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U.S. Municipal Bond Market

Municipal Sector Credit Outlooks, Municipal Credit Two Months into the New COVID-19 Normal

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Credit Fundamentals are Key

The current financial landscape state and local governments and other municipal bond issuers find themselves navigating is almost beyond imagination. The steps many states and local governments have taken to contain the spread of COVID-19 have slowed most economies to a crawl. Some states are beginning to slowly open but economic activity remains minimal. Over 20 million workers were released in April, and the unemployment rate was 14.7% according to data released at the beginning of the May.[1] Airport and mass transit activity is only a fraction of the norm. Hospitals are trying to adjust to the new standard. Questions remain about whether or not primary, secondary, and higher education students will even return to classrooms in the fall. This is the new COVID-19 normal.

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HilltopSecurities Municipal Sector Credit Outlooks

Sector	Hilltop Credit Outlook	Recent Action (May 2020)	Key Sector Trends
State Government	Negative	Lowered	Lower asset values, oil prices, lack of activity will weigh on some budgets & pension assets more than others, overall we expect a high level of budget stress
Local Government	Negative	Lowered	Local revenues will take a hit b/c lack of activity, events, students, etc., pension liabilities will rise, high level of budget uncertainty
School Districts	Negative	Lowered	State cuts will pressure credit profiles, schools and charter schools could be pressured without state/federal aid, pensions important here too
Airports	Negative	Lowered	We lowered our outlook again, the sector was breaking records to the up-side before COVID-19, the near term could test the sector
Health Care	Negative	None	Uncertainty remains about when systems may transition from concentrating on or waiting for COVID-19 before they can begin regular procedures
Higher Education	Negative	None	Most schools have not announced Fall 2020 plans yet, some preparing for students to work remotely, others not sure yet
Housing	Stable	None	The expected recession could impact real estate markets generally, HFAs will be less impacted, other housing will be impacted case by case
Public Power (Elec.)	Stable	None	Essential purpose, usage slowing due to steps taken to manage COVID-19 and upcoming recession, only material if for an extended time
Tobacco	Negative	None	Smoking activity and sales may rise slightly, but not enough to make up for the overall drop in activity we have seen generally
Toll Facilities	Negative	Lowered	Already seeing usage decreases, duration of slowdown related to managing COVID-19 and expected recession both keys for the sector
Water and Sewer	Stable	None	Essentiality continues to be a key factor in this sector, likely to continue in importance

Source: HilltopSecurities.

Largely, we see this new COVID-19 normal as a period that will meaningfully test the bounds of financial resources, not as one that tests the entire market's solvency. To be sure, this overall outlook could change the longer this new COVID-19 normal lasts.

Please see disclosure starting on page 8.

The new COVID-19 normal is certainly readjusting near-term municipal credit profiles and will have some medium- to long-term impact. Largely, we see this new COVID-19 normal as a period that will meaningfully test the bounds of financial resources, not as one that tests the entire market's solvency. To be sure, this overall outlook could change the longer this new COVID-19 normal lasts. In that case, the two more significant big picture questions are: 1) How long will it take for regional, state, and local economies to get back to some resemblance of normal? 2) What will future federal government relief and then stimulus look like? We also expect that additional federal relief, whether it is in the form of the Health and Economic Recovery Omnibus Emergency Solutions (HEROES) Act or some other form, to be additive to the credit landscape.

In that case, the two more significant big picture questions are: 1) How long will it take for regional, state, and local economies to get back to some resemblance of normal? 2) What will future federal government relief and then stimulus look like?

Until there are answers to those questions, we think near-term fiscal strains will test the general fund balances of the state and local government sectors and the liquidity levels of revenue bond sectors. Some may come near the edge of their financial limits. This potential reinforces why credit fundamentals are a significant differentiator in the current environment. The present landscape is one where the more difficult fiscally conservative decisions some entities made in recent years are likely to soon provide benefits. To put it even more clearly, those state and local governments with larger general fund balances and those organizations in the revenue sectors that have been more serious about maintaining higher liquidity will have a relatively better time, and we expect investors to acknowledge this when making investing decisions.

Navigating the Muni Mania

One of the more difficult dynamics municipal bond investors will have to navigate is what can be referred to as "Muni Mania." We describe "Muni Mania" as near-sensationalist coverage of the municipal sector. This comes in several forms, but mostly it is because of the nuances involved and credit intricacies. This "Muni Mania" leading up to and following the World Financial Crisis was covered well in The Muni-Meltdown That Wasn't (see page 3).[2] This time around we are seeing and expect more "Muni-Mania," especially because of the political bent developing in the current landscape.

