied to existing transmission facilities that increase the operational transfer capacity of a transmission network."

Federal Financial Assistance to Non-Federal Entities for Grid Reliability and Resilience Projects

The Act provides \$5 billion for DOE to offer grants to non-federal entities (state and local governments, state public utility commissions, and Indian Tribes) to collaborate with electric sector owners and operators on "innovative approaches...to harden and enhance resilience and reliability." This program is specifically targeted to allow states to develop resilience programs in coordination with municipal entities and rural electric cooperative entities "on a cost-shared basis." The program additionally appropriates \$1 billion in financial assistance to rural and remote areas for the same purpose. The program must be established by DOE by May 14, 2022.

Bracewell LLP – Boris Shkuta, Michael Brooks, Stephen J. Hug, Rachael Novier Marsh and Catherine P. McCarthy

November 18 2021

Modernizing American Infrastructure Requires People and Procurement, Not <u>Just Dollars</u>.

This time, it really was Infrastructure Week. On November 15, President Joe Biden signed into law the first comprehensive infrastructure bill in a generation, including over \$500 billion in new spending to upgrade broadband, roads, bridges, public transit, energy, clean drinking water, and other infrastructure systems.

While the bill is ambitious, it still misses important opportunities to modernize state and local governments. Without that focus, a large percentage of the funding in the enormous bill will inevitably be spent on the same types of projects we've been building for the last several decades—not the transformative projects we need.

Building those kinds of transformative infrastructure projects will require modernizing workforce development systems and procurement techniques. Unfortunately, the infrastructure bill doesn't do enough to help state and local partners with these essential inputs. If the nation wants generational impacts, we can't afford to overlook operational capacity.

Continue reading.

The Brookings Institution

by Ellory Monks

November 19, 2021

Infrastructure Investment & Jobs Act: What it Means for GFOA Members

On November 15, the Infrastructure Investment & Jobs Act (IIJA) was signed into law by the President. The highly anticipated bill authorizes \$1.2 trillion for transportation and infrastructure spending with \$550 billion of that figure going toward "new" investments and programs.

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Federal Infrastructure Bill Set to Supercharge P3 Spending: Saul Ewing

Development through public-private partnerships or "P3s" has increased sharply in the past several years, and is poised for an even bigger jump thanks to Uncle Sam. The infrastructure bill, which passed the U.S. House of Representatives last week as H.R. 3684 and which President Biden signed into law on November 15, 2021, aims to directly increase P3 spending by tens of billions of dollars. The bill is also likely to dramatically increase the number of P3 projects by making hundreds of billions of dollars available for infrastructure improvements across the United States.

One significant benefit to P3 development should come from proposed changes to private activity bond legislation. Private activity bonds or "PABs" allow state governments to issue tax-free

municipal bonds for the benefit of private entities that finance one of 27 categories of public works projects. As of 2021, states may issue PABs for P3 projects at a rate of up to \$325 million per year or \$110 per resident, whichever is greater. Federal law also caps highway and surface freight financing through PABs, which includes road, bridge, and tunnel projects, at \$15 billion total across all states.

The infrastructure bill takes two big steps to increase PAB spending. First, it increases the cap for highway and surface freight projects from \$15 billion to \$30 billion. Second, and potentially more impactful, the bill would exempt from state caps 75 percent of PABs issued for qualifying broadband and carbon capture projects. In other words, the vast majority of P3s focused on broadband access and carbon capture could more easily be financed through tax-free municipal bonds.

But the PAB provisions are only half the story when it comes to H.R. 3684's impact on P3s. With \$110 billion earmarked for roads and bridges, \$66 billion for railways, \$65 billion for power infrastructure, and \$39 billion for public transit, as well as tens of billions more for airports, sea ports, and water infrastructure, vast sums of money are likely headed to P3 projects.

The infrastructure bill will accelerate the recent U.S. trend of increased P3 spending. In 2020, the U.S. saw 84 active P3 projects – a more than 300 percent jump from 2018. P3 activity in 2022 and beyond is all but certain to dwarf those figures given the infrastructure bill.

Saul Ewing Arnstein & Lehr LLP

November 16, 2021

Developing WIFIA's Guarantee Capabilities for Taxable Municipal Bonds.

Legislative developments threw a few disappointments at water infrastructure finance recently, but there is a way to make at least a little lemonade from two Congressional lemons.

Legislative developments threw a few disappointments at water infrastructure finance recently. But there is a way to make at least a little lemonade from two Congressional lemons.

Lemon 1: Restoration of Direct-Pay Bonds Cut from BBB

A provision to restore and expand direct-pay bonds was approved by House Ways & Means for inclusion in the Build Back Better (BBB) legislation earlier this year. This was one of three provisions to increase the flexibility and reduce the cost of municipal finance. The other two, also originally approved, would reinstate tax-exempt advance refunding and expand the small tax-exempt issuer exception. However, in the Congressional horse trading required to resize the BBB to \$1.75 trillion, direct-pay bonds and the other provisions were cut. Notwithstanding a compelling letter sent to Congress by thirty municipal groups (including AWWA, NACWA and WEF), the bond provisions are unlikely to be back in the final bill.

All the provisions would have benefited the US water sector, but the restoration of direct-pay bonds would have been especially useful for water infrastructure renewal. This is because they are taxable bonds that receive federal support in the form of a cash subsidy (not a tax-exemption) and can be bought globally by institutional investors. These investors are well-suited to finance long-lived assets, and they have a lot of appetite for US infrastructure in particular. Taxable bonds are also more flexible for innovative approaches that include impact and other pay-for-performance features

which will interest the rapidly growing base of worldwide ESG and impact investors. Such risk-transferring features can be especially useful to water agencies in dealing with the infrastructure funding challenges of climate resilience and water equity.

Lemon 2: WIFIA Loan Program Authorization Flatlined in BIF

The recently passed \$1.2 trillion Bipartisan Infrastructure Framework (BIF) has a lot of great new and expanded funding provisions for the water sector. Drinking and Clean Water State Revolving Funds in particular got a big and well-deserved boost. The EPA's Water Infrastructure Finance and Innovation Act (WIFIA) loan program was also reauthorized at \$50 million per year for 2022-2026. But this authorization is slightly less than prior years. Relative to the other water-related provisions in the BIF that saw significant increases, this is disappointing.

The flatline of WIFIA's authorized funding is puzzling. The program has been remarkably successful since operational inception in 2018. Not expanding its resources would seem to indicate a perception that WIFIA has limited usefulness despite its initial success. This is somewhat understandable in light of WIFIA's portfolio to date. Almost universally, WIFIA loans are to highly rated water agencies that could have otherwise issued tax-exempt bonds. WIFIA loans have some very valuable features, especially with respect to construction period interest rate management, but in many ways they're not very different from tax-exempt water revenue bonds. Perhaps the program is seen as filling a niche purpose and not as a source of transformational or uniquely valuable financing for US water infrastructure?

This perception is completely incorrect. WIFIA's legislative framework and its proven team are capable of much more. The portfolio to date should be seen as demonstrating WIFIA's capabilities in efficiently sourcing and executing loans with high-quality borrowers that have excellent alternatives in the capital markets, no mean feat for a federal loan program. That capability is certainly not limited to interest rate management products — and it shouldn't be. WIFIA is only getting started.

Making Lemonade: Developing WIFIA Guarantees for Taxable Municipal Bonds

Perhaps not much can be done legislatively in the near future to restore direct-pay bonds or expand WIFIA's authorization. But there is an immediately available path to improve both situations and prepare for the next opportunity in Congress: Develop WIFIA guarantees for taxable municipal bonds.

WIFIA has the capability to attach a US full-faith-and-credit payment guarantee to loans and bonds, including taxable municipal bonds. Such a guarantee has quantifiable value. For example, a federal AAA/AA+ guarantee on a 30-year bond that otherwise would have been rated Baa3/BBB- will save the issuer about 0.50% in interest a year, or about 20% of debt service on a present value basis. In principle, the value of the federal guarantee for lower rated investment-grade bonds is equivalent to the cash subsidy of a direct-pay bond. The value of a guarantee is of course more variable and situational than a direct-pay bond's cash subsidy payments because it will depend on transaction terms, market conditions, etc. But both mechanisms are forms of direct and monetizable federal support for taxable bonds.

The value of a federal guarantee is not limited to simply raising the credit quality of a standard bond issue. Innovative infrastructure projects and funding sources often have demonstrably sound credit characteristics but financing them in the bond market may be prohibitively costly simply because the story is (by definition) new and unusual. A WIFIA guarantee would make bonds with innovative features much more attractive to investors, which also will familiarize them with the new approaches and create interest in the unguaranteed versions. Jump-starting new markets is a classic

role for federal loan programs, and WIFIA is especially well-positioned to do exactly that. Innovation is a central part of the program's mission — it's even in the name. Apart from its own expertise and credibility in large-scale infrastructure finance, WIFIA can directly access the climatic and other ESG resources of the EPA to analyze new approaches that private-sector investors can't consider until they're more developed. A WIFIA guarantee is effectively an imprimatur on several levels (not just financial) that could have a transformational impact on ESG and resilience water infrastructure investment.

Getting Ready for the Next Legislative Opportunity

Even apart from the benefits of near-term transactions themselves, developing WIFIA guarantees for taxable municipal bonds will advance a much larger objective for municipal and water infrastructure finance. Successful innovation always gets a lot of attention. Even a few transactions that combine innovative approaches with federal support for taxable municipal bonds will demonstrate the value and potential in both WIFIA and direct-pay bonds. It may be a few years before there's another legislative opportunity to expand WIFIA's resources and restore direct-pay bonds, but that time will come because the US municipal infrastructure challenge isn't going away. When it does, a track record of successful transactions, motivated stakeholders among both issuers and investors, and proven capability for large-scale innovation will be very hard for Congress to horse trade away.

WaterWorld

by Chad Praul, John Ryan

Nov. 17, 2021

About the Authors: Chad Praul, P.E. is the Domestic Portfolio Director at Environmental Incentives, the only professional services Benefit Corporation that supports mission-driven champions to meet their environmental imperative. He provides expert support for local governments to develop water-related performance metrics and alternative procurement programs such as Pay-for-Performance and Community Based Public Private Partnerships (CBP3).

John Ryan is principal of InRecap LLC, a firm that is focused on federal loan program alternatives for the recapitalization of basic public infrastructure. He has an extensive background in structured and project finance. He recently served as an expert consultant to the U.S. Environmental Protection Agency.

Fitch: Rising Insurance Costs Add to US Public Finance Cyber Pressures

Fitch Ratings-Austin/New York-18 November 2021: The growing pace and sophistication of cyberattacks on US public finance (PF) entities has led to rising costs of, and challenges in acquiring, robust cyber insurance coverage, Fitch Ratings says. Public entities are increasingly required to undergo stringent security audits and adherence to industry best practices in order to purchase cyber insurance. Cyber insurance may become increasingly unaffordable for PF entities with smaller budgets as premiums continue to climb and if insurer guidelines necessitate increased staffing and costs to update older systems and software.

Without the ability to adequately transfer risk, public entities could face greater financial and reputational risks from cyberattacks, which could have negative credit implications. According to a 2021 survey of local governments by the Public Technology Institute (PTI), 59% of municipal IT

executives report that their cybersecurity budgets increased from the previous year, yet the majority also felt their cybersecurity budget is inadequate to support ongoing and evolving security initiatives.

The rise of high-profile ransomware incidents in the PF sector beginning in 2018 led PF entities to turn to cyber insurance as a means of risk transfer. With ransom demands generally in the five-digit range, affordable and easy-to-obtain cyber insurance helped reduce financial risk.

However, with soaring ransom demands and recovery costs, insurers have adjusted premiums and prerequisites. With some ransomware demands climbing to six and seven digits, PF entities are getting priced out of quality and comprehensive commercial cyber insurance policies. Cyber insurers paid out about 73% of premiums collected last year, a dramatic rise from about 34% in 2018. Premiums on cyber insurance continue to rise in the wake of the coronavirus pandemic.

Despite higher costs, more and more PF entities are acquiring cyber insurance. About 90% of respondents in PTI's survey reported having cyber insurance, an increase from 78% the previous year, and 69% noted that their cyber insurance premiums increased since they were last renewed.

PF entities are also experiencing diminishing coverage limits, forcing some entities to purchase multiple policies to achieve the desired level of coverage. Reduced coverage may be more economical but it weakens the effectiveness of cyber insurance as a tool for risk transfer.

In addition to commercial insurance, state-level risk pools are important providers of cyber insurance for many smaller to mid-sized municipal issuers. The Association of Governmental Risk Pools (AGRiP) estimated at least 80% of all local public entities participate in one or more risk pools, which are typically established on a membership basis and oriented toward same-kind government groupings, such as school districts or counties. These pools, in which members agree to share the cost of risk, were established in the US in the 1970s and 1980s to reduce and stabilize general insurance costs when many commercial insurers did not serve the PF market. Public entity risk-sharing pools do not have to deliver profits and external regulation of pools varies from state to state and by type of risk.

Trends in insurance cost pressures may be lagged in risk pools compared with commercial insurance but will eventually drive increased member costs and/or expanded coverage at a higher price point. This direction is highlighted by the Texas Association of School Boards (TASB) Risk Management Fund. Privacy and information security coverage was initially offered to members in 2014 for protection against cybercrime but it was available only in conjunction with a member's school liability coverage. This type of coverage subsequently expanded and larger members with more complex systems had the option to purchase higher coverage limits based on their organization's needs starting in 2019-2020, with TASB staff evaluating each member to determine the additional cost for requested higher limits.

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The above article originally appeared as a post on the Fitch Wire credit market commentary page. The original article can be accessed at www.fitchratings.com. All opinions expressed are those of Fitch Ratings.

These Americans Are Just Going Around in Circles. It Helps the Climate.

An Indiana city has the most roundabouts in the country. They've saved lives and reduced injuries from crashes — and lowered carbon emissions.

CARMEL, Ind. — It's getting harder and harder to run a stoplight here, because there are fewer and fewer of them around. Every year, at intersections throughout this thriving city, traffic lights and stop signs have disappeared, replaced with roundabouts.

Lots and lots of roundabouts.

There is a roundabout decorated with the local high school mascot, a greyhound and another with giant steel flowers. A three-mile stretch of Carmel's Main Street has 11 roundabouts alone. The roundabout that locals perhaps prize the most features box hedges and a three-tier bronze fountain made in France. In 2016, it was named "International Roundabout of the Year" by no less than the U.K. Roundabout Appreciation Society, which, according to the Carmel mayor, Jim Brainard, is largely made up of "three guys in a pub." (Their actual membership is six. But, still.)

Continue reading.

The New York Times

By Cara Buckley

Nov. 20, 2021

Fitch: Inflation, Federal Policy to Weigh on U.S. Colleges

Fitch Ratings-Chicago-18 November 2021: Most U.S. colleges and universities have enough flexibility to absorb inflationary increases for the foreseeable future, though a new Fitch Ratings report says their financial cushion may diminish beyond fiscal 2022.

The higher education sector reduced its labor force sharply at the onset of the pandemic with a decade of job gains evaporated in the space of one year. Median expense growth is expected to inch upward in fiscal 2022 as universities absorb inflationary increases in supplies and labor. 'Most colleges will be able to absorb inflationary increases to some extent, though they will be working with less financial flexibility beyond fiscal 2022,' said Fitch Senior Director Emily Wadhwani.

A few key proposals for higher education are included in the current \$1.75 trillion budget reconciliation bill – among them a \$550 increase in Pell Grant maximum awards. Pell Grants have historically not kept pace with inflation and tuition increases, though the proposed Pell award increase reflects the largest increase in a decade. 'Implications for institutions with large Pell student bases are generally favorable, including increased access and perhaps increased headroom for tuition growth,' said Wadhwani.

Sector pressures will continue to weigh most heavily on Fitch-rated colleges rated 'BBB' and below. 'Institutions with limited financial reserves have borne the bulk of recent negative rating actions and remain the most vulnerable to credit deterioration, consolidation and closure,' said Wadhwani. 'Market performance buoying endowment valuations will only serve to widen that gap further in coming years.'

Undergraduate enrolment is down over 6% since fall 2019 through the pandemic. That said, four-year colleges have fared better and selective institutions have even seen increases. Enrolment will be affected by an increasingly competitive landscape, with longer-term implications from high school demographic trends, an uncertain immigration trajectory, and increasing levels of remote and hybrid education models.

'What Investors Want to Know: What's Next for US Higher Education' is available at 'www.fitchratings.com'.

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Additional information is available on www.fitchratings.com

U.S. Hospitals Face Financial Reckoning as Federal Aid Dwindles.

- Financial strains return with the retreat of the pandemic
- Costs for safety and labor surge while elective procedures lag

More than a year after Saint John's Episcopal Hospital in Queens admitted the borough's first Covid-19 positive patient in March of 2020, life is returning to some semblance of normalcy. The three refrigerated tractor-trailers serving as morgues are gone and its halls — once at 150% of capacity — have quieted.

But with the retreat of the worst of the virus comes the reality that for many facilities, the finances never worked. The billions of dollars of aid the U.S. government distributed to hospitals during the pandemic — including advances in Medicare payments — kept struggling facilities afloat, but papered over longstanding problems.

The elective procedures that generate the most revenue haven't returned to pre-Covid levels. Now, a staffing crisis has emerged as a new challenge just as the final government disbursements are paid

out — putting potentially thousands of hospitals at risk. "It does keep me up at night," said Jerry Walsh, chief executive officer of St. John's, a safety-net hospital that primarily treats patients that don't have private insurance.

Federal Support

These risks aren't yet reflected in the financial markets — an indication of the extent of the federal support. Junk-rated municipal hospital bonds are underperforming the overall high-yield muni index only slightly this year, with a 6.91% return, compared with 7.11% for the overall index. Still, concerns are growing about the added stress of rising labor, supply and interest costs on a system already rife with problems.

"We will see a significant number of failures post-pandemic," said Steven Shill, head of the health-care practice at advisory firm BDO USA. "All the risks are pointing to probably a tough 18 months."

Even before the coronavirus, many American hospitals were struggling to adapt to changing models of care, including the shift of even some complex procedures to outpatient settings. Weaker operators are still grappling with the same issues as before the virus, including poorer, sicker and often shrinking populations.

"There is no doubt that the CARES money kept the wolf from the door," said Ken Kaufman, chair and co-founder of health-care consultancy Kaufman Hall, which estimates that more than a third of the 6,000 or so hospitals in the U.S. are losing money. His group also forecast the pandemic has cost them close to \$400 billion this year and last.

More than three dozen hospitals entered bankruptcy in 2020, compared with just two this year, according to data compiled by Bloomberg. That includes Chicago's Mercy Hospital and Medical Center, which filed Chapter 11 in February and was sold for just \$1.

Turnaround adviser Alvarez & Marsal calculated that operating expenses jumped 5% last year at the 25 largest hospital systems, and those have the benefit of scale. St. John's, for example, has been paying thousands of extra dollars a week to staffing agencies for certain positions to compete with larger systems for health-care workers, Walsh said.

"For safety-net hospitals, it's an issue," Walsh said. With enough state money to just survive under normal circumstances, "when you run a Medicaid business and they haven't raised Medicaid rates in New York in 13 years, it's a problem."

Hospitals received \$178 billion through the Provider Relief Fund, with most funding distributed or about to be. But the remaining aid doesn't change the long-term problem that many don't bring in enough to pay their bills.

"The upcoming disbursements won't account for expenses and lost revenue from the spring and summer surges across the country due to the delta variant," American Hospital Association executive vice president Stacey Hughes said in a statement to Bloomberg.

After the pandemic abates, labor and supply costs will be permanently higher, chiseling margins for a well-run hospital to 1.5% to 2% from an already-modest 3%, according to Kevin Holloran, a senior director at Fitch Ratings.

And though defaults have been low, an uptick in interest rates could change that. Felicia Gerber Perlman, who co-heads the bankruptcy and restructuring group at law firm McDermott Will & Emery, expects the next wave of distress to hit in the second half of next year. Rural facilities, urban

hospitals that rely on publicly-funded insurance and centers in communities that can't support more than one hospital are expected to be hot spots.

"Now the federal aid is ending, but you still have underlying issues that will be facing the system," Perlman said.

Bloomberg Markets

By Lauren Coleman-Lochner

November 18, 2021, 5:15 AM PST

— With assistance by Dawn McCarty

Senior Living Facility Defaults in Muni Market Break Record.

- 2021 defaults represent more than 4% of sector's bonds: MMA
- Vacancies, growing labor costs, burnout, stalk nursing homes

Senior living facility defaults in the municipal bond market are at a record high and the distress won't likely end soon.

The persistence of the pandemic is driving up labor costs — and a federal mandate to vaccinate all health-care workers may amplify an already serious worker shortage. Meanwhile, occupancy at independent and assisted living facilities hasn't bounced back from record lows even as vaccination rates increase and facilities end move-in moratoriums.

About \$1.6 billion of muni bonds issued for senior living facilities have defaulted this year, representing 4.3% of the sector's \$37.6 billion of debt as of Jan. 1, according to Municipal Market Analytics. Thirty-one borrowers have missed a debt payment for the first time, tying the full year record set in 2020.

"Covid has made labor costs much higher, made staffing much more difficult and made occupancy more volatile," said Matt Fabian, a partner with Municipal Market Analytics. "Longer term it's a sector with good prospects, medium term, we're probably going to see more defaults."

The Covid-19 pandemic, which was especially lethal to the elderly, has roiled the finances of senior living facilities. Operators faced increased costs for staff and protective equipment as well as move-in restrictions from state health agencies. Now, a nationwide labor shortage has become the biggest issue facing senior facilities. Workers are leaving for many reasons: low pay, burnout, fear of contracting Covid-19 or caregiving responsibilities, according to an October Morning Consult poll.

Kept Afloat

Assisted living facility employment fell by 38,000 since the beginning of the pandemic, or 8.2%, and financially strapped providers are struggling to compete for qualified staff, according to a Nov. 10 report by the American Health Care Association and its National Center for Assisted Living.

The AHCA/NCA, which represents more than 14,000 nursing homes and assisted living facilities, said that a Biden administration mandate requiring health-care workers become fully vaccinated against Covid-19 by Jan. 4. could exacerbate a "dire workforce crisis."

"Across the country, access to long term care is becoming strained as providers have no choice but to limit admissions or even close their doors," Mark Parkinson, president and chief executive officer of AHCA/NCAL said in a Nov. 4 news release.

Occupancy at independent and assisted living facilities rose to 80.1% for the three months ended Sept. 30, from 78.7% in the previous quarter, according to survey by the National Investment Center for Seniors Housing & Care.

While many senior living facilities were kept afloat by federal Paycheck Protection Program loans last year, additional aid hasn't been forthcoming, Fabian said.

"Many of these assisted living projects are shoestring operations, so additional mandates are difficult," he said. "A lot of them need more money."

Bloomberg Markets

By Martin Z Braun

November 17, 2021, 10:31 AM PST

Muni-Bond Appeal for Wealthy Seen Easing With a Higher SALT Cap.

- Congress mulls proposals to raise state, local tax deductions
- 'Incremental demand would likely decline,' says Lord Abbett

The revival of proposals in Congress to increase the cap on state and local tax deductions threatens to erode some of the demand in the \$4 trillion municipal bond market from rich Americans.

Democrats are deciding between at least two proposals to change the limit imposed in the 2017 tax law revision. That change capped state and local tax deductions at \$10,000, an unpopular move with wealthier Americans in high-tax states such as California, New York, Connecticut and New Jersey who sought to ease the impact on their tax bill with investments in tax-exempt bonds.

"If this cap was lifted, then the incremental demand would likely decline a bit" in the highest-tax states, said Eric Friedland, director of municipal research for Lord Abbett & Co., which holds \$36 billion in muni assets. Still, any higher taxes at the federal, state or local level would serve to counter the impact and "further enhance the relative value of municipal bonds," he said.

The SALT cap helped propel record flows of cash into municipal-bond mutual funds, which have seen 37 straight weeks of gains, according to Refinitiv Lipper US Fund Flows data. Year-to-date, investors have added \$78.2 billion to muni funds, according to the Investment Company Institute. The record inflows have helped keep yields from rising too far above historic lows set in 2020 as demand overwhelmed the supply of bonds coming to market.

Demand has topped muni supply, keeping yields tight

That growth rate into mutual funds would slow as wealthier Americans in higher-tax states would see their tax liability lessened if the cap is increased, said Cooper Howard, director of fixed income strategy for the Schwab Center for Financial Research. "I would expect that we would not see new record inflows in mutual funds and ETFs," Howard said in an interview.

A potentially higher cap is one piece of a "shifting landscape" and could spur "modestly" higher muni yields, Howard said. The benchmark 10-year muni rate is hovering around 1.1%, which is relatively low by historical comparisons and investors have been on the look out for higher yields.

"Raising the limits on SALT can help undo some of the nosebleed prices bonds in both NY and CA have experienced since 2017," said Eric Kazatsky, an analyst for Bloomberg Intelligence.

Bloomberg Wealth

By Shruti Singh

November 19, 2021, 9:32 AM PST

Municipal Bond Funds On Track For Record Inflows In 2021.

Summary

- For the Refinitiv Lipper fund-flows week ended November 17, 2021, investors injected \$1.4 billion into municipal bond funds, for their thirty-seventh consecutive week of net inflows.
- Year to date the average municipal bond fund has returned 1.54%, with returns in this asset class ranging from 0.08% for Short Municipal Bond Funds to 4.88% for High Yield Municipal Bond Funds.
- For October, the Consumer Price Index witnessed a year-over-year rise of 6.2%, posting an almost 31-year high, and eclipsing the Federal Reserve's 2% target.

Continue reading.

Seeking Alpha

Nov. 21, 2021

What Advisors Should Know About Muni Bonds for 2022.

With tax season on the horizon, munis are on the mind. Municipal bonds, which are utilized to fund government activities and special projects, are generally free from federal taxes for their shareholders. They have become an important tax planning tool, which heightens their importance as tax season looms.

Recently, ETF Trends' managing editor Lara Crigger sat down with Joseph Gotelli, vice president and senior portfolio manager for American Century Investments, to discuss the role that muni bonds can play in a diversified, income-generating portfolio. Gotelli joined American Century in 2008, after seven years at Franklin Templeton Investments, where he served as assistant portfolio manager on various long- and short-term municipal bond portfolios.

Lara Crigger, managing editor, ETF Trends: We've seen massive flows entering the muni bond space this year. What market conditions have made munis such an attractive option?

Joe Gotelli, vice president and senior portfolio manager, American Century Investments:

Year to date, the asset class has had a very strong run. That was predominantly front-loaded at the beginning of the year, on the tail of the direct aid state and local governments received in mid-March under the American Recovery Plan Act (ARPA). That put a strong backstop into the fundamental view of the municipal credit market.

Additionally, the continuing recovery of the economy along with strong revenues at the state and local level really provided a tailwind for credit spreads early in the year. Combine that with expectations for large spending plans out of Washington and the potential for higher income taxes and corporate taxes, it helped to put tax mitigation on investors' minds. The attractive taxable equivalent yields the municipal market offers, combined with low default rates and low correlations to other asset classes, make a good case for owning municipals.

Then, as we look forward to 2022, we're probably looking at a more difficult rate environment. Rates have moved up recently, so total returns have come off the asset classes. A negative total return environment has created a little bit of a headwind for inflows into muni bonds. Investors have a more cautiously optimistic outlook for the fourth quarter and beyond. Still, there's lots of reasons to love the tax-exempt asset class as a whole.

Crigger: But there's still the expectation among investors of higher taxes down the line. Has that expectation evolved any, with all the back-and-forth in Congress?

Gotelli: Earlier in the year, investors were pricing in a higher probability of more extreme tax moves, in terms of what was proposed originally by the Biden administration. A lot of that has been taken back as the negotiations have continued. You've seen that in the ratio between municipals and treasuries. Mid-June is when we reached a recent peak in richness of the asset class, and since then, you've seen the relative value between munis and Treasuries ease off to become a more normalized range in the short term, but still generally rich over the long history of these ratios.

I do think investors recognize that it's probably not going to be [a situation] where short term capital gains skyrocket, and that, really, it's going to be on the margin for those earning \$400,000 or more. The corporate tax rate is probably only going to go to something like 25–26%. The most extreme scenario was taken off the table.

Investors are focused on owning the right sectors within the municipal market now, underwriting the names that you want to own for the long term. Because much of that credit spread compression — where the asset class earned a lot of the return — is in the rearview mirror for us.

Crigger: What are the right sectors within the municipal market, then? Many strategies take a holistic approach to the market, rather than sector-specific.

Gotelli: The market is predominantly high quality, which speaks to the low historical default rate and the strong fundamentals. But this market is much more than just state and local general obligation bonds. You have a number of sectors on the revenue side that provide investors with incremental yield opportunities, if they can access those sectors in the marketplace. Broadly speaking, the market is about one third general obligation bonds and two thirds revenue bonds.

A huge portion of the market is made of revenue-centric projects: things like education, healthcare, transportation, revenue, utilities, essential services. Given how diverse the muni market is — we have over 50,000 issuers and hundreds of thousands of individual CUSIPs — we have to select using fundamental research that our research team provides us to find those incremental yield opportunities for investors. They might be in sectors like housing, healthcare, even some quasi-corporate style municipal credits. Those are the areas of the market where we'll capitalize on the

relative value between sectors and leverage our research staff to do that deep fundamental analysis and provide the investment opportunities that might not be available in a more passive context.

Crigger: What other advantages does active management provide in the municipal bond market, compared to a market cap-based approach?

Gotelli: As we move away from market cap-weighted benchmarks, that provides us with a lens to view the market in terms of more relative value, and what's more opportunistic to the end investor. For the passive market participant, sectors such as healthcare, tobacco settlement, certain corporate names might not even be in the consideration set. So active management allows us to take them into the consideration set and view the entire market as an opportunity, rather than just the issuers that have issued the most amount of debt in the marketplace.

I think one thing that I always come back to is, when we talk with our credit team, we think about the fact that an AA-rated hospital is not the same as an AA-rated water bond, which is not the same thing as an AA-rated airport. They're all high quality, but with different risks. As you move down the credit spectrum, those differences get broader and broader in terms of what the credit quality is versus the yield, or the risk premium that we're achieving for being in those sectors. Leveraging all of those sectors, leveraging different coupon structures and calls — those are all the ways that we express our views on where there's relative value opportunity in the marketplace.

Crigger: Can you speak to the diversification benefits of munis in a portfolio?

Gotelli: For the end advisor, the asset class provides some important benefits such as low correlations or even negative correlations to other asset classes. We have a correlation matrix that shows investment grade municipals and their correlation to the S&P 500 Index (over the trailing 10 years) is nearly zero. For high yield municipals it's less than 0.25.

Crigger: That sort of non-correlation is hard to find nowadays.

Gotelli: Exactly. But when you look at what corporate high yield provides you, it's obviously a different lever, right? That's going to have much more correlation to the equity market.

So when an advisor thinks about the municipal market as a whole, some of those factors that can really benefit a client in their broader portfolio come from the levels of credit and credit exposure, rather than just high quality, passive duration exposure. We take the view that having that broad view of the marketplace and having a full representation of the market helps provide the end user of the product that level of diversification over time.

Crigger: You have a municipal bond mutual fund, and you have the American Century Diversified Municipal Bond ETF (TAXF). What is the advantage of using an ETF wrapper for this strategy?

Gotelli: When we designed TAXF, we were really trying to answer that question. We'd stand in front of clients and say, "We have a tax exempt core intermediate fund, we have a tax exempt high yield fund, and we view it as a core plus a satellite in terms of how you want to manage your duration and credit exposure." And what we found was investors telling us, "Well, you all are the experts. For those of us that believe in active management, we're willing to allow you to make that call for us."

That's what TAXF obviously is for. It tends to be a tool for advisors willing to allow us to make that allocation for them, allow us to take advantage of those opportunities — intra-month, intra-day, whenever we see opportunity. We don't have to wait for a model to rebalance to tell us how to position the portfolio. We're doing this, more or less, in real time.

I think that fits really well for advisors that are attracted to the ETF structure as a whole. Then, as a traditional mutual fund manager, the benefit of the ETF structure has become very apparent to me. Whether it's the levels of liquidity that the exchange offers and that the market offers to the redemption and creation process allowing for some tax efficiency. You allow somebody who's traditionally focused on taxes — like a tax-exempt mutual fund — to really have an extra tool in their toolkit through that creation and redemption process to help manage the tax exposure in the portfolio.

Crigger: What are folks still overlooking when it comes to muni bonds?

Gotelli: Right now, I think an eye on the duration impact in the portfolio is going to be key in the near term. But in terms of allocation to munis overall, I think that most investors are still underweight. Most could benefit from the tax exemptions, especially for the advisors with a higher net worth clientele in high tax states across the country.

I do think that it is an asset class to hold for the long term, which will help mitigate some of the volatility investors may experience. We have examples where we show just the holding period returns, where you rarely have had two years in a row where you have negative returns. So having a time horizon and being in the market for more than a short-term trade, that's important too. Because this is an investment vehicle, I wouldn't call it a trading vehicle. It allows us to use those levers that we just described to strive to achieve those returns over time. That's how I would view the best way to use the asset class, and TAXF is a great way to access it.

