MEMORANDUM

Date: February 25, 2020

To: The Honorable Chairman and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator

Re: **Recent Debt Sales**

On February 4, 2020 I issued the attached memorandum regarding the credit rating reviews received by Fitch Ratings and Standard & Poor's (S&P) Global Ratings for our 2020 Certificates of Participation (COP) and Sewer Revenue Obligations (SRO) debt.

As stated in that memorandum the two firms spoke highly of County fiscal management and our overall management in general. In addition, Fitch revised the rating outlook on the Sewer Obligations to Positive from Stable. Here are some of the comments from the ratings reports released in January 2020.

- "Strong management, with good financial policies and practices...." *(S&P - COPs)*
- "Very strong liquidity...." *(S&P - COPs)*
- "Extremely strong liquidity position...." *(S&P - SRO)*
- "Conservative budgeting, solid expenditure flexibility and a commitment to healthy reserves position the county to promptly close any budgetary gaps and maintain a high level of financial flexibility." *(Fitch - COPs)*
- "The County has consistently maintained robust liquidity...." *(Fitch - SRO)*
- "Rapidly declining debt levels...." *(Fitch - SRO)*

These debt issues were sold last week. Based on the market, our high quality ratings and sound financial practices, the County was able to obtain the following interest rates:

	Interest Rates
Certificates of Participation	1.1462%
Sewer Obligations	1.0165%

These interest rates are the lowest rates Pima County has seen in over 20 years.

Attachment

c: Jan Lesher, Chief Deputy County Administrator
Michelle Campagne, Director, Finance and Risk Management

MEMORANDUM

Date: February 4, 2020

To: The Honorable Chairman and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator

Re: **Credit Ratings**

The County has received the credit rating reviews by Fitch Ratings (Attachment 1) and Standard & Poor's (S&P) Global Ratings (Attachment 2) for the Certificates of Participation (COPs) and Sewer Revenue Obligations (SRO) that will be issued in March. Both rating agencies continue to assign the following ratings to Pima County's COPs, General Obligation and Sewer Revenue Obligations debt:

Pima County Credit Ratings				
	Standard & Poor's		**Fitch Ratings**	
	Rating	**Date**	**Rating**	**Date**
Certificate of Participations	AA-	January - 2020	AA	January - 2020
General Obligation	AA	January - 2020	AAA	January - 2020
Sewer Revenue Obligations	AA	January - 2020	AA-	January - 2020

In their ratings reports, the two firms spoke highly of County fiscal management and our overall management in general. In addition, Fitch revised the rating outlook on the Sewer Obligations to Positive from Stable. Here are some of the comments from the ratings reports released in January 2020.

- "Strong management, with good financial policies and practices...." *(S&P - COPs)*
- "Very strong liquidity...." *(S&P - COPs)*
- "Extremely strong liquidity position...." *(S&P - SRO)*
- "Conservative budgeting, solid expenditure flexibility and a commitment to healthy reserves position the county to promptly close any budgetary gaps and maintain a high level of financial flexibility." *(Fitch - COPs)*
- "The County has consistently maintained robust liquidity...." *(Fitch - SRO)*
- "Rapidly declining debt levels...." *(Fitch - SRO)*

Attachments

c: Jan Lesher, Chief Deputy County Administrator
Michelle Campagne, Director, Finance and Risk Management

ATTACHMENT 1

FitchRatings

Fitch Rates Pima County, AZ $45MM Ser. 2020A COPs 'AA'; Affirms IDR at 'AA+'; Outlook Stable

Fitch Ratings - Austin - 27 January 2020:

Fitch Ratings has assigned a 'AA' rating to the following Pima County, AZ obligations:

--$45 million certificates of participation (COPs), series 2020A.

In addition, Fitch has affirmed the following Pima County ratings:

--Long-Term Issuer Default Rating (IDR) at 'AA+';

--$227 million in outstanding unlimited tax general obligation bonds (ULTGOs) at 'AAA';

--$130 million in outstanding COPs at 'AA';

--$90.5 million in outstanding street and highway revenue bonds at 'AA'.

The Rating Outlook for all securities is Stable.

The Series 2020A COPs are scheduled for a negotiated sale the week of February 17. Proceeds will finance various capital improvements at several county departments.

SECURITY

The COPs are payable from payments from the county under a master lease agreement with a security interest in mostly essential assets. The lease is subject to annual appropriation and the trustee has the right to seize the assets in the event of less than full appropriation.

Outstanding ULTGO bonds are payable from an unlimited ad valorem tax levied against all taxable property in the county. The ULTGO bonds also benefit from a statutory lien. Outstanding street and highway revenue bonds are backed by a first lien on pledged street and highway taxes, fees and charges, and state motor vehicle license taxes collected by the state and returned to the county.

The street and highway revenue bonds are payable from an irrevocable lien on and first pledge of all revenues received by the county from a statutory allocation of street and highway taxes, fees, and charges, and state motor vehicle license taxes (VLTs) collected by the state and returned to the county for street and highway purposes.

IDR ANALYTICAL CONCLUSION

The 'AA+' IDR and 'AAA' ULTGO bond rating are supported primarily by solid expenditure flexibility, high level of financial flexibility, and a low long-term debt liability burden. The 'AA' COPs rating, one notch off the IDR, reflects the optionality inherent in an appropriation security structure. The 'AA' street and highway revenue bond rating reflects a solid coverage cushion, a strong additional bonds test of 2x, and Fitch's expectation for continued solid growth in the pledged revenue stream.

The Arizona legislature in its 2016 and 2017 sessions (52nd and 53rd legislatures) approved amendments to various sections of the Arizona Revised Statutes that provide ULTGO bondholders with a statutory lien on ad valorem taxes of cities, towns, counties, school districts, community college districts and various special districts in the state. Fitch believes the statute provides bondholders with a substantial preferential right in a bankruptcy proceeding, warranting a ULTGO bond rating two notches higher than the entity's IDR. The statutory lien applies only to ad valorem tax revenues and applies both to ULTGO bonds previously issued and to be issued in the future. The legislation does not affect the county's IDR.

