Summary:
Cambridge, Massachusetts; General Obligation

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Rationale

S&P Global Ratings assigned its 'AAA' rating to Cambridge, Mass.' series 2020 general obligation (GO) municipal-purpose loan bonds and affirmed its 'AAA' rating on the city's existing GO debt. The outlook is stable.

Security and use of proceeds

The city's full-faith-and-credit pledge, subject to Proposition 2-1/2 limitations, secures the GO debt. Despite commonwealth levy-limit laws, we did not make a rating distinction between Cambridge's limited-tax GO pledge and general creditworthiness because our analysis of its financial and economic conditions already includes the tax limitation imposed on its revenue-raising ability.

We rate Cambridge higher than the sovereign based on the application of our "Ratings Above The Sovereign: Corporate And Government Ratings—Methodology And Assumptions" criteria (published Nov. 19, 2013, on RatingsDirect). We believe the city can maintain better credit characteristics than the nation in a stress scenario based on its predominantly locally derived revenue base and our view that pledged revenue supporting bond debt service is at limited risk of negative sovereign intervention.

We understand officials intend to use series 2020 bond proceeds to fund various citywide projects, including school renovations and sewer improvements.

Credit overview

Cambridge is an affluent suburb immediately adjacent to Boston. Home to both Harvard and the Massachusetts Institute of Technology (MIT), the city is at the epicenter of biotech, pharmaceutical, and other knowledge-based sectors, which continue to generate growth in the tax base. The city faces challenges in addressing housing, transportation, and other infrastructure needs. However, it has a history of significant forward-looking financial planning and a track record of consistently outperforming the budget. We expect Cambridge to remain a desirable location to live and work, sustaining economic growth that will assist management in meeting future challenges.

The long-term rating further reflects our view of the following factors:

- Very strong economy, with access to a broad and diverse metropolitan statistical area (MSA);
• Very strong management, with strong financial policies and practices under our Financial Management Assessment (FMA) methodology;
• Strong budgetary performance, with operating surpluses in the general fund and at the total governmental fund level in fiscal 2019;
• Very strong budgetary flexibility, with an available fund balance in fiscal 2019 of 53% of operating expenditures, and the flexibility to raise additional revenues despite statewide tax caps;
• Very strong liquidity, with total government available cash at 61.0% of total governmental fund expenditures and 6.8x governmental debt service, and access to external liquidity we consider strong;
• Adequate debt and contingent liability position, with debt service carrying charges at 9.0% of expenditures and net direct debt that is 56.5% of total governmental fund revenue, as well as low overall net debt at less than 3% of market value and rapid amortization, with 81.9% of debt scheduled to be retired in 10 years, but significant medium-term debt plans and a large pension and other postemployment benefit (OPEB) obligation; and
• Strong institutional framework score.

Very strong economy
We consider Cambridge's economy very strong. The city, with an estimated population of 113,682, is in Middlesex County, directly across the Charles River from Boston. It is in the Boston-Cambridge-Newton MSA, which we consider to be broad and diverse. The city has a projected per capita effective buying income of 173% of the national level and per capita market value of $483,347. Overall, market value grew by 12.2% over the past year to $54.9 billion in 2020. The county unemployment rate was 2.7% in 2018.

Directly adjacent to Boston, Cambridge is an integral part of the larger broad and diverse MSA. Two subway lines, multiple highways, and a commuter rail connect Cambridge directly to downtown Boston. Harvard University and MIT, its two leading employers and two of the largest taxpayers, anchor the local economy. They serve as knowledge centers and focal points for dozens of start-ups, research centers, and life-science and high-technology companies. Microsoft, Google, Amazon, Apple, Facebook, Kayak, Pfizer, IBM, and Pegasystems have offices in the city. Behind the growth of the economy is a talented workforce—the American Community Survey conducted by the Census Bureau notes that residents are exceptionally well educated, with 77% of the 25-or-older population possessing a four-year college degree and 49% possessing a graduate degree—and a culture that promotes innovation and development.

As the city's population continues to grow, management is working through the challenges of housing new residents and trying to remain affordable. We understand that officials are working to increase the number of new housing starts to support sustained population growth. Officials note that there are over 1,800 units currently under construction throughout the city and that an additional 3,100 have been approved for development. In addition, affordable housing remains a priority. The city recently celebrated the 30th anniversary of the Cambridge Affordable Housing Trust, which has created over 3,000 affordable homes in the city. Further, it committed $9.7 million through the fiscal 20 capital budget to this trust to continue plans to increase affordable housing initiatives. We believe that housing, along with transportation and infrastructure improvements, will present the largest credit challenges to the city. Recent investments in non-vehicular transportation, including bicycle infrastructure and the rail network, are likely to add to the desirability of the community and help generate continued tax base growth.
The tax base is about 60% residential and 38% commercial and industrial. Management reports significant new development, both residential and commercial, with several projects in various stages of development within the city's seven economic development districts. In one district, the 45-acre North Point, renamed Cambridge Crossing, includes expansion of a light-rail line. The city agreed to support the project by contributing $12.5 million for the relocation of the Lechmere Station in Cambridge, adjacent to Cambridge Crossing, with DivCoWest contributing an additional $12.5 million. While the city does not offer tax abatement programs, it makes targeted investments that facilitate and entice development, which we expect to continue.

