MEMORANDUM

Date: November 13, 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 credit rating reviews by Fitch Ratings (Fitch) and S&P Global Ratings (Standard & Poor's) for the Certificates of Participation (COPs), Sewer Revenue Obligations (SRO) and Street and Highway Revenue Bonds (S&H) that will be issued in December.

Pima County's conservative approach to debt management and aggressive debt retirement has once again been rewarded. Fitch raised the County's debt rating for the Sewer Revenue Obligations from AA- to AA, reflecting the strong financial position of the System. The remaining ratings were all affirmed at the current level. Below is a recap of the current ratings for Pima County's COPs, General Obligation, Sewer Revenue Obligations and Street and Highway Bonds:

Credit Ratings				
	Standard & Poor's		Fitch Ratings	
	Rating	Date	Rating	Date
Certificates of Participation (COPs)	AA-	November-2020	AA	November-2020
General Obligation	AA	November-2020	AAA	November-2020
Street and Highway Revenue	AA	November-2020	AA	November-2020
Sewer Revenue Obligations	AA	November-2020	AA	November-2020

In their rating reports, the two firms spoke highly of the County's fiscal management and local economy. Here are some of the comments from the ratings reports released in November 2020.

- "Strong management, with good financial policies and practices...." *(S&P - COPs)*
- "Very strong liquidity..." *(S&P - COPs)*
- "Large and diverse economy, in addition to good incomes and an employment base made up of government, defense, tourism, higher education and services." *(S&P – S&H)*
- "Extremely strong liquidity position..." *(S&P - SRO)*
- "Strong expenditure flexibility, robust financial flexibility, a low long-term debt liability burden and stout operating performance." *(Fitch – COPs & S&H)*
- "Improved leverage profile amid completion of its facilities overhaul" *(Fitch – SRO)*

These ratings are a credit to the Board support for a conservative financial position as well as support for the fiscal stability program and practices adopted by the Board.

Attachments

c: Jan Lesher, Chief Deputy County Administrator
Michelle Campagne, Director, Finance and Risk Management
Jackson Jenkins, Director, Regional Wastewater Reclamation Department

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$50.48 mil certs of part ser 2020C due 12/01/2025		
Long Term Rating	AA-/Stable	New
US$16.015 mil certs of part ser 2020B due 12/01/2035		
Long Term Rating	AA-/Stable	New
Pima Cnty approp		
Long Term Rating	AA-/Stable	Affirmed
Pima Cnty GO		
Long Term Rating	AA/Stable	Affirmed

Rating Action

S&P Global Ratings assigned its 'AA-' long-term rating to Pima County, Ariz.'s pro forma $16.015 million series 2020B certificates of participation (COPs) and pro forma $50.48 million series 2020C COPs. 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 existing COPs. The outlook on all ratings is stable.

The COPs are payable from lease payments made from legally available revenue of the county subject to annual appropriation. The rating on the COPs reflects our view of the county's covenant to budget and appropriate annual lease payments. We rate these obligations one notch lower than the county's general creditworthiness to account for the risk of nonappropriation associated with the lease payments. The county is issuing the series 2020B and 2020C COPs to finance various capital projects throughout the county.

Revenue from unlimited ad valorem taxes, levied on taxable property within the county, secures 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 2020B and 2020C COPs, the county will have approximately $990 million in total direct debt.

Credit overview

The county experienced high unemployment and some limited business closures during the outset of the COVID-19 pandemic and recession; however, the overall impacts appear to have been relatively modest and brief, and the county's financial performance remains consistent with our prior expectations. During the past several years, the county produced operating surpluses that led to very strong general fund reserves, and the county communicated that it intended to deploy a portion of these reserves to fund one-time capital improvements. We understand that the county used about $7.2 million of reserves in fiscal 2019 for technology upgrades and about $36 million in fiscal 2020

for building and road improvements. The county continues to forecast assessed value (AV) growth--consistent with the past several years--and we understand that there have not been any material deviations in development activity during the past year. Our 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).

The stable outlook reflects our view of the county's large taxing area and modest impacts of the COVID-19 pandemic and recessionary pressures thus far. Although there remains uncertainty regarding the trajectory of the pandemic and economic recovery, we believe that the county will be able to make operating adjustments, as necessary, to maintain financial performance and strong available reserve balances. We do not expect to change the ratings within the two-year outlook horizon.

The 'AA' rating reflects 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 for fiscal 2019, but an operating surplus in the general fund for fiscal 2020 after excluding one-time use of reserves for pay-as-you-go capital improvements;
- Strong budgetary flexibility, with an available fund balance that we understand decreased to about 14.4% of operating expenditures for fiscal 2020 from about 18.2% for fiscal 2019;
- 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.

Environmental, social, and governance (ESG) factors

We analyzed the county's ESG risks relative to its economy, financial measures, and debt profile. We believe that the county's governance risk factors are in line with our view of the sector as a whole. Our rating incorporates our view regarding the health and safety risks posed by the COVID-19 pandemic, albeit temporary. Absent the implications of COVID-19, we consider the county's social risk to be in line with our view of the sector standard. Finally, although the county has elevated exposure to wildfire risk and drought, we believe that these risks have been substantially mitigated by state building codes and the state's efforts to secure water rights from various sources to support its growing population.

Stable Outlook

Downside scenario

We could take a negative rating action if we come to believe that the county will produce consistent operating deficits for multiple years with no plans to take corrective action, resulting in reserves falling below a level that we consider adequate.

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 performance with fund balances at levels that we consider very strong, we could take a positive rating action.

Credit Opinion

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 broad and diverse. The county has a projected per capita effective buying income of 85.6% of the national level and per capita market value of $86,567. The county's market value grew 6.4% during the past year to $89.5 billion in 2021. At the outset of the COVID-19 pandemic, the county's unemployment rate rose sharply to 12.8% for April 2020 from 4.2% for February 2020; however, it has subsequently declined to 6.5% for September 2020.

