U.S. Municipal Bond Market

The Municipal Market in 2023, Hilltop's Municipal Sector Credit Outlooks

Ted Chapman
ted.chapman@hilltopsecurities.com
214.859.1067

Tom Kozlik
tom.kozlik@hilltopsecurities.com
214.859.9439

Doug Nelson
doug.nelson@hilltopsecurities.com
818.212.2048

Yaffa Rattner
yaffa.rattner@hilltopsecurities.com
214.859.9883

Phil Villaluz
philip.villaluz@hilltopsecurities.com
321.788.6488

- There are more questions about the economic backdrop to begin 2023 compared to a year ago. This is despite the near-term positive economic tone we see to begin January.
- The Golden Age of Public Finance will continue into 2023, but there are threats, some developing others already entrenched, stressing public finance sectors.
- We are lowering our **State Government** outlook to "Stable" from "Positive." We are not expecting credit deterioration, we simply believe most upgrades have occurred already.
- Our **Local Government** sector outlook remains "Positive." We believe public finance rating upgrades will outpace downgrades in 2023 and many of those upgrades will occur in this sector.
- Healthy state balance sheets should keep K-12 funding steady even if recessionary conditions develop. We are watching legacy liabilities, operational and workforce factors closely in the **School District** sector as well.
- Passenger enplanements are recovering but, labor and capacity constraints, combined with the potential for a softening economy could moderate the **Airport** sector's revival.
- **Charter Schools** have benefitted from increased enrollment and revenues which have muted the impact of expense pressures allowing for generally stable financial operations.

HilltopSecurities Municipal Sector Credit Outlooks

Sector	Hilltop Credit Outlook	Jan. 2023 HTS Action(s)	Key Sector Trends
State Government	Stable	Lowered to Stable	Total balances remain near record levels, most states can withstand a recession
Local Government	Positive	None	Healthy reserves, concerned some credits are not preparing for financial reality
School Districts	Positive	None	Reserves are healthy here too, fiscal balance also needed
Airports	Stable	None	Enplanements bouncing back with a "permanent structural change"
Charter Schools	Stable	Initial outlook	Charters maintained COVID-19 enrollment gains
Community Facilities Districts	Stable	Initial outlook	California property values will support the state's CFDs market
Health Care (inv. grade)	Negative	None	Fiscal strain, consolidations, partnerships & affiliations still occurring
Health Care (sub-inv. grd, NR)	Negative	Initial outlook	Same backdrop as above, less resources
Higher Education	Public: Cautious Private: Negative	None	Forecast expects the number of high school grads to drop off starting in 2025, healthy state coffers provide a near-term boost to public entities
Housing	Stable	Lowered to Stable	Fiscal momentum is slowing and issuance is expected to drop
Public Power (Elec.)	Stable	None	Good cash position and coverage ratios are under pressure
Senior Living	Negative	Initial outlook	We expect more and greater operating headwinds in the medium-term
Tobacco	Negative	None	More downside risk b/c of government policy and declining tobacco usage
Toll Facilities	Stable	None	Vehicle miles traveled are recovering, watching economic growth
Water & Sewer	Stable	None	Essentiality remains a factor but fiscal pressures are building

Source: HilltopSecurities.

Please see disclosure starting on page 20.

- Our initial "Stable" outlook for the **Community Facilities District** sector is concentrated on activity in California, where property values remain relatively stable and housing demand endures.
- The **investment grade Health Care** sector was experiencing fiscal pressures before the COVID crisis, and those pressures are likely to continue into 2023 and the near-term.
- **Sub and non-investment grade Health Care** entities are more vulnerable to expense pressures given little revenue flexibility and generally less liquidity.
- Sluggish operating revenue growth, declining student enrollment, changing consumer preferences, along with heightened inflationary & cost pressures challenge **Higher Education.**
- We lowered our **Housing** sector outlook to "Stable" from "Positive," because of a slowdown in activity. Downgrades are not likely in the sector. Margins will remain healthy.
- The **Public Power** sector's cash position and metrics are under pressure from rising costs.
- **Senior Living** expenses have been pressured by wage and food increases while rental rate increases have been more muted resulting in margin compression and thus our "Negative" outlook.
- The **Tobacco** securitization sector continues to experience consumption declines and event risk.
- **Toll Facilities** activity is rebounding and we expect the recovery to be supported by stable-to-growing commercial vehicle traffic and a steady return of passenger travel.
- **Water and Sewer** sector: Though an essential service, the rate of increase in consumers' water bills has outstripped that of comparable services, personal real income and inflation for decades.

There is optimism about the trajectory of the U.S. economy to begin 2023. There is still a chance, albeit a small one, that a soft landing for the U.S. economy is achieved.

The Economic Backdrop

There is optimism about the trajectory of the U.S. economy to begin 2023. There is still a chance, albeit a small one, that a soft landing for the U.S. economy is achieved. However, just because the year is beginning on a more optimistic tone, it does not mean that is how 2023 is going to finish. The tone to begin 2022 was rather positive as well. Why has the outlook in January 2023 strengthened? Hilltop's Scott McIntyre and Greg Warner have recently reviewed why some of the latest economic data could support less Federal Reserve action in the near-term. We should keep in mind that the Fed wants to control consumer demand, slow job growth and manage wage inflation. The December non-farm payroll result could be supporting part of the Fed's aim. "U.S. businesses added the fewest jobs to company payrolls in two years," according to Markets Rally Big on Slower Wage Gains. And last week the first negative consumer price index data in 32 months reported that inflation may be easing, please see Markets Signal Smaller Rate Hike in Feb on Negative CPI Reading.

Last week the first negative consumer price index data in 32 months reported that inflation may be easing, please see Markets Signal Smaller Rate Hike in Feb on Negative CPI Reading.

Fed officials may be favoring a slowdown in the magnitude of rate hikes, but the rate hikes are likely to continue. At the end of 2022 many were expecting the Fed was going to raise its target rate by 50 basis points at the conclusion of its Feb. 1 meeting and another 25 basis points on March 22. Now, many believe that level of activity could be excessive. Target rate increases are still expected at the upcoming meetings, it's just

Fed officials may be favoring a slowdown in the magnitude of rate hikes, but the rate hikes are likely to continue.

that the escalations won't be as high as anticipated. According to the Fed's December statement, their expected median peak rate is around 5.00% for the rest of 2023, and the dot plot shows there could be rate cuts of 100 basis points in both 2024 and 2025.

We anticipate issuance activity will remained challenged again in 2023. Interest rates are likely to remain high, and we forecast $350 billion of municipal bond issuance for 2023.

Examining Themes We Expect Will Impact Public Finance

Federal Reserve activity significantly impacted public finance in 2022. Primary market municipal bond issuance fell by about 20% year-over-year. Refunding issuance collapsed because of higher interest rates. We anticipate issuance activity will remained challenged again in 2023. Interest rates are likely to remain high, and we forecast $350 billion of municipal bond issuance for 2023.

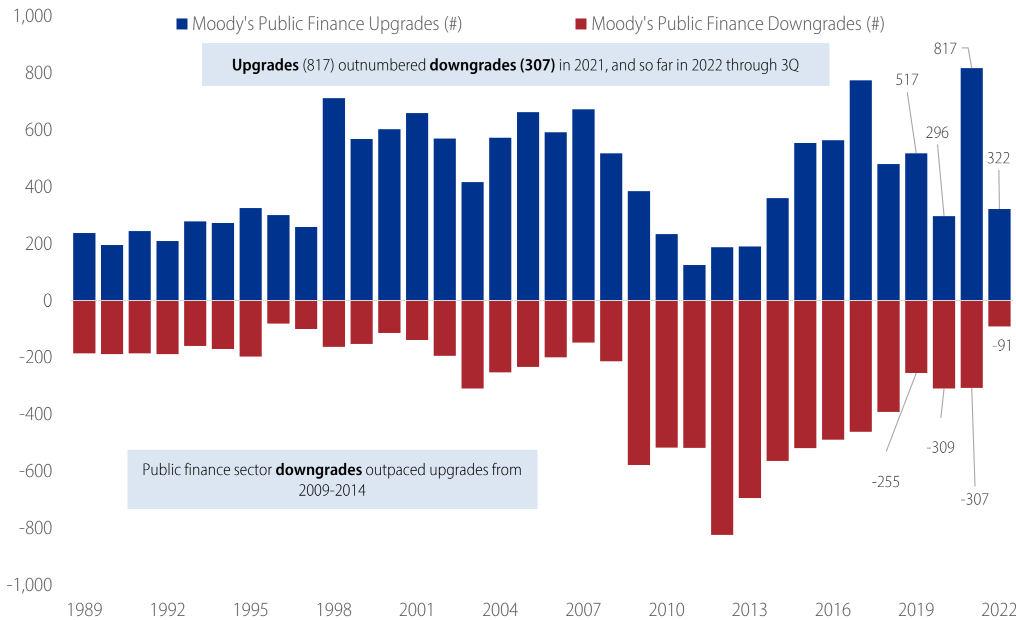
The public finance community and organizations that participate in the municipal bond market often react to financial occurrences in bespoke ways. A new financial reality is again developing across the U.S. Many public finance entities are in the midst of adjusting to the new reality. There are major themes like the course of the Federal Reserve's actions, the direction of interest rates, pace of economic growth/decline, rate of inflation, and international events that are all helping to chart the near-term course in the new year. There are also topics that are public finance specific such as: the evolving relationships between the federal, state, and local levels of government, the need for higher taxes and fees to balance budgets, the question of who will pay for the higher taxes and fees, the pros and cons of hybrid work (likely to heavily influence public finance) and required infrastructure upgrades (still) are among the issues we are tracking to begin the year. There is an interconnectedness among many if not all these themes. They all impact public finance and the sectors within public finance a little differently. It is often said that there are important nuances in public finance. These relationships, these nuances, are what we hope to flush out for readers and observers in this year's Municipal Sector Credit Outlook summary.