The city's central location supports the economy, which benefits from its proximity to Boston and serves as the region's primary economic hub. As a desirable location in New England, Cambridge is uniquely positioned to continue drawing talent to its universities and colleges, and retaining graduates with an ever-evolving mixture of employment opportunities. We expect that the city's economy will remain very strong.

**Very strong management**

We view the city's management as very strong, with strong financial policies and practices under our Financial Management Assessment (FMA) methodology, indicating financial practices are strong, well embedded, and likely sustainable.

We believe Cambridge's greatest credit risks are threats to its vibrant and growing economy. In particular, rising sea levels from climate change could directly affect taxable properties. The city has a history of proactively addressing future challenges, and, to this end, management maintains a number of long-term plans that generate shorter term decision-making.

The city is currently developing a "Climate Change Preparedness & Resilience (CCPR) Plan," described by management as its blueprint for reducing greenhouse gas emissions and addressing flood risk and storm water management. Management expects to complete this plan in the spring of 2020. In addition, Cambridge conducted a "Climate Change Vulnerability Assessment" to identify its specific vulnerabilities and inform the CCPR. Finally, the city has also undertaken efforts to reduce residential trash disposal, plant and maintain new trees throughout the city, and expand curbside organics collection.

While these plans outline long-term roadmaps for a number of major challenges, the city's annual budget development process supports the overarching goals. The annually updated five-year financial plan and five-year CIP outline immediate fiscal challenges while determining and prioritizing immediate capital needs. Management uses historical trend analysis to develop line-item and departmental expenditure and revenue assumptions.

Active management of discretionary spending and ongoing monitoring of intrayear spending ensure adherence to the adopted budget. Budget-to-actuals and investments are reported quarterly to the finance and investment committees, respectively. Currently, the city invests in the state-run Massachusetts Municipal Depository Trust (MMDT) and bank deposits. It has formal debt management policies beyond debt limits prescribed by commonwealth statute that include informal targets for debt service-to-budget limits and net present value savings thresholds for refunding transactions.

In terms of budgetary reserves, city policy affirms its commitment to maintaining an unassigned fund balance in excess of 15% of the ensuing fiscal year's operating revenue and total general fund balance at least 25% of the following fiscal
year's operating revenue.

We also note that the city has taken notable steps to mitigate exposure to cyber-related risks.

**Strong budgetary performance**

Cambridge's budgetary performance is strong, in our opinion. The city had operating surpluses of 2.9% of expenditures in the general fund and 3.4% across all governmental funds in fiscal 2019.

Management fosters a culture of careful, conservative budgeting along with in-year performance monitoring, which has led to a multiyear trend of the city outperforming the adopted budget and adding to reserves at year-end. Fiscal 2019 continued that trend, with revenues and expenditures across the board outperforming the budget. We adjusted budgetary performance to account for recurring transfers, as well as the expenditure of capital grant revenue and bond proceeds. Local real and property taxes accounted for about 63% of audited general fund revenues. Departmental revenues were about 11.3% and intergovernmental revenue was 10.8%. The city accounts for its sewer use charges in the general fund; this was the fourth-largest revenue source, at 8.3%. We also note that 42% of the intergovernmental revenues, or $29.6 million of $70.8 million, was a pass-through payment from the state for the teachers' retirement system. We believe the city's operating revenue profile is inherently stable and predictable, with the majority of revenues coming from locally derived sources.

The fiscal 2020 operating budget totals $678.4 million, a 5.7% increase from the 2019 adjusted budget. Coinciding with potential long-term expenditure pressures identified by management, the 2020 budget includes increases for employee salaries, health insurance, and pension costs, and continues the city's annual $2 million transfer to the OPEB trust fund. Management reports that the use of reserves to address capital and other priorities increased in 2020, by approximately $30 million. In recent years, the budgetary surplus created by revenues and expenditures outperforming the budget more than covered the use of reserves. In 2020, we expect this is unlikely to happen, given management's projections, but expect year-end operating performance to be approximately break-even, with no material change in the year-end reserve position relative to 2019. We consequently expect budgetary performance to remain strong.

We note that the city is working to address many priority needs through the tax levy. In areas such as transportation, housing, school infrastructure, and climate change, the annual budget includes targeted short- and long-term investments. We believe the city's long-range capital and programming needs are being factored into current budget decisions. We expect that as it continues to invest in critical needs areas, it is unlikely that costs associated with these projects will significantly pressure the budget in a meaningful way, given management's forward-looking planning, the strength of the tax base, and the city's significant budgetary flexibility.