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HilltopSecurities Municipal Sector Credit Outlooks in The New COVID-19 Normal

The fiscal pressures from the new COVID-19 normal are impacting different sectors in different ways and in different orders of magnitude. There are some sectors more impacted than others as some are experiencing significant fiscal strains already. Airports, mass transit and senior living are among those most negatively impacted to date. That does not mean that the sectors like airports, mass transit, or even senior living should be abandon. It does mean credit fundamentals, like we mentioned above, are going to be a significant differentiating factor. Now, that we are about two months after California, which was the first state to put into action a shelter-in-place advisory, did so – we are taking a closer look at the status of municipal credit and looking at where are our credit sector outlooks are now.

State Government

Current Outlook: "Negative"

Recent Action: We lowered the outlook to "Negative" from "Cautious."

Summary: There are some states better positioned to weather the new COVID-19 normal than others. While we saw a record amount of money stashed away in rainy day funds before these events, there were also several large states which had almost no rainy day funds saved. The next few budget cycles will be very difficult for those without the foresight to set aside money absent federal relief. The Center on Budget and Policy Priorities forecasts that the budget shortfalls U.S. state governments could be facing may amount to a record $650 billion, even more than what states experienced during and after the 2008 Great Recession. Even with federal relief, we expect that state governments are going to be forced to cut their budgets. With no federal relief, state governments are likely to be forced to make severe cuts that will damage levels of aid to local governments, schools, public higher-ed, and some healthcare.

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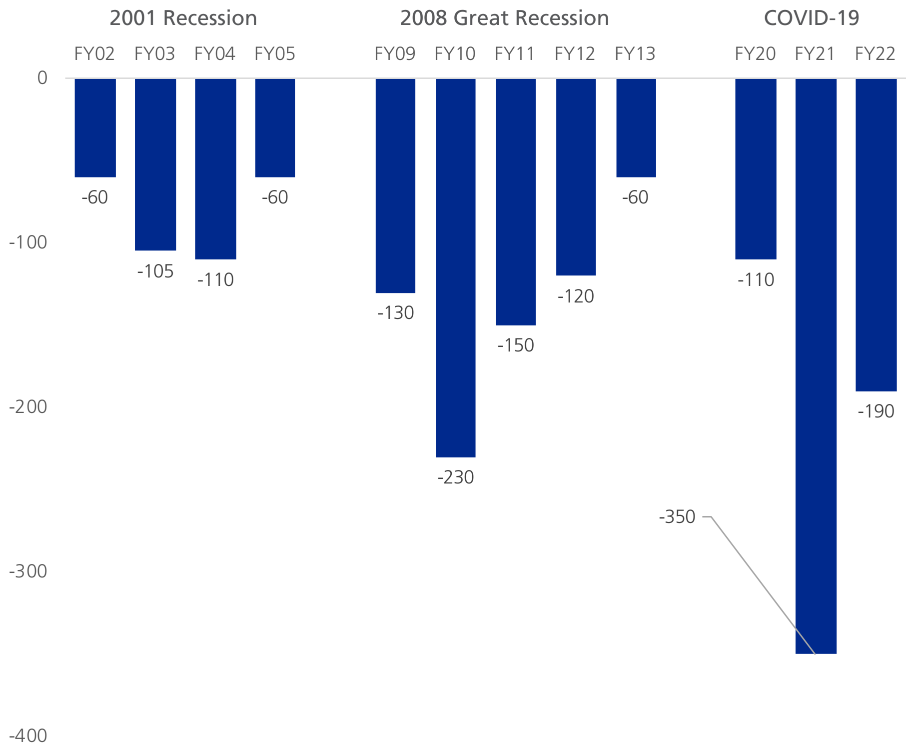
COVID-19 State Budget Shortfalls Could Be Largest on Record



Source: Center of Budget and Policy Priorities and HilltopSecurities, $ in billions

Among the budget solutions, we expect one that could be up for consideration was also utilized after the 2008 financial crisis, which is where states take pension funding holidays. This offers a short-term benefit, but raises the pension liability in the medium to long run. In most cases, states are not penalized for this and we expect it is a strategy that could be considered and then used. Overall, we also expect overall pension situations to deteriorate. Funding levels will fall as assets decline in value. Those pension plans with only a handful of years of payments remaining will come that much closer to pension plan insolvency.