A new financial reality is again developing across the U.S. Many public finance entities are in the midst of adjusting to the new reality.

A key story to follow in 2023 will be how it is that public finance entities who have mostly benefitted from the sugar-rush of massive federal government COVID-19 aid will adjust in coming years. Treasury Secretary Janet Yellen indicated that the significant level of public finance focused aid helped to correct a post-Great Recession era policy error. No matter the reason for the enhancement, we cannot deny the super credit positive backdrop the federal largess produced. The American Rescue Plan Act of 2021 was a game changer for public finance. We indicated a Golden Age of Public Finance was to follow after the American Rescue Plan was initially approved in March of 2021. A Golden Age did follow. In 2021 public finance (per Moody's) ratings upgrades soundly outpaced downgrades 817 to 307. Upgrades again outpaces downgrades through the first three quarters of 2022, 322 to 91. During both periods tax-backed credits received the majority of the upgrades, because federal aid was skewed to the positive in the state, local government and school district sectors.

A key story to follow in 2023 will be how it is that public finance entities who have mostly benefitted from the sugar rush of massive federal government COVID-19 aid will adjust in coming years.

Public Finance Upgrades Have Outpaced Downgrades in the Golden Age



Source: Moody's and HilltopSecurities.

The Golden Age of Public Finance is making the numbers look good for now, but we are going to be watching closely in 2023 to see how public finance entities in all sectors adjust to the new financial reality.

We described the current situation as a sugar-rush because it is only temporary. This support will only be here in the short-term. Federal government resources like this will not be the ongoing reality. Eventually, or should we say soon, public finance entities at the state and local level especially will need to adjust spending patterns to the new post-COVID-19 financial reality. The Golden Age of Public Finance is making the numbers look good for now, but we are going to be watching closely in 2023 to see how public finance entities in all sectors adjust to the new financial reality.

U.S. State Government Sector

HilltopSecurities Credit Outlook: "Stable"
Recent Change: Lowered to "Stable" from "Positive" in this analysis.
Author: Tom Kozlik

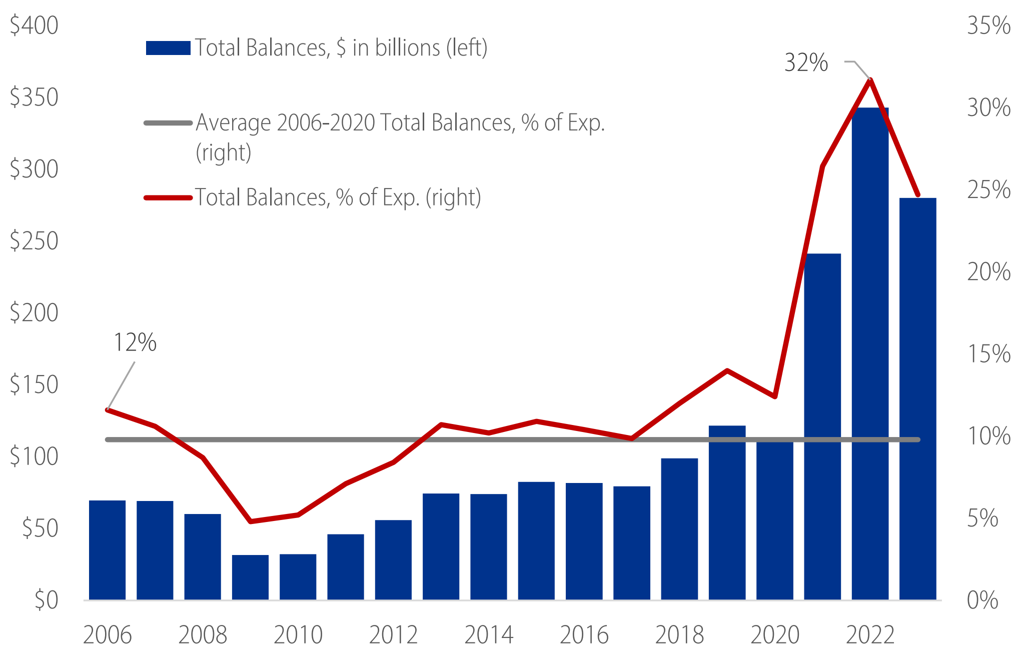
U.S. state credit quality remains very strong and state government finances are well positioned to withstand near-term inflationary pressures and a recession should one develop.

U.S. state credit quality remains very strong and state government finances are well positioned to withstand near-term inflationary pressures and a recession should one develop. A key reason state government credit quality is largely solid is because of the almost $200 billion in direct unencumbered aid that flowed to states as part of the American Rescue Plan Act of 2021. Sector total balances (which include rainy day funds and general fund ending balances) remain at very healthy levels according to National Association of State Budget Officers data. For fiscal year 2022 total balances climbed to $343 billion because of federal aid and higher than expected revenue collections. Total balances are expected to remain relatively high but fall year-over-year according to the NASBO fiscal year 2023 projections even though states are planning to spend down a portion of their balances and anticipating lower levels of revenue. We remain concerned about the rising federal share of state revenue.

We remain concerned about the rising federal share of state revenue.

We did lower our State sector outlook to "Stable" down from "Positive." This is not because we expect credit deterioration, it is because we believe most of the rating upgrades that are likely to occur in the state sector have already happened. We reviewed how the U.S. state ratings distribution shifted higher after COVID-19 in State Credit Mainly Improved & Most Positioned to Withstand a Recession (Dec. 6, 2022). Most states are positioned to withstand a moderate recession largely because of their surpluses. Moody's Analytics projects that seven states, Illinois (-18.7%), Alaska (-16.4), Arizona (-13.3%), Mississippi (-10.9%), New Hampshire (-10.2%), Pennsylvania (-8.4%), and Maine (-8.1%) will possess budget shortfalls after a moderate recession shock.

U.S. State Governments Still Maintain Very Healthy Total Balances in Reserve



Source: National Association of State Budget Officers and HilltopSecurities.

We did lower our State sector outlook to "Stable" down from "Positive." This is not because we expect credit deterioration, it is because we believe most of the rating upgrades that are likely to occur in the state sector have already happened.

U.S. Local Government Sector

HilltopSecurities Credit Outlook: "Positive"
Recent Change: None
Author: Tom Kozlik

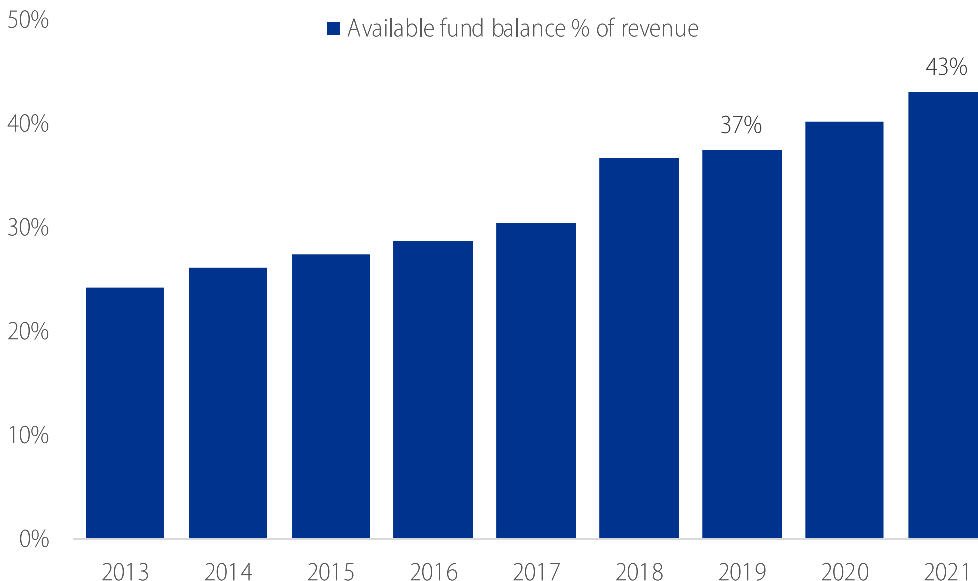
Local governments are beginning 2023 in excellent fiscal shape. Finances were bolstered in March 2021 with $130 billion of direct aid from the American Rescue Plan Act of 2021.

Local governments are beginning 2023 in excellent fiscal shape. Finances were bolstered in March 2021 with $130 billion of direct aid from the American Rescue Plan Act of 2021. $65 billion flowed to cities and $65 billion flowed to counties. Governments must obligate funds by the end of calendar year 2024 and expend funds by the end of calendar year 2026. As a result, local government financial reserves are very healthy. Available fund balances as a percent of revenue are at 43%, according to data from Moody's Investor Service. We expect that public finance ratings could continue to outpace downgrades in 2023 and this trend would be led by local government sector activity.

While there are limited major immediate stresses facing the local government sector there are factors that will require attention in coming budget cycles. The strong fiscal status should help the local government sector weather uncertainty such as shifts in working trends, mass transit funding requirements, inflation, commodity price uncertainty, infrastructure needs, and a potential recession. An important credit concern is that there are many local governments that have plugged holes in budgets, or even paid for increases in spending with the above-mentioned federal aid. When this aid is exhausted it will be important that finance officers regain or find fiscal balance. This planning should be occurring now. We are concerned that some local governments have been relying too heavily on federal aid. Local governments who fail to find fiscal balance will experience downgrades. We highlighted the fact that public entities are facing growing expenses from rising inflation and surging labor costs in The Next Big Risk (page 9).

We expect that public finance ratings could continue to outpace downgrades in 2023 and this trend would be led by local government sector activity.

City Financial Reserves are Also Very Healthy to Begin 2023



Source: Moody's Investor Service and HilltopSecurities.

We are concerned that some local governments have been relying too heavily on federal aid. Local governments who fail to find fiscal balance will experience downgrades.

U.S. School Districts

HilltopSecurities Credit Outlook: "Positive"
Recent Change: None
Author: Ted Chapman

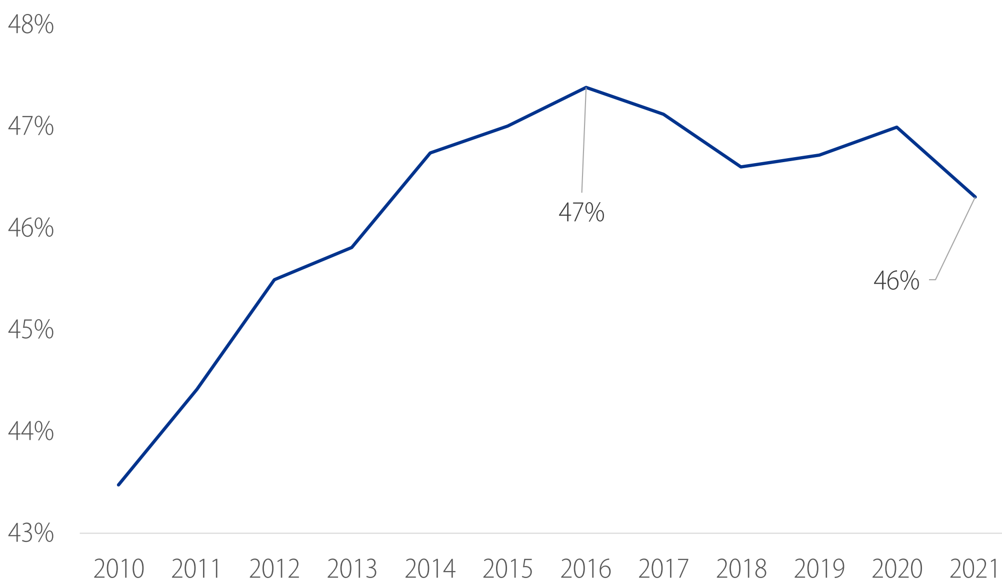
Our opinion on the U.S. school district sector remains auspicious because funding and direct revenue streams have built a solid cushion.

Our opinion on the U.S. school district sector remains auspicious because funding and direct revenue streams have built a solid cushion. Schools were also a beneficiary of the American Rescue Plan Act of 2021. The legislation allocated $123 billion in school funding. This is on top of the funds sent to states and local governments. Also, state funding as a percentage of total K-12 spending has trended steadily upward for more than a decade before plateauing at about 47% of total revenues. School district credit quality is often reliant on state credit and under the current circumstances that is a credit positive. U.S. state credit quality is very strong. States are financially much better positioned in 2023 than they were entering previous economic downturns.

The winter 2022 "triple-demic" of respiratory syncytial virus (RSV,) flu and the latest COVID strains serves as a reminder of what could be the new normal for local school administrators. Sadly, that is not the only headline risk pressuring local school health and safety budgets: campus security expenditures are projected to grow at more than 8% per year for at least the next few years and has been a consideration in a number of recent bond elections. Attracting and retaining teachers, counselors and staff is harder than ever. Certainly public school districts have to consider operational and financial competitive pressures from charter and private schools as well. However, the population of school-age children might finally be on an upswing after years of flat-to-declining numbers in many states; the Census Bureau noted that total enrollment in kindergarten rose 8% in 2021. For most public school districts, state revenues are based on some type of weighted or adjusted per pupil headcount.

School district credit quality is often reliant on state credit and under the current circumstances that is a credit positive. U.S. state credit quality is very strong.

State Share of Total K-12 Funding Has Remained Steady Recently



Source: US Census Bureau and HilltopSecurities.

Attracting and retaining teachers, counselors and staff is harder than ever. Certainly public school districts have to consider operational and financial competitive pressures from charter and private schools as well.

Airports

HilltopSecurities Credit Outlook: "Stable"
Recent Change: None
Author: Phil Villaluz

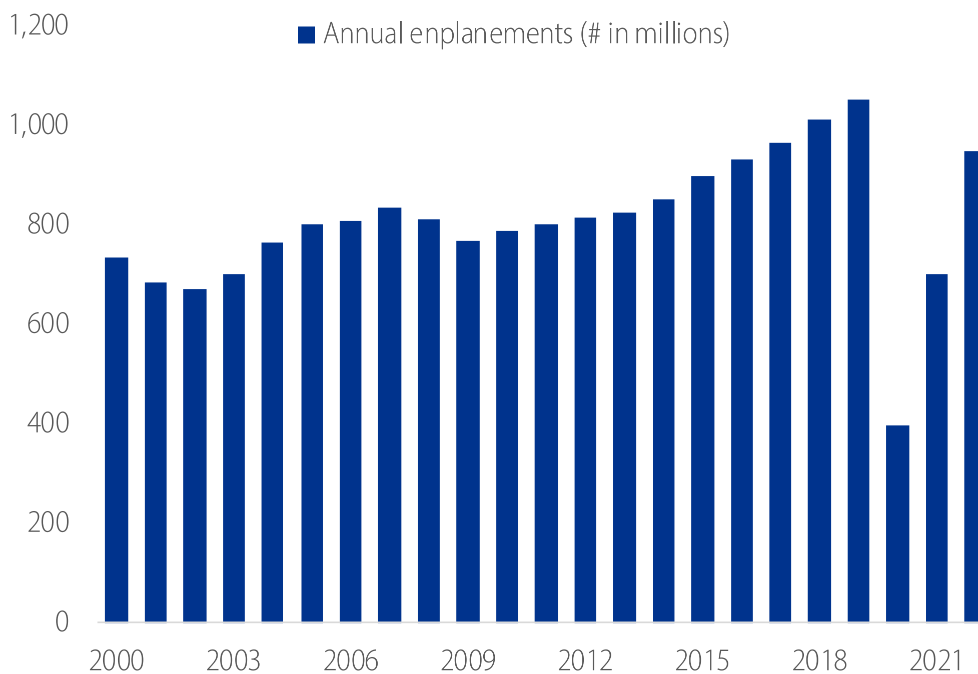
The airport sector received much attention in the depths of the COVID-19 related shutdowns. There are not many sectors that experienced as much uncertainty as this one.

The airport sector received much attention in the depths of the COVID-19 related shutdowns. There are not many sectors that experienced as much uncertainty as this one. Shifts in the industry have occurred that are having a differing impact nationwide, also. The CEO of United Airlines expects a "permanent structural change" because of changes related to hybrid work and a new level of leisure travel demand, for example. Here is what is happening with the numbers within the sector. Passenger enplanements have largely recovered and in cases some individual airports have even surpassed 2019 levels. As a result, airports have returned to more normalized rate-setting flexibility and revenue metrics; we think this supports rating stability for the sector. Adjustments will be made to support any structural changes, and we expect airlines and airports will be able to make the necessary adjustments over the near term.