DEDICATED TAX ANALYTICAL CONCLUSION

The 'AA' rating on the street and highway revenue bonds reflects the expectation of continued solid revenue growth and sound resiliency; the resilience assessment includes the assumption of additional leveraging.

(SEE BELOW FOR DEDICATED TAX ANALYSIS)

Economic Summary

Pima County has a population of roughly 1 million and is home to Tucson, Arizona's second largest city. The county's diverse economy features higher education, healthcare, government, technology, tourism and manufacturing as primary anchors. The top 10 taxpayers represent retail, healthcare, utility and mining sectors and comprise a modest 7% of total fiscal 2020 taxable values.

IDR KEY RATING DRIVERS

Revenue Framework:: 'aa'

Pima County revenue growth prospects are solid, benefitting from a diverse and growing regional economy. Pima County has few legal revenue-raising capabilities for operating purposes, but retains unused property tax levy that the state allows to be banked and carried forward.

Expenditure Framework:: 'aa'

Fitch expects the county's pace of spending to remain generally in line with revenue growth. The county's ability and willingness to adjust spending levels provides the capacity to manage specific cost pressures, including pension contributions. Carrying costs are a moderate burden on resources.

Long-Term Liability Burden:: 'aaa'

The combined burden of debt and unfunded pension liabilities in relation to personal income is low at just over 5%. The assessment reflects the county's rapid debt amortization rate (more than 90% retired in 10 years), moderate capital needs, and an elevated unfunded net pension liability over the medium term.

Operating Performance:: 'aaa'

Fitch expects Pima County to retain the highest gap-closing capacity during a typical economic downturn. The combination of bolstered reserves and solid expenditure flexibility give the county very strong gap closing capacity. Conservative budgeting allows the county to take advantage of economic recovery to replenish reserves promptly if necessary.

RATING SENSITIVITIES

Financial Resilience: The IDR, GO and COPs ratings are sensitive to Pima County's ability to maintain its overall financial flexibility and manage any pressures associated with anticipated near-term growth.

Street & Highway Revenue Bond Financial Cushion: Future strengthening of the resilience assessment, through continued positive pledged revenue performance, could lead to positive rating action. Conversely, material erosion of the current solid coverage cushion below expectations could apply downward pressure to the current rating.

ECONOMIC RESOURCE BASE

Pima County's economy by several measures is firmly in growth mode. Expansion is evidenced by seven consecutive years of gains in countywide market values, including a solid 7.4% increase in fiscal 2020 to $84.1 billion; this gain followed a 6.5% increase in fiscal 2019. Countywide annual retail sales have averaged 4% annual increases since 2013, including a 5.5% gain in 2018 to $9.3 billion. Fitch anticipates additional near-term tax base growth based on current reported construction activity, planned development, and appreciation of existing properties. Steady increases in employment and corresponding declines in the annual unemployment rate further support the expectation for additional economic expansion.

Major southern Arizona employers include the University of Arizona, Raytheon Missile Systems, Davis-Monthan Air Force Base, state and local government, Wal-Mart Stores Inc., Tucson Unified School District, and Banner Healthcare. Raytheon is one of several large enterprises that have recently announced new or expanded facilities in Pima County; others include Geico, Caterpillar Surface Mining, and Southern New Hampshire

University. Amazon also announced a doubling of headcount at its Tucson distribution center to 3,000 from 1,500.

IDR CREDIT PROFILE

Revenue Framework

The county's operating revenues are a mix of local-generated and state-shared revenues. Property tax revenues contribute about 60% of general fund revenues annually, and intergovernmental revenues are the next largest revenue component at nearly 30% of the total.

The most recent 10-year CAGR for Pima County general fund revenues (adjusted for tax rate changes) was essentially flat. Fitch's assessment of solid revenue growth prospects is based on Pima County's diverse economy, recent solid tax base and retail sales gains, and the expectation for continued economic expansion in the area. Fitch expects the county's revenue gains to exceed the modest growth rate over the past 10 years, which was muted due to the disproportionately large impact of the great recession throughout Arizona.

State law limits the county's ability to make changes to certain revenues. Primary property tax levies, used for operations, are limited to a 2% per annum increase over the maximum allowable levy in the prior year plus taxes on any new construction. Additionally, the state allows the banking and carry forward of the 2% maximum levy increase, to the extent not fully used. Pima County had approximately $95 million of annual unused capacity in this regard in fiscal 2019, equal to nearly 20% of the general fund budget.

Fitch notes that there is no limitation on annual secondary property tax levies, used for voter-approved bonded indebtedness; such levies are not available to support operations.

Expenditure Framework

The county's largest general fund expenditure areas are general government (45% of fiscal 2019 outlays), public safety (29%), and health and social services (19%).

Fitch expects the county's pace of spending to generally align with revenue growth over time as continued population gains increase service demands. Annual general fund spending increases over the past several fiscal years has been relatively modest; the slow rate of growth allowed management to both transfer increasing amounts for capital spending and boost operating reserves.

Sound expenditure flexibility is derived primarily from management's strong control over workforce costs. Carrying costs (debt service and retiree benefit outlays) are at the high end of moderate (21% of fiscal 2019 governmental spending). The carrying cost incorporates an aggressive debt amortization schedule (more than 90% repaid in 10 years) and recently climbing pension contributions.

Fitch does not anticipate carrying costs to shift materially over the near term due to moderate borrowing plans and the amortization schedule that will accommodate additional debt issues; this combination should offset expected further increases in pension contributions. The county has demonstrated the ability and willingness to make spending cuts when necessary to retain satisfactory budgetary flexibility.

Long-Term Liability Burden

Pima County's long-term liability burden, comprised of overall debt and Fitch-adjusted net pension liabilities, is low at slightly more than 5% of total personal income. Fitch expects the county's burden to remain affordable based on the rapid debt amortization schedule and moderate near-term borrowing plans. Management reports plans to issue roughly $21 million in street and highway user revenue bonds in 2021.

The county and its employees participate in six separate pension programs administered by four state-sponsored systems. The three most significant of these are the Arizona State Retirement System (ASRS), a cost-sharing multiple-employer plan; the Public Safety Personnel Retirement System (PSPRS), an agent multiple-employer (AME) plan; and the Corrections Officer Retirement Plan (CORP), and an AME plan.