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Local Government and School Districts

Current Outlook: "Negative"
Recent Action: We lowered the outlook to "Negative" from "Cautious."
Summary: There are some local governments and school districts within certain areas that are more exposed to the new COVID-19 normal than others. And, like the states, the amount of money the locals accumulated and kept in their general fund will be a differentiator among credit profiles. Those that stashed away reserves for a rainy day will be able to better adjust and will not rely on federal government support. In a report released last week, the National League of Cities projected total COVID-19 related revenue loss for cities, towns, and villages to be about $360 billion. We expect that state support is likely to fall in almost any circumstance, even if there is federal support. Therefore, credits more exposed to state aid will have an additional hurdle to overcome. Pension liabilities are an issue to consider here, too. Public pension funding levels are expected to drop, and will worsen further if locals take pension funding holidays, as we expect them to do.

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Airports

Current Outlook: "Negative"
Recent Action: We lowered the outlook to "Negative" from "Cautious."
Summary: The press coverage of the lack of activity at airports and pressures to the airline industry have been almost non-stop over the last two to three months. Federal relief from the CARES Act and potential additional federal relief is likely to help the municipal airport sector. How long air travel remains depressed is a key question for the sector and stresses the importance of the liquidity cushions airports have built for themselves in recent years. The municipal airport sector had some record-breaking years recently, and now credit and those liquidity positions could be put to the test. The Moody's median days cash on hand is 659 days with a range of 2,208 to 238 days for individual airports in the sector. Please see our commentary U.S. Airport Sector View – A Month Into COVID-19 (March 30, 2020) where we stressed the importance of the financial status of individual airports before the new COVID-19 normal and recent federal government support.

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Healthcare

Current Outlook: "Negative"
Recent Action: Our sector outlook has been "Negative" since our outlooks were created August 26, 2019.
Summary: The need for an increased amount of ventilators and hospital capacity have become hot topics in recent months. The number of COVID-19 cases has been leveling off in some places and rising in others, suggesting that the U.S. may not be out of the woods yet. Missed revenues from canceled services could continue to hamper healthcare credit quality. Meanwhile, the financial status of hospitals and healthcare systems and their liquidity positions remain key metrics to watch in the current environment. The Moody's median days cash on hand for the healthcare sector was 205. Federal aid will also be an important factor to consider. Almost 5% of the $2.3 trillion CARES Act was allocated to public health efforts. Another $100 billion was included in the HEROES Act proposal. Please see more in our commentary Non-Profit U.S. Healthcare – Rising Costs of Care from the COVID-19 Pandemic (April 7, 2020).

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Higher Education

Current Outlook: "Negative"
Recent Action: Our sector outlook has been "Negative" since our outlooks were created August 26, 2019.
Summary: We originally assigned a "Negative" outlook to the higher education sector back in August 2019 as a result of several factors such as falling enrollment and demographic influences. We also noted the end-of-summer stress following Alaska cutting its higher-ed budget could be a sign of things to come for soon-to-be stress for public higher-ed. At that time no one could have guessed a virus would clear out classrooms and campuses.

At the beginning of March, Harvard was one of the first univerisities to move to an online format. For fall 2020, it seems some campuses may be stating that they are leaning toward in-person classes.[3] But, it seems many decisions have yet to be made, according to this list of status from the top 25 colleges and universities.[4] Now, plans differ across the board. The 23 campuses and 500,000 students who are part of the California State University system already will not be returning in the fall. And University of California's 10 campuses, including Berkeley and UCLA, are preparing to hold classes primarily online.[5] The University of Notre Dame, located in South Bend, Indiana, announced that students will come to campus two weeks early, and skip fall break.[6] Talks continue about how to potentially allow sports to commence. A plan recently showed that rows of 20 seats could allow only five spectators each.[7] But, decisions about when and if to bring students back to campus are ongoing and reinforce to us that a return to "normal" is not likely for some time.

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Public and private institutions will be impacted in different ways but overall near-term liquidity will be key. The Moody's median days cash on hand was 338 days for private universities and 145 days for public universities. We also want to stress the idea that the level of a security pledge matters. More narrow security pledges tied to athletic or other specific revenue streams need to be considered, distinguished, and analyzed very closely. Please see our commentary Private Higher Education – Impact from Social Distancing (March 31, 2020) and Public Higher Education – A Closer Look (April 1, 2020) for a more detailed look at the higher education sector.

The main reason we have assigned a "Stable" outlook to the Housing (again with a concentration on State HFAs) sector is because of the very high credit quality that exists generally in the sector.

