Harris County, TX
Tax & Subordinate Lien Revenue Certificates of Obligation

Issuer: Harris County, TX		
Assigned	**Ratings**	**Outlook**
Tax and Subordinate Lien Revenue Certificates of Obligation, Series 2022	AAA	Stable

Methodology

- U.S. Local Government General Obligation Rating Methodology
- ESG Global Rating Methodology

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Rating Summary: The rating assignment reflects Harris County (the "County")'s large and diversifying economy, strong tax base growth, favorable financial operating performance supporting ample balance sheet resources, and strong financial management practices. The rating also reflects the subordinated lien on the County's hotel occupancy tax ("HOT") and the ad valorem tax that secure debt service, with the County having ample headroom to raise the ad valorem tax levy to meet debt service. In KBRA's view, these strengths largely mitigate the County's slightly elevated overall debt burden compared to its population and exposure to climate-related environmental risks.

The County's Tax and Subordinate Lien Revenue Certificates of Obligation, Series 2022 (the "Certificates") are being issued to pay contractual obligations that will fund capital projects for County-owned facilities at NRG Park, a sports complex.

The Certificates and parity Tax and Subordinate Lien Revenue Bonds (together, the "Tax and Subordinate Lien Debt") are secured by a subordinate lien on HOT revenues (see details under RD 1) and ad valorem taxes on all taxable property in the County. The County's expectation is that HOT revenues alone will be sufficient to pay debt service. The County reserves the right to issue senior lien debt secured by HOT revenue, but currently has no such outstanding senior lien debt and has historically chosen not to do so. Ad valorem taxes for purposes including debt service on Limited Tax Obligations, including Tax and Subordinate Lien Debt, are subject to a statutory limit of $0.80 per $100 of assessed value (AV). While the County has historically covered debt service with HOT collections alone, given that there is no rate covenant or additional bonds test (ABT) for the Tax and Subordinate Lien Debt, KBRA's rating assignment reflects the County's underlying credit strength and property tax pledge.

KBRA views the County's management structure and policies as strong, particularly given its comprehensive budgeting process, regularly updated multi-year revenue and expense forecasts, and frequent monitoring and reporting of fiscal conditions. With respect to a County reserve requirement, starting in FY 2023, the County targets a balance of 12.5% of projected General Fund revenue in the Contingency Fund as a reserve against major, unforeseen emergencies endangering public health, safety, and property. The County can make mid-year adjustments to spending, and frequently amends its budget mid-year to better reflect current conditions. Additionally, the County has ample headroom to raise property tax revenue for debt service, as the $0.40 per $100 of AV limit used by the State Attorney General is nearly ten times above the debt service portion of the levy in tax year 2021.

The County benefits from a large economy of over 4.7 million residents centered around the City of Houston ("the City"), the fourth largest city in the U.S. The County's population grew at a 1.44% compound annual growth rate (CAGR) from 2010 through 2020, similar to the overall population growth of Texas (the "State"; KBRA rated AAA/Stable) and well ahead of the U.S. average of 0.69%. While the County's economy has historically been concentrated in oil and gas extraction and energy production. the local economic base has diversified, with growth particularly notable in the healthcare, education, and professional services sectors.

The County's per capita personal income was 108.2% of the State average in 2020. Unemployment rates and poverty rates slightly lag the State, reflecting the area's comparatively urban character. More importantly with respect to the strength of the ad valorem tax pledge, the County's taxable assessed value (TAV) has realized demonstrable growth over the past decade at a 6.5% CAGR. This level of growth is of particular importance due to the General Fund's material dependence on ad valorem tax revenues, as they constitute the vast majority of the tax revenue that equaled 81.8% of operating revenue in FY 2022.

Audited General Fund operating results were positive in the ten fiscal years through FY 2021, including periods during the energy-driven economic downturn of the mid-2010s and the first year of COVID-19 pandemic, which coincided with FY 2021. The General Fund ended FY 2022 with an operating deficit of $226.9 million, or 8.8% of expenditures, largely due to increases in expenses for the administration of justice. Nevertheless, the County ended FY 2022 with an unassigned General Fund balance of $1.30 billion, or 50.5% of General Fund expenditures, a level that KBRA considers to be very strong and demonstrative of the County's ample financial capacity to absorb increases in expenses.

Additionally, KBRA views the County's total governmental funds liquidity to be strong, with cash and investments equaling 258 days cash on hand (DCOH) at FYE 2022, or 220 DCOH when excluding the Mobility and Infrastructure Funds, in which cash and investments are restricted to transportation purposes. KBRA views this liquidity and the above-mentioned unassigned General Fund balance as key buffers against economic fluctuations as well as the limited ad valorem tax collection – due to collection timing – in Short Fiscal Year ("SFY") 2022 ending on September 30, 2022. SFY 2022 is a transitional period as the County adjusts its fiscal year to better align revenue and expenses.

While KBRA considers County-wide ad valorem tax debt (excluding Toll Road Unlimited Tax Bonds)[1] to be low, KBRA views the overall net debt burden to be slightly elevated on a per capita basis, largely attributable to debt obligations of overlapping governmental entities. County-wide and overlapping ad valorem tax debt represents $7,820 per capita and 5.5% of the County's FY 2022 full market value ("FMV"). The County's pension burden is very favorable, in KBRA's opinion, with the aggregated plans overfunded at a 106.5% ratio on December 31, 2021. The County's record of contributing over 100% of actuarially determined contributions (ADC) to pensions since FY 2014 is an additional credit strength. KBRA estimates that total fixed costs, which also include debt service and OPEB contributions, were equivalent to a manageable 14.6% of FY 2022 total governmental fund expenditures, down from 16.9% in FY 2021.

