Public Finance Tax-Supported

U.S.A.

AAA

Carroll County, Maryland

New Issue Summary

Sale Date: Nov. 3, 2022

Series: Public improvement bonds of 2022

Purpose: Proceeds of the bonds will be used to finance certain capital projects

Security: The bonds are payable from Carroll County's full faith and credit taxing power, for which the county is empowered and directed to levy unlimited advalorem taxes.

The 'AAA' Issuer Default Rating (IDR) and general obligation (GO) bond rating reflect the county's demonstrated ability to maintain healthy financial flexibility. Along with sizable reserves, the county's broad revenue-raising authority and spending flexibility support its superior level of inherent budget flexibility to address periods of economic stress. Long-term liabilities are expected to remain exceptionallylow, reflecting manageablefuture issuance plans and modest net pension liabilities. Revenue growth prospects are expected to remain solid.

Economic Resource Base: Carroll County, located in north-central Maryland, covers 452 square miles and is within the Baltimore metropolitan area, approximately 40 miles from the downtown business district. The estimated 2021 population of 173,873 has increased by just 4% since 2010, well below that of the state and nation.

Key Rating Drivers

Revenue Framework: 'aaa': Revenues absent tax rate adjustments are expected to be above the level of inflation due to consistent recent economic development as well as assessed value growth of 2%-3% yoy. Income tax revenue growth absent rate reductions has been solid. The county has the independent legal ability to raise property tax revenues in an unlimited amount.

Expenditure Framework: 'aa': Fitch Ratings expects expenditures to grow marginally above revenues despite cost increases related to the expansion of the fire/emergency medical service (EMS) department. Fixed carrying costs for debt service and retiree benefits are moderate. Management maintains strong control over wages and benefits, providing solid expenditure flexibility.

Long-Term Liability Burden: 'aaa': The county's long-term liability burden is very low. Future debt plans are modest relative to personal income and current debt outstanding, and pensions comprise a small percentage of total liabilities.

Operating Performance: 'aaa': Fitch expects the county to maintain a high level of financial flexibility throughout economic cycles based on its expenditure and revenue flexibility and steady reserve position; solid economic and revenue prospects enhance this assessment.

Rating Sensitivities

Factors that could, individually or collectively, lead to positive rating action/upgrade:

Not applicable for a 'AAA' rating.

Factors that could, individually or collectively, lead to negative rating action/downgrade:

• Revenue growth trends that fall below Fitch's expectations for growth above the level of inflation over time;



Ratings

Long Term Issuer Default Rating AAA

New Issue

\$30,000,000 General Obligation Public Improvement Bonds, Series 2022 AAA

Outstanding Debt

General Obligation Bonds

Rating Outlook

Stable

Applicable Criteria

U.S. Public Finance Tax-Supported Rating Criteria (May 2021)

Related Research

Fitch Rates Carroll County, MD's \$30MM G Os 'AAA'; Outlook Stable (October 2022)

Analysts

Evette Caze +1 212 908-0376 evette.caze@fitchratings.com

Nicholas Rizzo +1 212 908-0596 nicholas.rizzo@fitchratings.com

Public Finance Tax-Supported U.S.A.

 Inability to adequately incorporate new spending needs associated with the new paid fire department within the current revenue structure, either through constraining spending elsewhere or by raising revenue while maintaining fiscal balance and a high level of financial resilience.

Current Developments

Fiscal 2021 (June 30 year-end) ended with the county recording a notable \$47.8 million (11.7% of spending) operating surplus. Positive operating results reflect a significant 14% increase in income tax revenues and a 4% increase in property tax revenues yoy. Recordation tax revenues also performed well while charges for services still lagged budgeted expectations. Expenditures were slightly below budget by about 2.5%. The unrestricted general fund balance increased to \$112.8 million, or 25% of spending.

The county received \$17.9 million in Coronavirus Aid, Relief, and Economic Security Act funding during fiscal 2021 that supported the unbudgeted expenses related to the pandemic and did not subsidize the county's normal general fund operations.

The fiscal 2022 \$474 million general fund adopted budget increased 14% (\$57 million) over the general fund fiscal 2021 adopted budget. It included an appropriated fund balance of \$44.9 million. According to the unaudited fiscal 2022 financial statement, the county realized a \$11.8 million operating surplus. The positive variance reflects better than budgeted income tax (17% above budget) and property tax revenues (4% above budget). The unrestricted general fund balance is expected to increase to \$132.6 million, or 32% of spending.

The county received a \$32.7 million allocation from the American Rescue Plan Act of 2021. The Board of County Commissioners has approved a spending plan that allocates the majority of funding toward broadband infrastructure, public works improvements and behavioral health programs.

The fiscal 2023 general fund budget of \$501 million is a 5.7% increase over the fiscal 2022 adopted budget. The budget again appropriates \$41.3 million of fund balance but keeps property tax rates and other fees unchanged. The budget increase is mostly tied to pay increases to remain competitive within the current labor environment.

