



# City of Cambridge

## Executive Department

**LOUIS A. DePASQUALE**  
City Manager

**LISA C. PETERSON**  
Deputy City Manager

February 27, 2017

To the Honorable, the City Council:

I am pleased to inform you, the taxpayers, and all our residents that the City of Cambridge has retained its noteworthy distinction of being one of approximately 35 municipalities in the United States with AAA ratings from each of the nation's three major credit rating agencies. Each year since 1999, the City has received these ratings from Moody's Investors Service, S&P Global Ratings, and Fitch Ratings. This achievement allows the City to invest more money into important projects throughout Cambridge with a favorable interest rate. The agencies highlighted the City's strong financial position, including significant reserve levels; a large and diverse tax base; ample excess levy capacity under Proposition 2 ½; and a strong and experienced management team.

These ratings are in conjunction with the City's sale of General Obligation bonds (\$2 million in minibonds and \$59.4 million in the competitive sale). The minibond sale took place on February 17-23, 2017 and the competitive sale will take place on March 1, 2017. Capital projects funded in these sales include the King Open/Cambridge Street Upper School and Community Complex, sewer reconstruction, street and sidewalk reconstruction, and other municipal and school building renovations.

All three agencies have given the City a positive outlook. However, in reviewing Moody's criteria, it is important that we continue to pay attention to the factors listed below to ensure our AAA rating in the future.

- Material growth in the debt burden
- Significant increases in pension and other postemployment benefit (OPEB) liabilities
- Deterioration of the tax base or weakening of the local economy
- Trend of operating deficits that lead to a significant reduction in reserve levels

Based on this ongoing recognition from the rating agencies, the City Council can be justly proud of its sound fiscal policies. Additionally, I would like to thank the City's Department Heads and staff for their commitment to prudently managing their budgets and programs. The City is fortunate to have such a strong and dedicated team.

Attached are the rating opinions of Fitch Ratings, Moody's Investors Service, and S&P Global Ratings.



Very truly yours,

A handwritten signature in dark ink, reading "Louis A. DePasquale". The signature is written in a cursive, flowing style.

Louis A. DePasquale  
City Manager

LAD/mec  
Attachment(s)

## CREDIT OPINION

15 February 2017

### New Issue

Rate this Research >>

#### Contacts

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## Cambridge (City of) MA

New Issue - Moody's assigns Aaa to Cambridge, MA's GOLT Bonds, 2017 Ser. A and B; Outlook Stable

### Summary Rating Rationale

Moody's Investors Service has assigned a Aaa rating to the City of Cambridge, MA's \$2 million General Obligation Bonds, 2017 Series A (Minibond Program) and \$61.4 million General Obligation Municipal Purpose Loan of 2017 Bonds, Series B. Moody's maintains the Aaa rating on \$377 million of outstanding general obligation debt. The outlook is stable.

The Aaa rating reflects the city's strong financial position, including significant reserve levels and healthy enterprise systems. The rating also incorporates the sizeable and diverse tax base that is anchored by world renowned higher education institutions and a substantial research and development sector, a below average debt burden, and large but manageable pension and OPEB liabilities.

### Credit Strengths

- » Healthy financial position guided by formal policies
- » Large and diverse tax base anchored by stable institutions and a growing commercial sector
- » Ample excess levy capacity under Proposition 2 ½
- » Strong and experienced management team

### Credit Challenges

- » High regional living and business costs

### Rating Outlook

The stable outlook represents our expectation that the city's prudent management team will maintain the healthy financial position given conservative multi-year budget forecasting and adherence to formal fiscal policies. Additionally, given the stability of Harvard University (Aaa stable) and Massachusetts Institute of Technology (Aaa stable), as well as ongoing commercial development, the diverse tax base will continue to grow and enhance Cambridge's credit profile.