The Stable Outlook reflects KBRA's expectation that the County's economy, financial management practices, and capacity to raise ad valorem tax revenue will continue to provide robust flexibility for the County to meet its debt obligations.

Key Credit Considerations

The rating was assigned because of the following key credit considerations:

Credit Positives

- Sizable and diversifying economy, centered around the nation's fourth largest city, that has benefitted from above average property tax base growth.
- Strong financial profile supported by generally favorable operations and considerable balance sheet resources, derived from stable property tax collections.
- Robust financial management practices, including a comprehensive budgeting process, frequent intra-fiscal year monitoring, and the recent introduction of a funding (reserve) policy for the Contingency Fund.

Credit Challenges

- Slightly elevated overall net debt burden when considering debt issued by various overlapping entities, which is partially offset by the County's limited unfunded pension liability.
- Susceptibility to significant storm activity given its domicile on Texas's Gulf Coast, as evidenced by Hurricane Harvey and other tropical systems.

Rating Sensitivities

▪ Not applicable for this rating level.	+
▪ A sizable and sustained economic contraction for the County / Houston MSA. ▪ A material and sustained degradation in operating reserves and available liquidity.	-

Key Ratios	
Economic Ratios	
Harris County Population (2021)	4,728,030
Population CAGR 2010 to 2020	
Harris County	1.44%
Texas	1.47%
United States	0.7%
Per Capita Personal Income (2020) as a % of State	108.2%
Taxable Assessed Value CAGR - FY 2012 through FY 2022	6.5%
Financial Ratios	
Debt Service Ad Valorem Tax Levy as a % of State Attorney General's Limit (Tax Year 2021)[1]	10.5%
County-Wide and Overlapping Debt Per Capita	$7,820
County-Wide and Overlapping Debt as % of FY 2022 FMV	5.5%
Aggregate Pension Funding Ratio[2]	106.5%
General Fund Unassigned Fund Balance as % of Expenses	50.5%

1. $0.04193 vs. State Attorney General's $0.40 per $100 of AV limit. Tax year ends on December 31.

2. Combines the County's portion of the Texas County & District Retirement System plan and the Harris County Sports & Convention Corporation plan.

[1] The County's Toll Road Unlimited Tax Bonds have historically not needed support from ad valorem tax revenue.

Rating Determinants (RD)	
1. Management Structure and Policies	AAA
2. Debt and Additional Continuing Obligations	AA+
3. Financial Performance and Liquidity	AAA
4. Municipal Resource Base	AA+

RD 1: Management Structure and Policies

KBRA views the County's comprehensive budget process, frequent fiscal monitoring and reporting, multi-year capital project planning, and a newly implemented reserve policy as reflective of strong management policies and practices.

Governing Bodies

The Court, composed of the County Judge and four Commissioners, is the County's main governing body and approves the budget, determines ad valorem tax rates, issues bonds, and reviews the Harris County Investment Policy at least once per year. Further, the County Assessor-Collector is responsible for assessing and collecting ad valorem taxes, while the Harris County Appraisal District (HCAD) appraises the taxable value of property.

Budgeting and Revenue Forecasting

The County's Office of Management and Budget (OMB) maintains multi-year forecasts of revenue and expenses. The County Budget Officer (the "Budget Officer") prepares the budget after consultation with department heads and representatives of members of the Court. The County Auditor (the "Auditor") projects financial resources, including revenue and transfers-in for the budgeting year, and submits the proposed budget to the Court for its consideration. The Auditor's projection includes an analysis of trends and assumptions relative to the County's revenue.

Public hearings on the budget are held by the Court, which may increase or decrease any budget item prior to such budget's formal adoption; however, the amount budgeted for any fund cannot exceed the County Auditor's estimate of revenues for the budget year plus the cash balances at the start of the fiscal year.

Property Tax Revenue Raising Flexibility

The State Constitution limits the aggregate ad valorem tax rate to $0.80 per $100 of AV for all purposes of a county's general fund, permanent improvement fund, road and bridge fund, and jury fund. These purposes include debt service on bonds or other debt issued against such funds; for Harris County, this includes the Certificates. Administratively, the Texas Attorney General does not permit the issuance of limited tax obligation that would result in debt service exceeding a level that could be paid from half, or $0.40 of the $0.80 tax limit.

For tax year 2021 (ending December 31, 2021), the County's aggregate tax rate was $0.3763 per $100 of AV and the portion utilized to pay debt service on Limited Tax Obligations was $0.04193. In KBRA's opinion, the County has a strong level of headroom to accommodate future debt service requirements since $0.04193 equals only 10.5% of the State Attorney General's $0.40 limit.

The County's ability to annually set a tax rate sufficient to pay debt service on the Certificates is not limited by the calculation of the "no-new-revenue tax rate" (discussed in RD 3).

Use of Hotel Occupancy Tax

The Certificates are secured by a pledge of:

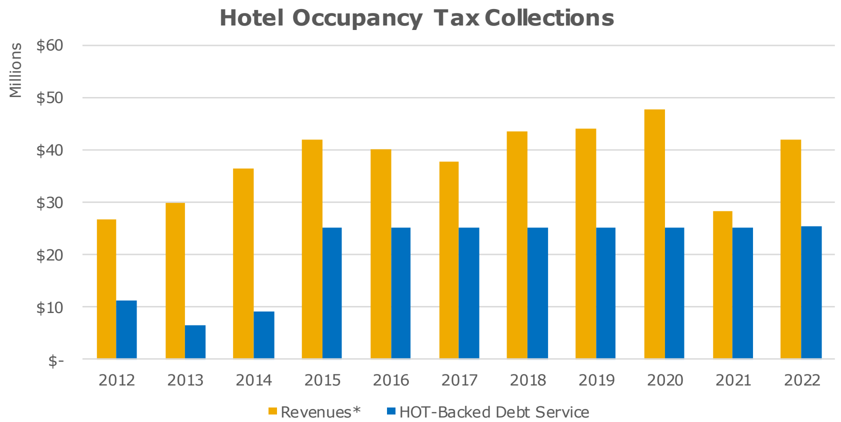
1) A subordinate lien on the proceeds of a hotel occupancy tax collected by the County, with pledges of a 1.85% rate (out of a 2% gross rate) on the price of occupying a room in a municipality with a population above 1,900,000 (City of Houston) and a 6.85% rate (out of a 7% gross rate) in other municipalities. The amount of HOT imposed and levied is limited so that the total amount of tax imposed by the State, the County, and any municipality on the price paid for occupancy does not exceed 15% of the price paid for such occupancy[2].

