

RatingsDirect®

Summary:

**Philadelphia; General Obligation;
General Obligation Equivalent
Security; Joint Criteria**

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Credit Profile

US\$27.42 mil city agreement rev rfdg bnds (Philadelphia-One Benjamin Franklin Parkway Proj) ser 2018B due 02/15/2027

Long Term Rating A/Stable New

US\$10.275 mil city agreement rev bnds (Philadelphia Museum Of Art Energy Savings Prog) ser 2018A due 02/15/2038

Long Term Rating A/Stable New

Philadelphia GO (BAM) (SECMKT)

Unenhanced Rating A(SPUR)/Stable Downgraded

Philadelphia Auth for Indl Dev, Pennsylvania

Philadelphia, Pennsylvania

Philadelphia Auth for Indl Dev (Philadelphia) city svc agreement rfdg rev bnds (Retirement Sys)

Long Term Rating A/Stable Downgraded

Philadelphia Auth for Indl Dev (Philadelphia) (Afford Hsg Preserv Prog Proj)

Long Term Rating A/Stable Downgraded

Rationale

S&P Global Ratings lowered its rating on Philadelphia's existing general obligation (GO) bonds and parity ratings to 'A' from 'A+'. At the same time, we assigned our 'A' long-term rating to the Philadelphia Authority for Industrial Development's series 2018A revenue bonds and 2018B revenue refunding bonds. In addition, the rating on certain PAID debt with PNC Bank was lowered to 'AA/A-1' from 'AA+/A-1', due to lowered city rating. We also affirmed our 'AA+/A-1+', with TD Bank providing liquidity support. The outlook is stable.

The lowered rating reflects our view of the city's likely longer term credit trajectory as it continues to address the costs associated with managing its pension pressures and School District of Philadelphia (SDP) costs. While there have been concrete improvements with respect to the city's stronger reserve position and pension reforms since we revised the outlook to negative in November 2016, we believe it still faces ongoing financial uncertainty with likely deviations from the pension plans' current discount rate, our view of potential uncertainty around revenue support for the SDP and potential funding needs for the district in the outyears, and policy changes at the federal level. The rating reflects our view that the reforms will likely have a positive effect on the city's overall funding levels, but that the city's expected funding target of 80% in 13 years is aggressive and that notable improvements will likely take more time to come to fruition. Additionally, given a proposed property tax increase to support the SDP, a proposed slower decline in the city's wage tax, a sales tax increase in 2014, and a beverage tax that is bringing in lower revenues than originally anticipated, we believe it is likely that the city's outyear budgets could be highly reliant on a growth in revenues from economic activity to meet its expenditure needs and that additional increases in tax rates may be difficult for the city.

The stable outlook reflects our view that Philadelphia's pension reforms should help control its pension liability and the

city's achievement of a stronger reserve position places it in a better position to address what we view as potential uncertainties regarding school funding needs, potential revenue fluctuations, and the high fixed costs of the pensions. We believe the city's performance, while it may fluctuate, is now likely to be similar to its peers as it continues to address some of its bigger picture issues.

The 2018A bonds (Philadelphia Museum of Art Energy Savings Program) are being issued to finance energy savings agreement at the art museum and the 2018B bonds (City of Philadelphia-One Benjamin Franklin Parkway Project) are being issued to refund the 2007 series C bonds. Both issuances will include the cost of issuing the bonds.

The authority's 2018 bonds and existing city agreement revenue bonds are limited obligations of the city, payable solely from rental payments from the city to the authority under the lease. Although current city revenue secures rental payments, the prime lease provides that as long as the bonds remain outstanding, Philadelphia's obligation to pay rent is absolute and unconditional. Therefore, we rate these bonds equivalent to the GO rating.

The rating reflects our opinion of the city's:

- Adequate 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, which closed with balanced operating results in the general fund and an operating deficit at the total governmental fund level;
- Very weak budgetary flexibility, with an available fund balance in fiscal 2017 of 4.6% of operating expenditures on a budgetary basis but limited by our view of a limited capacity to reduce expenditures and a potential future limited capacity to raise revenues in outgoing years;
- Very strong liquidity, with total government available cash including liquid investments above 10% of total governmental fund expenditures and 3.0x governmental debt service, and access to external liquidity we consider exceptional;
- Weak debt and contingent liability position, with debt service carrying charges at 3.6% of expenditures and net direct debt that is 47.9% of total governmental fund revenue, as well as a large pension and other postemployment benefit (OPEB) obligation with a plan that is evolving through pension plan reforms as well as higher contribution rates, though we still view assumptions as optimistic; and
- Strong institutional framework.

Adequate economy

We consider Philadelphia's economy adequate. The city, with an estimated population of 1.6 million, is in Philadelphia County in southeastern Pennsylvania. It is the sixth-largest city in the U.S. in terms of population. It is in the Philadelphia-Camden-Wilmington MSA, which we consider to be broad and diverse. The city has a projected per capita effective buying income of 79.9% of the national level and per capita market value of \$97,581. It underwent two revaluations with its tax base for 2017 and 2018, resulting in growth each year. Overall, the city's assessed value (AV) grew by 11.9% over the past year to \$153.0 billion in 2018. The county unemployment rate was 6.8% in 2016. Leading city employers include Albert Einstein Medical, Children's Hospital of Philadelphia, Southeastern Pennsylvania Transit

Authority, and Comcast Corp. of Willow Grove Inc.

Philadelphia's economy is comparatively diverse with strong health care and higher education industries, with historically more moderate employment growth base, and a higher unemployment rate when compared with state and national levels. The city has realized levels of employment growth over the past two years which have been higher than the U.S. rates, mitigating some of the economic concerns about five years of slower-than-U.S. employment growth through 2015. In 2016 and 2017, IHS Markit Economic indicates total employment growth above the U.S. level, at around 2%, but expected to fall below national levels in the out years. A recent bright spot for the city has been the change in population growth, after declines through 2006. Philadelphia has seen a rebound, particularly in the 25-34 age bracket between 2011-2015. According to projections, this population growth is anticipated to moderate somewhat in the upcoming years. The economy shows signs of stability, though projections suggest slower-than-U.S. levels of employment and growth. The stability of the economy will play an important role in the city's ability to service its expenditure needs as outlined. The city still has a comparatively low per capita effective buying income and a 26% poverty rate compared with national U.S. Census Bureau 2016 estimate of 12.7%, and it notes in its financial forecast that its population also holds high levels of deep poverty. These statistics feed into both the service-level needs and the ability to tap into the population for additional revenues.

Strong management

We view the city'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. Management practices include the following:

- Management develops revenue and expenditure assumptions during budget preparation based on an evaluation of past trends, adjusted for internal and external forecasts.
- Budget officials use regional economic models for revenue forecasting and consult with regional Federal Reserve Bank officials. The city submits quarterly reports to elected officials and the Pennsylvania Intergovernmental Cooperation Authority (PICA).
- Philadelphia annually produces formal rolling five-year financial plans that elected officials review and PICA approves. The five-year plan factors in all known effects on revenue and expenditures and expected tax-rate reductions and labor-cost increases, as well as identifies risks to the plan. In cases where material challenges occur after the five-year plan's introduction, PICA requires the city to submit a revised plan.
- Management updates its six-year capital improvement program (CIP) annually and identifies funding sources for each project.
- The city's formal investment policy requires monthly monitoring and reporting of holdings to the treasurer's office, coupled with quarterly meetings to evaluate performance.
- The city's debt policy targets the maintenance of level debt service and principal amortization of tax-supported debt at 50% within 10 years. In addition, debt service on GO and other tax-supported debt should not exceed 15% of general fund expenditures and net direct debt should not exceed 3.5% of total AV.
- Philadelphia adopted an amendment to the home-rule charter, calling for a budget stabilization reserve and it targets maintaining a general fund balance between 6% and 8% of revenue. However, due to its current financial condition, it has yet to meet this target.

Adequate budgetary performance

Philadelphia's budgetary performance is adequate, in our opinion, and improved from its previous years of weak performance. The city had a slight surplus in its general fund, but a slight deficit across all governmental funds in fiscal 2017. Looking forward, financial performance depends on several moving parts. Fiscal 2018 is showing close to break-even results as of the current five-year forecast, with the potential for the city to build its reserves if it doesn't spend down money set aside for contingency expenditures.

An initial look at the city's operations for fiscal 2019 (based off the recently released five-year plan and the mayor's budget) shows an anticipated deficit through the next couple of years, though the city's new practice of building in contingencies for uncertainty around labor agreements and federal policy provides some expenditure cushion that could result in either break-even or possibly surpluses at year-end, depending on how strong revenue growth is and whether expenditures remain as expected. New in fiscal 2019 is the need to accommodate revenue for the city's school system. For fiscal 2019, the mayor is proposing a property tax increase that will feed directly to the SDP, which is now under local control. Additionally, the proposal has the city building room in its budget to support the SDP. Specifically for the school district, the budget proposes a rate increase in the real estate transfer tax and a slowdown in the decrease in the wage and earnings tax. While the latter is not a tax increase, the city's comparatively high wage and earnings tax is often cited as a competitive weakness. Delays in lowering the tax, if sustained, may have consequences down the line. Also for the school, an additional \$20 million will also have to be identified in the general fund budget that is not currently covered by additional tax increases.

Financial statements are audited according to generally accepted accounting principles (GAAP), but management also reports results on a budgetary basis due to the significant amount of business-income-and-receipts-tax (BIRT) payments received in advance of being earned on a modified-accrual basis. Philadelphia has reported and prepared its five-year financial plan for PICA--on a budgetary basis for more than 10 years due to city-adopted legislation that changed the definition of BIRT but not the related cash flow. Ultimately, legislation resulted in the shifting of the city's April and May BIRT collections, or roughly one-half of annual receipts, to the subsequent fiscal year on a modified-accrual basis. We continue to adjust the city's GAAP results to reflect the budgetary basis because we believe BIRT receipts should be recognized in the fiscal year in which they are collected, and we view the budgetary basis as representative of the city's revenue profile. Moreover, we believe the disclosure provided on a budgetary basis is robust and well vetted.

Philadelphia's primary general fund revenue sources are wage-and-earnings tax receipts (35% of total fiscal 2017 general fund revenue), real property taxes (14%), and BIRT (11%). The city's beverage tax added roughly \$39 million, or 1%. The beverage tax is intended to support the city's rebuild initiative. There remains a pending lawsuit challenging this tax. Audited 2017 revenue from other governments for the general fund was 8.3% of total revenues. Federal and state grants represented 31% of the city's total revenues for 2017. We believe there is some potential for the city to be affected by uncertainty at the federal or the state government level.

Very weak budgetary flexibility

Philadelphia's budgetary flexibility is very weak, in our view, which reflects more our view of its high fixed costs and our concerns regarding its ability to cut future expenditures or potentially raise additional revenue than of the available balance, which has actually improved over the past year. The city's overall available fund balance on a budget basis

increased to roughly 4.6%, or \$189 million, up from 3.5% or \$148 million in 2016. On a GAAP basis (which doesn't account for the BIRT revenue), the city would have a 3.9% available reserve in 2017, up from 2%. Supporting our view of the city's potentially limited capacity to reduce expenditures are its high fixed costs, which for pensions alone will be around 15% in 2019. Our view of potential future resistance to additional tax increase is partially based on the belief that in conjunction with previous tax increases, if all 2019 proposed tax changes are implemented as planned, future tax increases could be hard to achieve. Additionally, the city raised its beverage tax, but continues to face lawsuits regarding the tax itself and revenue results have been disappointing.

Fiscal 2018 estimates currently show a slight deficit with roughly four months left in the fiscal year, though the city could end up seeing an addition to its reserves if it does not spend identified contingencies in the current year. Philadelphia has built in two additional reserve cushions for labor negotiations which expired at the end of fiscal 2017, and a cushion to absorb potential effects from changes at the federal level. The city's outyear reserves will depend on both whether revenue continues its positive trajectory and the resulting contingent cost results for the city. For fiscal 2018, sales tax grew by an estimated 5%, which is a positive sign for revenues, though some of that growth reflects its expanding base. We view the increases in the labor and federal contingency budget lines as a strong planning mechanism that provides some comfort regarding the uncertainties in the outyears. There is potential that reserves could end stronger than the five-year plan currently indicates.

Very strong liquidity

We believe the city has very strong liquidity, with total government available cash (when including liquid investments) above 10% of total governmental fund expenditures and 3.0x governmental debt service. We consider the city to have exceptional access to external liquidity. We believe Philadelphia's frequent issuance of multiple security types during the past 15 years illustrates its exceptional access to external liquidity. We do not consider its investments aggressive.

We do not believe the various liquidity facility agreements supporting service and lease-agreement debt expose the city to nonremote contingent liability risk. With certain limited exceptions, service agreements expressly prohibit the acceleration of service fees supporting debt service on the related obligations or credit facility payments. The exception is debt issued to fund the city's stadium projects; in those cases, agreements allow for term but not principal acceleration.

Furthermore, we do not believe the city's swaps create a nonremote contingent liability risk due to the wide margin between its rating and the 'BBB-' rating trigger. The mark-to-market-value across its six swap agreements is a negative \$44 million from the city's perspective, which is 8.3% of the current notional amount.

Weak debt and contingent liability profile

Philadelphia has a weak debt and contingent liability position, with debt service carrying charges at 3.6% of expenditures and net direct debt that is 47.9% of total governmental fund revenue, as well as a large pension and OPEB obligation with a plan that is evolving through pension plan reforms as well as higher contribution rates. Our concern remains that some assumptions regarding the estimated plan liability remain aggressive and that improvements in the funding will rely on strong market returns.

Principal debt amortization is average, in our opinion, with about 50% scheduled to be retired within 10 years.

In our opinion, Philadelphia's large pension and OPEB obligation, with a plan that is evolving through pension plan reforms as well as higher contribution rates, remains a credit pressure. The city maintains two defined-benefit plans: the city plan and the gas works plan. The city plan covers all officers and employees of the city, as well as those of three quasigovernmental agencies. The gas works plan covers employees of Philadelphia Gas Works (PGW). We believe Philadelphia has taken steps to accelerate the full funding of its pension by lowering the assumed rate of return and, therefore, increasing annual contributions, as well as actively seeking and obtaining material pension reforms through collective bargaining. In addition, it continues to collect from a permanent 1% increase in the sales tax rate, effective July 1, 2014, to benefit the pension fund after school district distributions. Previous contributions were net of debt service payments for the SDP, but sales tax revenue contributions are set to double in 2019 over 2017 levels as the SDP debt is paid off. This contribution is part of the city's revenue recognition policy to ensure contributions remain higher than the minimum municipal obligation (MMO) beginning in fiscal 2018. The city is projecting these reforms will result in an 80% funded pension plan at the end of 13 years.

Philadelphia produces two actuarial required contribution (ARC) calculations annually: one based on its MMO) and the other on a decades-old policy that amortizes its pension unfunded actuarial accrued liability (UAAL) much more rapidly than the MMO. The \$706 million represents 112% of the MMO. Philadelphia's combined required pension and actual OPEB contribution totaled 10.7% of total governmental fund expenditures in fiscal 2017. Of that amount, 9.1% represented required contributions to pension obligations and 1.7% represented OPEB payments. The city has consistently contributed more than 100% of the MMO to its plan since fiscal 2006, and the plan's funded level was 43.5% in 2017, a decline from 51.6% in fiscal 2006. Management attributes this decline largely to investment losses and reductions to the assumed earnings rate.

We believe the city's reforms, including plans that are now capping the defined benefit and combining it with a defined contribution for new employees, coupled with higher contribution rates for higher salary participants, should improve the funding over time. However, we are concerned that, due to market performance, pension funding levels may not reach 80% at the end of 13 years. The city's reduced discount rate is, in our view, still above average. Actual actuarial investment returns over the past five and 10 years have been 7.7% and 5.8%, respectively. However, the past year and past two years saw returns of 17.2% and 15.2%, respectively, which has helped offset slightly the necessary increase in contributions as the city lowers its assumed return rate. Additionally, making the 13-year time frame problematic is that, even during times of strong returns, in lieu of offering retirees cost-of-living adjustments, the city, through legislative policy, maintains a pension-adjustment fund supported with 50% of excess earnings between 1% and 6% of the actuarial assumed earnings rate; it uses this fund to pay for additional benefit distributions. This means retirees share in a portion of the gains when market returns exceed 1% of the assumed rate of return but not on the losses. While recent reductions to the assumed return are conservative overall, it also lowers the threshold needed for the pension-adjustment fund contribution to be triggered in years with strong market performance.

The city's OPEB UAAL was \$1.94 billion as of July 2016. It funds OPEBs on a pay-as-you-go basis. The plan is a self-administered, single-employer, defined-benefit plan and the benefits are to provide health care for five years subsequent to separation for its eligible retirees. Some union-represented members might be able to defer their benefits. Nevertheless, the amount Philadelphia pays will be fixed at the amount the member would have paid at the separation date.

Strong institutional framework

The institutional framework score for Philadelphia is strong.

Outlook

The stable outlook reflects our view of Philadelphia's improved financial cushion, bolstered by what we view as strong management. It also reflects our view that the city's pension reforms position it well to address its significantly underfunded plans, such that we expect to see some improvement over the longer term. The outlook takes into account that the city will address its ongoing pension costs and accommodate potential uncertainty regarding the SDP's revenue needs.

Upside scenario

Should the city be able to address its longer term pension liabilities with reductions in its unfunded levels and estimates based on what we view as reasonable assumptions, while simultaneously absorbing additional SDP-related costs and grow its reserves, we could raise the rating.

Downside scenario

Should the city's contributions weaken, or if the funding level of its pension fund does not improve, we could lower the rating. A weakening in the city's revenues or an increase in expenditures, whether from ongoing operations, pensions, or potential school district needs such that reserves weaken or operations return to consecutive deficits, could also lead to a further downgrade.

Ratings Detail (As Of March 26, 2018)		
Philadelphia GO		
<i>Long Term Rating</i>	A/Stable	Downgraded
Philadelphia GO		
<i>Long Term Rating</i>	A/Stable	Downgraded
Philadelphia GO		
<i>Long Term Rating</i>	A/Stable	Downgraded
Philadelphia GO (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia GO (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia GO (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia GO (AGM) (SECMKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia GO (AGM) (SEC MKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia GO (BAM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded

Ratings Detail (As Of March 26, 2018) (cont.)		
Philadelphia GO (BAM) (SECMKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia GO (BAM) (SECMKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia GO (BAM) (SECMKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia GO (BAM) (SECMKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia GO (BAM) (SECMKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia GO (BAM) (SECMKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia GO		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia Auth for Indl Dev, Pennsylvania		
Philadelphia, Pennsylvania		
Philadelphia Auth for Indl Dev (Philadelphia) multi modal lse - 2007B-3		
<i>Long Term Rating</i>	AA/A-1	Downgraded
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia Auth for Indl Dev (Philadelphia) GO		
<i>Long Term Rating</i>	A/Stable	Downgraded
<i>Unenhanced Rating</i>	NR(SPUR)	
Philadelphia Auth for Indl Dev (Philadelphia) GOEQUIV (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia Auth for Indl Dev (Philadelphia) GOEQUIV (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia Auth for Indl Dev (Philadelphia) GOEQUIV (AGM) (SECMKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia Auth for Indl Dev (Philadelphia) GOEQUIV (AGM) (SEC MKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia Auth for Indl Dev (Philadelphia) GOEQUIV (AGM) (SEC MKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia Auth for Indl Dev (Philadelphia) GO (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia Auth for Indl Dev (Philadelphia) JOINTCRIT		
<i>Long Term Rating</i>	AA+/A-1+	Affirmed
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia Auth for Indl Dev pension fdg		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Downgraded
Philadelphia Auth for Indl Dev (Philadelphia) multi modal lse - 2007B-4		
<i>Unenhanced Rating</i>	NR(SPUR)	

Ratings Detail (As Of March 26, 2018) (cont.)

Philadelphia Auth for Indl Dev (Philadelphia) GO

Unenhanced Rating A(SPUR)/Stable Downgraded

Philadelphia Mun Auth, Pennsylvania

Philadelphia, Pennsylvania

Philadelphia Mun Auth (Philadelphia) lse rev

Long Term Rating A/Stable Downgraded

Philadelphia Mun Auth (Philadelphia) GO

Long Term Rating A/Stable Downgraded

Philadelphia Mun Auth (Philadelphia) GO city agmt

Long Term Rating A/Stable Downgraded

Philadelphia Mun Auth (Philadelphia) GO city agmt (AGM)

Unenhanced Rating A(SPUR)/Stable Downgraded

Philadelphia Mun Auth (Philadelphia) GO (BAM) (SECMKT)

Unenhanced Rating A(SPUR)/Stable Downgraded

Philadelphia Mun Auth (Philadelphia) (BAM)

Unenhanced Rating A(SPUR)/Stable Downgraded

Philadelphia Mun Auth (Philadelphia) lse

Unenhanced Rating A(SPUR)/Stable Downgraded

Philadelphia Redev Auth, Pennsylvania

Philadelphia, Pennsylvania

Philadelphia Redev Auth (Philadelphia) rev rfdg bnds (Philadelphia) ser 2015A

Unenhanced Rating A(SPUR)/Stable Downgraded

Philadelphia Redev Auth (Philadelphia) GO

Long Term Rating A/Stable Downgraded

Philadelphia Redev Auth (Philadelphia) GOEQUIV

Long Term Rating A/Stable Downgraded

Philadelphia Redev Auth (Philadelphia) GO equiv (BAM) (SECMKT)

Unenhanced Rating A(SPUR)/Stable Downgraded

Philadelphia Redev Auth (Philadelphia) (Neighborhood Transformation Initiative) GO

Long Term Rating A/Stable Downgraded

Philadelphia Redev Auth (Philadelphia) (Neighborhood Transformation Initiative) GO (BAM)

Unenhanced Rating A(SPUR)/Stable Downgraded

Many issues are enhanced by bond insurance.

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