Housing

Current Outlook: "Stable"
Recent Action: Our sector outlook was "Positive" when they were created August 26, 2019. We lowered it to "Stable" in March 2020 and are keeping it at "Stable."
Summary: The details of this sector refer to single- and multi-family housing revenue bonds sold by state housing finance agencies (HFAs). There are several other housing subsectors (student, military, public housing cap funds) but those generally include a different type and sometimes different levels of risk and should be considered individually. While we lowered our Housing sector outlook to "Stable," you can see our opinion of the credit in the sector is much different from most of our other sector outlooks. This is not by accident. The main reason we have assigned a "Stable" outlook to the Housing (again with a concentration on State HFAs) sector is because of the very high credit quality that exists generally in the sector, and also because we think that even through the current or coming recession or economic downturn that the credit quality will mostly remain strong. State HFA credit quality remained resilient, even in the depths of the last recession, which significantly pressured housing markets across the country. This is a very nuanced sector, please see our recent commentary Single Family Housing, Durability Will Help Endure the New COVID-19 Normal (May 6, 2020) for a more detailed look at single family HFA housing.

The essential nature of public power for commercial and residential usage underscores its importance and strengthens the argument for the sector's "Stable" outlook, despite the fact that usage has fallen and is likely to remain below average during the expected economic slowdown.

Public Power

Current Outlook: "Stable"
Recent Action: Our sector outlook was "Stable" when they were created August 26, 2019. We are keeping it at "Stable."
Summary: Before this downturn, annual electrical generation remained very constant as economic growth rose, even though the sources have shifted–most notably the increase in natural gas as an overall percentage. Low natural gas prices have limited the financial impact of this shift for now. There is a relationship between economic growth and/or a decline in economic activity and energy use. This exposure exists in other sectors but is very apparent in public power. However, the essential nature of this product for commercial and residential usage underscores its importance and strengthens the argument for the sector's "Stable" outlook, despite the fact that usage has fallen and is likely to remain below average during the expected economic slowdown. The utilities that own generation rate-setting ability has helped them create stable to increased coverage metrics in recent years. We remain on the lookout to see if usage falls so far below acceptable levels that we would need to revise our sector outlook.

Tobacco

Current Outlook: "Negative"
Recent Action: Our sector outlook was "Negative" when they were created August 26, 2019. We are keeping it at "Negative."
Summary: The tobacco settlement revenue securitizations are bond issues secured by the tobacco settlement revenues tobacco companies agreed to pay to state and other governments under the Master Settlement Agreement (MSA) in 1998. Falling domestic cigarette sales are largely responsible for declines in the actual MSA payments that secure the bonds. The National Association of Attorneys General released its annual U.S. MSA domestic cigarette shipment data and showed lower numbers again, therefore payments to states were also lower. While we have read anecdotal evidence saying the use of tobacco is up in the U.S. because of COVID-19, we do not expect that there will be a material change to the sector credit quality as a result.

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Toll Facilities

Current Outlook: "Negative"
Recent Action: Our sector outlook was "Stable" when they were created August 26, 2019. We lowered it to "Cautious" in March 2020 and lowered again to "Negative."
Summary: This is one of the sectors that has been hardest hit by the new COVID-19 normal. Although, hopefully the worst is behind us as states begin to open up their economies. We saw toll traffic has been supported by stable economic growth in recent years and in some cases we even saw steady fee or toll increases to keep revenues rising at the necessary levels to maintain sufficient debt service coverage levels. We do not expect there is a significant amount of room for revenue increases above those that were already planned in most cases. Liquidity could play an important part here, as we have mentioned in recent summaries above. If traffic activity remains low, we will have to see how individual entities are able to react with needed revenue enhancements or added rounds of toll increases in order to maintain debt service coverage levels. This will need to be considered on a case-by-case basis. At the federal level, we were watching to see if there was continued dialogue about how to effectively and efficiently fund toll road infrastructure. It is possible that this could make its way into future relief and or stimulus, which would be a credit positive for the sector.

If traffic activity remains low, we will have to see how individual entities are able to react with needed revenue enhancements or added rounds of toll increases in order to maintain debt service coverage levels.

Water and Sewer

Current Outlook: "Stable"
Recent Action: Our sector outlook was "Stable" when they were created August 26, 2019.
Summary: The essentiality factor of water and sewer service is a significant driver of the strong financial and credit conditions of most of the issuers in this sector. Operating revenues have grown +3.0% annually since the 2008 Great Recession. Liquidity metrics are 50% higher than they were 10 years ago, and that is not because they were so low back then–it is frankly because they rose so much. Days cash on hand is at a high 561 days of operating expenses. And, debt service coverage have been over 2.0x for five straight years, all numbers according to Fitch Ratings. The above financial strength we report is one of the reasons there have only been two defaults of rated water and sewer issues since 1970, according to the recent Moody's default and recovery study. Surely, the financial performance could weaken some during the expected recession, but issuers in this sector are doing what they need to in order to weather the next economic storm.