2) An annual ad valorem tax levied on all taxable property within the County to be used solely for the payment of debt service on the Certificates and Parity Debt. This tax rate is subject to the limitations described above.

The County's current intent is to pay debt service on the Certificates solely from the HOT revenue. Historically, pledged HOT revenues have consistently exceeded debt service requirements on Tax and Subordinate Lien Debt, though these revenues have proven volatile in times of economic contraction (see Figure 1).

[2] Rates for HOT taxes imposed by the Harris County-Houston Sports Authority are not subject to this limit.

Figure 1



**Gross revenues prior to statutory deduction to fund tourism (0.15% of revenue derived from 1% HOT rate)*
Sources: Harris County, Harris County Auditor's Office, Series 2009C and 2012B Official Statements

Nonetheless, the security features do not include a rate covenant or an additional bonds test on the pledged HOT revenue. Additionally, the County can issue debt that is senior to the Tax and Subordinate Lien Debt. Thus, KBRA's analysis reflects the County's underlying credit strength and property tax pledge.

Fiscal Monitoring and Budget Adjustments

The Budget Officer and Auditor are responsible for monitoring the expenditures of the various departments of the County to prevent expenditures from exceeding budgeting appropriations, and for keeping Court advised of the condition of the various appropriation accounts. The Court may transfer amounts among budget classifications in these funds, but no such transfer will increase the budget's total amount. The Court may adopt supplemental budgets for limited purposes, such as for new sources of revenue not anticipated at budget adoption or for bond-financed capital projects.

The Budget Officer and Auditor are further tasked with monitoring of expenditures to ensure they do not exceed budgeted appropriations. The OMB and Auditor have added procedures over the past two years to control labor expenses, such as restricting departments from hiring or raising salaries if labor expenses exceed the budget, until the shortfall has been closed. The Auditor publishes monthly unaudited financial statements, which include comparisons of budgeted versus actual financials, and cash flow projections through the end of the fiscal year. The OMB conducts a midyear financial review and prepares quarterly Investment Reports.

Reserve Policy

In April 2022, the Court approved a formal target policy for the fund balance of the Contingency Fund at 12.5% of the County General Fund revenue projected by the Auditor, applying first in FY 2023. The Contingency Fund, previously known as the Public Improvement Contingency Fund ("PIC"), will focus specifically on helping the County to respond to, mitigate, and recover from major emergencies endangering safety, public health, and property.

Capital Improvement Program

The County has a five-year Capital Improvement Plan (CIP) that it updates annually. The County has been revamping its CIP process with a focus on transparency and efficiency. Changes so far include greater documentation and tracking of capital projects and streamlining approvals of commercial paper.

Bankruptcy Assessment

KBRA has consulted outside counsel on bankruptcy matters and the following represents our understanding of the material bankruptcy issues relevant to the County.

To be a debtor under the municipal bankruptcy provisions of the U.S. Bankruptcy Code (Chapter 9), a local governmental entity must, among other things, qualify under the definition of "municipality" in the Bankruptcy Code, and must also be specifically authorized to file a bankruptcy petition by the State in which it is located. The County is a political subdivision or public agency or instrumentality of a State, and thus is a "municipality" as defined under the Bankruptcy Code. In addition, Texas state law specifically authorizes any municipality in the state that has the power to incur indebtedness through the action of the municipality's governing body to file a Chapter 9 petition. Thus, the County has the authority under Texas state law to incur indebtedness and, hence, it is specifically authorized under Texas state law to file a Chapter 9 petition, subject of course to the further threshold requirements in Federal law (the Bankruptcy Code) for commencement of a Chapter 9 case.

Special Revenues

The principal of and interest on the Certificates are secured by and payable from (i) certain funds derived from a subordinated lien on the proceeds of a Hotel Occupancy Tax (the "Occupancy Tax Proceeds") and (ii) the receipt of an annual ad valorem tax levied on all taxable property within the County (the "Ad Valorem Tax Proceeds").

If the County were to file a petition commencing a Chapter 9 proceeding, Chapter 9 provides for post-petition recognition of (i) a security interest represented by a pledge of specific special tax revenues, municipal enterprise revenues, or a special excise tax imposed on a particular activity or transaction (each "special revenues") and also (ii) a statutory lien on revenues pledged for municipal obligations. By contrast, the pledge of general *ad valorem* property taxes for general purpose obligations of a municipality is not recognized as a security interest or lien that continues following the filing of a petition under Chapter 9.

With respect to the Occupancy Tax Proceeds, because the Occupancy Tax is a "special excise tax imposed on a particular activity or transaction" the Occupancy Tax Proceeds should qualify as "special revenues." Therefore, assuming there is no shortfall of funds to make debt service, if the County were authorized to file for protection under Chapter 9, it should generally be expected that such filing should have little to no effect on the payment of the Certificates during the bankruptcy case.