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. Raytheon Missile Systems is the leading employer (12,600 estimated employees), followed by The University of Arizona (12,500), Banner Healthcare-UMC (7,500), Davis-Monthan Air Force Base (7,200), and the county (6,900). 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 previously reported 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 continues to be strong, 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 4.7% in fiscal 2021, reaching $9.1 billion. We consider the tax base to be very diverse based on the top 10 taxpayers for the county representing 7.5% of AV in fiscal 2021.

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 regularly monitor all of them.

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 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 expenses for a large technology upgrade, building improvements, and road improvements.

The county's operations are stable, in our view, as management made aggressive expenditure adjustments at the outset of the pandemic to offset forecast revenues declines--such as a $25 million reduction to state-shared revenues in the fourth quarter of fiscal 2020--that ultimately did not materialize. Although consumer spending patterns have shifted during this period with a greater proportion of spending occurring online rather than in retail outlets, sales tax revenues have continued to be strong. Based on unaudited estimates for fiscal 2020 provided by management, we calculate that the general fund produced a 2.0% surplus when excluding $36 million of one-time capital improvements or a 4.6% deficit when including these expenditures. Revenues for fiscal 2020 increased by about 3.2% to $588 million, with the change attributable to a $9.1 million increase driven by rising property valuations and a $6.9 million increase in intergovernmental revenue that was primarily related to the consolidation of the Pima Animal Care Center into the county's general fund for reporting purposes. Expenditures for fiscal 2020 increased about 4.3% to $539 million, with the change primarily attributable to the consolidation of the Pima Animal Care Center into the county's general fund, increased costs associated with the long-term care system and outside hospital clinics, and higher pension costs for public safety employees.

Strong budgetary flexibility

Our calculation of available fund balance combines assigned and unassigned portions of the general fund balance. The county's available reserves steadily increased during fiscals 2014 through 2018, peaking at $109 million in fiscal 2018. Subsequently, the county has been deploying reserves for one-time capital expenditures including a reduction in reserves by $6.8 million in fiscal 2019 attributable to one-time technology upgrades and $24.7 million in fiscal 2020 consisting of $10 million for road improvements and $15 million for downtown county buildings. We understand that

the county intends to draw reserves down an additional $12.5 million in fiscal 2021, which would reduce available reserves to $64.8 million, or about 12% of operating expenditures. We are not anticipating further material reserve draws beyond fiscal 2021 and anticipate that reserves 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 strong access to external liquidity, as evidenced by its regular issuance of debt during the past 10 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 52.6% of total governmental fund revenue. Overall net debt is low at 1.6% of market value, and approximately 94.5% of the direct debt is scheduled to be repaid within 10 years, which are all positive credit factors, in our opinion.

We understand the county plans to issue approximately $70 million of additional COPs during the next two fiscal years--$35 million in fiscal 2022 and $35 million in fiscal 2023--and is also considering issuing $300 million of pledged revenue obligations--secured by state-shared sales taxes and vehicle license fees as well as various other revenues from fees and charges—to finance the county's unfunded liability to the Public Safety Personnel Retirement System (PSPRS) and Corrections Officer Retirement Plan (CORP). 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.

Pension and other postemployment benefit (OPEB) analysis

- Pima County's combined required pension and actual OPEB contributions totaled 6.2% of total governmental fund expenditures in 2019. The county made its full annual required contribution to the pension plans in 2019.
- We consider the county's pension liabilities to be large, although they could be addressed in the near term through a pension financing that the county is actively considering.
- The county has been proactive in adopting contribution increases to 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; and
- CORP--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, and is well above our guidance of 6.0%. 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.

Related Research

- Through The ESG Lens 2.0: A Deeper Dive Into U.S. Public Finance Credit Factors, April 28, 2020
- 2019 Update Of Institutional Framework For U.S. Local Governments

Ratings Detail (As Of November 6, 2020)		
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 ser 2019A due 12/01/2033		
Long Term Rating	AA-/Stable	Affirmed
Pima Cnty certs of part ser 2020A due 12/01/2022		
Long Term Rating	AA-/Stable	Affirmed
Pima Cnty Certs of part		
Long Term Rating	AA-/Stable	Affirmed

Ratings Detail (As Of November 6, 2020) (cont.)		
Pima Cnty Certs of part		
Long Term Rating	AA-/Stable	Affirmed
Pima Cnty GO		
Long Term Rating	AA/Stable	Affirmed
Pima Cnty GO (AGM)		
Unenhanced Rating	AA(SPUR)/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; Gas Tax

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Summary:

Pima County, Arizona; Gas Tax

Credit Profile		
US$21.0 mil street and highway rev bnds ser 2020 due 07/01/2035		
Long Term Rating	AA/Stable	New
Pima Cnty GASTAX		
Long Term Rating	AA/Stable	Affirmed

Rating Action

S&P Global Ratings assigned its 'AA' long-term rating to Pima County, Ariz.'s pro forma $21 million series 2020 street and highway revenue (HURF) bonds. At the same time, S&P Global Ratings affirmed its 'AA' long-term rating on the county's existing street and highway revenue debt. The outlook is stable.

The HURF bonds are secured by a first lien on revenue received by the county from taxes, fees, charges, and other money collected by the state and returned to the county for street and highway purposes pursuant to Arizona law. Pledged street and highway revenue includes revenue from state-shared fuel taxes, vehicle registration fees, and license fees. Street and highway revenue is collected by the state and distributed monthly to local agencies based on a statutory formula, with approximately 19% allocated to counties. Of the 19%, 72% is allocated based on point of sale, with the remainder based on population in unincorporated areas of the county relative to population in unincorporated areas of the state. Therefore, pledged revenue may vary as a function of statewide sales and collections, local sale volume, and county population relative to the state. The state may also alter the distribution formula or intercept revenue to the detriment of local agencies, as it has done in the past.

Proceeds of the series 2020 bonds will be used to fund various street and highway improvements within the county. Following the issuance of the series 2020 bonds, the county will have approximately $97.1 million in HURF debt outstanding.