In October 2020, county commissioners approved the creation of a combination fire and EMS department. The new department is meant to bring together 14 volunteer fire companies under acounty administered department with paid staff. The change is expected to happen fiscal years 2023 to 2025 and cost approximately \$15 million annually, with the cost in fiscal 2023 about \$5 million. Fitch expects the county to incorporate this new spending into its budget while maintaining its superior gap closing capacity.

The county develops a six-year financial plan annually. Fitch expects the county to have balance operations while implementing the new fire and EMS department and maintaining a superior level of resilience.

Credit Profile

The county continues to focus growth within its designated growth areas while trying to keep one-third of the county rural through its agricultural preservation program. As such, long-standing employers remain stable and economic expansion continues, although population growth is slow. The county's economy is anchored by two hospitals (Carroll Hospital Center and Springfield Hospital Center) and two colleges (McDaniel College and Carroll Community College). The unemployment rate remains below that of the state and nation. Wealth metrics are above national and state averages.

Revenue Framework

The county relies on a combination of property and income tax revenues, which totaled 50% and 45% of unaudited general fund revenues, respectively, in fiscal 2022.

The county's adjusted general fund revenue growth trended above inflation on a CAGR basis over the 10 years ending in fiscal 2021, somewhat reflective of federal stimulus moneys but also of strong income tax revenue trends and taxable assessed value growth. Like all Maryland

Rating History (IDR)

		Outlook/	
Rating	Action	Watch	Date
AAA	Affirmed	Stable	10/13/22
AAA	Revised	Stable	4/30/10
AA+	Affirmed	Stable	10/23/02
AA+	Upgraded	-	11/18/99
AA	Assigned	_	10/20/94

Public Finance Tax-Supported U.S.A.

jurisdictions, property is reassessed on a tri-annual basis. The tax base has been increasing in a range of 2.5%-3% per year and budgeted at \$22.9 billion, or a 4% increase in fiscal 2023.

Property tax revenues and rates are not subject to a cap. The income tax rate of 3.03% is below the maximum rate of 3.2%.

Expenditure Framework

The county's largest expenditure category is education at roughly 54% of general fund expenditures, followed by public safety at 14%.

Based on the county's history of structural balance, modest population growth and stable student enrollment at around 25,000, Fitch expects spending growth to increase marginally above revenues requiring budget management to remain balanced.

According to the state's maintenance of effort mandate, education spending cannot decline yoy without state approval, limiting the county's ability to reduce spending. However, the county's workforce is not currently unionized, providing broad flexibility to manage labor-related costs. Furthermore, the county gains additional flexibility from annual capital pay-go that is budgeted at over \$46 million in fiscal 2023, or 11% spending.

The county's fixed cost burden is affordable, with carrying costs for debt, pensions, and other post-employment benefits (OPEB) totaling about 11% of fiscal 2021 governmental expenditures; the debt service component accounted for 7% of the total and is expected to remain manageable based on potential future debt issuance and rapid amortization. Carrying costs include near full funding of the OPEB actuarially determined contribution.

Long-Term Liability Burden

Overall net debt plus the county's net pension liability is low at 3% of personal income. The county's fiscal years 2022-2027 capital plan totals approximately \$225 million, excluding enterprise fund projects. While the plan is funded with over \$204 million (2% of personal income) of tax-supported bonds compared to approximately \$254 million of outstanding net direct debt, Fitch expects the debt burden to remain low.

The county provides pension benefits to its employees through the county employee pension plan and to police officers and volunteer firefighters through the county certified law officers' pension plan and volunteer fireman pension plan; the county also participates in the statewide pension system.

Combined across plans, assets covered about 106% of liabilities according to the fiscal 2021 financial statement; adjusted to Fitch's standard 6% investment rate of return assumption, the funded ratio declines to 93%. OPEB liabilities do not represent a cost pressure. According to fiscal 2021 reported data, the net OPEB liability was a minimal \$16.5 million.

Given the increase in staff related to the expansion of the fire/EMS department, pension and OPEB liabilities may increase. Fitch will continue to monitor the impact on liabilities. However, given the current modest burden, the long-term liability burden is expected to remain within the 'aaa' assessment category.

Operating Performance

Fitch expects the county to manage through cyclical downtums while preserving a high level of financial resilience, given the county's revenue and expenditure flexibility and expected revenue volatility through economic cycles. General fund reserves are well above the county's 5% stabilization reserve policy.

Fitch anticipates the county would absorb any downward budget pressure by utilizing a combination of expenditure cuts and revenue-raising and could also make reserve draws if necessary. Given the array of budgetary solutions available, the county is well positioned to maintain its financial resilience through economic cycles.

The county has exercised its strong inherent budget flexibility (on both the revenue and spending side) to consistently come in ahead of budgets. During periods of economic expansion, the county has maintained structural balance and built up reserves to robust levels.

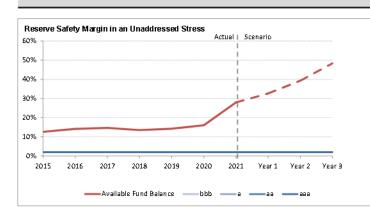
Public Finance Tax-Supported U.S.A.