That stated, there are several additional issues that arise with respect to the Occupancy Tax Proceeds. If the County were to become a debtor in a proceeding under Chapter 9 of the Bankruptcy Code, the bankruptcy court could possibly decide that (i) post-bankruptcy revenue certificate payments by the County are merely optional and not mandatory under the special revenues provisions of the Bankruptcy Code and/or (ii) the automatic stay exception for special revenues in those provisions does not apply (including to possible enforcement action) or is limited to amounts then on hand with the Paying Agent or the County. If the bankruptcy court were to interpret the Bankruptcy Code in that (or a similar) fashion, the parties to the proceedings may be prohibited for an unpredictable amount of time from taking any action to collect any amount from the Authority, or from enforcing any obligation of the County, without the bankruptcy court's permission. However, it is KBRA's understanding that such a ruling would be contrary to historical experience in Chapter 9, and the clear intent of Congress regarding the continued payment of municipal revenue bonds post-bankruptcy, as expressed in the legislative history for the special revenues amendments to Chapter 9 and as interpreted in properly-reasoned existing (albeit limited) case precedent under Chapter 9. Moreover, the lien securing the Certificates is junior to other future senior bond funding and on parity with the Subordinate Lien Bonds, which may dilute the revenue stream pledged to secure the Certificates.

In addition, assuming the pledged Occupancy Tax Proceeds are "special revenues", while there is no case law from which to make a definitive judgment, it is possible that, in the context of confirming a plan of adjustment in a Chapter 9 case where the plan has not received the requisite consent of the holders of the Certificates, a bankruptcy court may confirm a plan that adjusts the timing of payments on the Certificates or the interest rate or other terms of the Certificates, provided that (i) the certificate holders retain their lien on the special revenues and (ii) the payment stream has a present value equal to the value of the special revenues subject to the lien.

With respect to the Ad Valorem Tax Proceeds, because (a) the Ad Valorem Tax Proceeds pledged to pay the Certificates are not from a separate, dedicated source of revenues that meets the definition of "special revenues" under Chapter 9, and (b) there is no statutory lien imposed on the pledged tax revenues levied to pay the Certificates, therefore holders of the Certificates should, after proper presentation and argument, be treated as unsecured creditors of the County with respect to the Ad Valorem Tax Proceeds to the extent the Occupancy Tax Proceeds are insufficient to satisfy the obligations arising under the Certificates.

RD 2: Debt and Additional Continuing Obligations

KBRA considers Harris County to have a moderately strong debt and continuing obligations profile that reflects a slightly elevated overall debt burden partially offset by the County's robust funding of pensions.

Overall Ad-Valorem Tax

As of September 30, 2022 and inclusive of the issuance of the Certificates, County-wide ad valorem tax debt, which incorporates other County-wide taxing entities such as the Harris County Flood Control District (the "HCFCD"; KBRA rated AAA/Stable), equaled only $644 per capita (based on CY 2021 population). However, when accounting for the $32.3 billion of ad valorem debt from overlapping entities, this ratio rises to $7,820, a moderate level in KBRA's view. As a percentage of the County's FMV, total County-wide and overlapping debt was relatively more favorable at 5.5%.

Figure 2

Estimated County-Wide and Overlapping Ad Valorem Tax Debt	
(dollars in thousands)	
County's Total Outstanding Long-Term Tax Debt	
Limited Tax Debt	802,062
Unlimited Tax Bonds[1]	713,725
District Flood Contract Tax Bonds	151,335
Total County Long-Term Debt	**1,667,122**
Other County-Wide Taxing Entities	
Harris County Flood Control District	807,875
Hospital District	76,385
Port of Houston Authority	494,434
Total County-Wide Debt	**3,045,816**
Cities	5,253,589
Independent School Districts, College Districts, and the Harris County Department of Education	19,817,197
Utility Districts	7,189,085
Total County-Wide & Overlapping Debt[2]	**$ 36,972,809**

1. Excludes Toll Road Unlimited Tax Bonds. 2. Excludes commercial paper transactions.
Source: Series 2022 POS

At FYE 2022, all of the County's ad valorem tax bonds were fixed rate. Besides these bonds, the County also had $191.5 million of outstanding commercial paper (CP), out of a total of $1.78 billion of available CP.

Debt Service Profile

The current aggregate debt service schedule for County-wide ad valorem tax debt, inclusive of the impact of the Certificates and excluding commercial paper and Toll Road Unlimited Tax Bonds, is descending after reaching maximum annual debt service (MADS) of $342.0 million in FY 2025.

Capital Improvement Program

In the SFY 2022 update to the CIP, the costs of proposed projects totaled $11.03 billion through FY 2026. The vast majority of these potential costs are for the HCFCD and the Harris County Toll Road Authority (HCTRA) at 48.3% and 34.6% shares, respectively. As a result, sources outside the County's limited tax obligations would constitute the bulk of the funding if the entire CIP were realized.

Pension and OPEB Liabilities

All permanent County employees receive pension benefits through the County's participation in the agent multi-employer Texas County and District Retirement System (TCDRS). The pension funding ratio, which averaged 89.3% from December 31, 2016, through December 31, 2020, improved to 103.2% as of December 31, 2021, which KBRA views favorably. Since FY 2014, the County annually contributed more than 100% of the ADC for its share of the TCDRS. The Harris County Sports & Convention Corporation (HCSCC), a blended component unit of the County, also has a separate, smaller pension plan in the TCDRS that was funded at 140.0% as of December 31, 2021. As a result of these plans being funded above 100%, aggregate net pension liability as a percentage of the County's FY 2022 FMV was essentially zero on December 31, 2021.

The County offers an agent multi-employer OPEB plan for retired employees of the County, District, and certain other governmental entities. The plan provides medical, dental, vision, and basic life insurance benefits to plan members. The net ending obligation for this OPEB plan was approximately $3.94 billion on December 31, 2021.