**Very strong budgetary flexibility**

Cambridge's budgetary flexibility is very strong, in our view, with an available fund balance in fiscal 2019 of 53% of operating expenditures, or $351.3 million. We expect the available fund balance to remain above 30% of expenditures for the current and next fiscal years, which we view as a positive credit factor. Over the past three years, the total available fund balance has remained at a consistent level overall, totaling 54% of expenditures in 2018 and 52% in 2017. In addition, the city has the flexibility to raise additional revenues despite statewide tax caps, which we view as a positive credit factor.
We expect budgetary flexibility to remain very strong, given the city's existing reserves and significant flexibility under the levy limit. We include the budget-stabilization fund in our calculations, which the city accounts for in committed general fund reserves. We do not anticipate a material change in available reserves, despite increased use of reserves in the current fiscal year. We also believe the city has significant flexibility under the state levy cap. It currently has $190.4 million in unused levy capacity, about 29% of the adopted 2020 operating budget.

Very strong liquidity
In our opinion, Cambridge's liquidity is very strong, with total government available cash at 61.0% of total governmental fund expenditures and 6.8x governmental debt service in 2019. In our view, the city has strong access to external liquidity if necessary.

We adjusted available cash to exclude cash held in the capital fund, housing trust, and certain special revenue funds, which we believe is generally not available for liquidity purposes. Cambridge is a regular market participant that issued GO bonds frequently, supporting what we view as strong access to external liquidity. We understand the city has not entered into any bank loans, direct-purchase or variable-rate debt, and does not have contingent-liquidity risks from financial instruments with payment provisions that change on the occurrence of certain events. It has consistently had a very strong liquidity profile, which we expect to continue.

Adequate debt and contingent liability profile
In our view, Cambridge's debt and contingent liability profile is adequate. Total governmental fund debt service is 9.0% of total governmental fund expenditures, and net direct debt is 56.5% of total governmental fund revenue. Overall net debt is low at 0.8% of market value, and approximately 81.9% of the direct debt is scheduled to be repaid within 10 years, which are, in our view, positive credit factors. Weakening our view of the city's debt profile are its significant medium-term debt plans.

Cambridge has about $547 million of total direct debt outstanding. As of June 30, 2019, $120 million outstanding was self-supporting water and sewer debt. Approximately $21 million of the current issue is expected to be self-supporting sewer debt. As the city continues investments in schools, fire stations, and other tax-backed projects, we believe it could add debt at a rate faster than outstanding principal is paid, and we believe the amount of new-money debt is likely to be significant. However, while the city's debt ratios are likely to weaken, we expect management will fully incorporate costs into the budget and do not expect it to pressure the overall rating.

Pension and other postemployment benefits (OPEBs)
• In our opinion, Cambridge's large pension and OPEB obligation is a credit weakness, although we view the use of an actuarially determined contribution (ADC) and OPEB prefunding as credit positive.
• While actuarially determined, we believe some of the assumptions used to build the required contribution are permissive and could lead to fluctuating and rising costs.
• The city's GASB Statement 75 net OPEB liability totals $618.7 million. OPEB costs are paid on a pay-as-you-go basis, but the city has set aside approximately $14.8 million in a trust, to which it expects to continue contributing $2 million annually.

As of June 30, 2019, the city participates in the following pension plans:
• City of Cambridge Retirement System: 79.89% funded with a $240.3 million proportionate share of the net pension liability

Cambridge's combined required pension and actual OPEB contributions totaled 7.7% of total governmental fund expenditures in 2019. Of that amount, 4.4% represented required contributions to pension obligations, and 3.3% represented OPEB payments. The city made 101% of its annual required pension contribution in 2019. The system recently lowered its discount rate to 7.5% from 7.75%, which we view positively, but it remains above the 6.5% discount rate we view as likely to mitigate contribution volatility. The system's adopted funding schedule uses a level-percent basis through 2021, but maintains the 2021 contribution level through 2025, with a decline in the final amortization payment in 2026. While contingent on the system meeting assumptions, no or little growth in the pension payment is likely to translate to declining costs as a percentage of expenditures, which we would view positively. We view the closed, seven-year amortization schedule positively. The system exceeded both our static and minimum funding progress metrics in the most recent year, indicating it is making progress in addressing current costs and the unfunded liability. We expect the city will continue to prefund OPEBs and while the obligations remain somewhat large, we expect management will continue to make progress in addressing these liabilities.

Strong institutional framework
The institutional framework score for Massachusetts municipalities is strong.

Outlook
The stable outlook reflects S&P Global Ratings' opinion of Cambridge's stable and growing economic bases, which, along with a very strong financial management environment, has led to predictable financial performance. While retirement costs could rise, along with an increasing debt burden, we expect management will incorporate these costs into the budget with no material effect on financial results over the long term. The rating is further supported by the city's very strong reserves levels, excess levy capacity, and very strong liquidity profile. We do not expect to change the rating during the two-year outlook period.

Downside scenario
While unlikely, if economic growth were to stagnate, along with rising fixed costs, leading to significant reserve drawdowns, we could lower the rating.

Related Research
• S&P Public Finance Local GO Criteria: How We Adjust Data For Analytic Consistency, Sept. 12, 2013
• Criteria Guidance: Assessing U.S. Public Finance Pension And Other Postemployment Obligations For GO Debt, Local Government GO Ratings, And State Ratings, Oct. 7, 2019

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.