ETF TRENDS

by EVAN HARP

NOVEMBER 17, 2021

How Muni Bond Interest Can Trigger Medicare Premium Hikes.

KEY POINTS

- There's been record demand for U.S. municipal bond funds in 2021 with an estimated \$85.36 billion in net inflows through September.
- However, tax-free muni bond interest may trigger Medicare premium hikes for higher-income investors.

As investors flock to municipal bonds, also known as muni bonds, the tax-free interest may trigger a costly surprise for higher-income retirees.

There's been record demand for U.S. municipal bond funds in 2021, with an estimated \$85.36 billion in net inflows through September, according to Refinitiv Lipper data.

While demand slid from August through October, investors poured back into muni bonds in November, despite Democrats' stalled attempts to increase taxes on the wealthy.

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S&P U.S. Public Finance Rating Activity, October 2021.

View the S&P Report.

18 Nov, 2021

S&P U.S. Not-For-Profit Health Care Outstanding Ratings And Outlooks As Of Sept. 30, 2021.

View the S&P Report.

18 Nov, 2021

Pension Cash Dwindles, Risking Liquidity Crunch.

Cash allocations have dropped to a seven-year low, with pensions seeking greater returns in private markets

Bigger private-market bets, inflation fears and a surge of retirees are putting public retirement funds at risk of a cash crunch that would force them to sell assets at losses to pay pension checks.

Cash allocations have dropped to a seven-year low at the funds that manage more than \$4.5 trillion in retirement savings for America's teachers, police and firefighters. Public pension funds, which have increasingly turned to illiquid private markets to drive up returns, are now aiming to keep about 0.8% of their holdings in cash, according to data from the Boston College Center for Retirement Research.

These funds are managing a juggling act faced by many institutional and household investors who want to put their money to work but also want easy access to it in a pinch.

Continue reading.

The Wall Street Journal

By Heather Gillers

Nov. 22, 2021 5:30 am ET

MTA Fares Stay Put And Louisiana Rejects JP Morgan (Radio)

Joe Mysak, Editor of Bloomberg Brief: Municipal Market, discusses the latest muni news including MTA fares and JP Morgan's comments on guns affecting a potential deal with Louisiana. Hosted by Paul Sweeney and Matt Miller.

Listen to audio.

Bloomberg Radio

Nov 19, 2021

Investors Still Flocked to Muni Bonds in November.

Riding on the optimism of passing the infrastructure package through the House of Representatives, investors piled into municipal bonds during the month of November.

"There's been record demand for U.S. municipal bond funds in 2021, with an estimated \$85.36 billion in net inflows through September, according to Refinitiv Lipper data," CNBC reports. "While demand slid from August through October, investors poured back into muni bonds in November, despite Democrats' stalled attempts to increase taxes on the wealthy."

The interest in municipal bonds ramped up over the past couple of weeks before culminating in the trillion-dollar infrastructure package being signed into law. However, the package may have snubbed the municipal debt market, but it hasn't stopped investors in their tracks just yet.

"The municipal market has largely been left out of the infrastructure package signed by President Biden Monday, as well as Democrats' follow-up social-spending and climate proposal, disappointing investors looking to buy new bonds and local governments trying to manage their debt loads," a Wall Street Journal report notes. "The package could still help strengthen city and state balance sheets, another possible reason for investor optimism."

Continue reading.

ETF TRENDS

by BEN HERNANDEZ

NOVEMBER 19, 2021

Federal Infrastructure Funds Lessen Public Utility Operating Risk: Fitch

Fitch Ratings-New York/Austin-10 November 2021: The \$1.2 trillion Infrastructure Investment and Jobs Act (IIJA), which will soon be signed by President Joseph Biden, includes significant capital funding for utilities to address much needed remediation and resilience projects that will update and replace aging infrastructure and reduce operating risk, Fitch Ratings says. Access to grants and low-cost financing under the IIJA lowers a utility's cost burden and reduces the need to rely on rate increases to cover costs, which alleviates affordability pressures on the rate base.

With more resilient systems, utilities will be better positioned to mitigate increasing weather and cybersecurity threats and avoid more significant costs in the future. While increased capital spending generally improves a utility's lifecycle ratio and annual capex/depreciation, we do not expect ratings upgrades in the near-term based solely on any improvement in these metrics.

The total \$55 billion available to water utilities is unprecedented and addresses material infrastructure needs that accumulate as systems age. The IIJA adds over \$23 billion for both the Drinking Water State Revolving Fund (SRF) and the Clean Water SRF to fund water projects at lower interest rates, resulting in lower debt carrying costs. Funding will provide water and wastewater utilities essential capital funding for remediation of lead service lines (\$15 billion) and PFAS and other contaminants, including \$5 billion through SRFs and \$5 billion through the grant program for small and disadvantaged communities.

Many of the provisions in the IIJA are intended to broaden utilities' water portfolios, including \$100 million in competitive grant funds for water storage projects. Water infrastructure in the western US will receive a separate pool totaling \$8.3 billion. Over the medium to long term, these funds will help utilities in the west and southwest fund water storage and alternative water supply projects, such as water recycling, aquifer storage recovery and desalination, offsetting some of the supply pressures experienced due to prolonged drought conditions. The Drought Contingency Plan is also set to receive \$300 million under the IIJA to address drought risks to the Colorado River water supply.

IIJA moneys supplement Local Fiscal Recovery Funds for state, local, territorial and tribal governments under the American Rescue Plan Act that may be spent on broader needs and initiatives. A significant portion of these funds are expected to be spent on water and sewer infrastructure.

Water affordability is supported by the Low Income Water Assistance pilot program. This has limited benefit for most of our rated credits, which do not see material nonpayment or have a significant number of customers that would qualify.

Public power utilities will have access to funds that will provide necessary investment in grid resiliency, transmission and cybersecurity, allowing systems to limit incremental borrowings and moderate financial leverage. The most significant amount, \$10 billion, is dedicated to strengthening the electric grid's resilience against extreme weather events, and another \$3 billion is available to help increase grid flexibility to respond to events that cause demand volatility. Hydropower projects will receive a boost, with incentive payments in the amount of \$628.6 million to help fund hydroelectric capital and efficiency improvements.

Funds are also available to assist public and private entities affected by cyberattacks, with an additional \$250 million specifically for rural electric cooperatives or county-owned utilities to boost cybersecurity and respond to cyber threats.

Congress will continue discussions on the broader Build Back Better Act (BBBA) later this month. The BBBA currently includes additional public utility funding, particularly for disadvantaged and rural communities to replace lead service lines. Expansion of clean energy tax incentives are also part of the proposal.

The Path To Decarbonization

Key Takeaways

- Although the U.S. electric utility sector has reduced carbon emissions over the past decade, much work remains to be done.
- Preserving credit quality will require public power and electric cooperative utilities to maintain affordable rates and provide reliable service as they transition from carbon-based power resources.
- To achieve affordability and reliability goals, utilities need to identify economical solutions that mitigate the intermittency of renewable resources and their sizable spatial requirements.

Continue reading.

8 Nov, 2021

Fitch: Infrastructure Bill Could Spur Overdue Road, Bridge Repairs

Fitch Ratings-New York-09 November 2021: The Infrastructure Investment and Jobs Act (IIJA) provides US state and local governments with important funding to accelerate efforts to address repairs and replacement of aging and failing transportation infrastructure, Fitch Rating says. The roughly \$1 trillion bill passed by the House of Representatives on Friday and headed to the President's desk includes \$110 billion for roads and bridges and \$39 billion for transit systems. Federal spending can boost state and local transportation improvement efforts already underway, or potentially spur new initiatives.

State and local governments own and maintain nearly the entire inventory of such transportation assets. Assessment of the condition and necessary maintenance costs for these assets is opaque and inconsistent across governments, with very few providing a thorough and current accounting of full needs.

For the past several years, the National League of Cities' Fiscal Conditions Report has indicated that infrastructure funding is among the main factors negatively affecting budgets. While the IIJA will help state and local governments address key infrastructure funding gaps, the substantial investments are one-time in nature, and responsibility for long-term, sustainable transportation funding remains with state and local governments.

Continue reading.

Fitch: Federal Infrastructure Funds Lessen Public Utility Operating Risk

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Key Programs From Landmark \$1.2 Trillion Infrastructure Act.

Last Friday the \$1.2 trillion bipartisan Infrastructure Investment and Jobs Act ("Infrastructure Act"),

which passed the Senate on August 10, 2021, was passed in the House. The \$1.2 trillion Infrastructure Act includes \$550 billion in new funding for private and public sector initiatives related to energy, transportation, water, manufacturing, technology, and environmental infrastructure.

The \$550 billion in new spending includes: \$110 billion for roads, bridges, and major projects; \$66 billion for passenger and freight rail; \$65 billion for broadband; \$65 billion for power and grid; \$55 billion for water infrastructure; \$47.2 billion for resiliency projects; \$39.2 billion for public transit; \$25 billion for airports; \$21 billion for addressing legacy pollution; \$16.6 billion for ports and waterways; \$11 billion for safety projects; \$8.3 billion for western water infrastructure; \$7.5 billion for clean school buses and ferries; \$7.5 billion for electric vehicle charging; and \$1 billion for reconnecting communities.

Now that the Infrastructure Act has been passed, Federal agencies will be tasked with shaping and administering a substantial number of programs related to the Act. For many of the programs, agencies will develop specific eligibility requirements, funding procedures, and compliance and reporting standards. In order to facilitate these processes, federal agencies may seek public comment and input on the administration of these programs. Continuing to monitor these developments is essential for businesses, nonprofits, local governments, and Tribal governments seeking to utilize these programs.

Below are some of the key programs in the Infrastructure Act:

Roads, Bridges, & Major Projects

- \$36.735 Billion Bridge Grant Programs
- \$7.5 Billion Rebuilding American Infrastructure with Sustainability and Equity Grants
- \$5 Billion National Infrastructure Project Assistance Grant Program
- \$3.2 Billion Infrastructure for Rebuilding America Grant Program
- \$1.25 Billion Appalachian Development Highway System Formula Program
- \$1 Billion Culvert Removal, Replacement, and Restoration
- \$500 Million Surface Transportation Private Activity Bonds

Passenger and Freight Rail

- \$36 Billion Fed-State Partnership Intercity Passenger Rail
- \$16 Billion Amtrak National Network
- \$6 Billion Northeast Corridor Grants
- \$5 Billion Consolidated Rail Infrastructure and Safety Improvement
- \$3 Billion Railroad Crossing Elimination Program

Broadband

- \$42.45 Billion Broadband Equity, Access, and Deployment Program
- \$14.2 Billion Affordable Connectivity Program
- \$2.75 Billion Inclusive Digital Equity Grant Programs
- \$2 Billion Tribal Grants
- \$1 Billion "Middle Mile" Broadband Infrastructure Grant Program
- \$600 Million Private Activity Bonds

Power and Grid

• \$5 Billion - Preventing Outages and Enhancing the Resilience of the Electric Grid

- \$5 Billion Electric Grid Reliability and Resilience Research, Development, and Demonstration
- \$3.5 Billion Establish Four Regional Direct Air Capture Hubs
- \$3 Billion Deployment of Technologies to Enhance Grid Flexibility
- \$3 Billion Battery Material Processing Grant Program
- \$3 Billion Battery Manufacturing and Recycling Grant Program
- \$2.5 Billion Transmission Facilitation Program
- \$2.5 Billion Carbon Storage Validation and Testing Program
- \$2.1 Billion Infrastructure Finance and Innovation Act Program for Carbon Dioxide Transportation Projects
- \$2 Billion Pumped Storage Hydropower Wind and Solar Integration and System Reliability Initiative
- \$1 Billion Clean Hydrogen Electrolysis Program Research and Development Program
- \$750 Million Advanced Energy Manufacturing and Recycling Grant Program
- \$553.6 Million Maintaining and Enhancing Hydroelectricity Incentives
- \$500 Million State Energy Program
- \$500 Million Clean Hydrogen Manufacturing and Recycling Research and Development Program
- \$500 Million Clean Energy Demonstration Program on Current and Former Mine Land
- \$310 Million Carbon Utilization Grant Program
- \$250 Million Rural and Municipal Utility Advanced Cybersecurity Grant And Technical Assistance Program
- \$250 Million Enhanced Grid Security
- \$200 Million Electric Drive Vehicle Battery Recycling and Second-life Applications Program

Water Infrastructure

- \$23.426 Billion Drinking Water and Clean Water State Revolving Funds
- \$13.8 Billion Increased State Revolving Fund Authority
- \$10 Billion Perfluoroalkyl or Polyfluoroalkyl Substance Treatment
- \$3.5 Billion Indian Health Service Water and Sewer
- \$2.5 Billion Indian Water Rights
- \$1 Billion Bureau of Reclamation Water Programs

Resiliency

- \$3.5 Billion FEMA Flood Mitigation Assistance Program
- \$1.7 Billion Indian Health Services Sanitation Facilities Construction Enhancement
- \$1 Billion FEMA Building Resilient Infrastructure and Communities Program
- \$1 Billion State, Local, Tribal, and Territorial Cybersecurity Grant Program
- \$500 Million Forest Service Community Defense Grants
- \$500 Million Cyber Response and Recovery Fund

Public Transit

- \$8 Billion Capital Investment Grants Program
- \$5.25 Billion Low-No Program for the Purchase or Lease of Low-emission Transit Buses
- \$4.758 Billion State of Good Repair Grants Program
- \$2 Billion Transit Accessibility for Seniors and Persons With Disabilities Program

Airports

- \$15 Billion Airport Improvement Program
- \$5 Billion Airport Terminal Program

• \$5 Billion - FAA Facilities and Equipment

Addressing Legacy Pollution

- \$11.293 Billion Abandoned Mine Land Reclamation Fund
- \$4.7 Billion Orphaned Well Site Plugging, Remediation, and Restoration
- \$3.5 Billion Superfund Projects
- \$3 Billion Brownfields Grants

Ports and Waterways

- \$5.15 Billion Army Corps of Engineers Construction
- \$4 Billion Army Corps of Engineers Operations and Maintenance
- \$3.85 Billion GSA/CBP Land Ports of Entry Modernization and Construction
- \$2.25 Billion DOT Port Infrastructure Development Program
- \$912 Million Ferry Boat and Terminal Construction
- \$429 Million U.S. Coast Guard Unfunded Priority Infrastructure
- \$400 Million Reduction in Truck Emissions at Ports

Safety

- \$4 Billion Safe Streets For All Program
- \$1.1 Billion NHTSA Highway Safety Programs
- \$1 Billion Pipeline and Hazardous Materials Safety Administration Modernization
- \$500 Million SMART Grant Program
- \$467.5 Million Motor Carrier Safety Assistance Program
- \$200 Million High Priority Grant Program

Western Water Infrastructure

- \$3.2 Billion Aging Infrastructure
- \$1.15 Billion Water Storage, Groundwater Storage, and Conveyance Projects
- \$1 Billion Water Recycling and Reuse Projects
- \$1 Billion Rural Water Projects
- \$500 Million Dam Safety Projects
- \$400 Million WaterSMART Water and Energy Efficiency Grants
- \$300 Million Drought Contingency Plan

Clean School Buses & Ferries

- \$5 Billion Clean School Bus Program to Reduce Emissions
- \$1.25 Billion Federal Transit Administration's Passenger Ferry Grant Program
- \$1 Billion Establishment of Basic Essential Ferry Services
- \$250 Million Grant Program for the Purchase of Electric or Low-emitting Ferries

Electric Vehicle Charging

• \$7.5 Billion – Funds for Alternative Fuel Corridors and to Build Out a National Network of Electric Vehicle Charging Infrastructure

Reconnecting Communities

• \$500 Million - Reconnecting Communities Pilot Program

November 8 2021

Housing Provision in Reconciliation Bill Eases Private Activity Bond Cap.

States would enjoy more private activity bond volume flexibility under an affordable housing provision in the Build Back Better bill.

The legislation would reduce the so-called financing test for tax-exempt private activity bonds to 25% from 50%. Lowering the threshold would free up states' private activity volume for more affordable housing, or any other projects eligible for PABs financing.

The threshold provision means developers would only have to use 25% of tax-exempt PABs in their capital structure instead of 50% to qualify for the 4% low-income housing tax credits that are key to the economic feasibility of many affordable housing developments.

"It is a huge change for affordable housing," said Jennifer Schwartz, director of tax and housing advocacy for the National Council of State Housing Agencies. "It's really going to significantly extend the amount of affordable housing that we'll be able to build."

States like California and New York that regularly hit their PABs cap would especially benefit from the lower threshold as it will free up PABs volume.