### Factors that Could Lead to a Downgrade

- » Trend of operating deficits that lead to a significant reduction in reserve levels
- » Deterioration of tax base or weakening of local economy

- » Material growth in the debt burden
- » Significant increases in pension and OPEB liabilities

## Key Indicators

Exhibit 1

Cambridge (City of) MA	2012	2013	2014	2015	2016
Economy/Tax Base					
Total Full Value (\$000)	\$ 28,162,029	\$ 26,640,125	\$ 26,640,125	\$ 29,733,818	\$ 29,733,818
Full Value Per Capita	\$ 268,143	\$ 251,947	\$ 249,337	\$ 275,527	\$ 275,527
Median Family Income (% of US Median)	151.3%	144.4%	151.8%	158.2%	158.2%
Finances					
Operating Revenue (\$000)	\$ 459,009	\$ 477,946	\$ 520,910	\$ 541,899	\$ 560,698
Fund Balance as a % of Revenues	35.1%	40.5%	43.3%	50.5%	53.4%
Cash Balance as a % of Revenues	41.9%	47.3%	50.0%	56.5%	59.5%
Debt/Pensions					
Net Direct Debt (\$000)	\$ 327,254	\$ 356,269	\$ 258,476	\$ 284,326	\$ 247,240
Net Direct Debt / Operating Revenues (x)	0.7x	0.7x	0.5x	0.5x	0.4x
Net Direct Debt / Full Value (%)	1.2%	1.3%	1.0%	1.0%	0.8%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	1.3x	1.5x	1.6x	1.5x	1.5x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	2.0%	2.7%	3.1%	2.7%	2.8%

As of June 30 fiscal year-end

Source: Moody's Investors Service; city's audited financial statements

## Recent Developments

Since our last report in February 2016, the city's strong credit profile remains stable. Audited fiscal 2016 results reflect a \$21.7 million operating surplus which increased available General Fund balance (excludes nonspendable) to \$299.4 million, or a very strong 51.5% of revenues. In addition, the state released the city's fiscal 2017 equalized value (which is updated every two years), and it reflects a substantial increase of 33.1% to \$39.6 billion. Due to the strong growth in the tax base, the debt burden decreased slightly to 0.7% of equalized value (including the new issue).

## Detailed Rating Considerations

### Economy and Tax Base: Strong Economy Anchored by World Renowned Institutions

Cambridge's economy will continue to benefit from the presence of Harvard University (Aaa stable) and Massachusetts Institute of Technology (Aaa stable), which together enroll 33,000 students and provide employment for over 21,000 full-time equivalent positions (roughly 18% of the city's workforce). In addition, the city is home to vibrant and growing biotechnology and pharmaceutical sectors, which collectively employ an additional 21,000 people. Together, these institutions comprise 59% of the jobs provided by the city's top 25 employers, and building permits issued to the universities continue to represent a significant portion of the city's annual activity. The universities remain a significant driver behind the concentration of established technology companies in Cambridge, in addition to the influx of startups and related venture capital firms who value the highly educated workforce.

Assessed value growth remains very strong and has outpaced management's conservative projections for the past several years. Values have increased over 10% annually for the past three years (fiscal 2015-2017), including 14.3% in fiscal 2017, the largest increase of any municipality in the commonwealth. Additionally, the two year equalized value increased a substantial 33.1% from 2015, which is the second strongest growth rate of any municipality over this time period. Management's projections for future growth indicate 9.7% for fiscal 2018, and 3-5% increases for 2019 through 2021. New development remains robust, as evidenced by consistently strong

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building permit activity. Fiscal 2016 building permit valuations totaled \$1.6 billion (82% commercial and 18% residential). This equates to roughly \$26.1 million in revenue, the strongest in the city's history.

Construction of commercial space remains very healthy - roughly 950,000 square feet is currently under construction and another 4.4 million is fully permitted. Absorption of new space remains rapid and office/lab vacancy rates were down to 3.7% in the third quarter of 2016, down from 4% a year earlier. Cambridge's commercial vacancy rates compare favorably to metro Boston and the regional suburban vacancy rates of 7.2% and 17.4%, respectively.

Income levels remain above average relative to the commonwealth and national medians, despite being skewed downward by the high student population. Median family income of \$99,380 is 115.4% of the commonwealth and 151.9% of the US. Despite the tax exempt status of nearly one-third of the tax base, the fiscal 2017 equalized value per capita is strong at \$376,284 (420% of the US median). Unemployment remains very low at 1.7% (December 2016).