Airport finances and liquidity levels have benefitted from significant federal aid, however, it is projected that airport operators will exhaust most of this assistance by fiscal 2024. Furthermore, airport and airline labor and capacity constraints, combined with an anticipated softening US economy in 2023 could moderate the recovery in air travel as both leisure and business travelers cut back on spending.

Airports have returned to more normalized rate-setting flexibility and revenue metrics; we think this supports rating stability for the sector.

Passenger Enplanements Estimated to Recover to Between 2016 and 2017 Levels



Source: Bureau of Transportation Statistics and HilltopSecurities. 2022 enplanements are estimated assuming a recovery to 90% of pre-pandemic levels.

Airport and airline labor and capacity constraints, combined with anticipated softening US economy in 2023 could moderate the recovery in air travel as both leisure and business travelers cut back on spending.

Charter Schools

HilltopSecurities Credit Outlook: "Stable"
Recent Change: This is the first time we have included this sector.
Author: Yaffa Rattner

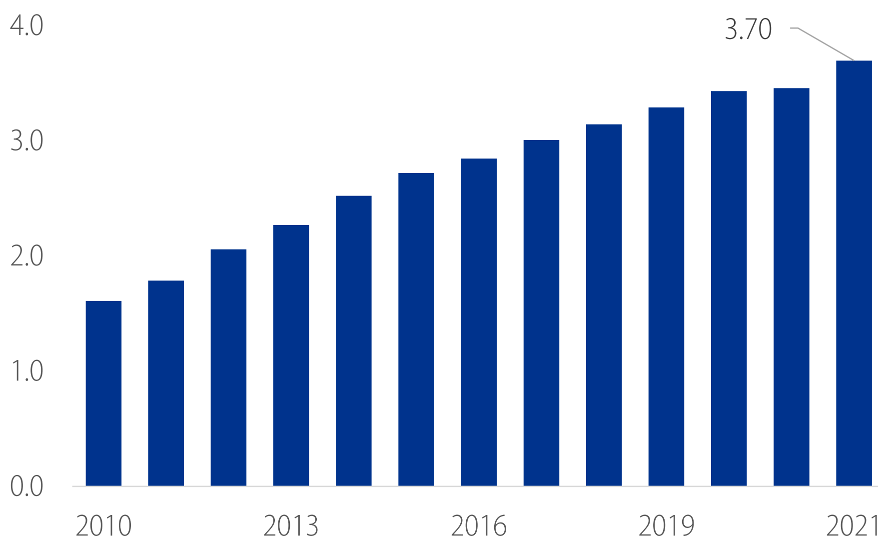
Charter schools currently educate approximately 3.7 million or 7.5% of K-12 students in the United States and accounted for $4.8 billion in municipal debt issued in 2022.

We are initially assigning a "Stable" outlook on the Charter School sector. Charter schools currently educate approximately 3.7 million or 7.5% of K-12 students in the United States and accounted for $4.8 billion in municipal debt issued in 2022. Charters are most prevalent in California, Texas, Florida, Arizona, New York, Pennsylvania, Colorado, and Michigan. Charter schools gained in enrollment during the pandemic and those enrollment increases were largely maintained as students benefitted from generally more flexible curriculums and academic gains when compared to traditional public schools. Some investors see charter schools as recession proof as the charters are tuition free for parents, and funding, predominantly state aid, is typically determined by enrollment which has been growing.

Charter schools operate via a charter with an authorizer that typically allows more flexibility to educational approach, as long as, financial, academic, and governance standards are maintained. Given the sharp increases in enrollment, from 1.6 million children in 2009 to 3.7 million children today, there has been a race to construct appropriate facilities. Funding for the schools varies state by state but follows the student and increases with enrollment growth. Ongoing credit related factors and metrics to watch on individual charter schools would be liquidity, capital needs, teacher availability, academic performance, demographic trends in the area, and a management team that can produce stable financial and academic results. Therefore, charter schools with good management, sound academic performance, and solid enrollment with significant waitlists are poised to weather economic challenges in the medium term.

Charter schools gained in enrollment during the pandemic and those enrollment increases were largely maintained as students benefitted from generally more flexible curriculums and academic gains when compared to traditional public schools.

Annual Charter School Enrollment *(#s in millions)*



Source: National Alliance for Public Charter Schools and HilltopSecurities.

Charter schools with good management, sound academic performance, and solid enrollment with significant waitlists are poised to weather economic challenges in the medium term.

Community Facilities Districts

HilltopSecurities Credit Outlook: "Stable"
Recent Change: This is the first time we have included this sector.
Author: Doug Nelson

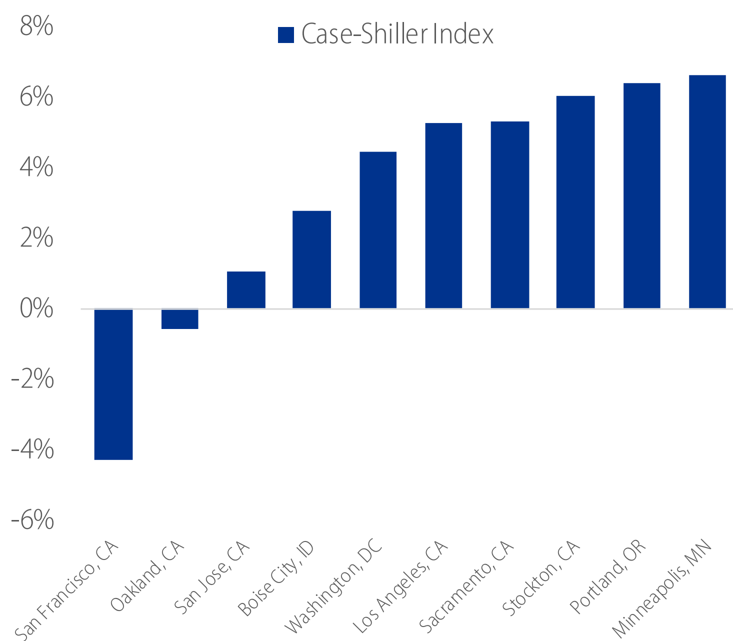
A community facilities district (CFD) is a special taxing district created within a municipality that allows the financing of the installation, operation and maintenance of public improvements that benefit a specified area usually within the district's boundary.

A community facilities district (CFD) is a special taxing district created within a municipality that allows the financing of the installation, operation and maintenance of public improvements that benefit a specified area usually within the district's boundary. CFDs are secured by special taxes levied based on the parcel size. Many CFDs are located in California, but there are other states that use a similar mechanism for new development. Most CFD bonds issues are non-rated, however, the larger CFDs can be investment grade and often come to market with insurance. With the passage of the Affordable Housing and High Roads Jobs Act of 2022 in California, which allows approval of affordable housing development on commercially zoned land, it will be interesting to see if the use of CFDs increases.

Housing starts have been slowing nationwide and in California, however, property values continue to rise albeit, more slowly in California due to a combination of rising mortgage rates and non-affordability.

Housing starts have been slowing nationwide and in California, however, property values continue to rise albeit, more slowly in California due to a combination of rising mortgage rates and non-affordability. There is still demand for housing in California. The graph below shows that growth in California housing prices have lagged the rest of the U.S. which can be explained by existing elevated housing prices and lack of affordability. According to the Case-Shiller Home Price index, between August of 2021 and August of 2022, the average home price in the U.S. rose 12%. Since growth has already been slowing in California, a major downturn in housing prices is not expected statewide. In addition, property values in California are expected to remain relatively stable, therefore, very few CFDs are expected to default or become distressed in California, but there will be a slower growth trajectory in the state.

Metros Where Housing Prices Lagged the U.S., *% YoY change ending Aug. 2022*



Source: Case-Shiller Home Price Index and HilltopSecurities.

Property values in California are expected to remain relatively stable, therefore, very few CFDs are expected to default or become distressed in California, but there will be a slower growth trajectory in the state.

Health Care (Investment Grade)

HilltopSecurities Credit Outlook: "Negative"
Recent Change: None
Author: Doug Nelson

There were fiscal pressures for non-profit Health Care (Investment Grade) before the COVID crisis, pressures heightened during the worst of the COVID-19 period, and financial concerns have not abated.

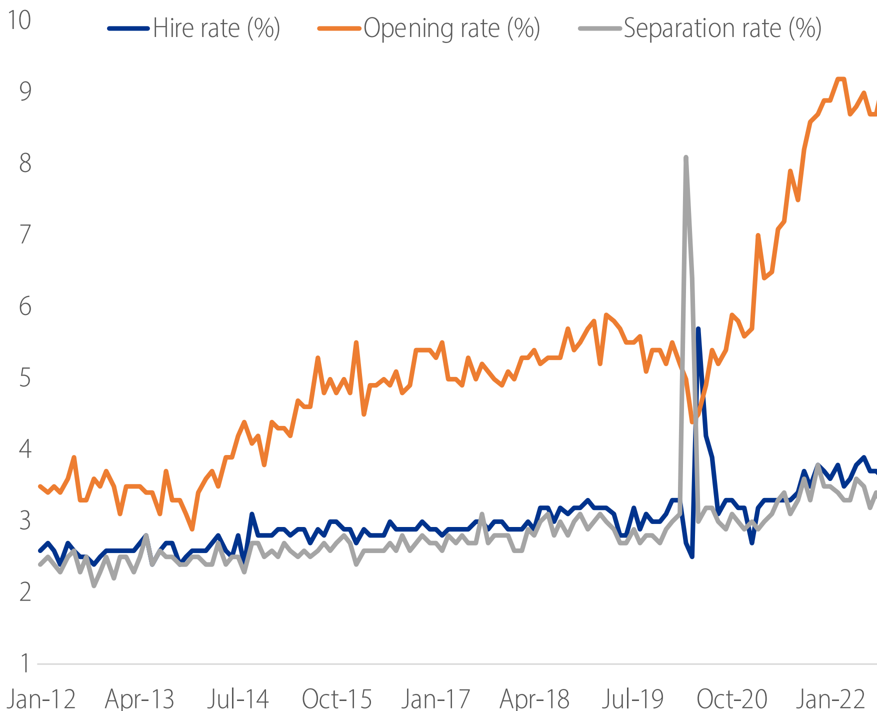
There were fiscal pressures for non-profit Health Care (Investment Grade) before the COVID crisis, pressures heightened during the worst of the COVID-19 period, and financial concerns have not abated. In general, 2022 was another tough year for hospitals and the non-profit Health Care (Investment Grade) sector. In the current landscape operating expenses have increased substantially as a result of continued staffing issues, inflation, cyberattacks, and the resurgence of COVID strains and flu outbreaks. Operating cashflow is expected to grow somewhere between 10-20% in 2023 according to Moody's Investor Service medians, which sounds good on the surface. But, this is after a horrendous 2022 where operating cashflow was projected to decline somewhere between 30%-35%. Also, liquidity metrics, like days cash on hand, are expected to weaken in 2022 and 2023.

Federal aid has been enormously positive for state and local governments. That is not still the case for the non-profit health sector still.

In addition, federal aid has been enormously positive for state and local governments. That is not still the case for the non-profit health sector. Federal and state subsidies and supplemental funding that occurred during the pandemic are no longer available and even with increased volumes, revenues have not kept pace with expenses. Some states, such as California, with its Hospital Quality Assurance Fee Program, do provide some additional support, but these programs haven't been sufficient to keep margins from getting weaker. Large geographical diverse systems and hospital districts that collect property taxes have fared better than smaller systems and stand-alone facilities. Consolidations, partnering and affiliations are still occurring.

Large geographical diverse systems and hospital districts that collect property taxes have fared better than smaller systems and stand-alone facilities. Consolidations, partnering and affiliations are still occurring.

Help Wanted – U.S. Health Care & Social Assistance Job Opening, Hire and Quit Rates



Source: U.S. Bureau of Labor Statistics and HilltopSecurities.

Health Care (Non and Sub Investment Grade)

HilltopSecurities Credit Outlook: "Negative"
Recent Change: This is the first time we have included this sector.
Author: Yaffa Rattner

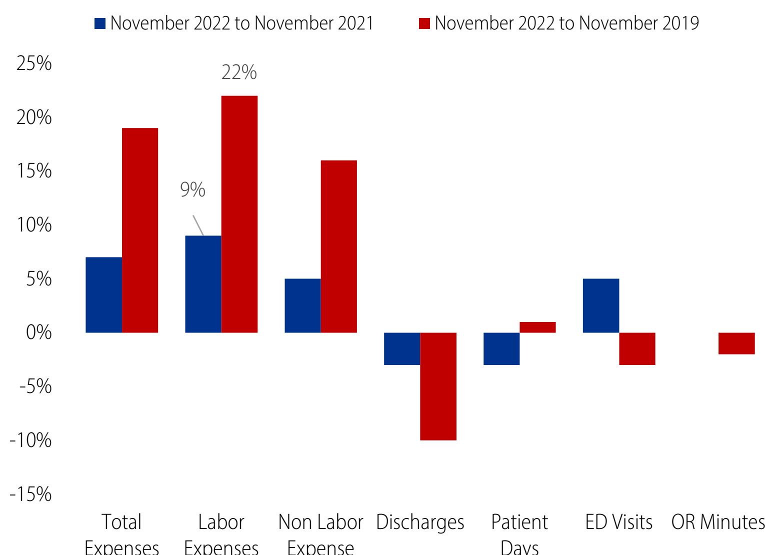
Our initial outlook for non-profit Health Care (Non and Sub Investment Grade) is "Negative."

Our initial outlook for non-profit Health Care (Non and Sub Investment Grade) is "Negative," recognizing the expense pressures, particularly as it relates to labor challenges, that are expected to extend into 2023 and the generally lower turning radius that is exhibited by non-rated or below investment grade hospitals. In fact, total expenses for these hospitals increased between November 2022 and November 2021 by 7% or 19% when comparing 2019, with labor expenses accounting for 9% year to date growth. According to data from KaufmanHall, adjusted patient days were up slightly at 3% year over year, emergency room visits were up 5%, and operating room minutes were flat, negatively affecting structural balance between recurring revenues and recurring expenses which was also challenged in 2021.

While Health Care (Investment Grade) entities are generally larger with sound market share, and sizable liquidity, hospitals that are below investment grade or non-rated tend to be smaller with less liquidity. As a result, there is generally less flexibility if utilization trends down or expenses trend up. Together the revenue and expense issues have eroded net income, compressed operating margins, and available liquidity. Take for example, liquidity as measured in Days Cash on Hand or Unrestricted Reserves to Debt. According to S&P Global Ratings, the median level of Days Cash on Hand (DCOH) for an A- rated hospital is 301.6 DCOH with 2.1x Unrestricted Cash to debt. To compare, in the case of a BBB level credit, this number is reduced to 172 DCOH and 1.87x Unrestricted Cash to Debt. Finally, for S&P hospitals rated in the Speculative Grade Category, DCOH is reduced to 112 and cash to debt is only 78.5%. In 2022, according to Bloomberg data, there was approximately $3 billion in hospital related debt issued that was rated BBB or lower or non-rated. Based upon the significant decreases in net income generation and liquidity, management teams of lower rated and non-rated hospitals generally have less flexibility in reacting to financial challenges which supports our "Negative" outlook.

Total expenses for hospitals increased between November 2022 and November 2021 by 7% or 19% when comparing 2019, with labor expenses accounting for 9% year to date growth.

National Hospital Utilization Data, *Year-over-Year Changes*



Source: KaufmanHall and HilltopSecurities.

Based upon the significant decreases in net income generation and liquidity, management teams of lower rated and non-rated hospitals generally have less flexibility in reacting to financial challenges which supports our "Negative" outlook.

Higher Education

HilltopSecurities Credit Outlook: Public "Cautious" and Private "Negative"
Recent Change: None
Author: Phil Villaluz

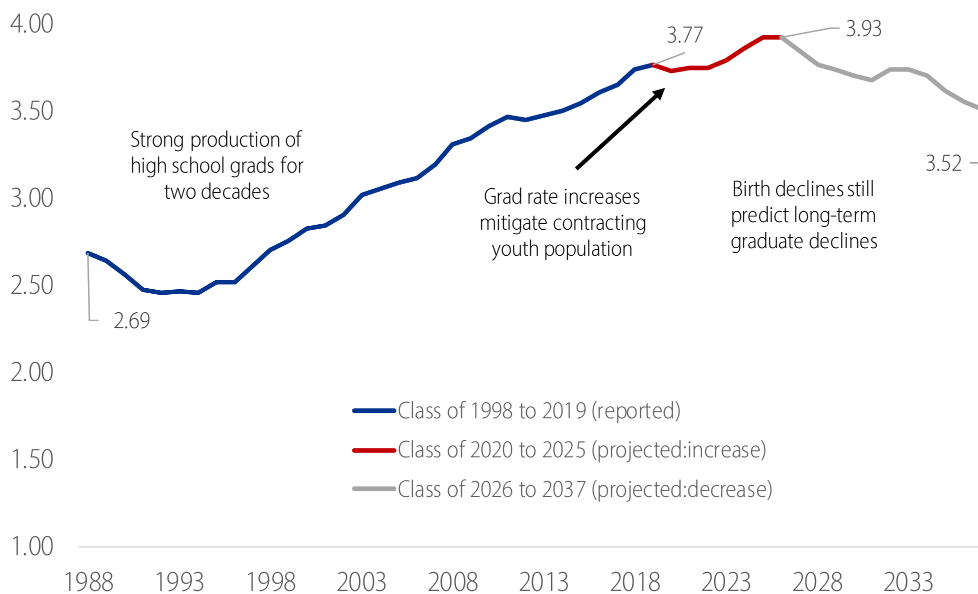
Demographic shifts could be considered a leading factor contributing to further enrollment pressures in the higher education sector.