Under GASB 67 and 68, the county reported a fiscal 2019 combined net pension liability (NPL) for all plans of $740 million, with fiduciary assets covering 62% of total pension liabilities. Investment return assumptions for the plans are all at or near 7.5%. Using a more conservative standard 6% investment return assumption, the combined NPL increases to $1.17 billion with assets covering 52% of total liabilities.

Operating Performance

Fitch anticipates that Pima County will demonstrate the highest gap-closing capacity through a typical economic downturn based on its ability and willingness to cut spending and raise tax rates. Conservative budgeting, solid expenditure flexibility and a commitment to healthy reserves position the county to promptly close any budgetary gaps and maintain a high level of financial flexibility.

Fiscal 2019 general fund results included a modest $4 million draw on reserves as the county continued its practice of pay/go capital spending; the results exceeded original budget projections. The unrestricted general fund balance at year-end totaled $102.1 million or nearly 18% of spending, comfortably above the county's minimum reserve target of 5% of spending. Recent increases in operating reserves (four out of the past five years) were due primarily to better than expected revenue performance and sound expenditure control.

Management reports fiscal 2020 revenues are trending ahead of budget, due to positive performance in both intergovernmental revenues and property taxes; general fund spending reportedly is trending below budget year-to-date. Year-end results are projected to include a moderate application of operating reserves towards the county's capital plan, both in the form of direct spending and principal retirement of these series 2020A COPs.

DEDICATED TAX KEY RATING DRIVERS

Solid Growth Prospects for Pledged Revenues: The pledged revenues that back the street and highway revenue bonds are expected to increase over the near term given healthy economic prospects for the regional economy.

Sound Resiliency: The pledged revenues generate a sufficiently strong debt service cushion to handily withstand even a severe decline scenario matching the great recession.

DEDICATED TAX CREDIT PROFILE

The pledged revenues meet the requirements set out in Fitch criteria for treatment as "pledged special revenues" under section 902(2)(D) of the U.S. bankruptcy code. Fitch has reviewed state statutes, which specify that the revenues backing these bonds may only be used for transportation-related projects.

Highway user tax revenues are collected by the state and deposited into the state highway user fund until distributed. Arizona counties currently receive 19% of the monthly revenue distributions, and the state Department of Transportation, the cities and towns and other state users receive the remaining 81%. Of the money distributed to counties in the state, 72% is distributed in proportion to the sale and consumption of fuel within each county, and the remainder is distributed based on the proportionate population within the unincorporated areas of each county.

The state legislature retains the authority to alter the rate of fees that are constitutionally required to be deposited into the state highway user fund, as well as the allocation of such monies between state purposes and the distribution to local governments. However, the Arizona Supreme Court has indicated that these revenues cannot be reduced in a manner that impairs an issuer's ability to meet debt service requirements on the bonds.

Borrowings over the next several years will exhaust the remaining $37.4 million authorization but are not expected to add materially to annual debt service given the currently declining debt service schedule. The planned additional leveraging is not expected to reduce coverage to the 2x ABT.

The 10-year CAGR of pledged revenues through fiscal 2019 is modest at 2%, but these results were materially affected by the great recession. Annual gains since fiscal 2012 have been solid, and the expectation is that this growth trend will continue given current and planned economic development activity in the county. Fiscal 2019 pledged revenues of $65.6 million were up for the seventh consecutive year and were up 6.6% from fiscal 2018.

To evaluate the sensitivity of the dedicated revenue stream to cyclical decline, Fitch considers both revenue sensitivity results (using the same 1% decline in national GDP scenario that supports assessments in the IDR framework) and the largest decline in revenues over the period covered by the revenue sensitivity analysis. Based on the county's 2000-2016 pledged revenue history, Fitch's analytical sensitivity tool (FAST) generates a 6% decline in pledged revenues in a 1% GDP decline scenario. The largest actual cumulative decline in this period was a steep 23.4% decline from fiscal 2008-2012.

Assuming issuance up to the 2x ABT, well below actual current coverage, the structure could tolerate a 50% drop in revenues, 8.3x the scenario results and 2.1x the largest actual revenue decline in the review period. Leveraging to 2.75x MADS is more likely given current borrowing plans and the use of surplus revenues for various transportation projects. This scenario would generate a cushion roughly 10.7x the scenario results and 2.7x the largest historical decline. Fitch believes that these results are consistent with an 'AA' rating (noting that the fiscal 2008-2012 revenue performance reflected the disproportionately severe impact of the great recession on Arizona, which Fitch believes is unlikely to recur).

CRITERIA VARIATION

None

In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis.

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of 3 - 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.

RATING ACTIONS

ENTITY/DEBT	RATING		PRIOR
Pima County (AZ) [General Government]	LT IDR AA+ Affirmed		AA+
Pima County (AZ) /Fuel Tax Revenues - Highway User Taxes/1 LT	LT AA Affirmed		AA
Pima County (AZ) /General Obligation - Unlimited Tax/1 LT	LT AAA Affirmed		AAA
Pima County (AZ) /Issuer Default Rating - General Government/1 LT	LT AA+ Affirmed		AA+
Pima County (AZ) /Lease	LT		AA

Obligations - Standard/1 LT	AA ◉ Affirmed		

Additional information is available on www.fitchratings.com

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Applicable Criteria

U.S. Public Finance Tax-Supported Rating Criteria (pub. 10 Jan 2020)

Additional Disclosures

Dodd-Frank Rating Information Disclosure Form
Solicitation Status
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SOLICITATION STATUS

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.

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Fitch Rates Pima County, AZ Revenue Obligations at 'AA-'; Outlook Revised to Positive

Fitch Ratings - Austin - 23 January 2020:

Fitch Ratings has assigned the following Pima County, AZ (the county) revenue obligations rating:

--Approximately $35.7 million sewer system revenue obligations, series 2020A 'AA-'.

The bonds are scheduled for a negotiated sale the week of February 10. Bond proceeds will be used for capital improvement projects and to pay issuance costs.