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A Spectrum of the Most Vulnerable and Least Vulnerable to Credit Deterioration

While the above sector outlooks are a good starting point, they do not include all of the subsectors that are included in the municipal bond market. We are expecting the importance of credit fundamentals will continue to be an important theme as the year continues. Therefore, we provide some additional guidance about the most and least vulnerable to potential credit deterioration as a result of COVID-19. We are going to begin at the top, with those that we believe are most vulnerable. Those at the bottom are those we believe are least vulnerable. Please remember that an entity with strong credit fundamentals, even if it is in a most vulnerable category, is better positioned to weather the impact from the new COVID-19 normal. Also, please see the answer to question #3: "What municipal sectors are most at risk (choose three) for credit deterioration as a result of the economic downturn as a result of the steps taken to reduce the spread of the coronavirus?" in our 2020 Municipal Analyst Survey to see what sectors municipal analysts believe are most at risk for credit deterioration.

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Most Vulnerable Subsectors and Credits

Senior living, nursing homes and retirement communities; mass transit; retail, stadium, hotel or casino related security pledges: narrow higher-ed pledges (athletic facilities); standalone housing projects; small, rural, or single location healthcare; small private higher education; small and some regional airports and other narrow airport-related pledges; and non-profit entities like museums.

Subsectors and Credits at the Middle Level of Vulnerability
States, local governments and schools exposed to pensions, energy (oil), or tourism and hospitality; entities exposed to potential state government budget cuts, larger airports, toll roads, charter schools, mid-level higher education institutions, and healthcare.

Least Vulnerable Subsectors and Credits
Most state and local governments, school districts; state housing finance agencies (single and large multi-family resolutions); public power, water and sewer; major private and public higher ed institutions.

Least vulnerable subsectors and credits: Most state and local governments, school districts; state housing finance agencies (single and large multi-family resolutions); public power, water and sewer; major private and public higher-ed institutions.

Definition of Outlooks

- **Positive:** HilltopSecurities Strategy and Credit believes there are factors which point towards improving issuer or sector credit quality which may result in a higher level of credit ratings upgrades versus downgrades.
- **Stable:** HilltopSecurities Strategy and Credit believes there are factors which point towards stable issuer or sector credit quality which are likely to result in an even level of credit ratings upgrades versus downgrades.
- **Cautious:** HilltopSecurities Strategy and Credit believes there are factors which introduce the potential for declines in issuer or sector credit quality that may result in potential credit ratings downgrades only slightly outnumbering upgrades.
- **Negative:** HilltopSecurities Strategy and Credit believes there are factors which point towards weakening issuer or credit quality that will likely result in a higher number of credit ratings downgrades versus upgrades.

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[1] *Please see The Bright Side of the Worst Employment Report Ever; Scott McIntyre; HilltopSecurities; May 8, 2020.*
[2] *Mysak, Joe; The Muni-Meltdown That Wasn't; Bloomberg; November 2014.*
[3] *Leckrone, Bennett; Here's a List of Colleges' Plans for Reopening in the Fall; The Chronicle of Higher Education; April 23, 2020.*
[4] *Hadden, Joey, Businessinsider; What the top 25 colleges and universities in the US have said about their plans to reopen in fall 2020; May 13, 2020*
[5] *Belkin, Douglas; Coronavirus to Force California Public Universities Largely Online for Fall; Wall Street Journal; May 12, 2020.*
[6] *Yan, Holly; Notre Dame plans to bring students back to campus 2 weeks early and will skip fall break; CNN; May 19, 2020.*
[7] *Higgins, Laine; College Football Prepares to a Tough Matchup: Tradition vs. Coronavirus; Wall Street Journal; May 18, 2020.*

Recent HilltopSecurities COVID-19 Municipal Commentary

- The HEROES Act: the House Democrats' Opening Proposition, May 12, 2020
- Updated Pricing Detail: Federal Reserve's Municipal Liquidity Facility, May 11, 2020
- Municipal Credit and Market Update, May 8, 2020
- Single Family Housing Durability Will Help Endure the New COVID-19 Normal, May 6, 2020
- Credit Deteriorating, Moody's Lowers State Outlook to "Negative," May 1, 2020

Recent HilltopSecurities COVID-19 Economic Commentary

- Notes on the May Bloomberg Economists Survey, May 18, 2020
- Consumer Spending Slammed in April, May 15, 2020
- Global Sheltering Clamps Down Prices, May 13, 2020
- The Bright Side of Worst Employment Report Ever, May 8, 2020
- Automakers Face a Rocky Road to Recovery, May 4, 2020