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CREDIT OPINION
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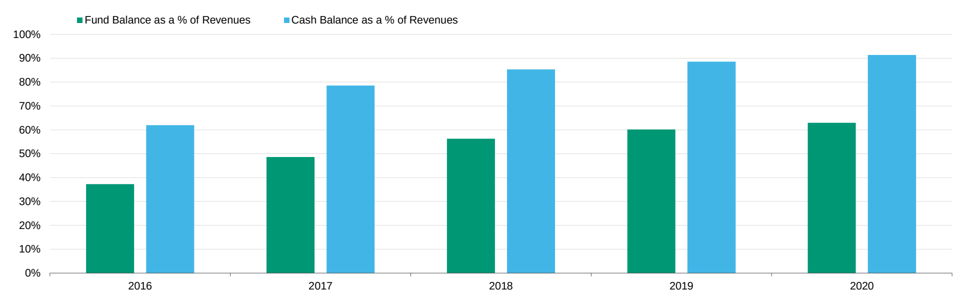
Harris (County of) TX

Update to credit analysis

Summary

Harris County, and Harris County Flood Control District TX's (Aaa stable) credit profile is supported by a large and global economy complemented by stable demographics that continue to drive the county's expansive and growing tax base. Recent conditions with low oil prices will challenge several companies in the energy sector, one of the largest in the area. However, increased diversity that has been established over several decades in nonenergy sectors including healthcare and logistics and transportation bode well for the county and will allow the area weather the current energy situation. The financial profile is strong and supported by prudent practices that have driven multiple years of surplus operations and an accumulation of reserves (see Exhibit 1). The county will maintain its healthy reserve position because its revenue mix is highly dependent on stable property tax revenue and pandemic related costs will be offset by funding from the coronavirus Aid, Relief and Economic Security (CARES) Act or the Federal Emergency Management Agency (FEMA). Environmental considerations remain a challenge for the area but part of the exposure is mitigated by multilevel government funding for infrastructure investment to improve the area's resiliency. The debt and pension profile and fixed costs will remain affordable, supported by a large and established economy.

Exhibit 1
Cash and fund balances have steadily improved in each of the past five years



Data includes general fund and non-major governmental debt service fund as reported in the CAFR
Source: Harris County, TX Comprehensive Annual Financial Reports (CAFR)

We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety. We do not see any material immediate credit risks for Harris County and Harris County Flood Control District, TX because of its high reserves and liquidity which is more than enough to ward off any difficulties associated with pandemic related costs. However, the situation surrounding coronavirus is rapidly evolving and the longer term impact will depend on both the severity and duration of the crisis. If our view of the credit quality of the county and district changes, we will update our opinion at that time.

Credit strengths

» Large and important economy driving assessed value growth

» Strong management team with a history of generating large surpluses

» Healthy reserves with ample liquidity in the operating funds

Credit difficulties

» Area is prone to weather related events due to location close to Gulf Coast

» Sizeable debt issuance expected in the next few years for flood control projects

Rating outlook

The stable outlook reflects the county's important and expansive economy which will sustain its tax base and support property taxes, the largest source of operating revenue. This coupled with prudent fiscal practices will allow ample reserves to remain and allow debt and pension levels to remain affordable over the next five years.

Factors that could lead to an upgrade

» Not applicable

Factors that could lead to a downgrade

» Substantial reduction in reserves

» Material economic contraction signified by weakening in key indicators

Key indicators

Exhibit 2

Harris (County of) TX	2016	2017	2018	2019	2020
Economy/Tax Base					
Total Full Value ($000)	$391,521,792	$421,438,862	$436,392,684	$448,414,364	$483,081,667
Population	4,434,257	4,525,519	4,602,523	4,602,523	4,602,523
Full Value Per Capita	$88,295	$93,125	$94,816	$97,428	$104,960
Median Family Income (% of US Median)	93.9%	93.3%	93.5%	93.5%	93.5%
Finances					
Operating Revenue ($000)	$2,475,057	$2,362,666	$2,371,430	$2,394,325	$2,573,425
Fund Balance ($000)	$921,953	$1,148,339	$1,335,512	$1,441,436	$1,619,309
Cash Balance ($000)	$1,534,428	$1,855,747	$2,022,716	$2,120,440	$2,352,266
Fund Balance as a % of Revenues	37.2%	48.6%	56.3%	60.2%	62.9%
Cash Balance as a % of Revenues	62.0%	78.5%	85.3%	88.6%	91.4%
Debt/Pensions					
Net Direct Debt ($000)	$2,673,979	$2,582,927	$2,449,388	$2,362,685	$2,414,024
3-Year Average of Moody's ANPL ($000)	$3,032,946	$3,732,524	$4,116,486	$4,410,572	$5,060,537
Net Direct Debt / Full Value (%)	0.7%	0.6%	0.6%	0.5%	0.5%
Net Direct Debt / Operating Revenues (x)	1.1x	1.1x	1.0x	1.0x	0.9x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	0.8%	0.9%	0.9%	1.0%	1.0%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	1.2x	1.6x	1.7x	1.8x	2.0x

Financial information includes general fund and non-major governmental debt service fund as reported in the CAFR
Source: Harris County, TX CAFRs, US Census Bureau

Profile

Harris County, home to the City of Houston (Aa3 stable), is the third most populous county in the nation with a total population of over 4.5 million people. The economy is driven by energy and resources, manufacturing and logistics.

Harris County Flood Control District is a conservation and reclamation district created by the Texas Legislature in 1937 to control storm and floodwaters in the area. The district's taxing boundary is co-terminus with the county.

The district and county are governed by the Harris County's Commissioners' Court.

Detailed credit considerations

Economy and tax base: large economy drives tax base growth

Harris County's strong economic performance will remain over the next five to 10 years supported by a large and more diversified economy and strong assessed valuation growth. However the pace of growth over the next couple of years will likely be tempered in response to weakened global conditions, a result of the coronavirus pandemic. The coronavirus is driving an unprecedented economic slowdown. We currently forecast US GDP to decline significantly during 2020 with a gradual recovery commencing toward the end of the year. Local governments with the highest exposure to tourism, hospitality, healthcare, retail and oil and gas could suffer particularly severe impacts.

Anchored by the City of Houston, a critically important global economic hub, the county's longer term economic outlook is solid because of favorable demographic trends and high demand for its main economic sectors: energy, healthcare and life sciences and logistics and transportation. In the near term, the economy is challenged by low oil prices and the effects of the coronavirus pandemic which has slowed economic output.

Population growth has been persistent, recording double digit increases in the past four census cycles. In 2018, the American Community Survey estimated population at 4.6 million, an increase of over 12% since 2010. Historical access to abundant job opportunities has supported high labor force participation. However, the county is not immune to difficulties from the coronavirus pandemic with a June 2020 unemployment rate of 10.3%, which was higher than the state's 8.9% but lower than the nation's 11.2% recorded during the same period. Employment in certain sectors have rebounded from a few months ago but increased coronaviruses cases in the state will likely result in uneven performance over the next few months.

Similar to other large urban areas, the county's income indicators lag the nation with the fiscal 2018 median family income at 93.5% of the nation. Positively, the median home value is low at 80.7% of the nation, signaling relatively low home affordability difficulties compared with peers.

Real property accounts for over 88% of the county's tax base with the rest from personal property. Mineral values are minimal in the area. With significant investment and redevelopment, assessed value has grown each year since fiscal 2011 yielding a sizeable $483.1 billion in fiscal 2020. The fiscal 2020 value is a solid 7.7% increase over the prior year bringing the five year average to 6.6%. Certified estimates as of July 24 reflect an increase of 5% for the county for fiscal 2021. Harris County Flood Control District, being co-terminus with the county also reports a 5% certified estimate increase for fiscal 2021.

Financial operations and reserves: operating performance is strong and drives ample reserves

The county's solid financial position will be sustained by conservative budgeting and strong property tax revenue growth, its largest revenue source. Despite weakness in sectors affected by consumer activity, property taxes are stable and projected to remain so even in fiscal 2021. The projections are supported by an increase in the certified estimate for fiscal 2021 reflecting values that were in the ground as of January 1, 2020.