"Those states that are cap-constrained are going to have a lot more bond cap for other priorities," Schwartz said.

There are 20 states that are currently oversubscribed with their volume cap, according to professional services organization Novogradac, which has been analyzing the low-income housing provisions in the legislation. Another 23 states are undersubscribed and seven are at parity, the group said.

The latest version of the \$1.75 trillion Build Back Better legislation features a swath of housing-related provisions that together would mean the creation of 936,900 additional affordable homes through 2031, according to Novogradac.

The lowered threshold provision is the largest driver of that new production, and would mean 712,400 more units, the group estimates.

The 4% housing tax credit is the "real economic kicker" for affordable housing, said Kyle Richard, an attorney with Foster Garvey's Public Finance & municipal Government Practice who has been tracking bond-related provisions in the Build Back Better bill.

"By making it so you only have to finance the project with 25% PABs, essentially that makes it so that you have to hit less volume cap so should be more volume cap available for everybody," Richard said. "Lowering the threshold also means you have tons more flexibility for how you build your capital structure."

Like other affordable-housing proposals, the lower threshold was stripped out of an earlier version of the Build Back Better bill but added back in the third version that the House Rules Committee released on Nov. 3.

The House could consider Build Back Better as soon as next week. The Senate would then take up the bill and is expected to impose its own changes.

"The provisions in the bill on the housing credit are very popular," Schwartz said. "I don't see these as being anything that would be targeted to be stripped out."

By Caitlin Devitt

BY SOURCEMEDIA | MUNICIPAL | 11/11/21

Infrastructure Bill Becomes Law.

President Joe Biden Monday signed into law a \$1.1 trillion infrastructure package that will infuse billions into state and local governments.

"We're taking a monumental step forward to build back better as a nation," said Biden at a White House ceremony attended by lawmakers, governors, mayors and others. "Things are going to turn around in a big way."

The bipartisan Infrastructure Investment and Jobs Act, approved by the House in November and the Senate in August, features \$550 billion for reauthorization of surface transportation infrastructure spending and another \$550 billion for assets ranging from bridges, drinking water, public transit, broadband, rail, electric vehicle chargers, ports and airports.

Biden said the package marked the "most significant investment in roads and bridges in 70 years, most significant investment in rail in 50 years and in public transit ever."

House Speaker Nancy Pelosi, speaking at the signing ceremony, called the bill the "biggest, boldest investment in our country's history."

Supporters say the program will generate thousands of new jobs, grow the economy and make the US more globally competitive.

For the municipal bond market, the infusion of federal money is expected to boost state and local credits. It may also accelerate local projects and lift new money supply as issuers take advantage of the federal cash by borrowing to jumpstart their own projects, said market participants said. Municipal Market Analytics projects the new law could boost 2022 new-money issuance to more than \$300 billion, up from a pre-infrastructure bill estimate of \$275 billion.

The package also doubles private activity bond volume for surface transportation projects to \$30 billion from \$15 billion, allows the use of PABs for broadband and carbon capture projects, and features other provisions that are expected to boost public private partnerships.

Biden has appointed former New Orleans Mayor Mitch Landrieu as senior advisor to oversee implementation of the infrastructure program. The president Monday also signed an executive order outlining six priorities for implementation – including building resilient infrastructure that can protect against climate change, effective coordination with state, local, tribal and territorial governments and equitable investment of the dollars – and establishes an Infrastructure

Implementation Task Force.

"Today is a monumental day for infrastructure across the country. We look forward to working with the administration to track the funds and get the infrastructure investments where they need to go," said Emily Brock, the Government Finance Officers Association's federal liaison.

The Department of Transportation will allocate the money. In a Nov. 8 White House briefing, Transportation Secretary Pete Buttigieg said the agency would focus on supporting projects that show "economic strength, safety, climate, equity, and preparing for the future."

The largest states will get the most money under the new law. California would see \$44.56 billion under the new law. Texas would see \$35.44 billion and New York is slated to receive just under \$27 billion.

The legislation will be paid for with various revenue streams, including more than \$200 billion in unspent coronavirus funds.

The bill had been held up for weeks in the House as moderate and progressive Democrats hammered out differences on a companion bill, the \$1.75 trillion Build Back Better legislation. With the infrastructure bill now law, all eyes will turn to Build Back Better, which the House has said it may vote on as early as this week. Moderate Democrats want to wait for a full score from the Congressional Budget Office, which has said it would have by Friday.

By Caitlin Devitt

BY SOURCEMEDIA | MUNICIPAL

Construction Ahead: Roughly \$1 Trillion Infrastructure Act Tackles Backlog And Future Risks

Key Takeaways

- The Infrastructure Investment and Jobs Act will address traditional infrastructure needs across the U.S., supporting a continued economic recovery.
- Transportation aspects of the act will be the most visible to the average citizen with money for roads, bridges, airports, transit and rail.
- The bill targets both long-standing infrastructure needs and risks related to resiliency, energy transition, electric charging stations, and cybersecurity.

Continue reading.

10 Nov, 2021

<u>S&P U.S. Transportation Infrastructure Sector Update And Medians: U.S. Airport Sector View Is Now Positive</u>

Key Takeaways

- We are revising our U.S. airport sector view to positive from stable based on improving aviation industry conditions. This improvement is reflected in the strong rebound of U.S. domestic passengers in recent months, stabilization of airline credit conditions, massive federal assistance provided to the sector, and recovery in airports' revenue-generating capacity and rate-setting flexibility.
- Our airport sector median analysis and the modest degree of credit erosion across the sector highlight the significance of \$15 billion-\$20 billion in special federal COVID-19 relief grants, which operators used to pay debt service expenses and operating costs while preserving unrestricted cash reserves comparable with pre-pandemic levels. Separately, the recent passage of the \$1.2 trillion Infrastructure Investment and Jobs Act will provide another \$25 billion for the airport sector to fund capital projects over the next five years.
- Our analysis of 2020 airport medians revealed the effects of airport management actions taken to limit the financial implications of the precipitous drop in passenger traffic, with median debt service coverage (DSC; S&P Global Ratings-calculated) declining to an adequate 1.1x in 2020 from a strong 1.6x in 2019, while median liquidity levels fell by less than 6% to 489 days and median debt outstanding increased 21% to approximately \$840 million.
- We expect the uneven enplanement recovery led by the domestic and leisure market segments will smooth out as business and international travel returns, aided by the lifting of certain travel restrictions on China, India, and much of Europe effective Nov. 8, 2021.
- Airports and related special facility issuers that demonstrate recoveries generally better than our activity estimates or demand levels sufficient to produce financial metrics we consider consistent with a higher rating on a sustainable basis are more likely to receive upgrades in the near term.
- We believe the experience and knowledge gained from handling the complex set of challenges from the severity of the COVID-19 pandemic will better prepare airport management teams and various stakeholders in addressing future shocks.

Continue reading.

10 Nov, 2021

America Has an Infrastructure Bill. What Happens Next?

Friday afternoons are typically the place to hide bad news, but that wasn't this.

Late Friday, November 5th, the House of Representatives passed the Senate version of the Infrastructure Investment and Jobs Act (IIJA). The bill now goes directly to President Biden's desk, where it will certainly become law. America finally has a generation-defining infrastructure bill—and if the reconciliation budget comes through, too, America will begin a building spree larger than what happened during the New Deal.

When landmark legislation like IIJA gets passed, it's easy to overemphasize victories on Capitol Hill. But that's not the case for infrastructure. Passing IIJA is only the end of the beginning.

Continue reading.

The Brookings Institution

by Adie Tomer, Caroline George, Joseph W. Kane, and Andrew Bourne

Tuesday, November 9, 2021

Fitch: Personal Income Spike Leads to Fall in Liability Metric for U.S. States

Fitch Ratings-New York-08 November 2021: Liability metrics for U.S. states fell for a fifth straight year in fiscal 2020, with a surge in personal income the primary catalyst, according to Fitch Ratings in its latest annual report. Actual liabilities remain largely unchanged over the past five years, however, indicating slow progress in addressing outstanding states' outstanding long-term obligations.

Federal measures to support individuals, businesses, and the economy at large helped spark the largest median state personal income jump in 14 years (6.3%). This resulted in Fitch-adjusted net pension liabilities (NPLs) as a percentage of personal income declining to 4.7% in fiscal 2020, from 5.2% as of fiscal 2019 across all states.

"Rapid personal income growth is likely to continue in 2021, given additional federal pandemic aid enacted early in 2021 and the broader economic recovery, with gains in 2022 likely to slow as federal aid expires," said Senior Director Doug Offerman. "Combined with rebounding investment markets, state liability burdens are likely to see further near-term declines."

Although their rankings shifted slightly compared to last year, the five states with the highest burdens remain unchanged, including Connecticut, Illinois, Hawaii, New Jersey and Alaska. Except for Alaska, the highest burden states have long-term liabilities above 20% of personal income. Fitch's data also shows 43 states with carrying costs below 10% of governmental expenditures in fiscal 2020, which Fitch views as low. Two states (Connecticut, Illinois) have elevated carrying costs in excess of 20% of governmental expenditures.

"States by and large avoided reductions to pension contributions as they addressed budget gaps with surging revenues and federal relief limiting fiscal damage from pandemic shutdowns," said Offerman. "Solid contribution practices look to continue at least in the near term, given the expansive fiscal flexibility provided by the economic rebound and the continued availability of federal pandemic relief funds available to offset other state needs."

Over the five years since changes to pension accounting resulted in more consistent reporting, the ratio of state pension assets to liabilities has barely changed. Adjusted to reflect a standard 6% investment return, the ratio stood at 61.7% in fiscal 2020, up from 60.4% in fiscal 2016. The stability of this ratio over time suggests that the state pension changes intended to improve sustainability have not yet meaningfully lowered pension burdens.

"State Liability Burdens Shrink in Fiscal 2020" is available at www.fitchratings.com.

Media Relations: Sandro Scenga, New York, Tel: +1 212 908 0278, Email: sandro.scenga@thefitchgroup.com

Additional information is available on www.fitchratings.com

Sustainable Fitch ESG Encyclopedia.

The ESG Encyclopedia provides insights on the credit relevance and materiality of all sector specific environmental credit issues, including air quality, energy and fuel

management, water, and more.

This volume of Fitch's ESG Encyclopedia provides insights on the credit relevance and materiality of all sector specific environmental credit issues, namely:

- Greenhouse Heating Gas emissions and air quality
- Energy and fuel management
- Water
- · Biodiversity and waste
- Exposure to environmental impact

It explains how these issues can translate into relevant credit issues and materialise as credit risks. As such, it constitutes an absolute reference for investment professionals who need to integrate ESG in their credit investment or risk management processes.

Download Now

S&P U.S. Not-For-Profit Health Care Rating Actions, October 2021.

S&P Global Ratings affirmed 22 ratings without revising the outlooks and took 13 rating actions in the U.S. not-for-profit health care sector in October 2021. One of the affirmed ratings also was removed from CreditWatch with negative implications. There were 21 new sales in October including a rating initially assigned to Vanderbilt University Medical Center, Tenn. The 13 rating and outlook actions were comprised of the following:

- Three upgrades, including two stand-alone hospital and one health system;
- Two unfavorable outlook revisions (to negative from stable); and
- Eight favorable outlook revisions (seven to stable from negative and one to positive from stable).

The table below summarizes S&P Global Ratings' monthly bond rating actions for U.S. not-for-profit health care providers in October. We based the credit rating affirmations and rating actions on several factors within enterprise and financial profiles, including business position, utilization, financial performance, debt levels, bond-issuance activity, physician relationships, and the external regulatory and reimbursement environment. This also incorporates our stable sector view and our assessment of COVID-19, staffing pressures, economic developments, and market volatility.

Continue reading.

12 Nov, 2021

NASBO Issue Brief: Outcome of Ballot Measures in the 2021 General Election

Read the NASBO Issue Brief.

Fitch Ratings in a Pandemic: Responsive and Measured

View the Fitch Special Report.

Thu 11 Nov, 2021

Muni Bond Prices Rally After Infrastructure Bill Leaves Out Market.

Yield on a 10-year tax-exempt triple-A muni bond has fallen 8% since Oct. 28

Municipal bond prices rallied over the past two weeks as investors abandoned hopes for a flurry of new bonds from Congress's \$1 trillion investment in U.S. infrastructure.

The yield on a 10-year tax-exempt triple-A muni bond has fallen 8% since Oct. 28, according to ICE Data Services. Bond yields fall as prices rise.

The municipal market has largely been left out of the infrastructure package signed by President Biden Monday, as well as Democrats' follow-up social-spending and climate proposal, disappointing investors looking to buy new bonds and local governments trying to manage their debt loads. The package could still help strengthen city and state balance sheets, another possible reason for investor optimism.

Muni market wishlist items included in an earlier draft of included federally subsidized interest payments and a plan to restore the federal tax exemption for early refinancings.

"They left out the tried and true mechanism for building local infrastructure in America," said Ben Watkins, director of Florida's Division of Bond Finance.

In the long term, any investment in roads, sewers and trains is generally seen as good for the market since it helps boost municipal credit. The \$1 trillion package could also eventually lead to more bond issuance because some projects will receive partial, rather than full, federal support, and states and cities will need to pay for the rest.

"In many cases the local contribution will come from municipal bonds," said Patrick Brett, head of municipal debt capital markets at Citigroup and chair of the Municipal Securities Rulemaking Board, the muni bond industry's self-regulatory organization.

But any immediate market impact will be muted. Congress's decision to scrap the municipal bond proposals represents a move by federal officials toward paying directly for projects, rather than standing back and ensuring states and cities can borrow cheaply for infrastructure while leaving the details to the locals.

States, cities, counties and school districts borrow at reduced rates in the nearly \$4 trillion muni market because investors don't have to pay federal—and often state—taxes on the interest. Local officials retain wide discretion over the projects themselves.

A \$3.5 trillion package considered in the House Ways and Means Committee in September included a measure based on the 2009-10 Build America Bonds program. State and local governments sold taxable Build America Bonds to a wide pool of buyers and the federal government paid a portion of the interest cost. That program spurred a record \$273 billion in new borrowing in 2010, 54% higher

than the yearly average over the past decade.

"It's a great tool to have in the tool kit," said Dallas Chief Financial Officer Elizabeth Reich, who urged a congressional committee to revive the program in March. The Omni Hotel in downtown Dallas was financed with the help of \$388 million in Build America Bonds, Ms. Reich said.

Congress particularly disappointed participants in the supply-starved muni market with its decision not to restore municipal governments' ability to refinance debt early at tax-exempt rates. That tool was eliminated in the 2017 tax overhaul to save the federal government money and mitigate the cost of tax cuts.

As a result, the many municipalities that rescheduled debt payments amid a pandemic-induced cash crunch over the past two years had to refinance at higher taxable rates.

Before the 2017 law change, cities and states could use tax-exempt borrowing when they wanted to refinance before a bond's agreed-upon call date to cut interest costs or put off payments. They would issue a second set of tax-exempt bonds, invest the proceeds in safe, short-term securities, and then use those funds to make payments on the older bonds. It is a move that makes the most sense for borrowers when short-term rates are high relative to long-term rates.

But because both sets of bonds remained outstanding until the first set could be refinanced, and both provided investors with interest exempt from federal taxes, the federal government lost out on additional tax dollars. The Joint Committee on Taxation estimated that restoring advanced refunding would have cost the federal government \$15 billion over the coming decade.

Municipal borrowers, for their part, could likely have reduced their interest costs, the reason the eliminated bill provision was a favorite of city finance chiefs and state treasurers. Ms. Reich estimated that Dallas saved \$147 million with tax-exempt advanced refinancing between 2007 and 2017.

Money managers meanwhile said they would have welcomed an influx of new tax-exempt debt, even if it meant foregoing a bump in the value of their current holdings.

"You want to have a decent amount of supply to create a healthy market with opportunity," said Dan Solender, director of tax-free fixed income at asset manager Lord Abbett.

The Wall Street Journal

By Heather Gillers

Updated Nov. 15, 2021 4:35 pm ET

Muni Investors Stay Flexible As Rates Rise.

Summary

- Truly active managers shine in challenging investment environments, especially when they are given a flexible mandate.
- With tax-loss harvesting, active investors can deliberately sell at a loss to offset taxes on gains elsewhere in a portfolio.

• Rising rates may be less worrisome than expected, at least as far as muni investors are concerned.

Continue reading.

Seeking Alpha

Nov. 09, 2021

Supreme Court Wades Into Battle Between Billboard Advertisers and City Officials.

Industry seeks to lift limits on 'off-premises' signs

WASHINGTON—Supreme Court justices Wednesday stepped into an advertising industry battle that could reduce restrictions on billboards across the country.