Credit overview

The 'AA' rating reflects our view that coverage will remain very strong even after taking into consideration additional debt issuances, consistent with the track record of good pledged revenue growth and very strong coverage. Moreover, the rating reflects the large and diverse economy, in addition to good incomes and an employment base made up of government, defense, tourism, higher education, and services.

The stable outlook reflects the continued growth in pledged revenue during the previous six years, with the exception of a modest decline in fiscal 2020 driven by reduced fuel sales during the outset of the COVID-19 pandemic, with year-to-date trends supporting a reversal of that decline in fiscal 2021. The stable outlook also reflects our anticipation that the county will maintain very strong maximum annual debt service (MADS) coverage during the two-year outlook horizon.

Key credit considerations include:

- A very strong local economic population base at the state and local level, along with good incomes within the broad and diverse Tucson metropolitan statistical area;
- Our view that nationwide gas taxes have historically demonstrated low volatility, in addition to our view of moderate-to-weak volatility at the local level; and
- The county's very strong coverage, with 3.9x MADS coverage based on fiscal 2020 pledged revenue.

Environmental, social, and governance (ESG) factors

We analyzed the county's ESG risks relative to its economy, financial measures, and debt profile. We believe that the county's governance risk factors are in line with our view of the sector as a whole. Our rating incorporates our view regarding the health and safety risks posed by the COVID-19 pandemic, albeit temporary. Absent the implications of COVID-19, we consider the county's social risk to be in line with our view of the sector standard. Finally, although the county has elevated exposure to wildfire risk and drought, we believe that these risks have been substantially mitigated by state building codes and the state's efforts to secure water rights from various sources to support its growing population.

Stable Outlook

Downside scenario

Should pledged MADS coverage fall below a level we consider very strong as a result of declining motor fuel sales activity or state interference with pledged HURF revenue, we could lower the rating.

Upside scenario

Should HURF bonds bond coverage increase to extraordinarily high levels on a sustained basis, we could raise the rating.

Credit Opinion

Economic fundamentals: Very strong

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. Raytheon Missile Systems is the leading employer (12,600 estimated employees), followed by The University of Arizona (12,500), Banner Healthcare-UMC (7,500), Davis-Monthan Air Force Base (7,200), and the county (6,900). 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 previously reported 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 continues to be strong, 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 assessed value (AV) grew 4.7% in fiscal 2021, reaching $9.1 billion. We consider the tax base to be very diverse based on the top 10 taxpayers for the county representing 7.5% of AV in fiscal 2021. The county's income indicators are good, in our view, with per capita effective buying income measuring 86% of the national level.

The county's population grew at an average annual rate of 1.6% between 2000 and 2010, and has since slowed to an average rate of about 0.7% from 2010 to 2019. A slower rate of population growth relative to the state could adversely affect the county's share of street and highway revenue, although the majority of funds (72%) are distributed according to the proportion of local sales and consumption. According to the Arizona Department of Transportation, total gallons of fuel taxed in Pima County increased at an average annual rate of 2.4% for fiscals 2016 through 2019 to 547 million gallons taxed, before declining by 3.9% in fiscal 2020 to 526 million gallons taxed as fuel sales sharply declined at the outset of the COVID-19 pandemic. Motor fuel tax revenue makes up roughly 75% of pledged revenue, while vehicle registration and in-lieu fees--which are based upon local registrations--make up the remaining 25% of pledged revenue.

Volatility: Moderate

We assess the volatility of revenue in order to determine the likelihood of the availability of revenue during different economic cycles. We have two levels of volatility assessment: macro and micro. We consider the macro volatility to be low and micro volatility to be moderate to weak.

Our macro volatility assessment begins with an assessment of the historical volatility of the economic activity being taxed, and includes an analysis of societal, demographic, political, and other factors that could affect these activities. We base our expectation of future volatility on the variance of national economic activity that we believe most closely represents the taxing base over multiple economic cycles. To determine our view of the volatility of gas taxes, we used motor fuel consumption data from the U.S. Department of Energy, for the period 1993-2014.

On a micro level, combined pledged revenue showed moderate-to-weak volatility during the recession, declining by a cumulative 23% between 2008 and 2012. Since the low in 2012, pledged revenue has increased by an average annual rate of 5.6% to $65.6 million in 2019, surpassing the prerecession peak of $58.6 million. We note that pledged revenues modestly declined by 1.1% for fiscal 2020 to $64.8 million, reflecting lower fuel sales during the outset of the COVID-19 pandemic.

We understand that the state has not increased the amount diverted since fiscal 2012, although some uncertainty remains regarding future state interception of HURF revenue upstream from counties. We note that a portion of the pledged revenue declines during the recession were associated with state diversions away from the Arizona Highway User Revenue Fund, which is distributed to cities, towns, and counties. The county has forecast that pledged revenues will improve modestly by 1.1% in fiscal 2021 and then grow by 3% annually through fiscal 2024.

Coverage and liquidity: Very strong

In fiscal 2020, available pledged revenue totaled $64.8 million, 75% ($48.8 million) of which came from highway user revenue (mostly fuel taxes), with the remaining 25% ($16.1 million) coming from vehicle license taxes. Based on fiscal 2020 unaudited revenue, we calculate MADS coverage on all HURF bonds at 3.9x, which we consider very strong.

Bond documents require MADS coverage of at least 2x by the preceding year's pledged revenue in order for the county to issue additional parity debt. Additionally, Arizona statutes require annual debt service coverage of at least 1.5x for additional parity bonds provided that the bonds being issued are rated 'A' or better. Management is expecting collections in 2021 to grow by roughly 1%, which would return pledged revenues to fiscal 2019 levels. Much of the existing HURF debt, including the series 2020 issuance, is amortized at a rapid pace, which helps to improve MADS coverage as early debt service payments are made. There is no debt service reserve fund held for the series 2020 bonds, or for any of the HURF bonds outstanding. With the current coverage levels and a low to moderate volatility assessment, there is no downward adjustment that would indicate potential liquidity pressures. The county will have $16.375 million of remaining authorization for HURF debt after the issuance of the series 2020 bonds, and it has indicated that it will likely issue approximately $5.4 million against this authorization in fiscal 2023. Despite planned additional issuances, we expect coverage to remain at or above a level we consider very strong.