In addition, Fitch has affirmed the rating on approximately $418.2 million in outstanding sewer system revenue obligations at 'AA-'.

The Rating Outlook has been revised to Positive from Stable.

SECURITY

The county's obligation to make payments is secured by net revenues of the county's sewer system (the system) and is additionally secured by the system's unrestricted cash balances.

KEY RATING DRIVERS

LOWER DEBT AND IMPROVED COVERAGE DRIVE OUTLOOK: The Positive Outlook is driven by the county's declining leverage and resulting trend of improving debt service coverage (DSC). The county's rapid amortization schedule and debt prepayments have reduced the debt per customer levels by nearly 30% in just three years. The current amortization schedule and manageable capital improvement program (CIP) suggest this trend will continue.

SOUND FINANCIAL PROFILE: The county has consistently maintained robust liquidity despite utilization of excess cash flows to retire debt early. Fitch-calculated DSC, exclusive of pledged unrestricted cash balances, has improved albeit remains below medians. Fitch believes the system's very strong cash balances, combined with a very rapid maturity schedule, somewhat offset below-average DSC levels.

MANAGEABLE CAPITAL NEEDS: The capital program is manageable. It is primarily driven by growth related projects with modest repair and replacement given the recent completion of a major asset overhaul. Scheduled debt maturities outpace planned debt issuance as management is now planning to cash fund about 14% of its capital program.

LIMITED RATE FLEXIBILITY: The county prudently adopted a series of large automatic annual rate increases to counter the rise in fixed costs when it embarked on its large capital plan in 2010.

STABLE ECONOMY: The service area is anchored by the presence of the military and defense industry that provide some stability. County unemployment rates are below state but above national levels.

RATING SENSITIVITIES

CONTINUED IMPROVEMENT IN METRICS: Pima County's continued decline in leverage that translates to sustained or improved financial metrics, including debt service coverage, could result in an upgrade.

CREDIT PROFILE

The system provides wastewater service to a population of more than one million through about 281,000 connections in the Tucson metropolitan area and separate outlying areas in eastern Pima County (general government IDR 'AA+'/Stable). Tucson (general government IDR 'AA-'/Stable) is the county seat and Arizona's second largest city. The system wastewater facilities have ample combined capacity of 94.8 million gallons per day (MGD), with sewer flows averaging 57.5 MGD in 2019.

The county embarked on a massive capital program to replace much of its obsolete infrastructure beginning about 10 years ago. The rapid pace of debt issuance over a relatively short time span (between 2010 and 2014) resulted in high leverage and debt service requirements that more than doubled from previous levels. The county prudently adopted large service rate increases to cover the rise in fixed costs associated with the new debt.

RAPIDLY DECLINING DEBT LEVELS

The recent massive CIP undertaking resulted in a spike in debt levels. Debt per customer peaked at $2,814 in fiscal 2013 but was down to $1,883 for fiscal 2019. This includes certificates of participation (COPs) that were issued by the county but repaid with enterprise revenues. The decline in leverage reflects the system's rapid amortization schedule and early debt retirement. While debt per customer remains above Fitch's 'AA' category median of $1,675, the projected debt per customer in fiscal 2024 continues a declining trend with debt maturities outpacing debt issuance. Conversely, Fitch's median trend is projected to rise. The county's scheduled amortization is very rapid, with principal payout at 92% in 10 years, which compares very favorably to even Fitch's 'AAA' category median rate of 54%. The county's leverage as measured by total debt to funds available for debt service has also improved over the past several years.

MANAGEABLE CAPITAL IMPROVEMENT PLAN

Capital needs are very manageable now that the major overhaul of its entire wastewater reclamation facilities is complete. This undertaking was necessary to address the system's aging infrastructure and to comply with regulatory requirements.

Capital needs over the next five years are expected to cost an estimated $232 million (including the current year) and are primarily for conveyance system expansion. The county has substantially met future permitting requirements for environmental compliance and has ample capacity in its existing treatment facilities. Ongoing repair and replacement to maintain system assets in good condition are projected at about $6 million annually over the next five years and will be funded on a pay-go basis.

Pima County, like all counties and cities in Arizona, is subject to limitations on expenditures from local revenues in excess of the established constitutional limits. Not subject to the limitations are items such as bond proceeds and related debt service. Given these constitutional limitations, the county plans to debt-fund 86% of its five-year CIP.

MIXED SYSTEM FINANCIAL METRICS

Despite multiple large rate increases, Fitch-calculated all-in DSC (exclusive of the pledged unrestricted cash balance) typically falls below Fitch's 'AA' category median of 2.7x. Fitch-calculated DSC has improved over the last two fiscal years to 1.6x, which is better than expected but remains below the median. Coverage levels have historically been very slim when including repayment of the COPs. However, as of January 2020, the system only owes $4.9 million in COPs, which will be paid in full during fiscal 2021. The county does not have plans to issue additional COPS to be repaid with system revenues.

The county's forecast including issuance of another $160 million in debt results in coverage ranging from 1.4x to 1.6x over the ensuing five years. Mitigating this lower level of DSC is the county's very rapid amortization of debt and robust liquidity.

AMPLE LIQUIDITY

Large rate increases enabled the county to build up and maintain high reserve levels despite a rapid pay down of debt. Unrestricted cash and investments totaled $66.7 million at the close of fiscal 2019. The county also maintained an additional $39 million in available restricted emergency and operating reserves which combined with unrestricted cash, equaled 508 days cash on hand for the year.

Unrestricted cash balances are legally pledged to the sewer system revenue obligations and can only be used to pay debt service, defease debt or provide rate relief. The emergency and operating reserves, combined with the unrestricted cash spending limitations, should help maintain strong liquidity levels and/or facilitate the continued acceleration of debt payments. The county cash defeased about $61 million in debt prior to maturity between fiscal 2017 and 2020 year to date.

DIMINISHED RATE FLEXIBILITY

Rates more than doubled between 2008 and 2014, but have remained relatively unchanged since then. The current monthly bill at $42.11 (assuming sewer flows of 6,000 gallons per month) approximates Fitch's 1.0% affordability threshold, somewhat limiting future rate flexibility. Favorably, the fixed component of the county's service rate comprises 31% of the standard monthly bill, reducing volumetric revenue variability. Management regularly performs a comprehensive review of rate adequacy and has indicated it would recommend additional rate increases if deemed necessary.