At issue is a long-recognized difference between on-premises signs that flag a business or activity taking place at a specific location, and off-premises advertising to which most billboards are dedicated.

A billboard company in Austin, Texas, is challenging a local ordinance that makes such a distinction to restrict the proliferation of digital signs, arguing that the First Amendment precludes government from distinguishing between on- and off-premises locations.

The Austin municipal code prohibits converting conventional billboards to digital unless they are on the premises of the business or activity being advertised. Local billboard companies complain that the regulations amount to discrimination based on the content of the message, something government generally is forbidden to do. The city counters that the rules are based on where the signs are located and not what they say.

Justice Brett Kavanaugh said that adopting the advertisers' view could disrupt sign regulations around the country.

"Unlike some of our decisions, this decision is going to affect every state and local official around America," he said. "They spend a lot of money and a lot of time trying to figure out how to comply with the First Amendment implications of sign ordinances."

According to a brief filed by the National League of Cities, the U.S. Conference of Mayors and other organizations representing local government, laws in at least 30 states and in thousands of jurisdictions distinguish between on- and off-premises signs "out of legitimate concerns regarding public safety and local aesthetics."

A decision in the case, City of Austin v. Reagan National Advertising of Austin LLC, is expected before July.

Reagan National Advertising argues that the premises distinction is unconstitutional in light of the court's 2015 decision striking down a Gilbert, Ariz., ordinance that restricted noncommercial temporary signs, with an exemption for political messages but not religious ones. A federal appeals court in New Orleans agreed, siding last year with advertisers.

In its brief, Reagan National Advertising said that digital billboards are superior to the conventional variety. "Digital billboards offer more opportunities to communicate with the public, because multiple messages can be displayed at a given time and updated instantly without the physical labor required to change a traditional billboard," the company said.

The city said in its brief that "signs can cause esthetic harms by their size, number, and placement. They can also pose traffic dangers by distracting drivers and obscuring views. Billboards, because of their size, prominence, and attention-getting designs, amplify those concerns. And digital billboards take those concerns to new levels."

At Wednesday arguments, justices expressed doubts that distinguishing between on- and offpremises businesses raised First Amendment concerns akin to discrimination regarding political, religious or artistic speech.

Chief Justice John Roberts said that treating the premises distinction as a content regulation could imperil the Highway Beautification Act of 1965, a cornerstone of the America the Beautiful program that limits outdoor advertising.

The highway law, a legacy of the late first lady Lady Bird Johnson, makes several distinctions among messages, permitting those from nonprofit groups advertising free coffee for weary motorists, and signs indicating lodging, gas stations, restaurants and other information useful to travelers.

The beautification act includes "five sign provisions, and under your theory, I suppose they would be unconstitutional," the chief justice told Kannon Shanmugam, the lawyer representing Reagan National Advertising.

Mr. Shanmugam said that it was possible the government could justify Highway Beautification Act distinctions enough to survive First Amendment scrutiny.

Several justices asked how the rule could apply to different messages.

"Let's say a sign just says 'Black Lives Matter,'" said Justice Neil Gorsuch. That wouldn't be offpremises because it doesn't mention a location. "But what if Black Lives Matter has a local office and it isn't there?" he continued. "How about if it says 'Black Lives Matter, Do Something About It,' anticipating an upcoming rally, but no information is provided?" he said. Alternatively, he posited, what if it did include the location?

"Somebody's going to have to read this and decide which side of the line these four examples fall on," Justice Gorsuch said.

Justice Elena Kagan said that it was "formally true" that city officials would need to examine a sign's content to determine whether it referenced an on-premises activity. On the other hand, she said, "there are some laws that sort of scream out not to worry in terms of any First Amendment values."

The Wall Street Journal

By Jess Bravin

Nov. 10, 2021 5:51 pm ET

Investment In Stadiums And Municipal Bonds (Radio)

Joe Mysak, Editor of Bloomberg Brief: Municipal Market, discusses, his recent column on the Buffalo Bills stadium, and other issues related to municipal bonds in Bloomberg Market's "Munis In Focus". Hosted by Matt Miller and Taylor Riggs.

Play Episode

Bloomberg Radio

November 12, 2021

Junk Munis Seeing Best Outperformance Since 2012 as Cash Returns.

- · Second-biggest inflow ever in high-yield munis extends advance
- Investors 'want to be involved' after seeing sector's strength

Junk-rated municipal debt is extending its biggest outperformance in almost a decade thanks to one of the largest weekly inflows ever seen into the sector.

Investors added \$1.2 billion to high-yield muni mutual funds in the week ended Wednesday, second only to a slightly bigger intake in April, according to Refinitiv Lipper US Fund Flows data.

The rush of money, coming after Treasury yields appeared to stabilize below their October peak, marks a shift from the lackluster demand and even periods of outflows that the riskiest part of the municipal market saw in prior months.

"The pivot from demand sluggishness at the end of October back to strong inflows/demand over the past week has been pretty abrupt," said Gabriel Diederich, a portfolio manager at Robert W. Baird & Co.

Junk munis are poised to gain for a third straight week, something they haven't done since July. The segment has earned 7.2% this year, compared with 1.1% for the overall market for state and local-government debt, Bloomberg index data show. That performance gap is the widest since 2012.

With most of the fixed-income universe posting losses in 2021, munis have been a haven. They've lured money as the economy has recovered from the pandemic, federal relief has flowed to municipalities and as lawmakers in Washington debated steeper taxes on higher earners. That backdrop has benefited the riskiest debt most.

'Garnering Attention'

"The big outperformance that we've seen this year is garnering attention," said Kathleen McNamara, senior municipal strategist at UBS Global Wealth Management. "Muni investors chase returns, they saw how well muni high-yield has done and they want to be involved."

McNamara said that after yields on junk munis rose from the record lows seen this year, investors who had been waiting on the sidelines returned to the market. Then, after the securities staged a rebound this month, more buyers wanted to participate given that municipal credit remains strong.

There's also the fact that munis have entered a "stronger technical backdrop" in November with the

calendar of new-issue sales dwindling before year-end and the need to start positioning for 2022, said Terry Goode, a senior portfolio manager at Allspring Global Investments.

That may benefit some high-yield bond sales on the horizon in the weeks ahead.

A conduit borrower in Phoenix, Arizona, is expected to sell \$256.7 million of unrated, tax-exempt bonds to finance the construction of a hotel and conference center in Puerto Rico. Separately, Grand Canyon University in Arizona is slated to offer \$1.3 billion of taxable, junk-rated bonds next week.

Bloomberg Markets

By Danielle Moran

November 12, 2021, 10:11 AM PST

Are We Due for a 'Golden Age' of Public Finance as the Infrastructure Bill Crosses the Finish Line?

There may be a small uptick in muni bond issuance, but perhaps not what bond buyers wanted

The bipartisan infrastructure bill passed late Friday by the House of Representatives promises hundreds of billions for a once-in-a-generation rebuild of America's aging and neglected built environment. But for the municipalities that stand to benefit from the funds, and the bond market where such projects are normally financed, it may not move the needle much, public-finance experts say.

President Joe Biden is likely to sign into law this week the Infrastructure Investment and Jobs Act, including \$550 billion in new federal investment in the kinds of projects cities, counties and states fund and manage.

The biggest boost will go to spending on roads and bridges, power systems, rail, broadband, water systems and public transit, according to an analysis from Moody's Analytics. An overview of some specific initiatives, from the National League of Cities, is here.

Following the \$260 billion American Rescue Plan by about six months, it extends what Tom Kozlik, head of municipal research and analytics at Hilltop Securities, calls a "golden age" of U.S. Public Finance.

"I say we're entering one of the more positive landscapes for municipal bond issuance that we've seen for a long time, and I've been pretty skeptical about this," Kozlik told MarketWatch. "Don't get me wrong, there is still uncertainty out there. But I think the Rescue Plan really put public finance entities in a much different place after this recent financial uncertainty compared to what we saw 10 years ago."

Yet Kozlik thinks total muni bond issuance may edge up only fractionally next year — to perhaps \$475 billion -\$500 billion, from roughly \$460 billion this year --- hardly a hearty endorsement of the transformative power of bonds to rebuild America, let alone enough to feed a market starved for supply.

As he wrote in a research note after Friday's House vote, the \$550 billion to be spent pales in comparison to the American Society of Civil Engineers 2021 Infrastructure Report Card, which identified a \$2.59 trillion infrastructure gap in the U.S over the next decade.

"There's never been an infrastructure program in this country that doesn't feature the states and locals," said John Mousseau, president and CEO of Cumberland Advisors.

Mousseau thinks the legislation may, on the margin, boost supply, but notes that the federal COVID-19 responses that have been most effective have been those that "got money out the door" quickly, like the CARES Act, in contrast to those that moved slowly, like rental assistance programs.

"Being able to streamline the money that's been approved is just as important as getting new money out," Mousseau said in an interview.

Indeed, multiple city managers have told MarketWatch that their <u>local infrastructure needs are so</u> <u>great</u> that they moved as quickly as possible to designate some of the spring's federal dollars to such projects rather than waiting for Congress to pass a stand-alone infrastructure bill.

It's hard to see anything that might dent demand for muni bonds, which has been red-hot, Kozlik noted. "The Rescue Plan act really put a floor under municipal credit at least for a couple years," he said.

And because the spending in the infrastructure bill is spread over a few years — which is what will likely keep bond issuance muted — it will be helpful for state and local budgets for some time.

Exchange-traded funds tracking muni bonds were slightly lower Monday, with the iShares National Muni Bond ETF MUB, 0.18% down 0.1% in the afternoon, and the Invesco Taxable Municipal Bond ETF BAB, 0.63% off 0.5%.

MarketWatch

By Andrea Riquier

Nov. 8, 2021

Washington Social-Spending Bill Snubs Municipal Bonds. Will the Market Care?

'Munis are going to muni,' says one expert

Provisions that would have benefited the state and local governments that issue municipal bonds have been axed from the \$1.75-trillion social spending bill now being debated by Congress, a step some public finance experts say won't help communities struggling to recover from the COVID pandemic, but one that's unlikely to move the needle on an already overheated muni bond market.

The Build Back Better program framework, released in late October by President Joe Biden, omitted the restoration of some forms of debt refinancings and a direct-pay bond program, among other industry priorities.

The framework also added a 15% corporate minimum tax that might hit purchasers of tax-exempt

bonds, a step particularly unpopular with industry groups. "The costs will be significant and, again, will be borne by our communities, not by the holders of the bonds," said a group of lobbyists in a letter sent to Congress on Monday.

But some public-finance observers are more sanguine. "Munis are going to muni no matter what's going on," said Eric Kazatsky, head of municipal strategy for Bloomberg Intelligence. "There's still going to be a minimum amount of spending for good repair, to keep the lights on, for states and locals. The muni-friendly provisions in the bill would have been an accelerant thrown onto that."

The refinancing provisions, known as "advance refundings" in bond-market jargon, were taken away from tax-exempt issues in the 2017 Tax Cuts and Jobs Act legislation. (Municipalities may choose to issue bonds that are exempt from taxes for the investors who buy them, or those that can be taxed.)

The restoration of tax-exempt advance refunding was the most critical provision in earlier versions of the bill, said Matt Fabian, a partner with Municipal Market Analytics. MMA estimates that issuers have paid an additional \$8-10 billion in extra interest costs since January 2020 because those refundings have been restricted.

"This is Congress pushing the cost of its savings downhill to cities and states," Fabian told MarketWatch.

In contrast, Kazatsky argued that the loss of a revitalized direct-pay bond program akin to the Build America Bonds introduced after the Great Recession is the bigger hit. Build America Bonds were taxable, and their presence helped attract many nontraditional investors, for whom the tax exemption wasn't key, into the muni market.

Right now, the landscape for state and local governments is tough, Fabian said. Many are still trying to determine whether their current revenue mix reflects the economy they have now, or the one they had before the pandemic.

"Issuers are unsure of the future, their current financials are volatile which, in their world, feels untrustworthy, and they're coming off 10 years of austerity," Fabian said. In that sense, even just a little more acknowledgment from Congress of problems on the state and local level would be helpful, he added.

"Partisan politics has made everything more tenuous than it used to be. Politicians have had to become more defensive about investment, even though long-term borrowing needs are probably as high as they've ever been because of climate change and deferred maintenance."

In a series of recent interviews with MarketWatch, several city managers said one of the great advantages of the massive amounts of federal stimulus directed their way was the ability to avoid issuing debt.

See: 'Infrastructure week' is here: Local governments aren't waiting for Congress any more

That stimulus has helped offset some of the uncertainty from Washington, Kazatsky said in an interview. And it's a big reason municipal issuance has been relatively tepid, even at a moment when interest rates aren't likely to go any lower.

That's happening even as demand is through the roof, with muni-bond inflows notching multiple weekly records this year and causing one mutual fund to close to new investors, while also pushing yields to among all-time lows.

"It's hard to get too worried about anything for this sector right now," Fabian said.

MarketWatch

Nov. 5, 2021

Munis and the Fed: Municipal Bonds are in Good Shape Coming into 2022: BlackRock's Peter Hayes

Watch video.

YouTube Finance

Nov 4, 2021

Market Expert: Social Spending Provisions Won't Stop Municipal Bonds

Municipal bonds can provide investors with low credit risk, yield, and tax-free income, but will a social spending bill quash their appeal in the debt markets?

According to a MarketWatch report, "Provisions that would have benefited the state and local governments that issue municipal bonds have been axed from the \$1.75-trillion social spending bill now being debated by Congress, a step some public finance experts say won't help communities struggling to recover from the COVID pandemic, but one that's unlikely to move the needle on an already overheated muni bond market."

An influx of bond investors piled into municipal debt, especially during the height of the pandemic where a safe haven scramble saw heightened muni interest. As mentioned, munis also provide tax-free income, shielding investors from Uncle Sam, but could that benefit be banished?

President Joe Biden's "Build Back Better" program removed types of debt re-financings and direct-pay bond programs. Furthermore, a 15% minimum corporate tax could also apply to tax-exempt bonds, which could sour their appeal — but will they?

"Munis are going to muni no matter what's going on," said Eric Kazatsky, head of municipal strategy for Bloomberg Intelligence. "There's still going to be a minimum amount of spending for good repair, to keep the lights on, for states and locals. The muni-friendly provisions in the bill would have been an accelerant thrown onto that."

Kazatsky's view comes as municipal bond inflows have been in high demand this year with weekly records reached, according to the MarketWatch article.

"It 's hard to get too worried about anything for this sector right now," said Matt Fabian, a partner with Municipal Market Analytics.

ETF TRENDS

by BEN HERNANDEZ

CDFA Publishes Annual Volume Cap Report: An Analysis of 2019-2020 Private Activity Bond & Volume Cap Trends

View the CDFA Report.

CDFA | Nov. 5

Despite Pandemic Concerns, Multifamily Private Activity Bond Issuance Reaches \$17.2B in 2020.

View the Novogradac Report.

Novogradac | Nov. 5

How the \$1 Trillion Infrastructure Bill Aims to Affect Americans' Lives.

The legislation seeks to ensure fewer blackouts and cleaner water, but in some areas it might fall short of needed upgrades

Congress has voted to pass the largest federal investment in infrastructure in more than a decade, a bipartisan injection of money across vast sections of the U.S. economy.

The \$1 trillion package would invest in refurbishing aging roads, bridges and ports; easing transportation bottlenecks; replacing harmful lead pipes; expanding internet access; upgrading the nation's power grid; and boosting infrastructure resilience amid growing concerns over climate change. The spending is to be paid for with a variety of revenue streams, including more than \$200 billion in repurposed funds originally intended for coronavirus relief but left unused; about \$50 billion from delaying a Trump-era rule on Medicare rebates; and \$50 billion from certain states returning unused unemployment insurance supplemental funds.

The legislation, spending billions in each of the next five years or more, falls short of the full ambitions of the Democratic Party, which is pursuing a separate, larger bill opposed by the Republicans. But the scope of the bill just passed makes the legislation significant in its own right. Here is a look at how the infrastructure package will affect American consumers and businesses, and where it might fall short of expectations.

Continue reading.

The Wall Street Journal

Nov. 6, 2021

This Is Where the States Want Billions in Infrastructure Funding Spent.

The plan finally approved on Friday will address transportation, water, broadband, energy and public safety needs that have been building for years, sometimes decades.

On the highway over the Teton Pass in Wyoming, avalanches have been threatening motorists since the 1960s. In Washington and Oregon, drivers live with the daily awareness that, in a major earthquake, the bridge between Vancouver and Portland will probably collapse. In California, residents are increasingly at the mercy of out-of-control wildfires and megadroughts — and their stratospheric costs.