Fiscal 2021 started on March 1, 2020, with the county adopting a balanced budget for the year. Property taxes, which fund over 75% of operations and other revenue sources including charges for services are reportedly stable. With limited increases in new cost for unanticipated financial difficulties, the county's April 30, 2020, unaudited cash flow projects an increase of $281.6 million in the general fund by fiscal year end.

Harris County has incurred $115 million in pandemic related costs including $30 million for individual aid, $10 million in forgivable loan for small businesses and safety equipment for employees. The county expects most of these costs will be covered through federal funding received from the CARES Act ($426 million received) or FEMA reimbursements.

In fiscal 2020 (February 29 year-end) the county reported a general fund surplus of $181 million, increasing its total balance to $2.1 billion, an abundant 82.2% of revenue. Of the total fund balance, $1.5 billion (60.3% of revenue) was available. The positive performance in fiscal 2020 extends the county's solid and surplus operating performance since fiscal 2012.

The general fund as reported in the CAFR includes a group of funds (General Operating, Public Contigency, Mobility Fund and General Debt fund). Within the group, the general operating and public contingency sub funds had unassigned balances of $1.2 billion and $243.5 million respectively. The mobility sub fund had a $278.6 million restricted for related projects and $251.8 million restricted for debt. The county's available reserves increase to $1.6 billion, 62.9% of operating revenue, when including the non-major governmental debt service fund.

The county remains well under its property tax cap although starting in fiscal 2021, the county's ability to raise property taxes on an annual basis is reduced to 3.5% without voter approval. This revenue limitation excludes new construction, in compliance with the mandate from Senate Bill 2. Total county operations are subject to a cap of $8.00 per $1,000 of assessed value with the Attorney General's office not permitting more than $4.00 allocated to debt service. The fiscal 2020 tax rate was $4.01 ($3.40 for general fund including $.010 for public improvement contingencies and $0.51 for debt service).

FLOOD CONTROL DISTRICT

The district's operating performance reflects a steady use of reserves to meet needs associated with flood control. Despite fiscal 2020 marking the first surplus in six years in the district's general fund, the district's reserves remain healthy. At fiscal year end, available reserves equaled $69.3 million (a solid 56.2% of revenue). Including the district's debt service fund, available reserves totaled $75.7 million (42.6% of operating revenue).

The Flood Control District also maintains flexibility with its current tax rate of $0.29 ($0.27 for operations and $0.01 for debt service), well below its cap of $3. The tax rates are set by the county's Commissioners Court.

Liquidity

The county's liquidity is high. As of April 30, 2020, general operating sub fund cash was $1.1 billion. The county also maintains liquidity in other funds available for general operating needs including $246.4 million in the Public Contingency Fund, $440 million in the Mobility Fund and $222.7 million in the Debt Service Fund. Together, these funds account for the general fund reported in the CAFR and totaled $2 billion, relatively stable since the end of the previous fiscal year.

At fiscal year end 2020, general fund cash was $2.1 billion, 84% of revenue. This number increases to $2.4 billion, 91.4% of operating revenue when including the non-major governmental debt service fund.

Also as of April 30, the district reported about $62 million in cash. Cash at fiscal year end 2020 was $8.2 million (6.6% of the district's general fund revenue) with $89.3 million in receivables from special revenue grant funds. Including the district's debt service fund, cash improved to $14.9 million (8.4% of revenue) at fiscal year end 2020.

Debt and pensions: modest debt burdens with affordable pensions

Harris County's debt profile will remain affordable supported by its large tax base even as debt issuance is expected in the next several years. The direct debt burden of 0.5% on a fiscal 2020 valuation is modest. This number increases to 7% when considering overlapping debt. The direct debt incorporates the county's $769.8 million in unlimited tax debt and $1.2 billion in limited tax debt (including the flood control contract tax bonds). The county also has $220.3 million in toll road tax bonds which have been fully supported by net revenue from the county's toll system, therefore they have been netted out of the debt burden. Of the total debt, we rate about $1.1 billion.

Payout is affordable with over 70% of principal retired in 10 years. Authorized unissued debt totals $3.4 billion with $2.5 billion allocated for flood control projects. The county expects debt issuance over multiple years to support a variety of initiatives including flood control.

The county's five year capital plan calls for $756.5 million in projected needs between fiscal 2020 and 2024. $144 million is likely to be reimbursed while some other needs will be funded as part of the annual budget process, with the rest in debt.

Legal security

The unlimited tax road bonds are secured by a direct and continuing annual ad valorem tax levied against all taxable property without legal limitation as to rate or amount.

The permanent improvement bonds are secured by a direct and continuing annual ad valorem tax levied against all taxable property within the limits prescribed by law. The county is legally allowed an $8 per $1,000 of assessed value tax rate for all purposes and the Attorney General's office will not permit more than $4 to be allocated for debt.

The flood control bonds are secured by a direct and continuing annual ad valorem tax levied against all taxable property within the limits prescribed by law. The flood control district can levy a total tax rate of $3 with no limit on how much can be used for debt service.

Debt structure

All of the county's debt is fixed rate. The pro forma debt service schedule is descending with a final maturity in 2044.

The county's outstanding debt is largely fixed rate but includes a $1.9 billion commercial paper (CP) program ($271.2 million outstanding as of June 30, 2020) excluding the program secured by toll revenue. As of June 30, 2020, CP accounted for 6% of the county's total debt. Commercial paper is used for capital purposes, in anticipation of periodic long-term bond issues. External liquidity for the program is provided by State Street Bank and Trust Company (Aa2 Stable), Bank of America N. A. (Aa2 stable), JPMorgan Chase Bank N.A. (Aa2 Stable), and Wells Fargo Bank N.A. (Aa2 stable), all of which have short term ratings of P-1.

Debt-related derivatives

The county has no general government swap exposure.

Pensions and OPEB

The county provides retirement, disability and death benefits for all of its non-temporary employees through a nontraditional defined benefit pension plan in the statewide Texas County and District Retirement System (TCDRS). The county has consistently fully funded its annual required contributions. However, we notes that TCDRS' discount rate remains very high at 8.1%, which is much higher than most large US public pension systems and highlights the system's vulnerability to pension asset volatility.

We gauge pension investment risks at the issuer level using our “pension asset shock indicator,” which is our estimate of the one-year probability of a pension investment loss amounting to 25% of a government's operating revenue. The indicator is a function of size of pension assets compared with revenue and asset volatility risk. The higher the assumed rate of investment return, the higher the expected volatility or standard deviation of returns that we assign, based on our estimated efficient frontier. Given the high assumed rate of return and sizable pension assets accumulated, Harris County's pension asset shock indicator of 11.9% was well above the median 6% for the entities covered in our most recent survey of the nation's largest local governments.

Unfunded pension and other post employment benefits (OPEB) liabilities should remain affordable, although the county's discount rate is high highlighting its risk to pension asset volatility. Our fiscal 2020 adjusted net pension liability (ANPL) for the county, using a 3.22% discount rate, is $6 billion, an affordable 2.3 times operating revenue. In comparison, the county reported a GASB net pension liability of $484.5 million, using an 8% discount rate, which is higher than most large US pension systems. The three year average ANPL was about 2 times operating revenue or 1% of full value.

The county has a strong history of making required contributions and in fiscal 2020, the county paid $167.6 million, which was above the our calculated “tread water” level of $150.2 million. The “tread water” indicator measures the annual government contribution required to prevent the reported net pension liability from growing under reported assumptions. Although actual contributions were higher than tread water, the indicator is understated given that the discount rate remains so high.

The county offers other post-employment benefits (OPEB) to its retirees in the form of medical, dental vision and basic life insurance benefits. The plan has historically been funded on a pay as you go basis; county officials expect this will continue. In fiscal 2020, the county contributed $58.5 million. The county's adjusted net OPEB liability was $2.3 billion. At 89% of revenue, the liability is an affordable source of balance sheet leverage.

Total fixed costs (pensions, debt and OPEB) was $574.3 million or an affordable 22.3% of operating revenue, with debt service accounting for most the costs at 60.6%.

ESG considerations

Environmental

The county is vulnerable to natural and man made hazards, with high exposure to sea level rise and flood vulnerability, given its proximity to the Gulf Coast. The county is embarking on major infrastructure development (about 200 projects) over the next 10 to 15 years supported by a $2.5 billion voter approved bond package, which together with about $3 billion in matching federal funds will enhance the county's existing infrastructure and increase its resiliency to future storms. Additionally, the area is likely to benefit from over $31 billion in targeted regional projects, also funded by the federal government. These initiatives and the county's solid liquidity position will be critical to mitigating the county's impact to future storms and maintaining its credit profile. Favorably, the county is well beneath its statutorily maximum for the dedicated property tax levy for flood control, providing access to funding, a key component of infrastructure development.