SERVICE AREA BENEFITS FROM STABLE ECONOMY

The area's economy is diverse, featuring military and defense, higher education, healthcare, government, and manufacturing as primary anchors. County unemployment levels at 4.1% as of November 2019 are slightly better than the 4.3% for the state but above the 3.3% national average. County wealth levels are slightly below state and national levels.

In addition to the sources of information identified in Fitch's Public Sector Revenue-Supported Entities Rating Criteria, this action was additionally informed by information from Lumesis.

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of 3 - 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.

RATING ACTIONS

ENTITY/DEBT	RATING		PRIOR
Pima County (AZ) [Water, Sewer]			
Pima County (AZ) /Sewer Revenues (2nd Lien)/1 LT	LT AA- Affirmed		AA-

Additional information is available on www.fitchratings.com

Applicable Criteria

U.S. Water and Sewer Rating Criteria (pub. 29 Nov 2018)
Public Sector, Revenue-Supported Entities Rating Criteria (pub. 07 Nov 2019)

Additional Disclosures

Dodd-Frank Rating Information Disclosure Form
Solicitation Status

Endorsement Policy

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ATTACHMENT 2

S&P Global
Ratings

RatingsDirect®

Summary:

Pima County, Arizona; Appropriations; General Obligation

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Summary:

Pima County, Arizona; Appropriations; General Obligation

Credit Profile		
US$45.0 mil certs of part ser 2020A due 12/01/2022		
Long Term Rating	AA-/Stable	New
Pima Cnty certs of part		
Long Term Rating	AA-/Stable	Affirmed
Pima Cnty certs of part ser 2019A due 12/01/2033		
Long Term Rating	AA-/Stable	Affirmed
Pima Cnty GO		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed

Rationale

S&P Global Ratings assigned its 'AA-' long-term rating to Pima County, Ariz.'s series 2020A certificates of participation (COPs; par amount of $45 million). At the same time, S&P Global Ratings affirmed its 'AA' long-term rating and underlying rating (SPUR) on the county's general obligation (GO) debt outstanding, and its 'AA-' rating on the county's COPs outstanding. The outlook on all ratings is stable.

The 'AA' rating reflects the county's growing and stable economy, as employers are expanding or moving into the community, along with strong residential and commercial activity leading to good assessed value (AV) growth in recent years. Financially, the county's positive operational performance has led to very strong general fund reserves, supporting our view of the county's creditworthiness. However, we recognize the county intends to spend a portion of accumulated fund balances in the next few years, largely for capital and road improvements. The rating also reflects our view of the county's manageable overall debt profile, including rapid amortization of debt, and low overall net debt at less than 2% of full cash value (market value).

Security and purpose

The COPs are payable from lease payments made from legally available revenue of the county subject to annual appropriation. The ratings on the COPs reflect our view of the county's covenant to budget and appropriate annual lease payments. We rate this obligation one notch lower than the county's general creditworthiness to account for the appropriation risk associated with the lease payment. The proceeds from the sale of the series 2020A COPs will fund various capital projects throughout the county.

Revenue from unlimited ad valorem taxes, levied on taxable property within the county, secure the GO bonds. The county has the power and obligation to levy these taxes without limitation as to rate or amount. Following the issuance of the series 2020A COPs, the county will have approximately $1 billion in total direct debt outstanding.

Credit fundamentals

The 'AA' ratings reflect our view of the county's:

- Strong economy, with access to a broad and diverse metropolitan statistical area (MSA);
- Strong management, with good financial policies and practices under our Financial Management Assessment (FMA) methodology;
- Adequate budgetary performance, with a slight operating deficit in the general fund and an operating deficit at the total governmental fund level;
- Strong budgetary flexibility, with an available fund balance that we expect will decrease in the near term from its fiscal 2019 level of 20% of operating expenditures;
- Very strong liquidity, with total government available cash at 57.8% of total governmental fund expenditures and 3.9x governmental debt service;
- Strong debt and contingent liability profile, with debt service carrying charges at 15.0% of expenditures and net direct debt that is 54.6% of total governmental fund revenue, as well as low overall net debt at less than 3.0% of market value and rapid amortization, with 93.7% of debt scheduled to be retired in 10 years; and
- Strong institutional framework score.

Strong economy

We consider the county's economy strong. Pima County, with an estimated population of 1 million, is in the Tucson MSA, which we consider to be broad and diverse. The county has a projected per capita effective buying income of 86.7% of the national level and per capita market value of $80,529. Overall, the county's market value grew 7.4% over the past year to $84.1 billion in 2020. The county unemployment rate was 4.5% in 2018. Through November 2019, the unemployment rate is averaging 4.6%.

Pima County encompasses 9,184 square miles of southern Arizona, and approximately half its population resides in Tucson. Education and health care, defense, and government are the county's primary employment sectors. The University of Arizona is the leading employer (16,200 estimated employees), followed by Raytheon Missile Systems (11,300), the county (7,700), and Davis-Monthan Air Force Base (7,200). Davis-Monthan Air Force Base supports a variety of missions; one of the largest plane groups at the base is the A-10. The Pentagon extended funding for the A-10, which had previously been at risk for near-term retirement, which has since been extended until 2022. Management reports that the F-35 is a probable replacement, and the base benefits from the competitive advantages provided by the airspace availability and weather. At this time, there are no consolidation concerns for the base. While we consider the regional economic base to be diverse, its reliance on the aerospace, defense, and government sectors contributed to a weaker recovery relative to those of areas that depend less on federal, state, and local government spending.

According to management, residential and commercial development has been quite strong recently, which we believe will lead to tax base growth and higher sales tax collections in the next several years. The county has experienced four-consecutive years of valuation growth, and limited property AV grew 5% in fiscal 2020, reaching $8.7 billion. In addition, preliminary fiscal 2021 values are showing a 4.6% increase, largely resulting from continued residential and commercial expansion within the county. The top 10 taxpayers for the county represent 7.3% of AV in fiscal 2020, which we consider very diverse.