America's to-do list has been growing for years, since well before President Biden and a bipartisan committee in Congress agreed this year to a historic upgrade of the nation's aging infrastructure. On Friday, the measure — held up for months amid negotiations over some \$2 trillion in other spending — finally passed.

"This is a game changer," said Mark Poloncarz, the county executive in New York's Erie County. "Right off the bat, I have somewhere around \$150 million in capital projects we could move, from bringing our wastewater treatment system into the 20th century to smaller bridges, some of which are 100 years old."

Continue reading.

The New York Times

By Shawn Hubler, Emily Cochrane and Zach Montague

Nov. 6, 2021

Fitch Ratings Updates U.S. Public Finance College and University Rating Criteria

Fitch Ratings-Chicago-04 November 2021: Fitch Ratings has updated its "<u>U.S. Public Finance</u> <u>College and University Rating Criteria</u>" as part of the routine criteria review process. Revisions to the criteria are mostly editorial in nature and there is no impact on existing ratings.

Primary revisions to the criteria are: minor editorial changes; clarification of the long-term debt definition to better match audit presentation and disclosure standards; and an updated and streamlined discussion of the scenario analysis to add clarity and support cross-sector criteria consistency.

This new criteria report replaces the criteria report of the same name dated Oct. 7, 2020.

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What's New In Retirement Facility Defaults.

The biggest source of municipal bond defaults for at least the last 40years have been bonds issued for retirement and congregate care facilities. Some 737 bond issues totaling \$11.7 billion dollars have been involved in defaults,. Unique among such defaults is that many facilities have defaulted, been sold and defaulted again. Most of these defaults are due to dishonest developers, corrupt bond underwriters or just plain incompetence in managing an extremely demanding business. Nevertheless, new bond offerings appear monthly since there are few better places to obtain funding for what is by definition a high risk business with limitless demand and much of the business is funded by a single payer, Medicare.

Getting an underwriter and bond issuing authority approval for a new facility is relatively easy as long as you know you will have to pay an interest rate 50% or more than investment grade paper. Too many issues have to achieve a trouble free startup to avoid default. Since this is unlikely, the projects usually end up in the hands of a successor manager, but with a much smaller debt service cost. Unfortunately, the successor owner is frequently operating a multiple of projects and will comingle funds from different bond issues if not outright steal them.

Covid-19 promises a surge of new defaults and two new and one old developments promise a rich harvest of more default abuses.. A new bond issuing authority has arisen in Texas which allows a private non-profit entity authority to issue tax free municipal bonds. The authority is described as follows in a recent offering statement – "Woodloch Health Facilities Development Corporation is a nonprofit corporation created and existing under the laws of the State and is authorized to issue the Bonds pursuant Chapter 221 of the Texas Health and Safety Code, as amended." There is no identification as to who formed Woodloch nor is there any proof that such an entity received authorization under this law. Perhaps none is needed? We also note that no such named corporation was incorporated in the state of Texas. This should be mandatory as a means for stopping just anyone from abusing this privilege. We make an issue of who authorized Woodloch because it has so far authorized 4 bond issues since 2016. Two are in default, one is in distress and the third is unknown since no documentation has been filed with the MSRB. Details for the three known issues are described in this issue. We suspect Piper Jaffray may have had a hand in forming Woodloch; since they are the underwriter on the two defaulted issues.

My second "What's New" topic is that there is a rising star in the retirement community bad actors

category named Mark Bouldin. He is a Florida based retirement community developer who has ventured into Texas via the two Woodloch defaulted issues. We guess we will be hearing more about him given that his difficulties pre-date Covid-19.

My third "What's New" observation is that some of the defaults occurring today seem to follow a confusing sequence of events with little clarification as to objective. This is leading to many bondholders selling out at 50 to 65 cents on the dollar. The question that arises should always be, who would buy such bonds when events are so unclear. The answer is usually, the party who has a major stake and knows what he intends to do once he has bought out all the weak players. Meanwhile, the lack of information only makes the buyout of bonds cheaper. This strategy is currently most apparent in the Proton Center bond issues, as discussed in our October issue, but has been standard fare for years in the retirement and nursing home arena.

It's time the MSRB got some backbone.

Forbes

by Richard Lehmann

Nov 6, 2021

Every Government Needs a Plan for the Worst-Case Cyber Scenario.

Relying on a one-off cybersecurity plan is no viable way for governments to defend their systems. Leadership changes, budgets and new technologies must be continually considered for long term success.

A colleague asked me last week if I could chat about refreshing her government organization's cybersecurity strategic plan, and the very next day the California Department of Technology and its Office of Information Security published "CAL-SECURE," described as the state's "multi-year information security maturity roadmap." Talk about coincidence: It's an issue that couldn't be more timely and worthy of discussion both inside the cybersecurity community and throughout government leadership.

The CAL-SECURE plan is one of the best I've seen, and when I asked California's chief information security officer, Vitaliy Panych, about it, he told me that "planning a roadmap that is applicable to all public-sector entities requires a community-driven approach where input from across the public and private sector is considered." The CAL-SECURE road map, he added, "consists of multiple people, process, and technology initiatives to continuously increase privacy and security for the benefit of all residents of California."

I have written or co-written several cybersecurity strategic plans over the years, and I think California's approach is right on target. As I thought about how I could help my CISO colleague with her strategic-plan refresh, I focused on some of the common mistakes and what I believe are the critical and essential elements of an exceptional plan.

A proper cybersecurity plan should be viewed through the lens of CAL-SECURE — as a road map that sets the stage for the future, and in government that means preparing for the people, processes and technology resources to carry out the mission. It also means calibrating with the CIO's goals to ensure that the cybersecurity road map is in alignment with the jurisdiction's digital transformation

initiatives and the delivery of citizen-facing services.

I found a number of state government cybersecurity strategic plans online and also discovered the National Governors Association's "Meet the Threat" memo on state cybersecurity strategies that, while a few years old, uncovered some incredibly consistent data across 18 state strategic plans. The NGA's Resource Center for State Cybersecurity is another goldmine for tools and recommendations to develop cybersecurity policies and practices.

One of the significant differences between private- and public-sector strategic planning is the dynamic nature of executive branch leadership over the course of election cycles. There is almost certain to be an election between the time a plan is published and the plan's time horizon, and priorities are often dramatically adjusted between administrations. A solid strategic plan helps keep long-term cybersecurity initiatives in focus and on target.

"It is especially important for government organizations to plan ahead because of the way budgets work," said Mike Lettman, who served as state CISO in both Arizona and Wisconsin. "Government entities are often asked to determine their risk and recommend a technology to fill it, but the funding doesn't happen until a year later and implementation until a year after that. Because technology innovation happens so quickly compared to the pace of government, both the risk and the technology will have undoubtedly changed by the time you get the funding or are ready to implement the technology."

One of my soapbox issues that I believe should be mandatory in any cybersecurity strategic plan is how the organization is planning for the growing and potentially calamitous cybersecurity workforce deficiencies. The just-released (ISC)2 Cybersecurity Workforce Study highlights that in the United States alone there are more than 350,000 vacancies in the cybersecurity workforce. Security executives everywhere should take the opportunity to read through this report, because while it highlights the challenges we face in hiring qualified people it also suggests a number of interesting and innovative approaches to address the development and retention of existing staff and provides key takeaways for managers seeking to hire people into cybersecurity roles.

While there are a number of fundamental components in a good strategic plan, I think there are three critical ones that hold the keys to success:

- Make success measures actionable and quantitative. A strategic plan is not the time to be solely aspirational. Putting stakes in the ground with measurable goals that clearly identify success and will survive the test of time encourages organizations to take ownership and be accountable.
- Get input from every organization with a role in the success of the strategic plan. Nothing sours a plan quicker and creates more animosity than being held accountable to a plan you didn't have a role in developing.
- A strategic plan is the beginning, not the end. Far too many state government cybersecurity plans are simply check-in-the-box exercises and begin to gather dust the moment they are signed. A strategic plan should be viewed as a living document, and because the cybersecurity threat and vulnerability environment change so rapidly, it should be reviewed at least annually to make sure the things you planned for last year are still valid. A strategic plan that hasn't been updated in two or three years is almost certainly worthless.

"Updated strategic plans were always vital to our enterprise success," said Dan Lohrmann, former chief technology officer and chief security officer for the state of Michigan. "Articulating a clear vision as well as an actionable road map to delivering expected results meant that everyone stayed on the same page from the governor's office all the way to the frontline workers. Strategic plans guide enterprise priorities, funding, project initiatives, resource gaps and much more."

Dan has it right: Cybersecurity has become a fundamental organizational component of all government organizations, and solid strategic planning is the least we can do for the citizens who support us.

Governing

November 04, 2021 • Mark Weatherford

<u>S&P: Cyber Risk In A New Era: U.S. Utilities Are Cyber Targets And Need To Plan Accordingly</u>

Key Takeaways

- S&P Global Ratings evaluates cyber security risks at U.S. utilities in our Operational and Management Assessment and as a component of environmental, social, and governance risks.
- Given that water and sewer services are critical to health and safety as well as the economy, the sector is particularly attractive to bad actors and cyber attacks could be devastating if not properly managed.
- Many U.S. utilities have historically prioritized the maintenance of their physical assets over their data-related systems, but the allocation of resources will need to be rebalanced to fully mitigate cyber risk.
- Failure to implement the most basic standards of cyber security indicates potential credit vulnerabilities, which can result in a lower rating given that a cyber incident can cause financial, legal, and reputational risk and even result in loss of life.

Continue reading.

3 Nov, 2021

Voters Weigh \$27 Billion of Bonds on Ballots Across U.S.

The amount of borrowing seeking voter approval is the lowest since 2017, according to IHS Markit data.

Voters across the U.S. are set to decide on an estimated \$27 billion worth of bond measures during Tuesday's elections to finance municipal improvements ranging from school repairs to road fixes.

The amount is about half of what voters faced during last year's presidential election, even though some local governments scrapped borrowing plans at that time amid pandemic uncertainty. This year's total is the lowest since 2017, and slightly below average over the last decade, according to preliminary data from IHS Markit.

"There are probably more ballot measures in years where the economy is not only growing, but when there is also a positive landscape for passage," said Tom Kozlik, head of municipal research and analytics at Hilltop Securities Inc.

State and local government payrolls still haven't recovered to pre-pandemic levels despite an influx

of federal stimulus money. That cautious fiscal approach may be contributing to deflated borrowing on ballots this year, much like the aftermath of the Great Recession, when planners were reluctant to add debt to balance sheets amid layoffs intended to balance budgets, Kozlik said.

Measures that pass will pump bonds into the \$4 trillion municipal market that's recently been plagued by scarcity. Governments have sold about \$386 billion of debt year-to-date in about 8,500 deals, a roughly 4.3% drop from the same period last year, according to data compiled by Bloomberg.

The biggest measure up for a vote this year is a \$1.2 billion bond to fund construction and renovation of schools in Fort Worth Independent School District in Texas, the sixth-biggest in the state. The measure is part of a package of bond proposals totaling \$1.49 billion. Other portions would be used for projects like stadium construction and auditorium upgrades.

Among the 10 largest bond measures, about half are for funding school improvements. Texas is proposing the most bonds, with about \$18.6 billion of debt up for a vote, followed by Virginia and Colorado, according to IHS Markit's preliminary tally.

Virginia's largest issue up for referendum is a \$567.5 million flood protection bond in Virginia Beach that would use proceeds to fund mitigation measures like barriers, drainage improvements and pump stations. If passed, residents would see real estate taxes increase between 4.3 cents and 6.4 cents per \$100 of a home's assessed value. For the median home owner, that would mean paying an additional \$115 to \$171 annually, according to the the city's website.

In Texas, voters will decide on more than \$8 billion of bonds for utility and hospital districts. Some of those measures, if approved, would grant districts the authority to issue bonds up to a given amount, but wouldn't obligate them to do so.

Bloomberg CityLab

By Nic Querolo

November 1, 2021, 11:01 AM PDT

— With assistance by Danielle Moran

Voters Pass at Least \$15 Billion of Munis, Majority of Proposals.

- · About \$27 billion of bonds were up for approval nationwide
- Propositions totaled lowest amount since 2017: IHS Markit data

U.S. voters are slated to approve at least \$14.9 billion of local-government debt sales on ballots this election, more than half the amount proposed nationwide, according to preliminary results after Tuesday's polling.

All in all, voters were asked to decide on about \$27 billion of municipal bonds, the lowest tally since 2017, according to data compiled by IHS Markit. The largest measures up for vote were set to fund work ranging from school construction to flood-prevention measures in Virginia Beach.

Continue reading.

Bloomberg Markets

By Nic Querolo and Joseph Mysak Jr

November 3, 2021, 6:30 AM PDT Updated on November 3, 2021, 12:20 PM PDT

U.S. Voters Passed at Least 65% of State and Local Bond Measures.

- Approved bonds to finance infrastructure improvements
- \$1.2B benchmarked for construction of schools in Texas

Voters in the U.S. on Tuesday approved at least 65% of the \$28.7 billion in municipal bonds they were asked to decide, according to IHS Markit.

The \$18.7 billion of approved borrowing will finance everything from road improvements to sewer lines, new schools, public transportation, stadiums and swimming pools. At least \$4.8 billion in bonds were rejected by voters, while results on another \$5 billion or so are still pending, according to IHS Markit.

The largest issue on the ballot anywhere Tuesday was a \$1.2 billion school bond in Fort Worth, Texas. The measure, Proposition A, was winning by just 42 votes, according unofficial county election results. The measure was part of a package of bond proposals totaling \$1.49 billion. The other portions, for projects like stadium construction and auditorium upgrades, were defeated, according to HIS Markit.

The \$28.7 billion on ballots was well below the \$45 billion voters faced during last year's presidential election, even though some local governments scrapped borrowing plans at that time amid pandemic uncertainty. This year's total is the lowest since 2017, and slightly below average over the last decade, according to IHS Markit.

Bloomberg Politics

By Sri Taylor and Joseph Mysak Jr

November 5, 2021, 12:36 PM PDT

— With assistance by Nic Querolo

Does Municipal ESG Make Sense?

Municipal bonds underscore the weaknesses of ESG investing.

The rise of Environmental, Social, and Governance (ESG) investing in corporate securities has reached the municipal-bond markets. But recent experience shows that incorporating ESG factors into municipal investing can be a convoluted, quixotic effort.

While ESG encompasses a wide range of factors, it is the "E" that gets the most attention in the municipal bond market, with climate change being the major concern. When thinking about the role

of climate change in municipal finance, we can imagine two issues: (1) Does climate change increase the risk of a municipal-bond default for specific issuers?; and (2) can investors choose bonds that finance projects that provide the largest reductions in greenhouse-gas emissions? Let's consider these two questions in turn.

Climate Change and Default Risk

Unlike corporate equities, municipal bonds offer little financial upside related to global warming. While an equity investor may achieve enormous returns by purchasing shares in a company that invents new green technologies, the best-case scenario for a municipal-bond buyer is the return of principal at par along with interest payments that rarely exceed 5 percent annually.

Continue reading.

NATIONAL REVIEW

By MARC JOFFE

November 2, 2021

Muni Bond Provisions Likely Dead in Democrats' Spending Package.

A last-ditch effort to salvage tax-exempt advance refunding and other proposals appears to have come up short.

It's unlikely that a municipal bond refinancing tool and other state and local public finance provisions will make it into the Democratic spending package taking shape on Capitol Hill, according to the office of a lawmaker who is a key advocate for the proposals.

A spokesperson for U.S. Rep. Dutch Ruppersberger, a Maryland Democrat who co-chairs the municipal finance caucus, said by email Tuesday morning that the congressman "made a final appeal" to House Speaker Nancy Pelosi's office to include the finance provisions—which included the revival of tax-exempt advance refunding—in the bill. But it appears to have been unsuccessful.

"We've put up a good fight and are disappointed they will not likely make the cut but understand that compromises must be made as we work toward a bill that can be passed and signed into law," said Jaime Lennon, Ruppersberger's director of communications.

The roughly \$1.75 trillion spending bill and a \$1.2 trillion infrastructure bill that is also pending in the House "are still ultimately good for states and counties," Lennon added. "We remain optimistic that Congressman Ruppersberger's advance refunding and related bills can be absorbed into future legislative packages as they are bipartisan, popular and enjoy support from committee leadership."

When Route Fifty asked Ruppersberger at the Capitol on Monday night about the outlook for the provisions, he referred to how finalizing the spending bill had turned into a complex balancing act among Democrats—which has bogged down legislative progress.

Democrats are seeking to fit in a wide range of programs related to the environment, health care, housing, education and other areas, while containing costs to satisfy moderate senators.

"Appropriations is about priorities," Ruppersberger said.