Obligor linkage: Close

We believe the priority-lien of pledged revenue provides some protection from operating risk; however, because taxes are largely collected by the state and distributed monthly to the county, which then is responsible for transferring the money to the bond fund, we consider the flow of pledged revenue to be within the county's direct control. Under our criteria, this narrows the linkage between the priority-lien pledge and the OC, as we believe pledged revenue has some degree of exposure to operating risk.

We assess the county's general operations, because we view overall creditworthiness as a key determinant of an obligor's ability to pay all of its obligations, including bonds secured by a special tax. In our view, the county's creditworthiness is enhanced by its strong underlying economy and the maintenance of a strong financial position, supported by what we consider good financial management policies and practices. For more information on the county's creditworthiness, please see our report published Nov. 6, 2020, on RatingsDirect.

Related Research

Through The ESG Lens 2.0: A Deeper Dive Into U.S. Public Finance Credit Factors, April 28, 2020

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

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S&P Global
Ratings

RatingsDirect®

Summary:
Pima County, Arizona; Water/Sewer

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Summary:

Pima County, Arizona; Water/Sewer

Credit Profile		
US$46.9 mil swr sys rev oblig ser 2020B due 07/01/2030		
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.

Rating Action

S&P Global Ratings assigned its 'AA' long-term rating to Pima County, Ariz.'s anticipated $47 million sewer system revenue obligations, series 2020B. 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 series 2020B 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 $500 million of total parity obligations. Of that, $37 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 (which is based on the existing indenture) as permissive, and given the sewer 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 2020B obligations will have a debt service reserve fund, funded at one-half of maximum annual debt service on the 2020B obligations.

Credit Overview

The ratings reflect our view of the county's sewer system's general creditworthiness and a combination of its extremely strong enterprise risk profile and very strong financial risk profile. Given constitutional limitations around expenditure limitation restrictions, the county will continue to debt-finance its capital improvement plan (CIP). As part of its financial plan, the county is transitioning from long-term debt financing to relatively short-term debt financing. For its sewer system, the transition to a pay-as-you-go capital financing approach could take several years over the medium-term horizon. We view the sewer system financial profile and projected minimum 1.3x all-in coverage more in line with similarly rated 'AA' utility peers.

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 review 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 combined with 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 40%; and
- Good Financial Management Assessment (FMA) of its policies and practices, which are mostly formalized and meaningful.

The stable outlook reflects our view of the sewer 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 downward during the outlook period, based on the extremely strong liquidity position, which we believe provides ample cushion against potential downward pressures.

Environmental, social, and governance (ESG) factors

The county recently completed a major overhaul of its entire wastewater reclamation facilities to address its aging infrastructure and comply with regulatory requirements. The county has substantially met future permitting requirements for environmental compliance and has ample capacity in its existing treatment facilities. The county's asset management plan also includes ongoing repair and replacement to maintain system assets in good condition. We view governance factors, including the board's history of credit-supportive rate-setting practices and regular review of long-term financial planning in line with other similarly rated utilities.

The county unemployment rate generally tracks the state level, but it rose to a peak of 12.8% in April 2020 following economic effects related to COVID-19 and stay-at-home orders. The county unemployment rate has decreased to more moderate levels (below 10%) in recent months. While we continue to monitor any possible pressures on the service area economy due to higher public health and safety risks related to COVID-19, which we view as social risk factors, we do not currently anticipate it affecting the system's ability to maintain budgetary balance and make debt service payments. For more information, see "All U.S. Public Finance Sector Outlooks Are Now Negative," published April 1, 2020, on RatingsDirect, and "The U.S. Economy Reboots, With Obstacles Ahead," published Sept. 24, 2020.

Stable Outlook

Downside scenario

We could lower the rating if all-in coverage significantly declines below management's forecast due to unanticipated large change in its capital plans or higher-than-expected operating costs that could alter related financial metrics, including significant spend down of unrestricted reserves. Moreover, we could lower the rating, if economic and financial metrics are no longer consistent with the rating level, as a result of the dampening effects of the pandemic on local economic activity.

Upside scenario

S&P Global Economics projects it may be late 2021 before credit conditions or economic recovery fully return to pre-pandemic levels. Therefore, we do not anticipate raising the rating during our outlook horizon. To consider a higher rating, we would primarily assess if the county's sewer system achieves stronger financial performance and metrics that are sustainable through this economic cycle, and supported by improved income levels.

Credit Opinion

Enterprise risk

The Pima County Regional Wastewater Reclamation Department provides wastewater collection and treatment services to approximately 285,000 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 Raytheon Missiles (12,600 employees), the University of Arizona (12,500 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. The county unemployment rate peaked at 12.8% in April 2020, and is down to an average of 9% during more recent months, as the state has reopened and lifted stay-at-home orders. 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 fiscal 2020. 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 above-average 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 1.1% of the county's MHHEBI. The last financial plan and rate review study was performed in 2020, 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 in the medium-term. Management plans to continue using unrestricted cash balances to repay debt service or provide rate relief.

We consider the system's operational management to be strong under our operational management assessment methodology, which indicates a favorable alignment of operations and organizational goals. 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 continue be good in the near future 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 based on net revenues, 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 to issue future COPs' obligations to fund system capital needs. Based on unaudited fiscal 2020 financials, we calculate all-in coverage was 1.5x.

Based on our analysis of management-provided projections, which we view as reasonable, we expect all-in coverage to be at a minimum of 1.3x through fiscal 2025, which we consider to be good. Furthermore, despite projections assuming debt issuances of $20 million in fiscal 2022, and $40 million in each of the fiscal years 2023-2025, we expect

all-in coverage and annual debt service costs to stay about level, because of management's plans to defease a portion of previous debt 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 $40 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 2020 (unaudited), unrestricted cash totaled approximately $122 million, equivalent to 548 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 $40 million of O&M and emergency reserve funds. We anticipate management will continue to maintain sufficient liquidity to meet operations.