Strong management

We view the county's management as strong, with good financial policies and practices under our FMA methodology, indicating financial practices exist in most areas, but that governance officials might not formalize or monitor all of them on a regular basis.

Highlights include the following:

- The budget is based on major revenue projections from the county and the state that include property tax revenue and state-shared revenue, while departmental expenditures are built on zero-based budgets.
- Officials review budget-to-actual performance monthly and monitor investment performance monthly, in accordance with an investment management policy that specifies permitted investments, maturities, benchmarks, and objectives.
- A formal debt policy limits the types, permitted uses, maximum maturities, and sources of payment for bonded debt and sets procedures for debt monitoring and oversight.
- The county maintains a comprehensive five-year rolling capital improvement plan, updated annually, and produces informal five-year financial projections as part of its budget development.
- The county has resolved to maintain a debt service retirement reserve of $5 million, and informally targets a minimum 5% reserve for contingencies, which is appropriated in its annual budget.

Adequate budgetary performance

Pima County's budgetary performance is adequate, in our opinion. The county had slight deficit operating results in the general fund of 0.8% of expenditures, and deficit results across all governmental funds of 9.5% in fiscal 2019.

We have adjusted the county's revenue and expenditures to reflect recurring transfers in and out of the general fund that we believe function like ongoing activity, including relatively large reoccurring transfers out for debt service and support for certain special revenue funds. In addition, we adjusted the county's general fund expenditures to reflect a one-time capital expense for a large technology upgrade.

The county's operations are stable, in our view, supported by a fourth-consecutive year of balanced or surplus general fund results. Management attributes the stable budget results in recent years to departmental efficiencies, along with conservative and comprehensive budgeting, including budgeting for all contingency expenses, which historically never occur. In fiscal 2019, the county closed out the year essentially balanced in the general fund, after an adjustment of some one-time spending that occurred during the year--notably a $7.2 million transfer out of the general fund for technology upgrades. Furthermore, the county's revenue profile has continued to increase year over year, largely due to an increase in the primary property tax rate and growth in state-shared sales tax revenue. The county raised its primary property tax rate in fiscal 2018 to mitigate an attempt from the state to shift certain expenses onto the county, which the state ultimately did not do. Pima County did lower the tax rate back down to $5.60 in 2020 from $6.02 in fiscal 2018.

From 2014-2019, the county's general fund revenue grew an aggregate 22%, largely due to the good growth in local sales taxes. The county anticipates ending fiscal 2020 balanced in the general fund, before transfers. However, officials stated intentions to use about $25 million in available reserves for the purpose of street and building improvements. We note that the full $35 million will likely be spent through fiscal 2021. Despite the one-time spending, management expects to close out fiscal 2020 better than budgeted, as year-to-date revenue collections are above budget projections, in addition to being $4.0 million below anticipated expenses at this point of the year.

Strong budgetary flexibility

Our calculation of available fund balance combines assigned and unassigned portions of the general fund balance. The county's available reserves increased approximately 28% year over year from 2014-2018, and the county added $11.2 million to its available fund balance in 2018. In fiscal 2019, general fund balances totaled $102.1 million, a slight decline of $6.8 million from 2018. According to management, the decline is largely associated with one-time spending for the technology upgrades. The county accumulated reserves in previous years to help fund upcoming road improvements. Although management intends to spend down a portion of reserves in the near term, we anticipate available fund balances will remain at least good in the next several years.

Very strong liquidity

In our opinion, Pima County's liquidity is very strong, with total government available cash at 57.8% of total governmental fund expenditures and 3.9x governmental debt service in fiscal 2019.

We believe the county has exceptional access to external liquidity, as evidenced by its consistent and diverse bond programs over the past 20 years, and we have not identified any immediate, short-term risks to liquidity. We do not consider the county's investments aggressive, as it invests primarily in federal agency securities and the state pool. Although the county has a sizable number of investments in corporate bonds, the majority hold investment-grade ratings by S&P Global Ratings. We have not identified any contingent liquidity risks in the form of variable-rate debt or significant contingent liabilities.

In 2017, the county entered into a private placement agreement with JPMorgan Chase Bank in the amount of $25.7 million. The privately placed bonds are secured by revenue from unlimited ad valorem taxes levied on taxable property in the county, and are also on parity with the county's existing GO bonds. We understand that JPMorgan Chase Bank lacks the ability to accelerate debt service payments under the agreement.

Strong debt and contingent liability profile

In our view, Pima County's debt and contingent liability profile is strong. Total governmental fund debt service is 15.0% of total governmental fund expenditures, and net direct debt is 54.6% of total governmental fund revenue. Overall net debt is low at 1.6% of market value, and approximately 93.7% of the direct debt is scheduled to be repaid within 10 years, which are in our view positive credit factors.

We understand the county plans to issue approximately $35 million in additional COPs debt in the next 12-18 months, along with a potential street and highway revenue bond issuance in calendar year 2021. The county's debt management policy calls for a maximum amortization period of 15 years for GO, appropriation, and revenue debt, and we understand that any future COPs or revenue bonds would comply with the policy.

Pima County's combined required pension and actual other postemployment benefits (OPEB) contributions totaled 6.2% of total governmental fund expenditures in 2019. The county made 98% of its annual required pension contribution in 2019.

We consider the county's pension liabilities to be large, and given the relatively low funded ratios for the county's pension plans, we expect the county's contributions to increase in future years, which could result in some budgetary pressure in the medium term.

The county has been proactive in adopting contribution increases for its Public Safety Personnel Retirement System (PSPRS) for cost of living adjustments and lawsuit settlements, and opted to remain on a 20-year amortization schedule rather than extending its maturity. However, the county continues to pay its annually required contributions to the agent multiple-employer plan rather than contributing above the required amount.

Arizona covers OPEBs for retirees, and consequently, the county does not report a material liability associated with these benefits.