Social

We regard the coronavirus pandemic as a social risk but we do not see any immediate material risks for the county or district. Strong demographic trends and high labor force participation coupled with a relatively lower median age (33.3 in 2018 per the American Community Survey) bode well for the county. Please see the summary rationale and economy and tax base sections for detailed information.

Governance

The county and district are governed by the commissioner's court which include the county judge and four county commissioners, all are elected officials. The county demonstrates good governance evidenced by a history of sound fiscal practices and adherence to its own policies. Budget management is strong with practices that include the ability of departments to roll over unused funds into the next budget cycle has allowed the county's finances to be nimble. The county also uses multiyear financial planning which incorporates demographic projections for the area. Positively and recently, the county released a detailed five year capital plan identifying capital priorities and providing a map as the county navigates the flood control needs, among others. Transparency and disclosure practices are solid with annual audits available typically within six months of the fiscal year end. Monthly financial reporting on operating performance is also available on the county's website.

Texas Counties have an Institutional Framework score of Aa, which is strong. The sector's major revenue source is property taxes which are highly stable and predictable but are subject to a cap, which cannot be overridden. As such, unpredictable revenue fluctuations tend to be minor or under 5% annually. Counties have an affordable ability to raise revenue. The cap of $8 per $1,000 of assessed values, with no more than $4 allocated for debt service, still allows for significant revenue-raising ability. Although most counties are well under the cap, counties can only increase their property tax revenue by 3.5% on existing property without voter approval on an annual basis; all increases above 3.5% must be approved by voters. Operating expenditures for counties tend to be highly stable and predictable with minor fluctuations under 5% annually. Counties also have an affordable ability to reduce expenditures.

Rating methodology and scorecard factors

The US Local Government General Obligation Debt methodology includes a scorecard, a tool providing a composite score of a local government's credit profile based on the weighted factors we consider most important, universal and measurable, as well as possible notching adjustments dependent on individual credit strengths and weaknesses. Its purpose is not to determine the final rating, but rather to provide a standard platform from which to analyze and compare local government credits.

Exhibit 3

Harris (County of) TX

Scorecard Factors	Measure	Score
Economy/Tax Base (30%) [1]		
Tax Base Size: Full Value (in 000s)	$483,081,667	Aaa
Full Value Per Capita	$104,960	Aa
Median Family Income (% of US Median)	93.5%	Aa
Notching Adjustments:[2]		
Regional Economic Center		Up
Finances (30%)		
Fund Balance as a % of Revenues	62.9%	Aaa
5-Year Dollar Change in Fund Balance as % of Revenues	36.6%	Aaa
Cash Balance as a % of Revenues	91.4%	Aaa
5-Year Dollar Change in Cash Balance as % of Revenues	43.0%	Aaa
Management (20%)		
Institutional Framework	Aa	Aa
Operating History: 5-Year Average of Operating Revenues / Operating Expenditures (x)	1.1x	Aaa
Debt and Pensions (20%)		
Net Direct Debt / Full Value (%)	0.5%	Aaa
Net Direct Debt / Operating Revenues (x)	0.9x	A
3-Year Average of Moody's Adjusted Net Pension Liability / Full Value (%)	1.0%	Aa
3-Year Average of Moody's Adjusted Net Pension Liability / Operating Revenues (x)	2.0x	A
Notching Adjustments:[2]		
Unusually Strong or Weak Security Features: Debt secured by statute		Up
	Scorecard-Indicated Outcome	Aaa
	Assigned Rating	Aaa

[1} Economy measures are based on data from the most recent year available
[2] Notching Factors are specifically defined in the US Local Government General Obligation Debt methodology
[3] Standardized adjustments are outlined in the GO Methodology Scorecards Inputs publication
Source: Harris County, TX Comprehensive Annual Financial Reports, US Census Bureau, Moody's Investors Service

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