Demographic shifts could be considered a leading factor contributing to further enrollment pressures in the higher education sector. By 2025 the number of high school graduates is expected to decline steadily for at least ten years according to forecasts by the Western Interstate Commission for Higher Education. Also, in future years it is likely that new demographic trends will also reduce the number of college-bound high school graduates. Nathan Grawe, the author of Demographics and the Demand for Higher Education Enrollment and creator of the Higher Education Demand Index (HEDI) projects less college-bound grads in certain regions of the U.S. than we've seen in recent decades.

On the financial side, sluggish operating revenue growth, projected to be approximately 2%, according to Moody's Investor Service, will likely lag inflation for much of 2023. Declining enrollments, changing consumer preferences, heightened inflationary and cost pressures will continue to challenge operating performance over the near to intermediate term. Erosion of cash and investment positions due to investment market volatility may be exacerbated by the need for colleges and universities to draw on reserves to close budget gaps. Nonetheless, we think wealthier institutions with diverse revenue streams, strong brand recognition and student demand, will fare better and maintain credit quality, compared to smaller schools struggling with weak finances and declining enrollment.

On the financial side, sluggish operating revenue growth, projected to be approximately 2%, according to Moody's Investor Service, will likely lag inflation for much of 2023.

Number of High School Graduates Projected to Decline After 2025 *(#s in millions)*



Source: Western Interstate Commission for Higher Education, Knocking at the College Door: Projections of High School Graduates, 2020, www.knocking.wiche.edu and HilltopSecurities.

We think wealthier institutions with diverse revenue streams, strong brand recognition and student demand, will fare better and maintain credit quality, compared to smaller schools struggling with weak finances and declining enrollment.

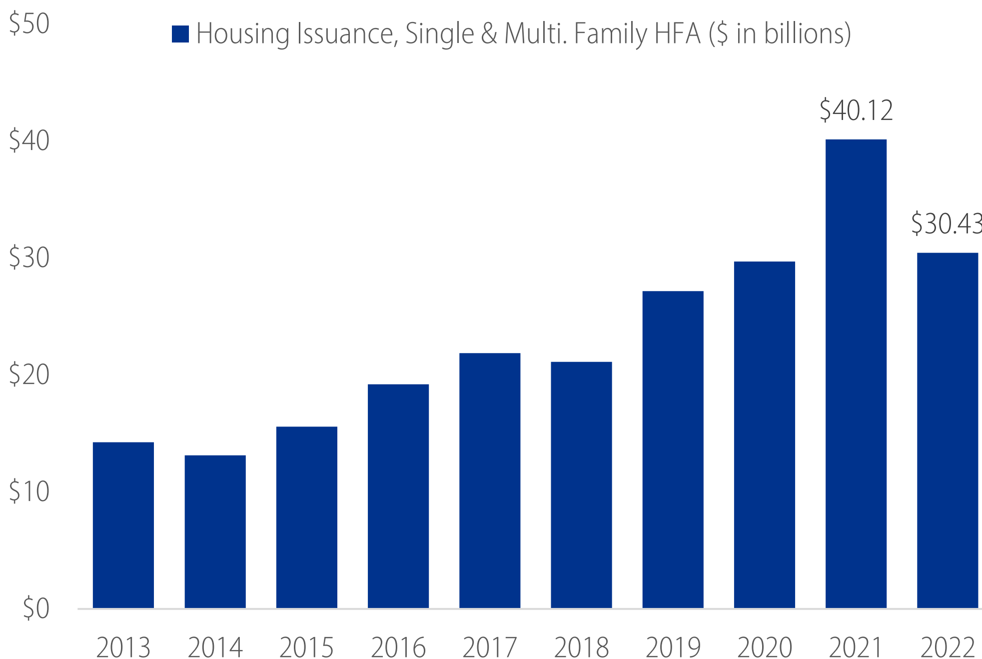
Housing

HilltopSecurities Credit Outlook: Stable
Recent Change: Lowered outlook to "Stable" from "Positive"
Author: Phil Villaluz

We lowered our sector outlook to "Stable" from "Positive" on slowing state housing finance agency (HFA) activity in the form of financings, loan originations and narrowing margins.

We lowered our sector outlook to "Stable" from "Positive" on slowing state housing finance agency (HFA) activity in the form of financings, loan originations and narrowing margins due to lower revenue from secondary market loan (or To-Be-Announced, TBA) sales. It is important to note that we do not expect credit or rating deterioration in the near term in the sector. But, it is not a surprise that fiscal momentum is slowing especially as a result of rising interest rates. Bond issuance fell in 2022 to about $30 billion and issuance activity is again expected to fall in 2023. How far issuance falls depends upon interest rates, loan activity, and economic growth.

Housing Issuance Fell in 2022, and Could Fall Again in 2023



Source: Refinitiv and HilltopSecurities.

Bond issuance fell in 2022 to about $30 billion and issuance activity is again expected to fall in 2023. How far issuance falls depends upon interest rates, loan activity, and economic growth.

Our "Stable" outlook for HFAs is supported by margins that are expected to remain healthy at approximately 15%, according to Moody's Investor Service expectations, as higher investment income and increased revenue from bond-financed loans help to counter declining revenue from TBA sales. Furthermore, single- and multifamily loan portfolio delinquencies should remain at manageable levels; multifamily portfolios will be supported by strong demand for affordable rental housing. HFA delinquencies (and loans in foreclosure) rose to almost 8% (according to Moody's HFA Surveys) a few years after the housing crisis and Great Recession. They rose to almost 10% (mostly delinquencies) during COVID, but these levels still did not significantly pressure State HFA credit profiles.

Our "Stable" outlook for HFAs is supported by margins that are expected to remain healthy at approximately 15%, according to Moody's Investor Service expectations.

Public Power (Electric)

HilltopSecurities Credit Outlook: “Stable”
Recent Change: None
Author: Ted Chapman

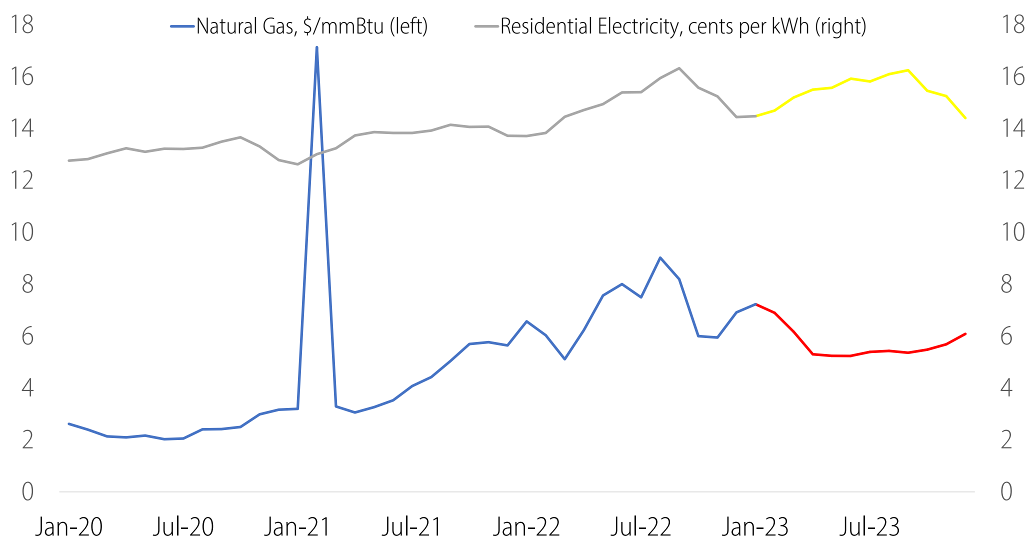
The public power sector’s good cash position and coverage ratios are under pressure. Average hourly earnings increased 5% in 2022.

The public power sector’s good cash position and coverage ratios are under pressure. Average hourly earnings increased 5% in 2022. Unlike other sectors, rising utility wages are not to attract talent, but to retain it: the sector’s unemployment rate was a mere 1.3% as of November 2022 and has averaged only 2.2% since 2018. Annual retail sales of electricity declined after each recent recession, including COVID, and it took years to recover; 2022 was about where we were in 2018. Demand destruction from conservation is part of the decrease as well. Still, rising costs are being recouped from a static number of megawatt-hours.