### **Financial Operations and Reserves: Well-Managed Financial Position with Strong Reserves Will Continue**

Cambridge's financial management is very strong and audited fiscal 2016 results reflect the fifth consecutive operating surplus. Going forward, we expect that conservative budgeting and prudent expenditure management will ensure the maintenance of healthy reserve levels despite rising costs for debt service and employee benefits. Steady revenue streams, generated by the stable tax base, provide flexibility to address budgetary challenges. Local property taxes continue to comprise the majority of General Fund revenues, representing 61.3% in fiscal 2016, and collections remain very strong with over 98% collected in the current fiscal year. Additional flexibility is provided by an all-time high of \$168 million (fiscal 2017) of unused levy capacity under Proposition 2 ½.

The fiscal 2016 surplus of \$21.7 million (net of bond premium) increased available General Fund balance (excludes nonspendable) to \$299.4 million or 51.5% of revenues. Of this amount, \$215.8 million (37.1%) remains unassigned. The city remains well above its policies requiring total and unassigned General Fund balance to be at least 25% and 15%, respectively, of the subsequent fiscal year's operating revenue. Free cash, the most conservative measure of legally available reserves as certified by the commonwealth, improved to a record high \$197.6 million (net of \$4.9 million in mitigation receipts), or a strong 34% of revenues.

The fiscal 2017 budget increased 4.8% due to salaries, employee benefits, and a \$2 million contribution to the OPEB trust. The budget was balanced with a 5.1% tax levy increase and \$10.2 million of free cash. Approximately \$9 million of free cash was used to reduce the levy and \$1.2 million funded IT initiatives. Management reports that revenues are performing strong year to date, and should be sufficient to cover an overage in special education costs.

Future budget projections (fiscal 2018-2021) include conservative assumptions and shows that revenues will be sufficient to cover expenditures. The main budget drivers are education, salaries and benefits, and debt service. New growth is conservatively assumed at \$675-950 million annually, though recently, actual new growth has been over \$1 billion annually. The city could begin to use a modest amount of its excess levy capacity in fiscal 2019-2021 to help balance budgets.

Partially offsetting the loss of potential revenue from the several tax-exempt institutions are Payments In Lieu of Taxes (PILOT). The city budgeted \$6 million from PILOT agreements in fiscal 2017, or roughly 1% of General Fund revenues. The majority comes from Harvard and MIT. Both institutions own significant taxable real estate and are major taxpayers, together representing 9.3% of the 2017 assessed value and roughly 15% of the levy. In fiscal 2005, the city signed 40- and 50-year PILOT agreements with MIT and Harvard, respectively. Each PILOT includes annual escalators on the initial base payment over the term of the agreement to provide stability and to allow long-range planning for the city.

### **LIQUIDITY**

General Fund cash remains very strong and has increased annually due to the positive operating results. The cash position at the close of fiscal 2016 was \$333.8 million or 57.4% of revenues.

### **Debt and Pensions: Average Debt Burden; Large But Manageable Pension and OPEB Liabilities**

The net direct debt burden, currently below average at 0.7% of 2017 equalized value, will increase moderately over the near term but will remain manageable given a rapid rate of principal amortization and a healthy level of self-supporting debt. The overall debt burden increases to 1.3% when incorporating overlapping wastewater debt from the Massachusetts Water Resources Authority (Aa1 stable).

Positively, approximately 39% of the city's gross debt outstanding is supported by the sewer system and other user fees, and the city remains committed to some pay-as-you-go capital financing.

The city plans to issue \$370 million from fiscal 2018-2021 for elementary school reconstruction, sewer reconstruction, and various other city projects including streetscape and other improvements. Approximately 33% of the debt will be supported by user fees. Despite the new debt, the debt burden will remain manageable and is projected (through 2021) to remain below 1.5% of equalized value using conservative new growth assumptions. Further, the city has designated debt stabilization reserves (held as committed General Fund balance) to partially offset the rising debt service costs. The combined balance in these funds (city and school) was \$44.6 million as of fiscal 2016 year-end, and is expected to increase to \$52 million in fiscal 2017.

#### DEBT STRUCTURE

All debt is fixed rate and amortization of principal is fast, with 86.3% repaid within ten years. General Fund supported debt service costs of \$54.8 million in fiscal 2016 comprised an elevated 9.8% of expenditures. This remains below a policy to limit General Fund debt service to 12.5% of expenditures.