The system is moderately leveraged based on a pro forma debt-to-capitalization of about 40%, which includes management's expected future debt issuances and potential cash defeasance of debt. The five-year capital improvement plan (CIP) is about $225 million and consists of mainly repair and replacement projects and system expansions. The county estimates ongoing capital repair and replacement projects at about $40 million annually going forward. 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 regularly. The Regional Wastewater Reclamation Committee and county administration reviews the system's long-range financial and capital plan annually and its financial reporting complies with generally accepted accounting principles.

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RATING ACTION COMMENTARY

Fitch Upgrades Pima County, AZ Revenue Obligations to 'AA'; Outlook Revised to Stable

Tue 10 Nov, 2020 - 10:31 AM ET

Fitch Ratings - Austin - 10 Nov 2020: Fitch Ratings has assigned an 'AA' rating to Pima County, Arizona's (the county) revenue obligations as follows:

--Approximately $46.8 million sewer system revenue obligations, series 2020B.

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

Fitch also upgraded to 'AA' from 'AA-' approximately $417.9 million in outstanding sewer system revenue obligations.

In addition, Fitch has assessed the utility's Standalone Credit Profile (SCP) at 'aa'.

The Rating Outlook has been revised to Stable from Positive.

ANALYTICAL CONCLUSION

The 'aa' SCP assessment and upgrade to 'AA' reflects the sewer system's (the system) improved leverage profile amid completion of its facilities overhaul. The 'AA' rating reflects

the system's very strong revenue defensibility, which is supported by its fundamental role as the sole sewer provider to a service area with favorable demographic trends. The system's low operating risks consist of a low operating cost burden and moderate life cycle investment needs supported by adequate capital investment. The system's financial profile, assessed at 'aa', reflects a low net leverage ratio (net adjusted debt to adjusted funds available for debt service [FADS]) that has been on a declining trend, due in large part to management's disciplined rate-setting. Fitch expects net leverage will remain very low and decline further in the near term as a result of a very rapid amortization schedule.

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 (IDR AA+/Stable). Tucson (IDR AA-/Stable) is the county seat and Arizona's second largest city. The system wastewater facilities have ample combined capacity of 94.7 million gallons per day (MGD), with sewer flows averaging about 57.8 MGD.

The county embarked on a massive capital program to replace much of its obsolete infrastructure beginning around 2010. 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 adopted large service rate increases to cover the rise in fixed costs associated with the new debt and has been generating sufficient revenues to accelerate debt repayment very rapidly.

Coronavirus Considerations

The recent outbreak of coronavirus has had limited impact to system operations. However, Fitch's ratings are forward-looking in nature, and Fitch will continue to monitor developments related to severity and duration, as well as revise expectations for future performance as appropriate.

KEY RATING DRIVERS

Revenue Defensibility 'aa'

Very Strong Revenue Defensibility in Favorable Service Area

System revenues are entirely derived from monopolistic services to a stable customer base with average income and employment levels. The county has independent legal ability to increase rates and charges are affordable to the vast majority of the population.

Operating Risks 'a'

Low Cost Burden, Manageable Capital Plan

The system's operating profile assessment reflects a low operating cost burden, and its moderate life-cycle ratio indicates investment needs are generally supported by adequate capital investment. The system has a manageable capital plan that is primarily driven by conveyance expansion needs.

Financial Profile 'aa'

Very Low Net Leverage

Net leverage is low and has been on a declining trend over the last few years. Despite additional debt issuance for capital needs, Fitch expects the net leverage will continue to decline given that the system debt will amortize at a faster pace than expected new debt issuance.

ASYMMETRIC ADDITIVE RISK CONSIDERATIONS

No asymmetric additive risk considerations affected this rating determination.

RATING SENSITIVITIES

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

--Consistent net leverage of less than 5.0x for multiple years with sustained adequate liquidity cushion.

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

--Weakening demographic trends could result in a change in the revenue defensibility assessment to 'a' and raise the leverage hurdle;

--Increase in net leverage in excess of 6.0x that is sustained for multiple years.

BEST/WORST CASE RATING SCENARIO

International scale credit ratings of Sovereigns, Public Finance and Infrastructure issuers have a best-case rating upgrade scenario (defined as the 99th percentile of rating transitions, measured in a positive direction) of three notches over a three-year rating horizon; and a worst-case rating downgrade scenario (defined as the 99th percentile of rating transitions, measured in a negative direction) of three notches over three years. The complete span of best- and worst-case scenario credit ratings for all rating categories ranges from 'AAA' to 'D'. Best- and worst-case scenario credit ratings are based on historical performance. For more information about the methodology used to determine sector-specific best- and worst-case scenario credit ratings, visit [https://www.fitchratings.com/site/re/10111579].

SECURITY

The obligations are payable from purchase payments made by the county to the trustee. The county's obligation to make the purchase payments is secured by a first lien on net revenues (including unrestricted cash balances) of the system.

REVENUE DEFENSIBILITY

Revenue Defensibility is very strong, assessed at 'aa', with all of the revenue derived from services or business lines exhibiting monopolistic characteristics in a service area with a

generally stable population base and average demographic trends. The county has independent legal ability to increase service rates without external approval. Sewer rates are affordable for the vast majority of the population.

Fitch considers the service area characteristics to be favorable and assessed this subfactor at 'a' with customer growth averaging about one percent. The area's economy is diverse, featuring military and defense, higher education, healthcare, government and manufacturing as primary anchors. County unemployment levels are typically higher than the national levels, but, at 6.5% as of September 2020, are tracking better than the 7.7% national average. County wealth levels average about 85% when compared with the national median household income.

Fitch measures service rate affordability relative to the most vulnerable customers who are at the lower income brackets of the service territory. The system's monthly service charges at $42.11, assuming Fitch's standard 6,000 gallons per month sewer flows, is deemed affordable to over 80% of the population. The county increased rates annually between 2008 and 2014 during its most intense capital program. A modest 3% rate increase was implemented in fiscal 2017 but rates have remained unchanged since then. The system is generating ample revenue to continue its CIP while rapidly amortizing outstanding obligations. Consequently, management has no plans to increase rates in the next five years.

OPERATING RISKS

The system's operating risk is assessed at 'a', which takes into consideration a low operating cost burden with moderate life-cycle investment needs supported by adequate capital investment. The system's operating cost burden is slightly over the $6,500 per million gallons (mg) threshold for the stronger assessment. The capital planning and management assessment reflects Fitch-calculated life cycle ratio of 35%. The system recently completed an overhaul of its water reclamation facilities. Consequently, spending, while adequate, has come down and capex to depreciation has averaged 93% over the last five years.

Fitch's calculation of the operating cost burden includes all operating costs and net transfers, which yielded an operating cost burden of $6,748/mg of sewer flows treated in fiscal 2019. This metric ranged from a low $5,162/mg to a high $7,439/mg from fiscal years 2015 through 2019. The volatility of this metric is because the county managed some interfund financing for capital needs via transfers to and out of the utility enterprise fund. The county has suspended the practice of funding capital through these transfers, the final transfer will be made later this month (fiscal 2021).

Capital needs are very manageable. The county recently completed a major overhaul of its entire wastewater reclamation facilities to address its aged infrastructure and comply with regulatory requirements. Capital needs over the next five years are expected to cost an estimated $225 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.

FINANCIAL PROFILE

The financial profile is assessed at 'aa' characterized by very low net leverage resulting from the county's disciplined rate action following embarking on a large CIP. Fitch's net leverage calculation was 4.4x at the end of fiscal 2019. This metric peaked at 6.6x in fiscal 2017 and declined briskly to the current level, as the utility's capital needs moderated and the county began to accelerate its debt retirement pace.

The utility accumulated very robust cash balances from large rate increases during the most capital-intensive years. 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. In order to manage its growing cash balances while maintaining its existing rates, management began to defease debt early. Between fiscal years 2017 and 2019, the utility defeased about $39 million in debt prior to scheduled maturity. The utility has been generating ample revenues to repay debt. Over the last five audited fiscal years, long-term debt declined by $120 million while available cash declined by only $44 million. While its five-year CIP is planned to be primarily debt funded, the pace of debt retirement is projected to exceed new debt issuance over the five-year forecast, essentially transitioning to a cash funded CIP as planned.

The liquidity profile is neutral to the rating. Although Fitch's calculated coverage of full obligations (COFO) in two of the last five years was less than 1.0x, current days cash on hand consistently exceeded one year. Moreover, the COFO calculations include some of the defeased debt. The county targets to maintain unrestricted cash between $50 million to $60 million in addition to a $20 million emergency reserve and another $20 million O&M reserve. At the close of fiscal 2019, the system had $66.7 million in unrestricted cash and maintained full funding of its emergency and O&M reserves. Fitch calculated debt service coverage (DSC) for fiscal 2019 was 1.3x.

Fitch's Analytical Stress Test (FAST)

The FAST base case utilized the system's fiscal 2020 to 2024 financial forecast, which is considered reasonable. The county forecast assumes no rate increases and modest escalation of operating costs. Fiscal 2020 results reflect unaudited figures as the county's fiscal year ends on June 30. The operating revenues are conservatively flat despite connection growth given slower assumed collection rates expected during the pandemic. Operating expenditures are projected to grow modestly. The county plans to defease approximately $97 million of debt over the next five years and Fitch included these defeasances in its base case for liquidity analysis. The base case also includes the $35.3 million series 2020A bonds issued during fiscal 2020, the current bond sale and an estimated $100 million to be issued between fiscal years 2022 to 2024 for capital outlays.

The FAST base case output reflects Fitch's expectation that the utility's leverage will continue to decline as more debt rolls off than is added. Net leverage gradually decreases annually from 4.3x projected in fiscal 2020, to roughly 3.2x by fiscal 2024. Although unrestricted cash is projected to fall below the county's $50 million target, the liquidity cushion ratio remains robust at about 256 days. The FAST rating case, which layers an additional 10% in capital spending on the base case, shows net leverage declining to about 3.4x in fiscal 2024.

Fitch also applied additional sensitivity with regard to the pandemic reducing connection fee revenues to the five-year historical low at $10.3 million from the projected $14.5 million in fiscal years 2021 to 2024. Under this scenario, the base case increases to 4.4x in fiscal 2021 and declines to 3.5x in fiscal 2024. In the rating case, the scenario yields a 4.5x peak with gradual decline to 3.8x by fiscal 2024.

ASYMMETRIC ADDITIVE RISK CONSIDERATIONS

No asymmetric additive risk considerations affected this rating determination.

SOURCES OF INFORMATION

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

REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

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.

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APPLICABLE CRITERIA

Public Sector, Revenue-Supported Entities Rating Criteria (pub. 27 Mar 2020) (including rating assumption sensitivity)

U.S. Water and Sewer Rating Criteria (pub. 03 Apr 2020) (including rating assumption sensitivity)

ADDITIONAL DISCLOSURES

Dodd-Frank Rating Information Disclosure Form

Solicitation Status

Endorsement Policy

ENDORSEMENT STATUS

Pima County (AZ)	EU Endorsed

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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.

ENDORSEMENT POLICY

Fitch's approach to ratings endorsement so that ratings produced outside the EU may be used by regulated entities within the EU for regulatory purposes, pursuant to the terms of the EU Regulation with respect to credit rating agencies, can be found on the EU Regulatory Disclosures page. The endorsement status of all International ratings is provided within the entity summary page for each rated entity and in the transaction detail pages for all structured finance transactions on the Fitch website. These disclosures are updated on a daily basis.

US Public Finance Infrastructure and Project Finance North America United States

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FitchRatings

RATING ACTION COMMENTARY

Fitch Rates Pima County, AZ Ser. 2020B and 2020C COPs, 2020 HURF 'AA'; Outlook Stable

Wed 11 Nov, 2020 - 1:08 PM ET

Fitch Ratings - Austin - 11 Nov 2020: Fitch Ratings has assigned a 'AA' rating to the following Pima County, AZ obligations:

--$16.015 million certificates of participation (COPs), series 2020B;

--$50.48 million certificates of participation (COPs), taxable series 2020C;

--$21 million street and highway revenue bonds (HURF), series 2020.