Congress might consider incentives for the physical (given recent vandal attacks) and cyber security of the grid, disaster resilience and maybe the dearth of electric vehicle charging stations. Everyone will be watching the Environmental Protection Agency’s (EPA) allocation of the $27 billion Greenhouse Gas Reduction Fund. EPA just proposed tougher particulate matter standards that would impact coal-fired plants, though 19 gigawatts are slated to be retired by 2025 anyway. That retirement of baseload, and drought impacting western hydropower, are creating headaches for grid operators (PJM and TVA, Christmas weekend 2022; Cal-ISO, summer 2022). Given Vogtle’s cost, timeline and participant disharmony issues, new nuclear is at least a decade away; production tax credits are just to extend the life of existing units. Natural gas plants take two to three years to build, with fuel that may cost twice as much in 2023 as it did in 2021. Renewables have lower capacity factors and require new transmission. Public power is risk averse despite Infrastructure Reduction Act incentives for green energy. Since buying is quicker than building, we are watching how fixed and commodity costs will be priced into new purchased power agreements and the impact on finances.

Everyone will be watching the Environmental Protection Agency’s (EPA) allocation of the $27 billion Greenhouse Gas Reduction Fund.

The Residential Electricity Price Outlook



Source: Source: US Energy Information Administration and HilltopSecurities.

Since buying is quicker than building, we are watching how fixed and commodity costs will be priced into new purchased power agreements and the impact on finances.

Senior Living

HilltopSecurities Credit Outlook: "Negative"
Recent Change: This is the first time we have included this sector.
Author: Yaffa Rattner

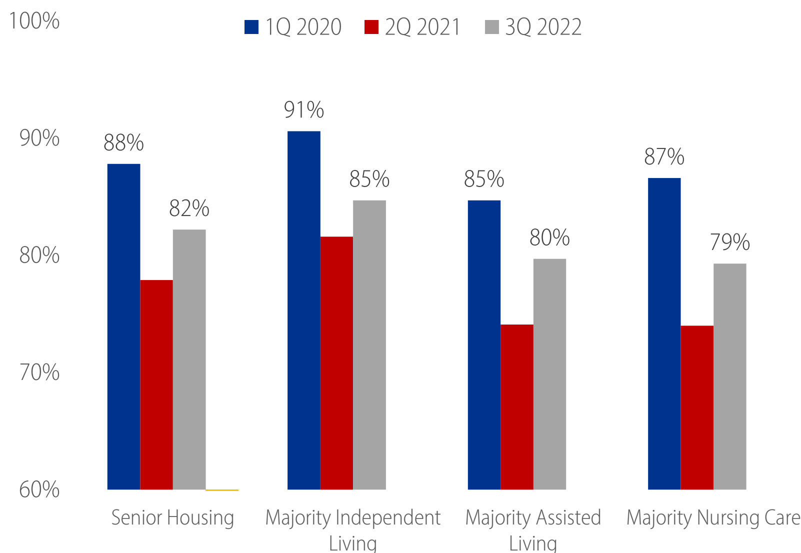
Our initial outlook for the Senior Living sector is "Negative," as we expect greater operating headwinds over the medium term. Although 10,000 baby boomers turn 65 every day, many people chose to age-in-place and are not necessarily seeking congregate care. According to the National Investment Council (NIC), senior living occupancy approximated 82.8% as of October 2022. While this is a significant increase from the pandemic low of 77.9% recorded in June 2021, occupancy has not fully recovered to the 88% level recorded at the end of 2019 before the pandemic began. Occupancy in assisted living units, which reflects a more need-based care, has had the strongest recovery to date, while occupancy in independent living and nursing care units have lagged. In general, revenues generated from independent living units generate the highest operating margin as they are less labor intensive then assisted living and nursing care.

Our initial outlook for the Senior Living sector is "Negative," as we expect greater operating headwinds over the medium term.

Given available supply, rate increases have remained relatively muted, on average, at approximately 4-5%, while the costs for labor and food rose in many cases by more than 10%. Together the relatively flat growth in incremental revenues coupled with the more significant acceleration of expenses have compressed operating margins and have challenged operators to produce stable financial results. To date, there have been significant headlines in the space and approximately 50% of the 2022 municipal defaults have been in the retirement space according to Municipal Market Analytics and Bloomberg. We believe that senior living communities that are in highly desirable areas, with strong occupancy, seasoned management, and good liquidity are prepared to weather these challenging times. However, communities with limited liquidity or those that are operating in more competitive locations, are poised for additional challenges in 2023.

Given available supply, rate increases have remained relatively muted, on average, at approximately 4-5%, while the costs for labor and food rose in many cases by more than 10%.

Senior Living Occupancy, Peak to Trough



Source: NIC MAP Data, powered by NIC MAP Vision and HilltopSecurities.

We believe that senior living communities that are in highly desirable areas, with strong occupancy, seasoned management, and good liquidity are prepared to weather these challenging times.

Tobacco

HilltopSecurities Credit Outlook: "Negative"
Recent Change: None
Author: Doug Nelson

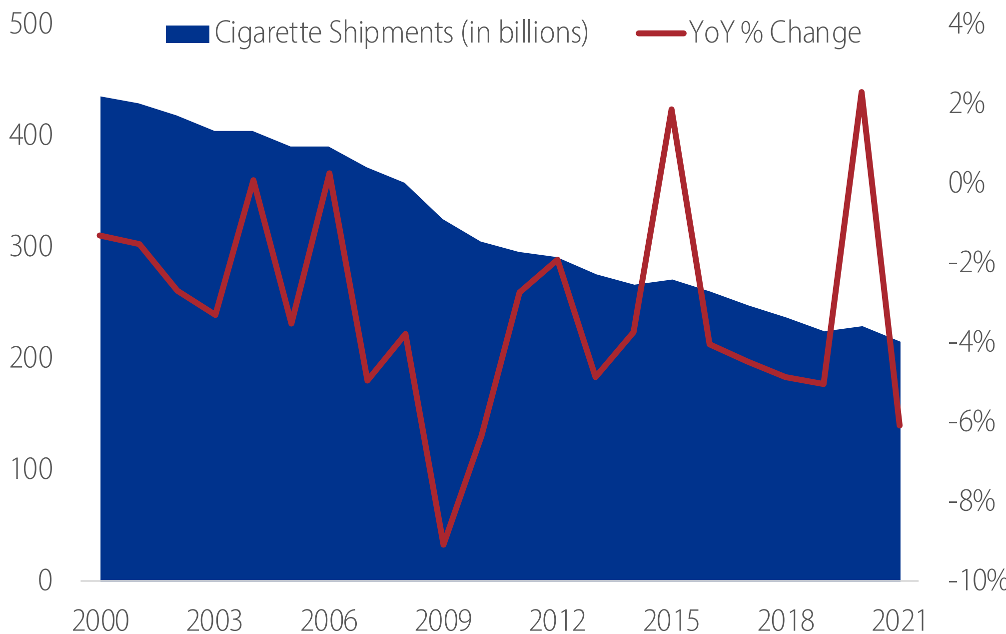
Declining domestic cigarette sales are largely responsible for declines in the actual Master Settlement Agreement payments that secure the bonds.

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. Declining domestic cigarette sales are largely responsible for declines in the actual MSA payments that secure the bonds. Annual U.S. MSA domestic cigarette shipment data has been steadily in decline as reported by the National Association of Attorneys General.

The tobacco sector continues to experience consumption declines and event risk. The U.S. Food and Drug Administration (FDA) has broad authority over the manufacture, sale, marketing and packaging of tobacco products. The FDA has announced proposed product standards to prohibit menthol as a characterizing flavor in cigarettes. There is no required timeline to implement this standard. The FDA also announced a plan to propose a rule to establish a maximum allowable nicotine level in cigarettes that would make them minimally- or non-addictive. The proposed rule is expected in May 2023. Moody's Investors Service estimates that a ban on menthol could accelerate the annual percentage rate decline of volumes to the low double-digit level over the next three to five years. This expected decline in consumption will put even more downward pressure on Master Settlement Agreement revenues which are used to repay the bonds.

The FDA also announced a plan to propose a rule to establish a maximum allowable nicotine level in cigarettes that would make them minimally- or non-addictive.

U.S. Cigarette Shipments Continue Their Downward Trajectory



Source: National Association of Attorneys General and HilltopSecurities.

This expected decline in consumption will put even more downward pressure on Master Settlement Agreement revenues which are used to repay the bonds.