#### DEBT-RELATED DERIVATIVES

The city is not party to any interest rate swaps or other derivative agreements.

#### PENSIONS AND OPEB

The city participates in the City of Cambridge Retirement System, a cost sharing multiple employer defined benefit retirement plan. The city contributed \$37.9 million in fiscal 2016 (\$300,000 more than the actuarially determined contribution), equal to a manageable 6.8% of General Fund expenditures. The fiscal 2016 three-year average Moody's Adjusted Net Pension Liability (ANPL), under Moody's methodology for adjusting reported pension data, is \$832.2 million, or an average 1.5 times General Fund revenues. The pension plan is expected to be fully funded by 2026, well ahead of the state mandated date of 2040. To meet this aggressive funding schedule, the city projects that pension costs will increase 5.9% annually (at least through fiscal 2021), and the city will continue contributing an additional \$300,000 over the required contribution.

The city contributed \$21.4 million towards its annual OPEB cost in fiscal 2016, representing 48.1% of the annual OPEB cost and 3.8% of expenditures. The total unfunded liability is \$550.7 million with a funded ratio of 1.4%, as of the July 1, 2015 valuation report. The OPEB trust fund has a balance of \$12.2 million as of December 31, 2016, and additional \$2 million annual contributions are expected moving forward.

Total fixed costs for fiscal 2016, including debt service, required pension contributions and retiree healthcare payments, represented \$114.1 million, or an elevated 20.4% of expenditures.

#### Management and Governance

The stable and experienced management team is very strong, as evidenced by a growing and healthy fund balance, adherence to formal fiscal policies, and multi-year budget forecasting and capital planning.

Massachusetts cities and towns have an institutional framework score of "Aa," or strong. Revenues are highly predictable due to a heavy reliance on property taxes. Cities have a moderate revenue-raising ability given the Proposition 2 ½ levy limit. Expenditures primarily consist of personnel costs, as well as education costs for cities that manage school operations, and are highly predictable given state-mandated school spending guidelines and employee contracts. Cities have a moderate expenditure reduction ability given the high presence of collective bargaining contracts, offset by low fixed costs in most cases.

#### Legal Security

The bonds are secured by a limited tax pledge as debt service is subject to the levy limitations of Proposition 2 ½.

#### Use of Proceeds

Bond proceeds will finance various capital projects, including reconstruction of an elementary school sewer improvements, and streetscape.

## Obligor Profile

Cambridge is a sizeable community located in the Boston Metropolitan Area. The city is anchored by several prominent higher education and health care institutions, with a population of approximately 105,000.

## Methodology

The principal methodology used in this rating was US Local Government General Obligation Debt published in December 2016. Please see the Rating Methodologies page on [www.moodys.com](http://www.moodys.com) for a copy of this methodology.

## Ratings

Exhibit 2

### Cambridge (City of) MA

Issue	Rating
General Obligation Bonds, 2017 Series A (Minibond Program)	Aaa
Rating Type	Underlying LT
Sale Amount	\$2,000,000
Expected Sale Date	02/23/2017
Rating Description	General Obligation Limited Tax
General Obligation Municipal Purpose Loan of 2017 Bonds, Series B	Aaa
Rating Type	Underlying LT
Sale Amount	\$61,372,000
Expected Sale Date	03/01/2017
Rating Description	General Obligation Limited Tax

Source: Moody's Investors Service



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REPORT NUMBER

1059939

Attachment: 02272017\_2017 Moody's Rating Report (CMA 2017 #48 : AAA bond rating)



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## Summary:

# Cambridge, Massachusetts; General Obligation

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## Table Of Contents

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Rationale

Outlook

Attachment: 02272017\_2017 SP Rating Report (CMA 2017 #48 : AAA bond rating)

## Summary:

# Cambridge, Massachusetts; General Obligation

### Credit Profile

US\$59.373 mil GO bnds (Mini Bnds Prog) ser 2017B due 02/15/2037		
<i>Long Term Rating</i>	AAA/Stable	New
US\$2.0 mil GO bnds (Mini Bnds Prog) ser 2017 A due 02/15/2022		
<i>Long Term Rating</i>	AAA/Stable	New
Cambridge GO		
<i>Long Term Rating</i>	AAA/Stable	Affirmed

## Rationale

S&P Global Ratings has assigned its 'AAA' rating and stable outlook to the City of Cambridge, Mass.' 2017 series A and series B general obligation (GO) bonds and affirmed its 'AAA' rating, with a stable outlook, on the city's GO debt outstanding.