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

Carroll County (MD)

Scenario Analysis Ver 48



Analyst Interpretation of Scenario Results

Fitch expects the county to manage through cyclical downturns while preserving a high level of financial resilience, given the county's revenue and expenditure flexibility and expected revenue volatility through the economic cycle. General fund reserves are well above the county's 5% stabilization reserve policy.

Scenario Parameters:			Year 1	Year 2	Year 3
GDP Assumption (% Change)			(1.0%)	0.5%	2.0%
Expenditure Assumption (% Change)			2.0%	2.0%	2.0%
Revenue Output (% Change)	Min V1 Stress: -1%	Case Used: Moderate	(1.0%)	1.8%	4.3%
Inherent Budget Flexibility				Superior	

Revenues, Expenditures, and Fund Balance				Actua Is				Sce	nario Outpu	t
	2015	2016	2017	2018	2019	20 20	2021	Year1	Year 2	Year 3
Total Revenues	350,889	370,458	373,735	379,534	400,054	406,177	441,123	436,712	444,770	463,973
% Change in Revenues	-	5.6%	0.9%	1.6%	5.4%	1.5%	8.6%	(1.0%)	1.8%	4.3%
Total Expenditures	360,309	367,547	378,037	387,561	399,423	400, 148	399,872	407,869	416,027	424,347
% Change in Expenditures	-	2.0%	2.9%	2.5%	3.1%	0.2%	(0.1%)	2.0%	2.0%	2.0%
Fransfers In and Other Sources	75,114	22,394	20,009	11,263	11,601	56,996	51,331	50,818	51,756	53,990
Transfers Out and Other Uses	67,244	16,661	14,139	11,186	7,745	52,820	44,779	45,675	46,588	47,520
Net Transfers	7,871	5,734	5,870	78	3,856	4,177	6,552	5,143	5,167	6,470
Bond Proceeds and Other One-Time Uses	59,780	-	6,525	-	-	45,143	36,955	-	-	-
Net Operating Surplus/(Deficit) After Transfers	(1,550)	8,644	1,568	(7,950)	4,486	10,206	47,804	33,986	33,911	46,096
Net Operating Surplus/(Deficit) (% of Expend. and Transfers Out)	(0.4%)	2.2%	0.4%	(2.0%)	1.1%	2.5%	11.7%	7.5%	7.3%	9.8%
Jnrestricted/Unreserved Fund Balance (General Fund)	46,241	54,241	56,315	53,792	57,937	65,452	114,043	148,029	181,939	228,035
Other Available Funds (GF + Non-GF)	-	-	-	-	-	-	-	-	-	-
Combined Available Funds Balance (GF + Other Available Funds)	46,241	54,241	56,315	53,792	57,937	65,452	114,043	148,029	181,939	228,035
Combined Available Fund Bal. (% of Expend. and Transfers Out)	12.6%	14.1%	14.6%	13.5%	14.2%	16.0%	28.0%	32.6%	39.3%	48.3%
Reserve Safety Margins		Inherent Budget Flexibility								
Moderate		Minimal		Limited		Midrange		High		Superior
Reserve Safety Margin (aaa)		16.0%		8.0%		5.0%		3.0%		2.0%
Reserve Safety Margin (aa)		12.0%		6.0%		4.0%		2.5%		2.0%
Reserve Safety Margin (a)		8.0%		4.0%		2.5%		2.0%		2.0%
Reserve Safety Margin (bbb)		3.0%		2.0%		2.0%		2.0%		2.0%

Notes: Scenario analysis represents an unaddressed stress on issuer finances. Fitch's scenario analysis assumes the GDP and expenditure growth sequence shown in the 'Scenario Parameters' section. Inherent budget flexibility is the analyst's assessment of the issuer's ability to deal with fiscal stress through tax and spending policy choices, and determines the multiples used to calculate the reserve safety margin. For further details, please see Fitch's US Tax-Supported Rating Criteria.

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.

DISCLAIMER & DISCLOSURES

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by following this link: https://www.fitchratings.com/understandingcreditratings. In addition, the following https://www.fitchratings.com/rating-definitions-document details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, oriteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at https://www.fitchratings.com/site/regulatory. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA- or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third- party verification sources with respect to the partought verification can ensure that all of the information Fitch relies on in connection with a rating or areport will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of theinformation they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters Further, ratings and/orecasts offinancial and/other information are inherently forward-looking andembody assumptions and prediction subtres with respect to financial and the reports. As aresult, despite any verification orune thas all its rating

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitchdoes not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents inconnection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the taxexempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) perisse. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license na 337123) which authorizes it to provide credit ratings to wholesale dients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"), While certain of the NRSRO's credit rating subsidiaries are Isted on Item 3 of Form NRSRO and as suchare authorized to issue credit ratings on behalf of the NRSRO (see https://www.fitchratings.com/site/regulatory), other credit rating subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratingsissued by or on behalf of the NRSRO.

Copyright © 2022 by Fitch Ratings, Inc., Fitch RatingsLtd. and itssubsidiaries. 33Whitehall Street, NY, NY 10004. Telephone: 1-800-7534824, (212) 908-0 500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved