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# Pittsburgh (City of) PA

Update to credit analysis

## Summary

Pittsburgh, PA's (A1 stable) credit profile continues to be bolstered by its diverse and vibrant tax base, with management reporting ongoing expectation of new development in the city - both commercial and residential. Pittsburgh's robust $19 billion base is supported by the anchoring presence of several renowned education and medical institutions ("eds & meds"), which has driven substantial ancillary business growth in technology, robotics and life sciences industries in the city. Though wealth levels are below national averages, and high poverty is a persistent concern, resident wealth is rising, and unemployment continues to improve. Pittsburgh has delivered strong operating surpluses over the last few years, and current reserve and liquidity levels are satisfactory compared to similarly sized peer cities in the US. The city's credit profile continues to be constrained by a notable pension liability, though its moderate debt burden is benefitted by a rapid amortization.

Our view of Pittsburgh's credit profile also incorporates the substantive capital needs of the city's water and sewer utility, the Pittsburgh Water and Sewer Authority (A3 stable), as well as the utility's considerable existing debt burden. Though the authority's finances have improved considerably during the last year, and while the authority is separately governed from the city, given the essentiality of the utility, any prolonged or material stress in the authority's financial position could potentially impact city finances in the future.

## Credit strengths

» Anchoring eds & meds institutions provide economic stability and ancillary business growth

» Diverse economy; regional urban hub attracting younger, educated population

» Material fund balance growth over the last four years; continued stability expected

» Rapid amortization of debt will reduce fixed costs in the near term and provides room for additional debt issuance over the longer horizon

» Formalized fund balance and operational policies implemented upon Act 47 exit

## Credit challenges

» Substantial underfunded pension liability

» Relatively high debt burden; overlapping debt is considerable

» Above average fixed costs

» Weakness at the water & sewer utility could impact city's competitiveness / could impact city's finances

## Rating outlook

The outlook is stable based on our expectation of continued moderate tax base growth and economic vibrancy as well as city projections that reflect continued surplus operations over the near term horizon.

## Factors that could lead to an upgrade

» City finances and socioeconomic profile positively and materially impacted by growing economic diversity

» Growth in general fund reserves

## Factors that could lead to a downgrade

» Material deterioration of pension funding levels that is not quickly remedied

» Material negative trends relating to the city's water & sewer utility; any need for the city to financially support the utility

## Key indicators

Exhibit 1

| Pittsburgh (City of) PA | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| Economy/Tax Base | | | | | |
| Total Full Value ($000) | $14,229,858 | $16,422,122 | $16,506,773 | $17,777,692 | $18,201,431 |
| Population | 306,430 | 306,045 | 305,928 | 305,305 | 305,012 |
| Full Value Per Capita | $46,496 | $53,680 | $54,067 | $58,285 | $63,121 |
| Median Family Income (% of US Median) | 83.1% | 84.2% | 85.4% | 87.1% | 87.6% |
| Finances | | | | | |
| Operating Revenue ($000) | $485,531 | $523,787 | $558,061 | $545,781 | $575,051 |
| Fund Balance ($000) | $58,674 | $72,715 | $102,742 | $120,078 | $125,642 |
| Cash Balance ($000) | $51,573 | $48,828 | $74,098 | $102,418 | $92,859 |
| Fund Balance as a % of Revenues | 12.1% | 13.9% | 18.4% | 22.0% | 21.8% |
| Cash Balance as a % of Revenues | 10.6% | 9.3% | 13.3% | 18.8% | 16.1% |
| Debt/Pensions | | | | | |
| Net Direct Debt ($000) | $552,414 | $497,890 | $415,161 | $402,874 | $389,002 |
| 3-Year Average of Moody's ANPL ($000) | $1,160,785 | $1,258,910 | $1,284,479 | $1,329,611 | $1,461,222 |
| Net Direct Debt / Full Value (%) | 3.9% | 3.0% | 2.5% | 2.3% | 2.1% |
| Net Direct Debt / Operating Revenues (x) | 1.1x | 1.0x | 0.7x | 0.7x | 0.7x |
| Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%) | 8.2% | 7.7% | 7.8% | 7.5% | 8.0% |
| Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x) | 2.4x | 2.4x | 2.3x | 2.4x | 2.5x |

*Source: Moody's Investors Service; Pittsburgh PA's audited financial statements*

## Profile

The city of Pittsburgh is located at the mouth of the Ohio River in Allegheny County (Aa3 stable) in far western Pennsylvania (Aa3 stable). It is the second largest city in the commonwealth with a population of 305,704 as of 2017.

## Detailed credit considerations

### Economy and tax base: large, growing base with strong institutional presence

Pittsburgh's large $19.6 billion tax base boasts a five year average annual growth rate of 6.3%, well above the median for commonwealth cities of 2.1%. The city strongly benefits from an increasingly diverse and dynamic economy, long supported by a strong institutional presence from nationally recognized eds & meds institutions. While these institutions certainly have an anchoring impact on the city's economy, they have also helped to encourage innovation, making Pittsburgh attractive to tech giants like Amazon, Facebook, Apple and Uber. Though the material size of Pittsburgh's non-profit sector limits its ability to capture revenue from all property in the city - roughly 40% of city property is tax exempt - this substantial part of the local economy has proven to be a catalyst for Pittsburgh's transformation from a city historically dependent on steel, to a city that is now characterized by a vibrant and material knowledge-based jobs sector.

Notable Pittsburgh institutions include the University of Pittsburgh (Aa1 stable) and the University of Pittsburgh Medical Center (A1 negative) as well as Carnegie Mellon University, and Duquesne University (A2 stable). These institutions graduate thousands of students each year, and there is evidence that the city is better able to retain graduates today than in the past; the city's population of 20 - 34 year olds is nearly 35% as of 2017, versus 30% just four years ago. The city's median age is just 33, compared to median age in the commonwealth of 41. The population is also becoming better educated, with close to 35% of people in the Pittsburgh MSA possessing a bachelor's degree or higher, compared to just 30% for the commonwealth.

Favorably, the city reports both residential and considerable commercial development, particularly the redevelopment of its Strip District Produce Terminal for mixed-use, which management estimates as a $110 million project. The city also reports expectation of $1.0 to $2.0 billion of eds & meds development over the next five years, particularly from Carnegie Mellon and University of Pittsburgh expansions. Management also reports a burgeoning condominium and townhome market in the city, appealing to younger buyers.

While these are strong positive economic trends, these changes to the city's tax base have yet to substantially improve socioeconomic indicators. Poverty remains a concern at more than 20%, and while median family income has improved in the broader metro area, median family income for city residents is still below average, at just 87% of the nation. Further, the city continues to struggle to maintain population, with 2017 census data showing a population decline of roughly 3,300 (about 1%) from the prior year. We also note the city's growing capital needs, particularly with regard to its aging utility infrastructure.

### Financial operations and reserves: Stable financial position with consistent operating surpluses

In its third quarter 2019 unaudited financial results, the city estimates a healthy operating surplus for the year of $13.8 million, with total revenues of $587 million up 2.9% from the prior year. Management reports continued strength of its earned income tax and real estate tax, with both line items expected to be stable in 2020. As of the 2020 operating budget, the city reports an estimated ending 2019 cash-based fund balance, after transfers to pay-go capital and early childhood education projects, of $85.8 million, or a satisfactory 14.6% of revenue.

The city's forward looking projections favorably assume structurally balanced operations in each of the next five years. Though the city expects to spend down fund balance somewhat for pay-go capital, the use of fund balance for capital expenditures is offset by a rapidly amortizing debt burden with limited new issuance expected in the near term. The city's debt service declined by nearly $22 million between 2018 and 2019. This increases the city's flexibility to spend not only on pay-go capital needs, but to also increase its contributions to its pension funds while still maintaining surplus operations.

Upon its exit from Act 47, Pennsylvania's program for distressed cities, in February 2018, Pittsburgh institutionalized certain policies to ensure financial health going forward, such as a minimum budgetary fund balance requirement of 10%. The city has also pledged to keep annual debt service to less than 12% of expenditures. These are positive guidelines, particularly given Pittsburgh's relatively high current fixed cost burden. Pittsburgh's pension and OPEB liabilities are sizeable, and so annual contributions are material. The city's overall fixed cost burden was 33% for fiscal 2018.

An elevated fixed cost burden can severely impact a government's financial flexibility. Favorably, Pittsburgh realized a considerable drop-off in debt service in 2019, and again in 2020, 2027 and 2033. This should allow for increased flexibility, as well as additional debt capacity to meet the city's capital needs; Pittsburgh's current capital plan includes new money debt issuance of $250 million over the next five years, primarily to address infrastructure needs.

#### LIQUIDITY

Pittsburgh's unrestricted cash balance was $92.5 million as of 2018 year end, or about 16% of revenue, which is satisfactory given the city's current credit profile, though its liquidity is still somewhat below the median for similarly sized US cities (22%).

### Debt and pensions: Above average debt and pension burden with high fixed costs

Pittsburgh's net direct debt of is 2.3% of full value, considerably higher than the median for US cities of 1.2%. However, Pittsburgh benefits from a very rapid amortization of its debt, with 85% of current debt repaid within 10 years. The city's 2018 debt service of $74 million was down about $20 million from the year prior, and equated to just 13% of general fund revenue. Though existing debt will continue to amortize rapidly, the city does have plans to issue roughly $50 million annually going forward to finance ongoing infrastructure maintenance and improvements. Nevertheless, the accelerated amortization of debt will allow for further debt service savings in 2027 and 2033, leaving the city ample room for additional debt over the longer term if required.

Despite some debt service reductions that have already been realized, the city's fixed costs (annual debt service, pension contributions, and post-employment health benefits) remain elevated at $191 million at fiscal year end 2018, or 33% of general fund revenues.

#### DEBT STRUCTURE

All of the city's debt is fixed rate and matures over the long term.

#### DEBT-RELATED DERIVATIVES

The city is not party to any derivative agreements.

#### PENSIONS AND OPEB

While Pittsburgh's debt is declining, a credit positive, its pension liabilities continue to increase. The city's net direct debt plus its Moody's adjusted net pension liability ("ANPL") plus its adjusted net OPEB liability ("ANOL") equated to more than 450% of revenue and an elevated 14.5% of full value for 2018. Pittsburgh's unfunded pension and OPEB liabilities will continue to be a challenge unless a more proactive approach to funding is undertaken, and is a material negative factor for the city's credit profile, though favorably, the city has committed to making contributions above the MMO in 2019 and in each of the next five years.

The city contributes to three single employer defined-benefit pension plans, a Municipal Plan, the Policemen Plan, and the Firemen Plan. The city also retains the pension obligation for PWSA employees. The combined adjusted net pension liability (ANPL), under Moody's methodology for adjusting reported pension data, was $1.66Bn or an above average 2.89 times operating revenues and an elevated 9.13% of full value for fiscal 2018.

Under Act 47 (which the city exited in Feb 2018) the Commonwealth required the city's aggregate pension funding level to be at least 50 percent by December 31, 2010 to avoid having the city's pension funds seized and administered by the Pennsylvania Municipal Retirement System. The city met this requirement by transferring $45 million to the Comprehensive Trust Fund in 2010 and agreeing to dedicate parking tax revenues for the next 22 years.

While the city's actuarial pension assets include the present value of future dedicated parking revenues, the city's reported unfunded liability for accounting purposes, as well as our ANPL, exclude future parking revenues from current assets. Instead, we treat the city's dedicated parking revenues as contributions when they are generated and deposited into its pension systems.

The city contributed $13.4 million of the parking tax revenue to the Fund from 2011-2017, and increased that contribution to $26.8 million in 2018 through 2041. In addition to the $26.8 million parking revenue contribution, the city also put $10 million in gaming funds and $3.3 million from other sources toward the total pension contribution - $89.8 million for the fiscal year. Positively, these additional contributions in 2018 resulted in a payment that was 114% of our "treadwater" calculation - the amount needed to keep the liability level.

The city reports its current pension funding level at roughly 60%, which includes the present value of the future parking revenue. If this asset was excluded, the reported funded ratio, according to audited financial statements, is closer to 32%. The city has no plan to move its discount rate below the current 7.25%.

### Management and governance

Upon its exit from Act 47 in 2018, Pittsburgh enacted a series of amendments to the city code to institutionalize certain provisions of Act 47, such as maintaining a minimum fund balance of 10%, a required supplemental annual pension contribution, and the publication of quarterly reports. The city also set a debt service threshold of 12% of total expenditures to ensure that it can control its debt burden going forward. We believe these steps are reflective of prudent management, and management's commitment to strengthen the city's finances. We expect continued strong controls of expenditures coupled with conservative budgeting practices in the future.

Pennsylvania cities have an Institutional Framework score of Aa, which is high compared to the nation. Institutional Framework scores measure a sector's legal ability to increase revenues and decrease expenditures. Cities major revenue sources, property taxes, are moderately predictable but most cities are also exposed to economically sensitive income taxes. Unpredictable revenue fluctuations tend to be moderate, or between 5-10% annually. Across the sector, fixed and mandated costs are generally less than 25% of expenditures. However, Pennsylvania has public sector unions, which can limit the ability to cut expenditures. Unpredictable expenditure fluctuations tend to be moderate, between 5-10% annually.

## Rating methodology and scorecard factors

The US Local Government General Obligation Debt methodology includes a scorecard, a tool providing a composite score of a local government's credit profile based on the weighted factors we consider most important, universal and measurable, as well as possible notching factors dependent on individual credit strengths and weaknesses. Its purpose is not to determine the final rating, but rather to provide a standard platform from which to analyze and compare local government credits.

Exhibit 2

**Pittsburgh (City of) PA**

| Rating Factors | Measure | Score |
|---|---|---|
| Economy/Tax Base (30%) [1] | | |
| Tax Base Size: Full Value (in 000s) | $19,296,244 | Aaa |
| Full Value Per Capita | $63,264 | A |
| Median Family Income (% of US Median) | 87.6% | A |
| Notching Factors:[2] | | |
| Institutional Presence | | Up |
| Regional Economic Center | | Up |
| Outsized Unemployment or Poverty Levels | | Down |
| Finances (30%) | | |
| Fund Balance as a % of Revenues | 21.8% | Aa |
| 5-Year Dollar Change in Fund Balance as % of Revenues | 6.8% | A |
| Cash Balance as a % of Revenues | 16.1% | Aa |
| 5-Year Dollar Change in Cash Balance as % of Revenues | 2.5% | A |
| Notching Factors:[2] | | |
| Other Analyst Adjustment to Finances Factor: | | Down |
| Management (20%) | | |
| Institutional Framework | Aa | Aa |
| Operating History: 5-Year Average of Operating Revenues / Operating Expenditures (x) | 1.0x | A |
| Debt and Pensions (20%) | | |
| Net Direct Debt / Full Value (%) | 2.3% | A |
| Net Direct Debt / Operating Revenues (x) | 0.8x | A |
| 3-Year Average of Moody's Adjusted Net Pension Liability / Full Value (%) | 7.6% | Baa |
| 3-Year Average of Moody's Adjusted Net Pension Liability / Operating Revenues (x) | 2.5x | A |
| Notching Factors:[2] | | |
| Other Analyst Adjustment to Debt and Pensions Factor (specify): | | Down |
| | Scorecard-Indicated Outcome | A1 |
| | Assigned Rating | A1 |

[1] Economy measures are based on data from the most recent year available.
[2] Notching Factors are specifically defined in the US Local Government General Obligation Debt methodology dated December 16, 2016.
[3] Standardized adjustments are outlined in the GO Methodology Scorecard Inputs Updated for 2019 publication.
*Source: US Census Bureau, Moody's Investors Service*

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