Fixed Cost Burden

FY 2022 debt service was equivalent to around 6.4% of FY 2021 total governmental expenditures. KBRA estimates that total fixed costs, including the County's contributions to TCDRS and its OPEB plan and HCSCC's contribution to TCDRS, were equivalent to around 14.6% of FY 2022 total governmental expenditures.

RD 3: Financial Performance and Liquidity

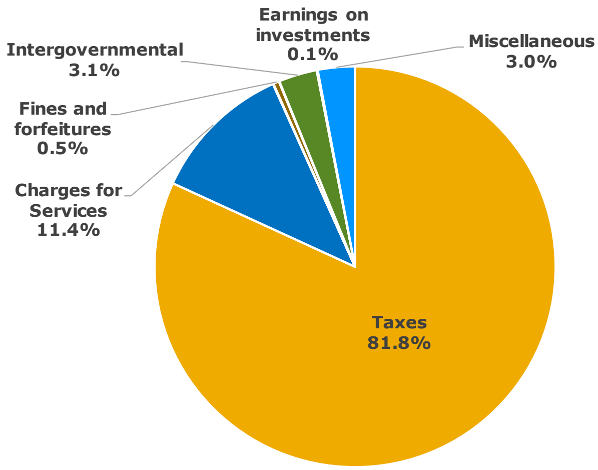
KBRA considers the County's financial performance to be strong, as evidenced by the generation of annual General Fund operating surpluses in almost all of the past ten consecutive fiscal years, high unassigned General Fund balances, and strong total government funds liquidity. The general trend of positive operations reflects both revenue growth derived from a robust economic and property taxing base and the County's conservative budgeting.

Revenue Diversity

General Fund revenues are primarily derived from tax collections, which accounted for approximately 81.8% of FY 2022 revenues. Property tax revenues comprise the vast majority of these collections, with HOT revenues constituting the remainder. Tax collections have shown steady growth, largely moving in lockstep with the growth realized in the County tax base. Primary reliance on ad valorem revenues allows the County to buffer against broader economic factors and recessionary events, such as fluctuations in energy industries.

Figure 3

General Fund Revenue Mix (FY 2022)



Source: County ACFR

FY 2022 General Fund Results

The General Fund is a group of funds that includes the General Operating, Public Contingency, Mobility, Infrastructure, and General Debt Funds. For FY 2022 (ended February 28), the County posted a General Fund operating deficit of $226.9 million, or 8.8% of spending, versus a $69.0 million operating surplus in FY 2021. Inclusive of other financing sources and uses, such as transfers, the net change in fund balance in FY 2022 was a decrease of $191.2 million. The primary reason for the operating deficit was a $243.2 million increase in administration of justice expenses, driven by factors such as the return of operations previously reduced during the pandemic, normal increases in pay, increased spending in departments such as jails, and lower reimbursements of costs by pandemic-related grants.

While the County's unassigned General Fund balance decreased slightly from $1.38 billion at FYE 2021 to $1.30 billion at FYE 2022, the balance represents 50.5% of FY 2022 General Fund expenses, which KBRA considers to be very strong. In KBRA's opinion, the County's success in maintaining an unassigned General Fund balance above 50% of expenses – as the County has done so since FY 2017 – despite the aforementioned deficit is demonstrative of the County's robust financial cushion.

Figure 4

General Fund Summary Statement of Income and Balance Sheet FYE February 28 (Audited GAAP Basis) (dollars in thousands)	2018	2019	2020	2021	2022
Statement of Income					
Revenues	$ 2,104,966,396	$ 2,194,019,703	$ 2,297,280,445	$ 2,346,478,327	$ 2,339,403,583
Expenditures	1,988,494,090	2,111,580,164	2,186,560,922	2,277,507,386	2,566,253,758
Excess of Revenues					
Over (Under) Expenditures	116,472,306	82,439,539	110,719,523	68,970,941	(226,850,175)
Other Financing Sources (Uses)	31,219,024	51,874,920	70,435,930	287,369,440	35,656,011
Net Change in Fund Balance	**147,691,330**	**134,314,459**	**181,155,453**	**356,340,381**	**(191,194,164)**
Beginning Fund Balance	1,587,501,039	1,735,192,369	1,869,506,828	2,050,662,281	2,407,002,662
Ending Fund Balance	**1,735,192,369**	**1,869,506,828**	**2,050,662,281**	**2,407,002,662**	**2,215,808,498**
Balance Sheet					
Assets					
Cash and Cash Equivalents	382,470,531	621,713,085	305,113,709	608,632,655	592,942,275
Investments	1,156,398,288	1,048,862,834	1,541,526,692	1,605,726,785	1,477,995,373
Receivables (Incl. Notes)	137,230,310	169,085,077	155,050,698	159,593,391	173,084,629
Due from Other Funds	11,605,158	13,163,247	36,479,415	83,804,086	143,193,796
Prepaids and other assets	5,937,797	6,894,011	10,102,105	2,321,860	4,315,892
Inventories	2,328,103	2,291,397	2,811,310	2,530,982	2,015,772
Advances to other funds	140,000	140,000	140,000	340,000	370,000
Restricted cash and cash equivalents	237,155,352	240,890,464	195,059,224	133,310,718	223,768,638
Restricted investments	50,999	46,361	53,396,106	135,189,577	7,599,707
Other	-	-	-	-	-
Total Assets	**1,933,316,538**	**2,103,086,476**	**2,299,679,259**	**2,731,450,054**	**2,625,286,082**
Liabilities					
Vouchers payable	76,955,280	61,510,594	72,627,694	107,871,673	120,500,458
Accrued payroll and compensated absences	90,984,754	99,510,264	101,141,941	157,311,965	204,517,537
Retainage payable	4,921,739	4,873,197	1,857,109	12,447,968	4,877,418
Due to other funds	352,696	1,026,493	833,560	18,081,559	24,677,713
Due to other governmental units	-	-	-	-	-
Other liabilities	230,561	283,661	151,461	151,461	151,461
Advances from other funds	-	-	-	-	-
Unearned revenue	8,354,767	8,638,113	12,005,637	6,952,152	7,496,423
Total Liabilities	**181,799,797**	**175,842,322**	**188,617,402**	**302,816,778**	**362,221,010**
Deferred Inflows of Resources					
Unavailable revenue-property taxes	8,120,103	47,130,241	37,164,990	9,352,969	37,324,803
Unavailable revenue-other	8,204,269	10,607,085	23,234,586	12,277,645	9,931,771
Total deferred inflows of resources	16,324,372	57,737,326	60,399,576	21,630,614	47,256,574
Fund Balance					
Nonspendable	8,405,900	9,325,408	13,053,415	5,192,842	6,701,664
Restricted	512,962,739	532,074,026	533,151,681	994,737,889	781,834,387
Committed	-	-	-	-	73,236,166
Assigned	50,988,858	40,139,177	31,299,415	27,414,385	56,831,745
Unassigned	1,162,834,872	1,287,968,217	1,473,157,770	1,379,657,546	1,297,204,536
Total Fund Balance	**1,735,192,369**	**1,869,506,828**	**2,050,662,281**	**2,407,002,662**	**2,215,808,498**
Total Fund Balance as % GF Expenditures	*87.3%*	*88.5%*	*93.8%*	*105.7%*	*86.3%*
Unassigned Fund Balance as a % of GF Exp.	*58.5%*	*61.0%*	*67.4%*	*60.6%*	*50.5%*