We rate Cambridge higher than the sovereign because we believe the city can maintain better credit characteristics than the U.S. in a stress scenario based on its predominantly locally derived revenue base and our view that pledged revenue supporting debt service on the bonds is at limited risk of negative sovereign intervention. In 2016, local property taxes generated 63% of revenue, demonstrating a lack of dependence on central government revenue. (See "Ratings Above The Sovereign: Corporate And Government Ratings—Methodology And Assumptions," published Nov. 19, 2013, on RatingsDirect.)

The city's full faith and credit pledge, subject to the limits of Proposition 2 1/2, secures the bonds. Despite the limitations imposed by the state levy limit law, we did not make a rating distinction for the limited-tax GO pledge given the city's flexibility under the levy limit. We understand proceeds will finance various capital improvements such as school building upgrades, Harvard Square reconstruction, street and sidewalk repairs, and building renovation and energy improvements.

The series A bonds will be sold as minibonds, a financing tool allowing local residents to directly invest in city infrastructure. The bonds will be sold in minimum denominations of \$1,000 and are initially offered only to Cambridge residents, although the bonds may be sold or transferred afterward to any purchaser. For credit analysis purposes, we evaluate minibonds based on the general obligation security pledge of the city.

The rating reflects our opinion of the following factors for the city:

- 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 2016;

- Very strong budgetary flexibility, with an available fund balance in fiscal 2016 of 49% of operating expenditures, and the flexibility to raise additional revenues despite statewide tax caps;
- Very strong liquidity, with total government available cash at 61.9% of total governmental fund expenditures and 7.0x governmental debt service, and access to external liquidity we consider strong;
- Adequate debt and contingent liability position, with debt service carrying charges at 8.8% of expenditures and net direct debt that is 45.1% of total governmental fund revenue, as well as low overall net debt at less than 3% of market value and rapid amortization, with 79.3% 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 110,151, is located in Middlesex County 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 156% of the national level and per capita market value of \$359,778. Overall, the city's market value grew by 14.3% over the past year to \$39.6 billion in 2017. The county unemployment rate was 4.0% in 2015.

Located directly north of Boston, Cambridge is extremely plugged into the area economy with two subway lines, multiple highways, and a commuter rail. Its local economy is anchored in its two principal employers--Harvard University and Massachusetts Institute of Technology--which serve as knowledge centers and focal points for dozens of start-ups, research centers, life science and high-tech companies. Other large employers include Biogen, Novartis Institutes for Biomedical Research, and Mount Auburn Hospital, which employ upward of 2,000 people. Microsoft, Google, Amazon, Apple, Facebook, Kayak, Baxalta, Pfizer, Sanofi/Genzyme, and Takeda/Millennium all have offices within the city.

Economic expansion within the city continues--particularly in the biotechnology and technology sectors--and has contributed to sustained property tax base growth. In 2016, the city experienced \$1.26 billion in new construction, which added \$18.3 million to the tax levy limit. The tax base is about 62% residential and about 35% commercial and industrial. The 10 largest taxpayers account for 21% of the city's tax base, indicating moderate levels of taxpayer concentration. City officials also report a number of developments that they expect will have a positive impact on the city's tax base, including the addition of almost 1,000 housing units throughout Cambridge, construction of commercial space totaling 950,000 square feet, and the leasing of 630,000 square feet in Kendall Square to Akamai Technologies for 15 years (which, according to the city, is the largest real estate deal in the commonwealth in the past three years).