"We're going to come up with other strategies," he added, referring to the muni bond provisions. "We're still going to stay on top of it, because it's needed and everybody in leadership understands that. But right now, we got to get out of this situation we're in."

Tax-exempt advance refunding was a tool states and localities previously used to refinance and restructure debt to achieve cost savings. But the 2017 Republican tax overhaul killed the tax exemption for interest investors earned on the bonds, halting their issuance.

State and local government groups and their advocates in Congress have pushed to restore tax exempt advance refunding in the years since. The infrastructure legislation and the spending bill were seen as a good opportunity to do that, given municipal debt is commonly used to finance infrastructure projects.

A provision to bring back advance refunding was included in legislation the House Ways and Means Committee marked up in September. But it was left out of the framework that the Biden administration rolled out last week.

When it comes to federal budget legislation, the tax break for the bonds shows up as a cost in the form of sacrificed tax revenue, complicating the case for restoring advance refunding as Democrats tried to thin down their bill.

Congress' Joint Committee on Taxation, around the time the 2017 tax bill passed, projected that the repeal of the advance refunding tax exemption would increase federal revenues by \$17.4 billion between fiscal years 2018 and 2027.

Looking to the state and local level, the Government Finance Officers Association estimates that between 2007 and 2017 advance refunding transactions nationwide saved tax- and rate-payers over \$18 billion.

Language designed to increase the access small municipal borrowers have to capital, through "bank qualified debt," which is generally considered lower cost than turning to the traditional bond market is also unlikely to make it into the spending legislation. As is a program to revive "direct-pay" type bonds—similar to the Build America Bonds launched around the time of the Great Recession.

ROUTE FIFTY

by BILL LUCIA

NOVEMBER 2, 2021

Public Finance and Racism.

Abstract

Mainstream public finance research has largely ignored racial issues. This paper calls on public finance economists to explore racial issues more extensively. The obvious reasons are to understand the effects of inequitable and inefficient policies, help develop remedies, and ensure that public finance is addressing the issues most salient to society. The less obvious reason is that public finance has tools and frameworks that can provide useful insights into the economics of racism. As economists search for issues that are both amenable to analysis and important for society, the

pervasive effects of racism stand out in both regards.

Download the full report.

The Brookings Institution

by William G. Gale

November 4, 2021

Muni Investors Put 'Buying Shoes' Back on After 3-Month Slide.

- State, local debt rebounds with biggest weekly gain since July
- Calm in Treasuries is helping, Neuberger Berman's Iselin says

The municipal-bond market is seeing a bullish vibe re-emerge after the longest streak of monthly losses since 2016 put a dent in what has otherwise been a robust year for the securities.

The \$4 trillion market for state and local debt is coming off its strongest week since July, according to Bloomberg indexes. What's more, the flood of cash into muni mutual funds, a key driver of the debt's outperformance in 2021, has picked up again.

Much of the credit for the rosier backdrop goes to Treasuries, where volatility has ebbed after Federal Reserve Chair Jerome Powell said last week that officials can be patient on raising interest rates.

Investors are starting to put their "buying shoes" back on after lacking conviction to dive in from August through October, said James Iselin at Neuberger Berman, which manages over \$12 billion in munis.

"It definitely feels like a bit of a better tone, with Treasuries calming down at least a little bit in the short-term," said Iselin, the firm's head of municipal fixed income. "That's probably given people a bit more confidence to start buying."

Even with the slide of the past three months, munis are still beating other fixed-income asset classes in 2021. They've earned about 1% this year, while the broader U.S. bond market has lost about 1%, according to Bloomberg index data.

Cash has poured in partly as lawmakers in Washington have been debating lifting levies on higher earners. That's one big risk hanging over the market — that Democrats' efforts to introduce tax increases on wealthy Americans stall out, squelching demand for tax-exempt debt.

More Cash

For now, stability across debt markets has been enough to revive investor appetite. Last week's muni rebound coincided with increased retail interest. Investors added about \$603 million to muni funds during the week ended Wednesday, the most since the week through Sept. 22, according to Refinitiv Lipper US Fund Flows data.

They're buying in as tax-free yields remain relatively high compared with recent months. The rate on the 10-year AAA municipal benchmark is around 1.12%, compared with the average of 0.94% for this

year. It was as low as 0.66% in February.

Iselin said the resurgent demand has boosted bonds sold by large issuers, like the state of Illinois, which had seen credit spreads widen in the past few months. An index of 10-year Illinois general-obligation bonds yielded about 71 basis points more than top-rated debt on Nov. 5, down from around 91 in late October.

Tobacco bonds are also benefiting, an encouraging sign for high-yield munis as the securities are seen as a bellwether for the junk sector because they're relatively easy to trade.

High-yield tobacco debt posted its best performance last week since November 2020, according to Bloomberg index data. The price on Buckeye Tobacco Settlement Financing Authority debt due in 2055, the index's biggest holding, have inched back up in the last month.

For Barclays Plc strategists led by Mikhail Foux, it's adding up to a solid closing stretch for this year.

"We will likely end 2021 on a strong note," they said in a Nov. 5 note.

Bloomberg Markets

By Amanda Albright

November 8, 2021

Texas Gun Law Isn't Hurting One of Its Largest Bond Issuers, CFO Says.

- DFW International Airport easily sold bonds last month
- A change in underwriters had no impact on pricing, CFO says

Dallas Fort Worth International Airport faced a potential bind ahead of its recent \$1.2 billion bond sale: a new Texas law designed to stop banks from straying into political issues had forced three underwriters to bow out of part of the offering.

But the airport, one of the largest issuers of municipal bonds in Texas, ended up swapping in two other banks. There didn't appear to be any impact on the pricing when it sold the securities late last month, said Christopher Poinsatte, the airport's chief financial officer, in an interview.

The airport's ability to sell bonds even after a last-minute change in underwriters underscores how demand for municipal bonds remains intense, even with recent signs that investor interest might be cooling a bit. With money managers still clamoring for the bonds, dozens of banks are eager to fill the void left by any banks affected by the state law.

The new Texas law bars state and local governments from doing business with banks that have limited their ties to the firearms industry. A separate measure restricts state contracts with firms that have shunned fossil-fuel producers, a major industry in Texas.

The laws come after activists have for years pressed banks to stop lending to gun makers as well as drillers and transporters of fossil fuels. In some cases, banks have listened to that pressure.

Now those banks are facing pushback from Texas. Citigroup Inc., JPMorgan Chase & Co., Bank of

America Corp. and Goldman Sachs Group Inc. have faced a hit to their public finance business in Texas since legislation went into effect on Sept. 1.

Citigroup, JPMorgan, and Bank of America were expected to underwrite the roughly \$700 million taxable portion of the airport's offering, but were replaced with Barclays Plc and Morgan Stanley, Poinsatte said. The taxable securities received orders equal to more than six times the amount for sale.

"We were very pleased," Poinsatte said. "Barclays and Morgan Stanley stepped in, they really only had about three weeks to ramp it up. They did a great job with it."

Overall, the deal received more than \$7 billion of orders from 155 unique investors, he said. The bonds were sold to refinance debt and fund construction projects.

One place where state and local governments could see difficulty with the new laws is with finding firms to provide them with banking services, Poinsatte said, such as making deposits and getting credit cards.

"That's probably the biggest issue," Poinsatte said. "There are a lot of other underwriters that we can go to, banking relationships will be a harder problem to solve."

The airport is about two years into a 10-year contract with JPMorgan that was finalized before the laws went into effect on Sept. 1. The legislation only impacts new contracts, so the airport's agreement isn't affected. Poinsatte called that "fortunate" but other government entities going through the requisition process for banking services could see challenges with some large players unable to participate.

"I think the area that could impact Texas municipalities more than any other is the banking relationship," Poinsatte said.

Dallas Fort Worth Airport is one of the largest issuers of municipal bonds in Texas and it's in the middle of a borrowing spree, with plans to sell \$4.2 billion of new money bonds to finance capital projects through the 2027 fiscal year, according to a presentation to investors dated Oct 7. That doesn't include refinancings.

As the three biggest U.S. banks have faced pressure in Texas, other firms including UBS AG, Wells Fargo & Co. and smaller players like Hilltop Securities have stepped into the breach.

Bloomberg Markets

By Danielle Moran

November 3, 2021, 9:00 AM PDT

— With assistance by Amanda Albright

Despite Volatility, Munis Are Still a Good Deal.

There are some market segments that are just boring. And one of them happens to be the municipal bond market. Historically, munis have been a 'steady-as-she-goes' investment. It is perhaps the ultimate buy and hold for high-net-worth individuals, institutional investors,

and insurance funds. Typically, munis are as exciting as watching paint dry. But lately, that steadfastness has been put to the test.

Munis have suffered from some high bouts of volatility.

Several factors have helped munis become a pretty sector since the end of the summer. While that may dampen some of munis' appeal, the reality is bonds are still a good deal and may even be a better buy for the future ahead. In the end, don't let some increased volatility persuade you from moving out of the municipal bond sector.

Continue reading.

municipalbonds.com

by Aaron Levitt

Nov 03, 2021

Newly Flush With Cash, Retirement Funds Struggle to Find Appealing Investments.

Long-underfunded pension systems share bittersweet challenge with other investors that see hazards in many asset classes

State and local pension funds are reaping a historic windfall thanks to billions of dollars in record market gains and surplus tax revenues. Now they need to decide what to do with the money.

It is a bittersweet dilemma that the chronically underfunded retirement systems share with many household and institutional investors around the country. Just when they finally have cash to play around with, every investment opportunity seems perilous.

Leave the money in stocks, and a pension fund becomes more vulnerable to the type of losses suffered in the 2008-09 financial crisis. Move the money into bonds for safekeeping, and the fund risks losing even minimal gains to inflation. Seek out alternative assets to help diversify and drive up returns, and the fund enters a crowded competition for private equity and real estate where it can take years for money to be put to work.

Continue reading.

The Wall Street Journal

By Heather Gillers

Nov. 7, 2021 9:00 am ET

Munis In Focus: Kazatsky (Radio)

Eric Kazatsky, Senior Municipal Strategist for Bloomberg Intelligence, discusses the latest from the

muni market. Hosted by Matt Miller and Sonali Basak.

Play Episode

Bloomberg Radio

November 5, 2021 — 9:18 AM PDT

Barclays Says Green Bond Investors Pay More for Less Liquidity.

- Findings imply that most green bond investors are buy-and-hold
- Demand for the securities is strong enough to weigh on yields

Demand is so strong for green bonds, or debt that funds environmentally friendly projects, that investors are accepting lower yields for securities that are harder to trade, according to Barclays Plc.

Barclays looked at trading volumes across U.S. dollar and euro-denominated investment-grade markets, and found that green bonds trade less often than corporate bonds in general. Meanwhile, new environmentally friendly bonds tend to yield about 0.04 percentage point less, even after record issuance of the securities, Barclays strategists led by Charlotte Edwards and Bradley Rogoff wrote in their report.

The results confirm what investors have long suspected: that more investors in green bonds are of the buy-and-hold variety, including pension funds, asset management arms of insurance companies and mutual funds, rather than active traders. But the findings also imply that if many investors decide to liquidate their holdings at some point, they may be disappointed by demand in the secondary market.

Newly issued green bonds denominated in U.S. dollars do trade more often than the broader market, Barclays found, but after three months that shifts, with the environmentally-linked debt trading with reduced frequency. For euro-denominated debt, green notes trade less than average from the start.

Paying Up

Borrowers are taking advantage of the robust demand to fund environmental projects. Corporations and governments globally have sold a record \$411 billion of green bonds so far this year, compared with \$234 billion raised in all of last year, data compiled by Bloomberg show. Global sales of environmental, social and governance bonds are also at a record and are expected to hit \$1 trillion by end of this year.

Firms have long been able to get cheaper funding by selling green bonds, but even with record issuance that benefit has only shrunk marginally, by just 1 basis point from the peak of 5 basis points earlier this year. Barclays expects demand to support a greenium of 4 basis points to 5 basis points over the medium term, assuming elevated issuance.

The strategists screened the U.S. high-grade market for green bonds trading with yields well below similar non-green debt, on the thinking that the divergence "is likely not justified" longer term.

"For holders of green bonds who are less concerned about the green label, swapping into similar maturity non-green bonds makes sense, in our view," wrote the strategists.

Bloomberg Green

By David Caleb Mutua

October 18, 2021, 8:56 AM PDT

New EMMA Feature Helps Investors Identify Green, Social, Climate and Sustainable Bond Investments.

Washington, D.C. – The Municipal Securities Rulemaking Board (MSRB) announced today that it has launched a new feature on its free Electronic Municipal Market Access (EMMA®) website that indicates when an upcoming municipal security new issue is either self-designated or certified as meeting certain Environmental, Social or Governance (ESG) criteria.

"It is not surprising that impact investors are turning to the municipal securities market for investments that meet certain ESG criteria. Our market finances many projects that advance environmental and social goals in our communities, such as public transportation, clean water and affordable housing," said MSRB CEO Mark Kim. "While there is no universally accepted ESG standard or definition on labeling an ESG security in the municipal market, there are internationally recognized frameworks that many states and municipalities follow to label their bonds as ESG. Integrating these frameworks into the free new issue calendar on EMMA will improve market transparency about the emerging trend of ESG and empower investors to make informed investment decisions."

The MSRB established the EMMA website more than a decade ago to provide investors and the public with centralized, online and free access to real-time municipal securities transaction prices and disclosure documents. The new issue calendar is one of several free tools available on EMMA that enhances market transparency. The new issue calendar lists the municipal securities scheduled to come to market across the country, as well as those that have recently sold.

Using data uploaded to EMMA from financial services technology and data provider IHS Markit, the new ESG Type field will show whether a new issuance has been designated as Green, Climate, Social, or Sustainable, among others, while the new ESG Certifier field will show whether the new issuance has been certified by one of several verifiers that assess the issuance for adherence to ESG criteria.

Date: October 25, 2021

Contact: Leah Szarek, Chief External Relations Officer

202-838-1300 lszarek@msrb.org

As US Cities Build Green Infrastructure, Here's One Way They're Paying For It.

In 2015, rainstorms in Washington DC would cause parts of the city's sewer system to overflow dumping millions of gallons of raw sewage into the Anacostia and Potomac rivers. Pipes buried in

the 19th century combined stormwater and sewage, discharging a noxious brew of trash, bacteria, and heavy metals that polluted the rivers. By 2005, the pollution had gotten so bad it violated Environmental Protection Agency clean water standards, killed wildlife, and posed a threat to people living in the area. The federal government ordered DC Water, the region's sewer and water management authority, to clean up the rivers.

At first, DC Water tried to tackle the problem with traditional "gray" infrastructure: big underground tunnels to store excess stormwater. But the agency's leaders were in search of a cheaper, more sustainable solution. So in 2015, DC Water proposed using parks, plants, and permeable pavements strategically distributed to absorb some stormwater runoff and prevent overflow.

This "green infrastructure" was appealing for engineers: it had the potential to be less costly than gray infrastructure, and had knock-on benefits for neighborhoods, like providing natural cooling in summers, and improving property values. But it was uncharted territory; DC Water had never built green infrastructure before, and few other US cities had.

Continue reading.

quartz.com

By Camille Squires

Published October 27, 2021

Flooding Could Leave Billions of US Municipal Debt Under Water.

Approximately a quarter of the entire U.S. infrastructure is at risk of severe flooding, hitting the \$ 4 trillion municipal bond market price and crediting city and state issuers, according to a new study. It can jeopardize your strength.

New York-based climate research firm First Street Foundation has issued a <u>report</u> finding that US infrastructure, such as roads, hospitals, and power plants, shows a higher risk of flooding than previously estimated. This has serious implications for state and city financial resources, asset value, mortgage-backed securities and municipal bonds.

Louisiana, Florida, and West Virginia have the potential for the worst floods in the continental United States, First Street Foundation data show. In Louisiana, 45% of all critical infrastructure facilities, including hospitals, fire departments, airports and power plants, are at risk of failing due to this year's floods.

In addition, 39% of roads and 44% of social infrastructure (schools, government buildings, places of worship) are at risk of closure. In some cities in Louisiana, such as Metairie and New Orleans, the risk for all these categories is almost 100%.

Municipal bonds have long been a shelter asset class and are popular with long-term investors such as pension funds and insurance companies. Municipal bond default rates have historically been low, but can rise as underfunded cities struggle to keep up with the costs of extreme weather damage.

Municipal bonds also tend to mature between 15 and 30 years. According to the Securities and Financial Markets Association, the average maturity issued last month was 18.6 years. Climate

change is so fast that there is a lot of time left before a disaster strikes.

Investors also face the risk of geographical concentration. Owning a munis issued by the state in which you live gives investors certain tax incentives, so muni investors tend to be highly exposed to certain areas. Therefore, in the event of bad weather, the vast value of the municipal bond portfolio can quickly be lost.