Source: County ACFRs

Liquidity Position

In KBRA's view, the County's liquidity position is strong. At FYE 2022, the County had $2.94 billion of cash and investments in total governmental funds, which represents 258 DCOH. Excluding cash and investments and expenses of the Mobility and Infrastructure Funds, where cash and investments are restricted to transportation purposes, total government funds liquidity equaled 220 DCOH, a level that KBRA still views as strong.

Figure 5

Liquidity Total Governmental Funds FY 2022	
Cash & Investments	2,935,380,954
Total Govt Funds Expenditures	4,145,146,619
DCOH	**258**
Excluding Mobility & Infrastructure Funds	
Cash & Investments	2,352,364,705
Total Govt Funds Expenditures	3,908,775,015
DCOH	**220**

Source: County ACFRs

Fiscal Year Change, SFY 2022, and FY 2023 Budget

In February 2022, the Commissioners Court adopted a new operating budget and implemented a fiscal year end change for the County, in an effort to better align the County's expenses and available revenues. With this change in the fiscal year end, the County had a transitional period, SFY 2022 (March 1, 2022 through September 30, 2022), which the County anticipates publishing audited financial statements for. The next full fiscal year will be the twelve-month period that will begin on October 1, 2022, and end on September 30, 2023.

Due to limited property tax collected during SFY 2022, the SFY 2022 budget estimates $306.2 million in General Operating Fund revenue and other financing sources, versus the $2.02 billion in revenue and other financing sources budgeted for FY 2022. Typically, the highest property tax collections are recognized in the final months of the calendar year and the first months of the next. The County relied on its reserves to help fund operations, with the reserves being replenished thereafter.

The adopted FY 2023 budget is based on an annualization of the SFY 2022 budget since the County did not have a quorum to vote on a new tax rate by the deadline. A "no-new-revenue tax rate" budget freezes the level of property tax revenue to be collected, except for new revenue collected from property that had been added to the tax roll for the prior year. Given the lower level of budgeted revenue than in the originally proposed FY 2023 budget, the County has asked its departments to reduce expenses accordingly. KBRA believes that the County's conservative financial management will facilitate the closing of gaps between the budget and spending.

RD 4: Municipal Resource Base

KBRA views the County's municipal resource base as strong given the growing population and increasingly diverse economy. With a population of over 4.7 million, Harris County is the most populous county in Texas. The county seat is Houston, the largest city in Texas and the fourth largest city in the U.S. Like other metropolitan areas across the nation, the County's economy and employment base were impacted by the COVID-19 pandemic as well as the volatility with the energy market.

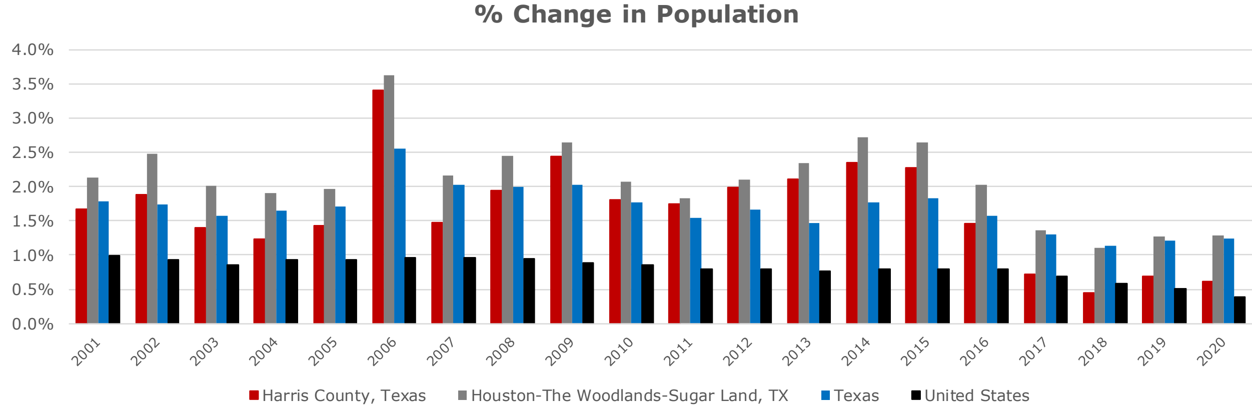
The County's economic activity is largely centered in and around the City, which is commonly known as the "Energy Capital of the World". This concentration reflects the presence of the Port of Houston, a sprawling 50-mile-long port complex that is home to a large concentration of deep-water terminals, oil refineries, related petrochemical activity, and other industrial and shipping activity. The Houston-The Woodlands-Sugar Land MSA (the "MSA") is also home to extensive industry specializing in the design and manufacture of oil and gas equipment as well as petrochemical and plastics engineering. These activities contribute significantly to the economic output of the MSA, but concentration in these areas has eased in recent decades as the MSA has grown. Nevertheless, energy remains a key industry and movement in oil and gas prices remain an important driver of both economic growth and volatility year to year. Other significant contributors to the MSA economy include Texas Medical Center and the University of Houston.