The county participates in the following plans funded as of June 30, 2019:

- Arizona State Retirement System (ASRS): $329 million in net pension liability, and 73.4% funded;
- PSPRS--sheriff plan: $236 million in net pension liability, and 40.1% funded;
- Corrections Officer Retirement Plan--Detention: $69 million in net pension liability, and 46.5% funded.

Pima County's combined required pension and actual OPEB contributions totaled 6.2% of total governmental fund expenditures in 2019. The county has consistently funded its annual required contribution, which is equal to the actuarially determined contribution (ADC). The county's 2019 ADC for both of its major plans fell short of static funding and minimum funding progress, indicating that the liability is increasing annually. The discount rate used for most of the county's pension liabilities is about 7.4%, which adds to our view of contribution volatility. For PSPRS, the plan uses a level percent-of-pay amortization method, which we believe will result in higher future costs, whereas the ASRS uses a level-dollar amortization method, but on a longer 30-year schedule. We will continue to monitor the impact on the county's budget, noting that the county has historically made necessary budgetary adjustments to absorb the rising costs.

Strong institutional framework

The institutional framework score for Arizona counties is strong.

Outlook

The stable outlook reflects our view of the county's large taxing area and strong economic activity in recent years, which has boosted property and sales tax collections. The stable outlook also reflects our view of the county's stable operations and very strong fund balances. Although we expect the county will use a portion of reserves and issue additional debt in the near term, we anticipate the county's overall financial and debt position will remain stable. We do not expect to change the ratings within the two-year outlook horizon.

Upside scenario

Should the county's key economic indicators improve to levels we consider comparable with those of higher-rated peers, while the county sustains positive operational performances and fund balances at levels that we consider very strong, we could raise the ratings.

Downside scenario

If the county cannot achieve operational balance for multiple years, resulting in reserves falling below a level that we consider strong, we could lower the ratings.

Related Research

- 2019 Update Of Institutional Framework For U.S. Local Governments

Ratings Detail (As Of January 28, 2020)		
Pima Cnty approp		
Long Term Rating	AA-/Stable	Affirmed
Pima Cnty approp		
Long Term Rating	AA-/Stable	Affirmed
Pima Cnty approp		
Long Term Rating	AA-/Stable	Affirmed
Pima Cnty Certs of part		
Long Term Rating	AA-/Stable	Affirmed
Pima Cnty Certs of part		
Long Term Rating	AA-/Stable	Affirmed
Pima Cnty GO		
Long Term Rating	AA/Stable	Affirmed
Pima Cnty GO		
Long Term Rating	AA/Stable	Affirmed
Pima Cnty APPROP		
Long Term Rating	AA-/Stable	Affirmed

Many issues are enhanced by bond insurance.

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S&P Global Ratings

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Summary:

Pima County, Arizona; Water/Sewer

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Summary:

Pima County, Arizona; Water/Sewer

Credit Profile		
US$36.315 mil swr sys rev oblig ser 2020A due 07/01/2027		
Long Term Rating	AA/Stable	New
Pima Cnty swr		
Long Term Rating	AA/Stable	Affirmed
Pima Cnty swr		
Long Term Rating	AA/Stable	Affirmed
Pima Cnty swr subord (AGM)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Pima Cnty swr (AGM)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Pima Cnty swr (ASSURED GTY)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed

Many issues are enhanced by bond insurance.

Rationale

S&P Global Ratings assigned its 'AA' long-term rating to Pima County, Ariz.'s sewer system revenue obligations, series 2020A. At the same time, we affirmed our 'AA' long-term rating and underlying rating (SPUR) on the county's previously issued revenue obligations. The remaining principal on the closed senior lien are no longer outstanding and the subordinate-lien obligations will now be the working lien. The outlook is stable.

The ratings reflect our view of the sewer system's extremely strong enterprise risk profile and very strong financial risk profile, coupled with good projected financial performance and additional debt plans.

The enterprise risk profile reflects our view of the system's:

- Service area participation in the strong Tucson metropolitan statistical area (MSA), in southern Arizona;
- Affordable service rates in the context of the service area's adequate income metrics;
- Very low industry risk as a monopolistic service provider of an essential public utility; and
- Strong Operational Management Assessment (OMA), as reflected in management's maintenance of the integrity of the system and consistent reviews of rates throughout the fiscal year.

The financial risk profile reflects our view of the system's:

- Projected good all-in coverage metrics, which we expect to stay consistent given management's debt plans, planned cash defeasance of previous bond obligations, and review and implementation of rate increases as needed;

- Extremely strong liquidity position that we believe is sustainable even with planned drawdowns to defease previously issued debt;
- Moderate leverage based on a pro forma debt-to-capitalization of about 44%, which includes management's expected future debt issuances; and
- Good Financial Management Assessment (FMA) of its policies and practices, which are mostly formalized and meaningful.

The series 2020A obligations will pay a portion of the costs of the construction, expansion, and improvement of sewer treatment facilities and conveyance facilities for the system. After the proposed issuance, Pima County will have approximately $458 million of total parity obligations. Of that, $39 million is bank-placed debt (8% of total debt), which the county entered into in 2017. We do not view the terms and conditions on the bank-placed debt as permissive, and given the system's extremely strong cash position, we also do not view this as posing any liquidity stress.

The bonds are payable from installment payments secured by the net revenues and unrestricted cash balances of the county's sewer system. Pima County's obligation to make the installment payments is absolute and unconditional. Debt service coverage (DSC) calculations are somewhat permissive given that cash on hand may be used to comply with the rate covenant requirements. Key provisions include a 1.2x rate covenant and a 1.2x additional bonds test. Furthermore, the series 2020A obligations will have a debt service reserve fund, funded at one-half of maximum annual debt service on the 2020A obligations.