"It's clear that (climate) is a risk factor in the municipal bond market," said Peter DeGlute, head of municipal bond research at JP Morgan. "Increasing the frequency and intensity of meteorological events is a costly and complex issue for the federal government, as well as for state and local governments."

Floods can affect municipal debt in a variety of ways. It has a direct impact. Municipal bonds issued to fund the construction of hospitals are at risk of depreciation or default if their source of income is abruptly terminated when the hospital is destroyed by a storm.

Natural disasters can also alienate people and businesses, reduce the value of existing assets, and reduce the tax base of a state or city. This is another way for municipal bonds to be repaid.

Extensive floods are also very expensive. Between 1980 and 2020, natural disasters caused \$ 1.8 trillion worth of damage. About half of them were associated with hurricanes and tropical storms. Municipalities must borrow more to pay for reconstruction and to build new climate-adapted infrastructure. This increases the credit risk of existing bonds and the cost of borrowing new funds.

Led by Paul Goldsmith Pinkham of Yale University, the municipal bond market is already beginning to price the risk of rising sea levels.

The federal government has traditionally intervened to help rebuild cities after a catastrophe. However, as these events become more frequent, resources can be under pressure and local governments may be more responsible for funding recovery efforts.

Of the top 10 states with the highest risk of infrastructure floods, Connecticut and New York are also the most helpful. Connecticut has the highest per capita net tax support debt of all 50 states, the second highest net tax support debt as a percentage of personal income, and the second highest net tax support as a percentage of state gross domestic product. I have debt. According to credit rating agency Moody's. New York is also in the top 10 in each of these categories.

California News Times

Clean Energy Giant NextEra Begins Push Into Water Utilities.

- NextEra recently spent \$45 million on Texas water assets
- CEO 'optimistic' about extension of clean-energy tax credits

NextEra Energy Inc., which calls itself the world's biggest provider of wind and solar power, plans to buy up municipal and privately owned water assets to build a "world-class water utility," the company said in its third-quarter earnings call Wednesday.

"We're really excited about building a significant presence in the water business," said chief financial officer Rebecca Kujawa. She also announced the company recently spent \$45 million to buy

regulated water and wastewater utility assets in eight counties near Houston, Texas. NextEra's water strategy will also focus on assets outside Texas and will probably target certain U.S. regions, she said.

NextEra chief executive Jim Robo said on the call that he's "optimistic" about the reconciliation bill U.S. lawmakers are debating and that he'd be shocked if there wasn't a long-term extension of the clean energy tax credits that boost the company's business. "I feel good about both the policy tailwinds and how our business is executing along those goals," he said.

Bloomberg Markets

By Josh Saul

October 20, 2021, 7:47 AM PDT

SIFMA Statement on Exclusion of Muni Bond Provisions from Reconciliation Bill.

Washington, D.C., October 29, 2021 – SIFMA today issued the following statement from president and CEO Kenneth E. Bentsen, Jr.:

"It is regrettable that the municipal bond provisions have been dropped from this version of the reconciliation bill and hopefully Congress will restore these important state and local government funding measures. State and local governments, unlike virtually everyone else in America, are unable to take full advantage of historically low interest rates through advanced refundings and generate cashflow to reinvest in their communities. Direct pay bonds and updating the small issuer rules will attract more private capital to state and local government projects, and combined with refundings will serve as critical infrastructure funding source. We are also concerned that the proposed change to the corporate minimum tax rate as currently drafted would have a negative impact on the demand for municipal bonds by some investors, increasing the cost to state and local government issuers."

Muni Market Letdown as Bond Proposals Cut From Biden Plan.

- Advance refunding revival, taxable infrastructure bonds axed
- Proposals were seen spurring tens of billions in new issuance

A key debt-refinancing tool for state and local governments and the creation of a Build America Bonds-style debt program are among the municipal-bond provisions excised from the Build Back Better legislation proposed by the Biden administration on Thursday.

Advance refundings, a new version of taxable Build America Bonds, an expansion of bank-qualified bonds and an increase in private activity bond issuance aren't in the latest bill.

"Never been more disappointed," Emily Swenson Brock, director of the Government Finance Officers Association's Federal Liaison Center, said in an email on Thursday. "Bonds are out entirely in the framework."

The new BABs would have helped municipalities to finance much-needed new infrastructure, said Brock. "Jurisdictions across the country really thought this was our time."

Brock added that "there's still some process to go," meaning one or more of the provisions could be added back into the legislation as it's still subject to possible amendment.

Michael Decker, who lobbied for the provisions for the Bond Dealers of America trade group, called their being dropped "a disappointment" in an email, and added, "The bond provisions that have been under consideration are all modest in cost but with outsized benefits for state and local taxpayers around the country."

Bond issuers, bankers and buyers in the \$4 trillion market had welcomed the provisions when the new bill was unveiled in September, saying they could spur the issuance of tens of billions of dollars in new bonds. Their enthusiasm was short-lived.

"Like a scene from a movie that wasn't crucial, muni provisions got left on the cutting room floor," said Eric Kazatsky of Bloomberg Intelligence. "This speaks to the growing divide between the importance of these provisions to MuniLand and perhaps lack of importance to everyone else."

Tom Kozlik, head of municipal strategy and credit at Hilltop Securities in Dallas, Texas, said in an email that he wasn't too surprised that the muni provisions were dropped, "when so many priorities like community college and paid leave were being abandoned. I thought there was a very slight chance the direct pay infrastructure program could at least be included," he said, referring to the new version of Build America Bonds.

Bloomberg Markets

By Joseph Mysak Jr

October 28, 2021, 11:56 AM PDT Updated on October 28, 2021, 1:11 PM PDT

— With assistance by Martin Z Braun

Push Is On to Salvage Muni Finance Provisions Left Out of Biden Plan.

A key refinancing tool that states and localities want to see brought back, along with other proposals, didn't make the cut.

The roughly \$1.75 trillion domestic spending plan President Biden unveiled on Thursday leaves out provisions that supporters say would provide state and local governments greater flexibility and substantial cost-savings when financing infrastructure projects.

In response, over two dozen groups that represent cities, counties, towns, government finance officials and public works agencies are mounting a last ditch effort to get those proposals included, sending a letter to congressional leaders after the plan's release pleading their case. But the window to make changes to the package could be tight.

One of the absent municipal finance measures would restore what's known as advance refunding for state and local government bonds. States and localities relied on tax-exempt advance refunding as a key tool to refinance and restructure debt before it was eliminated in the Republican-crafted tax law

that passed in late 2017.

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ROUTE FIFTY

by BILL LUCIA

OCTOBER 29, 2021

Will Muni Bonds Get a Big Boost from Capitol Hill?

Pending municipal finance provisions in the big spending bills before Congress could benefit issuers, investors and taxpayers. To get the best deal, state and local leaders must press their case immediately.

As Congress continues to kick around bills for infrastructure and federal spending priorities, state and local leaders need to keep their eyes on the shape the legislation's somewhat arcane provisions for municipal finance will take.

In the grand scheme of things, they don't cost federal taxpayers that much, so one would think that they stand a good chance of adoption, but nobody can take that for granted. It's one of those esoteric topics that rarely makes the headlines outside of industry newsletters, but the benefit/cost ratio for local taxpayers is easily demonstrable. Whether the muni provisions make into law is now very much up in the air as the Senate whittles down its version's "tax expenditures."

Although many state and local officials are fixated foremost on the infrastructure bill, the House budget reconciliation bill has three provisions that are a big deal in the world of municipal bond finance; on the Senate side, these provisions are now in peril. One of them gives issuers of tax-exempt debt an option to sell their bonds on a taxable basis, pay a higher interest rate and receive a federal cash subsidy. Economists call it a "taxable bond option" (TBO), though it's better known in the industry as Build America Bonds (BABs) from the Obama era when they were allowed temporarily during the Great Recession.

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governing.com

October 26, 2021 • Girard Miller

NASBO Issue Brief: Analysis of State Fiscal Recovery Fund Allocations

Read the Issue Brief.

The Global Supply Chain Chaos and its Impacts on Local and State Economies.

With the rapid rollout of coronavirus vaccines, the global economy is emerging out of the pandemic. However, with the sudden closure of the large economies, the global supply chain is seriously grappling with issues like labor shortages for manufacturers and distributors and a rapid increase in global demand.

In recent months, these issues were paired with things like the emergence of the Delta variant, global power outages in certain parts of China, and a shortage of truckers in the U.S., further exacerbating the already huge challenges of the global supply chain. In addition, paired with historically low labor participation rates, the U.S. is also seeing labor shortages in areas related to the national supply chain (e.g., warehouse workers, port employees, truck drivers), further adding to congestion and backlog in the overall supply chain.

In this article, we will take a closer look at how global supply chain issues will impact local and state revenues and when the situation can get better.

Continue reading.

municipalbonds.com

by Jayden Sangha

Oct 21, 2021

Public-Pension Funding Hits Highest Since 2007, Powered by Market Returns.

Plans gained a median 27% in financial markets so far in 2021

Public-pension funding surged in 2021 thanks to buoyant financial markets, taking funding levels to the highest in over a decade.

As of June 30, 2021, the aggregate funded ratio of the 100 largest U.S. public pension plans is estimated at 85%, according to the 2021 Public Pension Funding Study from Milliman, an actuarial company, marking what the group calls "a stunning improvement" from 70% in 2020.

It's also the highest level of funding in the eight-year history of Milliman's report. According to another data source, <u>Public Plans Data at the Center for Retirement Research</u>, which covers a larger universe of pension plans, the last time funding was so high was 2007.

Continue reading.

MarketWatch

By Andrea Riquier

Oct. 27, 2021

Cyber Risk In A New Era: Are Third-Party Vendors Unwitting Cyber Trojan Horses For U.S. Public Finance?

Key Takeaways

- Digitalization in operations and IT services can increase risks of cyber attacks for U.S. public finance (USPF) issuers if proper vendor risk management is not in place.
- Integration of third-party vendor risks into a comprehensive cyber-defense strategy is an important aspect for an issuer to help reduce the frequency and mitigate the effects of a cyber attack.
- Failure to incorporate these risks into risk-management policies could result in negative rating pressure if an issuer's practices seem materially weaker than those of peers.

Continue reading.

25 Oct, 2021

Fitch: Cryptocurrency Poses Risks, Opportunities for US Public Finance

Fitch Ratings-Chicago/Austin/New York-19 October 2021: A limited number of US public finance issuers are encouraging cryptocurrency (crypto) ventures and exploring the use of crypto as a form of exchange to grow economies and promote efficiencies, but this can expose issuers to a still-evolving economic and regulatory environment, Fitch Ratings says. Public entities have so far typically been recipients of crypto that is converted to cash.

Crypto offers ease and speed of transfer of value, relative to settlement through the conventional US financial system. Because crypto transactions are conducted via distributed ledger technology (DLT), payments can be automatically executed once conditions of the contract recorded on the electronic ledger are met.

However, cryptocurrency can introduce financial and operating risks, particularly as a result of price volatility. The lack of an overarching regulatory framework in the US and other countries contributes to market uncertainty, with changes in regulations potentially affecting value. Increased crypto investment holdings could negatively affect budgets and the ability to pay obligations if there are material price swings. Most municipalities' investment guidelines are typically governed by state statutes, which may allow for crypto investments as regulation develops. In contrast, pension fund investment guidelines are typically at the discretion of the funds' boards or their designees and allow a much broader range of options.

Crypto use will likely require new IT spending, including reinforcing cybersecurity. The rapid rise in the market values of cryptocurrencies, such as Bitcoin, has made them an attractive target for cyber criminals. The nascent global crypto regulatory environment and transaction anonymity contributes to the increased risk of cybercrime and ransomware attacks.

Issuers focused on environmental effects may view the energy-intensive computing power required for the proof-of-work consensus mechanism to validate transactions and mine coins such as bitcoin as detrimental to environmental, social and governance (ESG) goals. Furthermore, social and governance issues may arise from crypto payments or donations from anonymous sources that could create risks for public entities.

Public finance interest in cryptocurrency is not new. Ohio became the first state in 2018 to allow companies to pay taxes in crypto. A third-party processor converted the payment to US dollars, which would then be deposited into a state account. Within a year the program was suspended, with the Ohio State Attorney General citing legal prohibitions against the use of a payment processor to convert cryptocurrency into US dollars for the electronic payment of taxes. Ohio has left the door open to future use.

State and local governments have taken different approaches to crypto, with some cultivating the crypto market by establishing accommodative legal frameworks. Two Texas laws established a working group on blockchain technology and updated the state's Uniform Commercial Code to recognize crypto. Wyoming passed laws that explicitly exempt virtual currencies from state money transmission laws and permits state-chartered depositories to provide banking services to virtual currency companies. Rhode Island and New York introduced crypto regulations.

Miami accepts donations from CityCoin, a non-profit opensource protocol. CityCoin allows users to mine "MiamiCoins", which are not affiliated or endorsed by the city. Thirty percent of the contributions submitted by miners is converted to US dollars and transferred to the city. The protocol generated several million for the city since its inception. Miami is not permitted to hold or invest in crypto under current state law.

Not-for-profit healthcare and higher education entities have begun to receive donations in the form of crypto, potentially tapping a new philanthropic base. Many opt to liquidate immediately to avoid the risk of volatility, and crypto remains a small percentage of total giving. Technological infrastructure and a clear policy framework are necessary to accept and process these donations.

Related Research:

- FinTechs, Financial Institutions Balance Risks, Rewards of Crypto (October 2021)
- Digital Assets to Become More Institutionalized in US Financial Sector (September 2021)

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The above article originally appeared as a post on the Fitch Wire credit market commentary page. The original article can be accessed at www.fitchratings.com. All opinions expressed are those of Fitch Ratings.

Fitch: New Covid Variants Ground Recent Traffic Improvements for Airports

Fitch Ratings-New York/Austin/London/Sao Paulo/Mumbai-19 October 2021: New Covid variants could impede recent improvements in vaccination rates and recent subsequent increases in passenger traffic at airports throughout the world, according to Fitch Ratings in its latest quarterly Global Airport Traffic Tracker.

Vaccination rates have improved significantly during the past three months, with all countries administering at least one dose to at least 50% of their populations and Spain leading at 81%. However, there are 11 variants classified as "under monitoring" by the World Health Organization. "Passenger traffic recovery may be vulnerable as these variants could trigger lockdowns, especially in countries with low inoculation rates — as has been the case in Australia," said Director Jeffrey Lack.

Australia's lockdown is already having a discernible effect with Fitch paring back its global airport traffic recovery estimates to roughly 68% by 2022, down from 78% in Fitch's 2Q report, with a full recovery still on tap for 2024.

Drilling down into regions of the world, passenger traffic for U.S. airports continued to ramp up through July 2021, surpassing 80% of pre-pandemic levels in that month. "Passenger traffic at U.S. airports is likely to plateau this quarter before recovering gradually to 100% by 2024," said Lack.

Tempering the effect of Australia's recent lockdown are faster recovery prospects in China and Brazil, which could see full traffic recovery by 4Q'22 and 4Q'23, respectively. Fitch anticipates slower recoveries in France, Italy, Spain and the UK, where recovery is not likely until 2025-2026.

Fitch's 'Global Airport Traffic Tracker: 3Q21 Update' is available at 'www.fitchratings.com'.

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Fitch: Delta Variant Reverses Leisure Jobs Recovery for Major U.S. Metros

Fitch Ratings-New York-19 October 2021: The Delta variant has pumped the brakes on leisure & hospitality job growth sector growth for U.S. metros throughout the country, according to Fitch Ratings in its latest U.S. Metro Labor Markets Tracker.

August marked a stagnant period for employment recovery for the U.S. as a whole thanks largely to broad reversals in the leisure and hospitality (L&H) sector.

The Northeastern L&H sector's recovery rate fell back to 88%, represented a 4% decrease from July. "Boston, Philadelphia, and New York City each saw job leisure and growth flatten and, in the case of Philadelphia, fall in August," said Senior Director Olu Sonola.

The Midwest and the South also posted month-over-month declines. Meanwhile, Kansas City is the latest major metro to achieve a 100% L&H recovery since February 2020. The Southern metros' L&H recovery rates declined sharply in August, falling to 81% from 87%. "Miami and New Orleans in particular saw their recent strong recoveries reverse in August," said Sonola.

Noteworthy among Western metros is Las Vegas, which has the highest L&H employment concentration among major metros. Las Vegas' L&H sector accounted for two thirds of job losses from February 2020 through August 2021 and has only recovered 57% of those jobs.

Fitch's latest "U.S. Metro Labor Markets Tracker" is available at www.fitchratings.com.

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