Population Trends

Harris County continues to be the nation's third largest county with a 10-year population CAGR of 1.44% (Figure 6).

Figure 6

% Change in Population



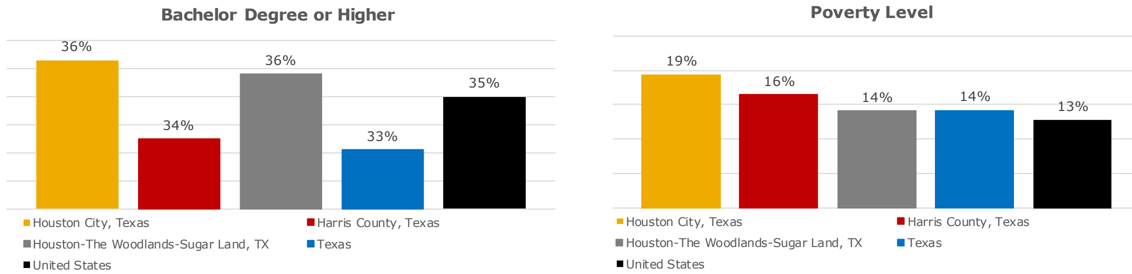
	2000	2010	2020	% Δ 2010 to 2020	10 Year CAGR (2020)
Harris County, Texas	3,414,239	4,107,542	4,738,253	15.4%	1.44%
Houston-The Woodlands-Sugar Land, TX	4,717,507	5,947,185	7,154,478	20.3%	1.87%
Texas	20,944,499	25,238,863	29,217,653	15.8%	1.47%
United States	282,162,411	309,378,433	331,501,080	7.2%	0.69%

Source: U.S. Bureau of Economic Analysis

Personal Income, Education Attainment, and Poverty Level

The County's personal income per capita, as of 2020, is $60,183, which exceeds the State's $55,601 average and the national $59,765 average. While poverty level for the County is somewhat elevated reflecting the area's comparatively urban character, the level has trended downward since FY 2010. Education attainment has trended upward since 2010, ahead of the State (Figure 7).

Figure 7



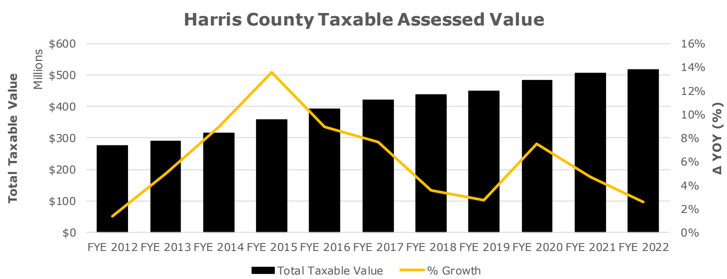
	As of 2021 Point Δ 2010 to 2021	As of 2021 Point Δ 2010 to 2021
Houston City, Texas	8.0	-3.4
Harris County, Texas	5.7	-2.3
Houston-The Woodlands-Sugar Land, TX	7.4	-2.4
Texas	7.2	-3.7
United States	6.8	-2.5

Source: U.S Census
Bachelor degree or higher defined as "% of population over 25 with Bachelor's degree or higher".
Poverty level defined as "portion of population living below the poverty line".

Tax Base

The County's TAV has realized demonstrable growth over the past decade at a 6.5% CAGR between 2012 and 2022 (Figure 8). While the top ten taxpayers are concentrated in the oil & gas industry, these taxpayers only accounting for 3.95% of TAV (Figure 8). Full market value per capita is strong at $109,508 based on the 2022 assessment.

Figure 8



Source: Harris County Tax Assessor-Collector and Harris County Auditor's Office

Harris County Top Ten Taxpayers
(Dollars in Thousands)

Taxpayer	Type of Business	Taxable Valuations[(a)]	% of Total Taxable Valuation[(b)]
Centerpoint Energy	Electric Utility	$4,164,243	0.82%
Exxon Mobil Corp	Oil, Chemical Plant	3,915,202	0.77%
Chevron Chemical Company	Oil, Gas	3,272,176	0.64%
Equistar Chemicals LP	Chemical Plant	2,004,318	0.39%
Shell Oil Co	Oil Refinery	1,634,341	0.32%
Enterprise	Pipeline	1,198,256	0.24%
Lyondell Chemical	Chemical Plant	1,080,178	0.21%
Palmetto TransOceanic LLC	Real Estate, Energy	1,012,329	0.20%
Walmart	Retail	949,463	0.19%
Phillips 66 Company	Oil, Gas	861,332	0.17%
Total		**$20,091,838**	**3.95%**

(a) Amounts shown for these taxpayers do not include taxable valuations, which may be substantial, attributable to certain subsidiaries and affiliates which are not grouped on the tax rolls with the taxpayers shown.