Enterprise risk

The Pima County Regional Wastewater Reclamation Department provides wastewater collection and treatment services to approximately 281,000 customers in the Tucson MSA and outlying service areas. We believe that customers in the service area benefit from residing in the strong Tucson MSA. Major employers include the University of Arizona (16,000 employees), Raytheon Missiles (11,300 employees), and Davis-Monthan Air Force Base (7,200 employees). We view the service area's income levels to be adequate, based on the county's median household effective buying income (MHHEBI), which was 86% of the national level. For November 2019, the county's unemployment rate was about 4.1%, which was higher than the nation's, at 3.3%, and lower than the state's, at 4.3%. The system's customer base is primarily residential and diverse, with about 67% of user-fee revenue deriving from residential customers. During the past 10 years, customer growth has been modest, averaging about 1% each year. The county uses the University of Arizona's economic projections, which project growth between 0.5%-1.0% annually. We consider the customer base to be very diverse based on the leading 10 customers contributing less than 5% of total operating revenues for 2018. The largest customers consist of the Arizona State Prison in Tucson and University of Arizona, followed by Davis-Monthan Air Force Base. Management does not expect any material changes to leading customers that would result in a material decline in system flows in the future.

We view the system's market position as very strong given the affordable service rates in the context of the service area's adequate income metrics. However, we understand rates may be less affordable to a portion of the customer base given the high county poverty rate. The present schedule of user fees includes a monthly service charge and a monthly commodity usage charge. The most recent rate increase was in 2017, by 3% to the user fee. For a typical residential customer using our benchmark of 6,000 gallons of water usage per month, the monthly-equivalent bill is affordable, at about 1.2% of the county's MHHEBI. The county's poverty rate as reported by the U.S. Department of Agriculture is 17%, which we view as above-average. The last financial plan and rate review study was performed in 2019, and the board's subcommittee reviews rates eight times a year and has a track record of supporting rate increases when needed. At this point in time, management does not expect any further rate increases. Management plans to continue using unrestricted cash balances to repay debt service or provide rate relief.

Based on our OMA, we view the system to be a '1' on a six-point scale, with '1' being the strongest. We view the operational management of the system as strong. In our view, the system has sufficient operational capacity to meet demand during the medium-term horizon. The county recently completed a major upgrade of its entire wastewater reclamation facilities to address aging infrastructure and meet with regulatory requirements. The Agua Nueva Wastewater Reclamation Facility (which replaced the Roger Road facility) and the Tres Rios Wastewater Reclamation Facility (formerly known as the Ina Road facility) serve metropolitan Pima County. Combined, the two metropolitan facilities have a current treatment capacity of approximately 85.2 million gallons per day (mgd). The nonmetropolitan Pima County areas are served by separate wastewater reclamation facilities: Green Valley, Avra Valley, Corona de Tucson, Arivaca Junction, Mt. Lemmon, and the Pima County Fairgrounds. These nonmetropolitan facilities have a current treatment capacity of approximately 9.6 mgd, for a total capacity for all facilities of about 94.8 mgd. The sewer system's average daily flow is about 58 mgd, which allows for sufficient capacity of the overall system. The county has a 15-year contract with CH2M Hill to operate the Agua Nueva Wastewater Reclamation Facility with five-year renewals. Although we see potential for future financial adjustments based on contractual changes, we do not see any significant financial pressure from CH2M Hill in the near term.

Financial risk

Pro forma all-in coverage will be good beginning in fiscal year 2020 after the system's portion of the county's certificates of participation (COPs) mature or is cash defeased. All-in coverage is our internally adjusted DSC metric that we believe best tracks the use of every dollar of utility operating revenues, regardless of lien position, accounting treatment, or ultimate purpose. We have included the system's payments to support the county's COPs, which were issued for a short-term financing to support system capital projects. When we consider the system support for its allocable share of the county's COPs debt service, which is different from the indenture's definition of bonded coverage, we calculate all-in coverage was mostly sum sufficient historically, figures that we consider to be adequate. The last COPs' payment is in 2021, and management does not expect the system to support future COPs' obligations.

Based on our analysis of management-provided projections, which we view as reasonable, we expect all-in coverage to improve to a minimum 1.3x through 2024, which we consider to be good. Furthermore, despite projections assuming debt issuances of $40 million in each of the fiscal years 2021-2024, we expect all-in coverage and annual debt service to stay about level, because management plans to defease a portion of previous obligations with cash.

Liquidity is a credit strength despite planned drawdowns to pay down debt; we expect liquidity will stay extremely strong in the future. When calculating total unrestricted cash, we include the approximately $39.72 million of operations and maintenance (O&M) and emergency reserve funds, because these funds are designated but can be legally available upon board approval. At the end of fiscal 2019, unrestricted cash totaled $106 million, equivalent to 508 days of operating expenses. Based on cash flow projections, management targets cash levels at an estimated minimum $50 million in the near term, which does not include the $39.72 million of (O&M) and emergency reserve funds.

The system is moderately leveraged based on a pro forma debt-to-capitalization of about 41%, which includes management's expected future debt issuances and potential cash defeasance of debt. The five-year capital improvement plan (CIP) is about $232 million and consists of mainly repair and replacement projects and system expansions. Given constitutional limitations around expenditure limitation restrictions, the county plans to mostly debt finance its entire CIP over the next five years. Not subject to the limitations are items such as bond proceeds and related debt service.

We consider the system's management practices to be good under our FMA methodology. In our view, management is transparent in regards to the system's policies and practices. The system has meaningful debt and investment policies with meaningful cash targets to maintain about $50 million of unrestricted cash for the Regional Wastewater Reclamation fund, not including the designated operations and emergency reserve funds. In addition, long-term financial planning is detailed and reasonable and is updated monthly. Furthermore, management presents financials to the Regional Wastewater Reclamation Committee and to county administration monthly and annually updates a detailed long-term CIP and complies with generally accepted accounting principles.

Outlook

The stable outlook reflects our view of the system's primarily residential and very diverse customer base, and our anticipation that the system will maintain a strong financial profile during the two-year outlook period, which is characterized by good all-in coverage and extremely strong liquidity levels. We do not anticipate changing the rating during the outlook period, based on the extremely strong liquidity position, which we believe provides ample cushion against potential downward pressures.

Upside scenario

In our opinion, upward mobility for the ratings will depend on sustained maintenance and improvement of all-in coverage metrics that we consider good or better, supported by improved income levels.

Downside scenario

We could lower the ratings if the system unexpectedly spends down cash more than what was presented in management-provided projections. We could additionally lower the ratings if all-in coverage declines to a level that we believe is consistent with that of a lower rating.

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