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

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

--$174.9 million in unlimited tax general obligation bonds outstanding (ULTGOs) at 'AAA';

--$150.8 million in COPs outstanding at 'AA';

--$76.1 million in street and highway revenue bonds outstanding at 'AA'.

The Rating Outlook for all securities is Stable.

The Series 2020B COPs, Taxable Series 2020C COPs and Series 2020 HURF are scheduled for a negotiated sale the week of Nov. 30. 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.

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.

ULTGO bonds outstanding 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.

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 by strong expenditure flexibility, robust financial flexibility, a low long-term debt liability burden, and stout operating performance. The 'AA' COPs rating, one notch off the IDR, reflects the discretion contained 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 resumed growth in the pledged revenue stream and limited additional borrowing planned in this program.

The 'AAA' ULTGO bond rating is higher than the IDR due to a statutory lien, which provides bondholders with a substantial preferential right in a bankruptcy proceeding and warranting a ULTGO bond rating two notches higher than the county'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.

DEDICATED TAX ANALYTICAL CONCLUSION

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

(SEE BELOW FOR DEDICATED TAX ANALYSIS)

ECONOMIC SUMMARY

Pima County has a population of just over 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 components. The top 10 taxpayers represent retail, healthcare, utility and mining sectors and represent 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 regional economy that continues to perform overall. State law limits the county's ability to raise taxes for operating purposes, but the county 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 responsiveness and willingness to adjust spending levels provides the capacity to manage cost pressures, including pension contributions. Carrying costs are elevated within the moderate

range due to rapid debt amortization, and the county operates under a flexible labor framework in which management retains full control over head count and wages.

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 91% retired in 10 years), moderate capital needs, and an elevated unfunded net pension liability over the medium term.

Operating Performance: 'aaa'

Pima County has the highest gap-closing capacity with sizable reserves and superior inherent budget flexibility. Conservative budgeting allows the county to adapt to economic conditions and to replenish reserves during periods of recovery.

RATING SENSITIVITIES

IDR, GO and COPs

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

--Reduction of carrying costs to levels in line with 10% of expenditures, providing additional financial flexibility;

--Sustained revenue growth above the rate of nominal U.S. GDP growth.

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

--While unlikely, increases in carrying costs that consistently exceed 30% of expenditures;

--A failure to make necessary and expected budget adjustments in response to a return to economic contraction in the U.S., consistent with Fitch's coronavirus downside scenario, which materially erodes the county's gap-closing capacity.

Street & Highway Revenue Bonds

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

--Pledged revenue performance consistent with recent results that further strengthens the resilience assessment.

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

--Consistent erosion of pledged revenues and that weakens the recent strong coverage cushion and resilience.

BEST/WORST CASE RATING SCENARIO

International scale credit ratings of Sovereigns, Public Finance and Infrastructure issuers have a best-case rating upgrade scenario (defined as the 99th percentile of rating transitions, measured in a positive direction) of three notches over a three-year rating horizon; and a worst-case rating downgrade scenario (defined as the 99th percentile of rating transitions, measured in a negative direction) of three notches over three years. The complete span of best- and worst-case scenario credit ratings for all rating categories ranges from 'AAA' to 'D'. Best- and worst-case scenario credit ratings are based on historical performance. For more information about the methodology used to determine sector-specific best- and worst-case scenario credit ratings, visit [https://www.fitchratings.com/site/re/10111579].

CURRENT DEVELOPMENTS

The outbreak of coronavirus and related government containment measures worldwide have created an uncertain global environment for U.S. state and local governments and related entities. Fitch's ratings are forward-looking in nature, and Fitch will monitor the severity and duration of the budgetary impact on state and local governments and incorporate revised expectations for future performance and assessment of key risks.

While the initial phase of economic recovery has been faster than expected, GDP in the U.S. is projected to remain below its 4Q19 level until at least 4Q21. In its baseline scenario, Fitch assumes continued strong GDP growth in 3Q20 followed by a slower recovery trajectory from 4Q20 onward amid persisting social distancing behavior and restrictions, high unemployment and a further pullback in private-sector investment. Additional

details, including key assumptions and implications of the baseline scenario and a downside scenario, are described in the report "Fitch Ratings Coronavirus Scenarios: Baseline and Downside Cases - Update", published on Sept. 8, 2020, and "Fitch Ratings Updates Coronavirus Scenarios for U.S. State and Local Tax-Supported Issuers," published on Oct. 1, 2020 on www.fitchratings.com.

CORONAVIRUS IMPACT ON PIMA COUNTY, ARIZONA

The county received $87 million in Coronavirus Relief Fund Grants in calendar 2020, with approximately $10 million expended in fiscal 2020 and the remaining $77 million to be spent prior to the end of Dec. 2020. Additionally, the county received $27 million more in coronavirus related grants that are being spent. The grant funds are segregated in a special revenue fund and being used for various programs including testing and contact tracing ($20 million), small business grants, childcare organizations, food banks, and evictions and homelessness.

For the county's general fund, preliminary fiscal 2020 results are positive as compared to the adopted budget on both revenues and expenditures. Management expects revenues to beat budgeted amounts by $7 million, and expenditures and net transfers out are projected at approximately $41 million under budget. Revenue outperformed expected increases on property tax and state shared sales tax due to rising valuations and internet sales, respectively. These gains more than offset hotel/motel tax revenues weakness, with the receipt of $5.7 million for fiscal 2020 as compared to a budget of $6.9 million. Expenditure containment was due to vacant salary savings and limitations on departmental spending. The adopted budget planned a $56 million use of the county's $102 million fiscal 2019 unrestricted fund balance to fund a pay-as-you-go capital initiative. With the fiscal 2020 budget execution, the unrestricted fund balance is expected to end at $77 million, a $30 million positive variance.