(b) County's total taxable value based on Appraisal District supplemental reports dated as of February 28, 2022.

Source: Harris County Appraisal District

Employment and Unemployment

The COVID-19 pandemic, beginning in March 2020, weighed negatively on employment, due to various pandemic-related business restrictions and major volatility in the energy market tied to the demand shock associated with the sudden shift to work from home. West Texas Intermediate (WTI) prices fell from $51 per barrel in February 2020 to $17 in March, before recovering to about $50 range in December 2020. As such, the County's unemployment rate surged to 13.8% in April 2020 at the peak of stay-at-home restrictions and distressed oil prices versus State and U.S. unemployment peaks of 12.1% and 14.4%, respectively.

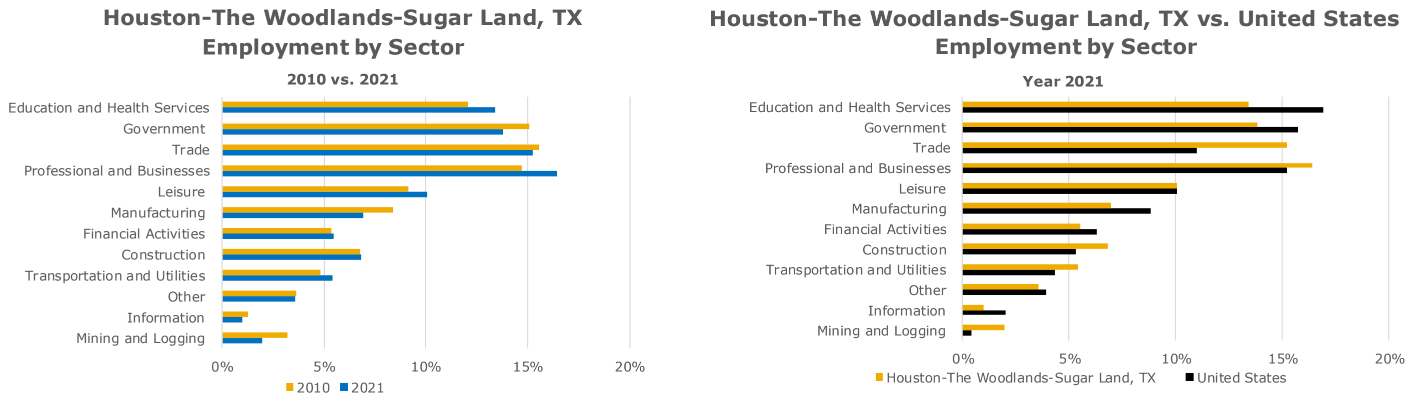
As WTI prices have rebounded to an average of $67.99 per barrel in 2021 and reaching above $80 per barrel in 2022, unemployment rate has receded to 4.2% as of September 2022. Nonetheless, the level continues to exceed the State and U.S. unemployment rate at 3.8% and 3.3%, respectively.

Harris County's current employment base[3] is well diversified with a degree of concentration in professional & business services as well as trade, transportation & utilities, and construction relative to the U.S. overall (Figure 9). The employment market has diversified since 2010 with increased focus in high value-added sectors including professional & business

[3] Represented by the Houston-The Woodlands-Sugar Land MSA

services and education & health services. Manufacturing employment concentration lessened over the period, reflecting declining reliance on oil and gas activity.

Figure 9



Source: U.S. Bureau of Economic Analysis

ESG Management

KBRA typically analyzes Environmental, Social, and Governance (ESG) factors through the lens of how issuers plan for and manage relevant ESG risks and opportunities. More information on KBRA's approach to ESG risk management in public finance ratings can be found here. Over the medium-term, public finance issuers will likely need to prioritize ESG risk management and disclosure with the likelihood of expansions in ESG-related regulation and rising investor focus on ESG issues.

Environmental Factors

Climate Resiliency: Following the impact of Hurricane Harvey in 2017, the County held a special election to issue up to $2.5 billion of bonds to fund capital projects related to Harvey, as well as other projects aimed at reducing the impact of future flood events. Projects supported by this $2.5 billion approval include:

- Channel modifications to improve stormwater conveyance
- Regional stormwater detention basins
- Major repairs to flood-damaged drainage infrastructure
- Removing large amounts of sediment and silt from drainage channels
- Voluntary buyouts of flood-prone properties
- Wetland mitigation banks
- Property acquisition for preserving the natural floodplains
- Drainage improvements made in partnership with other cities, utility districts, or other local government agencies
- Upgrading the Harris County Flood Warning System

Social Factors

In 2019, the County created its Department of Economic Equity & Opportunity ("DEEO" or "Department") in an effort to implement economic policies and initiatives focused on fair and equitable county contracting, workforce development, job placement, community benefit agreements, and workers' rights. DEEO's Program Planning & Innovation serves as an advisor and subject matter expert to County leaders, businesses, individuals, and other vested stakeholders – while at the same time provides program planning with a focus on innovation, community insights, program evaluation and analytics, and policy advising to advance equity and economic opportunity in the County. The Department also oversees vendor diversity, wage and compensation protection, and the HUD Economic Opportunity Program.

Governance Factors

Cybersecurity: Harris County Cybersecurity is a division within the Harris County Universal Services Department (HCUS), which provides shared services, including information technology, across the County government. An Information Security Officer, in addition to a Director and a Deputy Director of IT Infrastructure, is among HCUS's administrators. UCUS provides reports on vulnerabilities and potential mitigation actions, annual cybersecurity training and other education events to County employees, and actively monitors application systems.