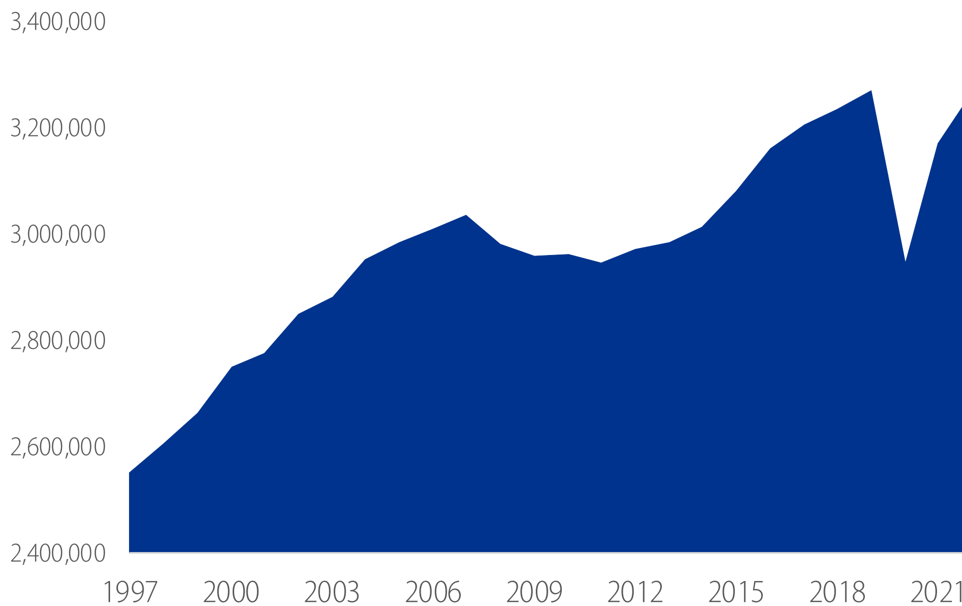
Toll Facilities

HilltopSecurities Credit Outlook: "Stable"
Recent Change: None
Author: Phil Villaluz

Durable traffic trends, as measured by vehicle miles traveled, and strong financial profiles support credit stability in the U.S. toll road sector.

Durable traffic trends, as measured by vehicle miles traveled, and strong financial profiles support credit stability in the U.S. toll road sector. Throughout the pandemic, toll road credits have been among the most resilient of transportation infrastructure names. Many toll road operators saw traffic and revenue figures rebound to pre-pandemic levels, and we expect the recovery to be maintained over the next two years, supported by stable-to-growing commercial vehicle traffic and steady return of passenger traffic usage. Also, facilities with toll rate-setting policies linked to inflation could see even stronger revenue growth in 2023 further supporting improved operating metrics. Tempering our outlook is expectations for slowing commercial traffic growth. Entities planning to ramp-up capital spending for maintenance and expansion projects in the near future may result in rising debt levels and costs.

Vehicle Miles Traveled is Continuing to Recover From COVID-19



Source: U.S. Dept. of Transportation and Hilltop Securities. This is a 12 month moving average and #s are in millions of vehicle miles traveled.

Tempering our outlook is expectations for slowing commercial traffic growth. Entities planning to ramp-up capital spending for maintenance and expansion projects in the near future may result in rising debt levels and costs.

Water and Sewer

HilltopSecurities Credit Outlook: "Stable"
Recent Change: None
Author: Ted Chapman

The year begins with 30% of the population in moderate or worse drought conditions. If the federal government finally mandates cuts to the seven states that use Colorado River water, larger municipal systems have backup options but, typically they are more expensive options.

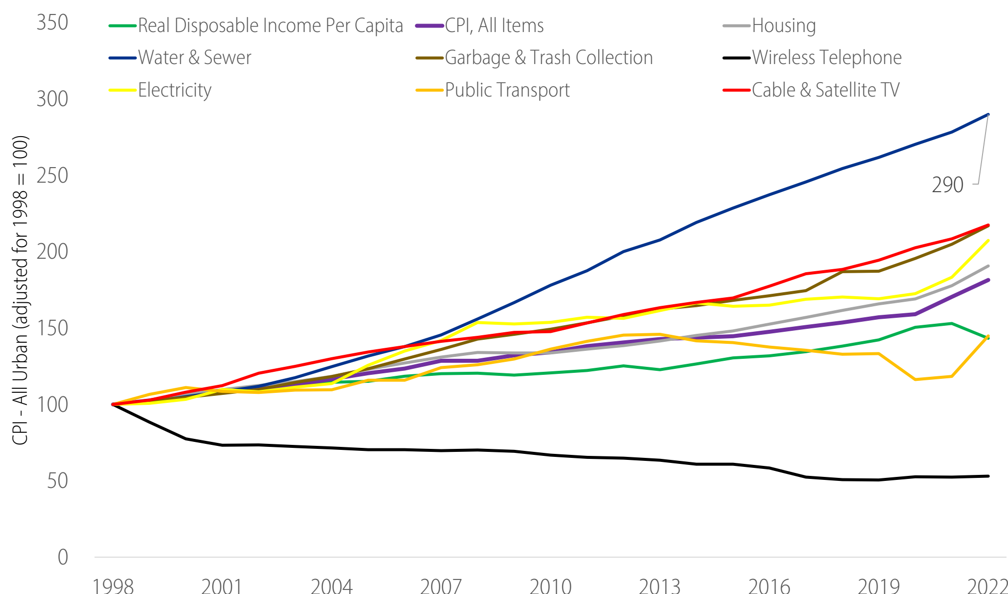
The year begins with 30% of the population in moderate or worse drought conditions. If the federal government finally mandates cuts to the seven states that use Colorado River water, larger municipal systems have backup options but, typically they are more expensive options. Small and rural water systems typically do not have other options to source water. Agriculture and power generation, critical to the Western U.S. economy, together use four to five times as much water as municipal systems and their output could also be impacted. The California Dept. Water Resources announced in December 2022 that an initial State Water Project allocation of only 5% of requested supplies, meaning even if conditions aren't as bad as this time last year (0%), they're still bad enough that 29 public water agencies serving 27 million Californians likely will prolong conservation measures.

Though an efficient essential service, the rate of increase in water bills has outstripped that of comparable services, personal real income and inflation for decades.

The water and sewer sector has no shortage of needs. This is not just headline risk. Real life reports of system failures have made the national press in recent years. In fiscal 2022, 7% of the approximately 50,000 community drinking water systems had health-based violations of the Safe Drinking Water Act; 1% had violations that have the potential to produce immediate illness. There is an extensive list of active multi-billion dollar Clean Water Act corrective action programs. We expect regular borrowing will pressure debt service coverage (DSC) and drive more rate increases. Though an efficient essential service, the rate of increase in water bills has outstripped that of comparable services (see line chart below), personal real income and inflation for decades. This heightens the risk that local water leaders might make decisions that, while sensitive to customers, could come at the detriment of financial performance. Operational challenges tend to squeeze net revenues, too. We expect that 2023 could pressure what has generally been good DSC and strong liquidity metrics.

We expect that 2023 could pressure what has generally been good DSC and strong liquidity metrics.

Selected Inflation Rates, Last 25 Years



Source: Source: Bureau of Labor Statistics and HilltopSecurities.

Definitions of HilltopSecurities Municipal Sector Credit Outlooks

Positive: HilltopSecurities believes there are factors which point towards improving issuer or sector credit quality. This may result in a higher level of credit ratings upgrades versus downgrades if issues are rated.

Stable: HilltopSecurities believes there are factors which point towards stable issuer or sector credit quality. This is likely to result in an even level of credit ratings upgrades versus downgrades if issues are rated.

Cautious: HilltopSecurities believes there are factors which introduce the potential for declines in issuer or sector credit quality. This may result in credit ratings downgrades only slightly outnumbering upgrades if issues are rated.

Negative: HilltopSecurities believes there are factors which point towards weakening issuer or credit quality. This will likely result in a higher number of credit ratings downgrades versus upgrades if the issues in the sector are rated.

Recent HilltopSecurities Municipal Commentary

- A Public Finance and Infrastructure Fiscal Policy Checklist and a Warning, Jan. 9, 2023
- Web3, Blockchain and U.S. Public Finance, Dec. 15, 2022
- The Texas PSF is Up Against a Federally Allocated Cap, Dec. 8, 2022
- State Credit Mainly Improved & Most Positioned to Withstand a Recession, Dec. 6, 2022

Readers may view all of the HilltopSecurities Municipal Commentary here.

The paper/commentary was prepared by HilltopSecurities (HTS). It is intended for informational purposes only and does not constitute legal or investment advice, nor is it an offer or a solicitation of an offer to buy or sell any investment or other specific product. Information provided in this paper was obtained from sources that are believed to be reliable; however, it is not guaranteed to be correct, complete, or current, and is not intended to imply or establish standards of care applicable to any attorney or advisor in any particular circumstances. The statements within constitute the views of HTS as of the date of the document and may differ from the views of other divisions/departments of affiliate Hilltop Securities Inc. In addition, the views are subject to change without notice. This paper represents historical information only and is not an indication of future performance. This material has not been prepared in accordance with the guidelines or requirements to promote investment research, it is not a research report and is not intended as such. Sources available upon request.

Hilltop Securities Inc. is a registered broker-dealer, registered investment adviser and municipal advisor firm that does not provide tax or legal advice. HTS is a wholly owned subsidiary of Hilltop Holdings, Inc. (NYSE: HTH) located at 717 N. Harwood St., Suite 3400, Dallas, Texas 75201, (214) 859-1800, 833-4HILLTOP

©2023 Hilltop Securities Inc. | All rights reserved | MEMBER: NYSE/FINRA/SIPC