For the fiscal 2021 budget, the county made expenditure reductions that include eliminating vacant positions and limiting or eliminating spending on categories such as travel, overtime and supplies. The county has also opted to forgo the pay-as-you-go capital project funding for one year. The budgeted unrestricted general fund balance is $49 million, which is well above the reserve safety margin requirement for the highest financial resilience assessment. The county's budgets tend to be conservative, and Fitch expects actual fund balance to exceed the amount budgeted. To date, revenues are forecast to be over budget by about $15 million due to increased property, sales and vehicle license tax collections. Expenditures are forecasted to be about $5 million over budget, primarily due to a $3 million warehouse purchase for pandemic related supplies and services.

ECONOMIC RESOURCE BASE

Prior to the pandemic, Pima County's economy was firmly in growth mode with eight consecutive years of gains in countywide market values. Market value increased a solid 6.4% in fiscal 2021 to $89.5 billion and 7.4% in fiscal 2019. Countywide retail sales have averaged 4% annual increases since 2013, including a 4.6% gain in 2019 to $9.7 billion. Management expects additional near-term tax base growth based on current residential construction activity and appreciation of existing properties. The economy has weakened during the pandemic, but appears to be outperforming the

nation. Layoffs have occurred, particularly in the tourism and entertainment sectors. The University of Arizona has had layoffs and non-renewed contracts totaling 251 staff. Unemployment has risen to 6.5% as of September, consistent with that of the state and noticeably lower than the 7.7% for the U.S.

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.

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 sustained revenue growth prospects is based on Pima County's diverse economy, solid population growth, recent solid tax base and retail sales gains, and the expectation for continued economic development in the area. Fitch expects the county's revenue gains to exceed the modest growth rate over the past 10 years, which was constrained due to the disproportionately large impact of the great recession throughout the state.

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. The primary tax rate was reduced for the fiscal 2021 budget adoption, which marks the fourth consecutive year of a decrease in this component of the levy. The same declining trend holds true for the total tax rate over the same period.

There is no limitation on annual secondary property tax levies used for voter-approved bonded indebtedness; those levies are not authorized to support operations. The secondary tax rate was also reduced for fiscal 2021, dropping to $1.4304 from $1.6018 in the prior fiscal year.

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 91% 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 projected increasing required contributions to county pension plans. The county has demonstrated the ability and willingness to make spending cuts when necessary to retain the sound 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 $5.4 million in street and highway revenue bonds in 2022-23 and $35 million in COPs in both fiscal 2022 and 2023. The current COPs issue, originally planned for $35 million, has been upsized to address pavement preservation projects.

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), also 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.

The county is currently formulating an enhancement to their pension financing policy through the establishment of a reserve for future unfunded pension liability. The county may also proceed with a policy statement that precludes the Board of Supervisors from accepting any grants that provide for personnel costs, except for those that provide for those types of expenses in the form of overtime payments. In December 2020, the Board of Supervisors are scheduled to consider the issuance of approximately $300 million of pledged revenue obligations to address up to 90% of the unfunded liabilities in the PSPRS and CORP pension programs.

OPERATING PERFORMANCE

Fitch expects that Pima County will utilize the highest gap-closing capacity through an economic downturn based on its capacity and willingness to cut spending and manage tax rates as necessary. Conservative budgeting, solid expenditure flexibility and maintenance of healthy reserves position the county to quickly address 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 (five out of the past six years, including unaudited fiscal 2020) were due primarily to better than expected revenue performance and sound expenditure control, which was consistent with the county's plan to build up fund balances to use for pay-as-you-go capital projects.

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 modestly over the near term given recovery prospects for the revenue sources and the general overall health of the state and regional economy.

Sound Resiliency: The pledged revenues generate a strong debt service cushion to withstand the current downturn, as well as 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 treats the debt as somewhat insulated from the operating risk of the entity. Therefore, the rating on the dedicated tax bonds can be up to four notches above the entity's IDR. 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.

At this point, the county only plans to issue $5.4 million of the remaining $16.4 million authorization in fiscal 2023 and has no current plans to issue the remaining bond authority. The future debt issuance is 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%, as 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. Fiscal 2020 pledged revenues are expected to decline about 1.2%; starting with fiscal 2021, resumption of modest growth is anticipated.

Fiscal 2019 pledged revenues totaled $65.6 million. Fitch estimates fiscal 2019 pledged revenues can decline by about 74% before coverage of MADS ($16.8 million) reaches 1.0x. The 74% revenue cushion is equivalent to 3.2x the worst historical cumulative decline in pledged revenue dating back to

fiscal years 2008-2012 and 13x the expected 5% revenue decline under Fitch's standard -1% U.S. GDP scenario. In both cases, the pledged revenue cushion would be equivalent to an 'aa' level of resilience assuming no additional leverage. To evaluate the sensitivity of the revenues in the current environment, Fitch also applies a revenue stress of 34% (annualized) to the latest audited annual totals. The coronavirus stress would still result in a solid 2.6x coverage of MADS.

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

REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

ESG CONSIDERATIONS

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RATING ACTIONS

ENTITY/DEBT	RATING			PRIOR
Pima County (AZ) [General Government]	LT IDR	AA+ Rating Outlook Stable	Affirmed	AA+ Rating Outlook Stable

ENTITY/DEBT	RATING			PRIOR
• Pima County (AZ) /Fuel Tax Revenues - Highway User Taxes/1 LT	LT	AA Rating Outlook Stable	Affirmed	AA Rating Outlook Stable

VIEW ADDITIONAL RATING DETAILS

FITCH RATINGS ANALYSTS

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APPLICABLE CRITERIA

U.S. Public Finance Tax-Supported Rating Criteria (pub. 27 Mar 2020) (including rating assumption sensitivity)

APPLICABLE MODELS

Numbers in parentheses accompanying applicable model(s) contain hyperlinks to criteria providing description of model(s).

FAST States & Locals - Fitch Analytical Stress Test Model, v2.4.0 (1)

ADDITIONAL DISCLOSURES

Dodd-Frank Rating Information Disclosure Form

Solicitation Status

Endorsement Policy

ENDORSEMENT STATUS

Pima County (AZ)	EU Endorsed

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