### Very strong management

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

Key factors for the FMA analysis include:

- Conservative revenue and expenditure assumptions in the budgeting process that focus on five years of historical information;
- Quarterly budget-to-actual and investment reporting to the city's finance and investment committees, respectively;

- Long-term financial plan with credible assumptions;
- Five-year capital plan with funding sources identified, which is being expanded to include a municipal facilities improvement plan;
- A robust debt and investment policy that is reviewed at least annually to demonstrate adherence; and
- A reserve policy requiring a minimum 15% of expenditures.

### **Strong budgetary performance**

Cambridge's budgetary performance is strong in our opinion. The city had operating surpluses of 3.9% of expenditures in the general fund and of 2.3% across all governmental funds in fiscal 2016.

The data was adjusted for recurring transfers as well as the spending of bond proceeds. Property taxes generated 63% of total general fund revenue in fiscal 2016. The fiscal 2017 operating budget increased 4.8% over 2016 to \$574.6 million due, in large part, to a 2% increase in salary costs for employees, a \$2 million budgeted allocation to the other postemployment benefits (OPEB) trust fund, and a 5.85% increase in employee pension costs. The city used \$10.2 million in surplus cash to lower the property tax increase, which it expects to make up through better-than-budgeted results in 2017. According to city officials, revenues and expenditures are trending on budget.

We believe that rising debt service costs and increasing health insurance (with cost increases as high as 7% in 2021) will continue to pressure the budget. However, we expect the city's astute management, with regular oversight and planning, will serve to shield the budget from these cost pressures. Therefore, we expect our assessment of budgetary performance to remain strong.

### **Very strong budgetary flexibility**

Cambridge's budgetary flexibility is very strong, in our view, with an available fund balance in fiscal 2016 of 49% of operating expenditures, or \$277.1 million. In addition, the city has the flexibility to raise additional revenues despite statewide tax caps, which we view as a positive credit factor.

In our opinion, budgetary flexibility remains very strong with no plans to materially spend down reserves. Included in our calculation is the city's budget stabilization fund, which has grown in each of the past three years and currently has a balance of \$49.2 million. In addition, Cambridge's excess levy capacity, which increased 8.6% year-over-year to \$168.3 million in fiscal 2016, is significant and expected to grow through its four-year financial projection.

### **Very strong liquidity**

In our opinion, Cambridge's liquidity is very strong, with total government available cash at 61.9% of total governmental fund expenditures and 7.0x governmental debt service in 2016. In our view, the city has strong access to external liquidity if necessary.

Cambridge is a regular market participant, having issued GO bonds frequently over the past several years. We understand the city has not entered into any bank loans, direct-purchase debt, or contingent liquidity risks from financial instruments with payment provisions that change on the occurrence of certain events. It has consistently had very strong liquidity and we do not anticipate a change to these ratios, consistent with our view of the city's strong performance.

### Adequate debt and contingent liability profile

In our view, Cambridge's debt and contingent liability profile is adequate. Total governmental fund debt service is 8.8% of total governmental fund expenditures, and net direct debt is 45.1% of total governmental fund revenue. Overall net debt is low at 0.7% of market value, and approximately 79.3% of the direct debt is scheduled to be repaid within 10 years, which are in our view positive credit factors. Negatively affecting our view of the city's debt profile is its significant medium-term debt plans.

The city has \$433.9 million of total direct debt, \$147 million of which is self-supporting water and sewer debt. Over the next four fiscal years, the city expects to issue \$369 million (of which, \$193 million will be issued within our outlook horizon). The majority of debt will fund elementary school reconstruction and sewer improvements.

In our opinion, a credit weakness is Cambridge's large pension and OPEB obligation. The city's combined required pension and actual OPEB contributions were 7.3% of total governmental fund expenditures in 2016. Of that amount, 3.9% represented required contributions to pension obligations, and 3.4% represented OPEB payments. The city made its full actuarial determined pension contribution in 2016. The funded ratio of the largest pension plan is 80%.

The city is part of the Cambridge Retirement System, which is a member of the Massachusetts Contributory System. The city has always contributed 100% of the actuarial determined contribution, which was \$24 million in 2016. Cambridge officials expect to fully fund their \$212 million pension liability by 2026.

As of June 30, 2016, the city reported an OPEB unfunded actuarially accrued liability of \$550.7 million. In 2015, the city established an irrevocable trust fund, which has a current balance of \$12.2 million. The city expects to add \$2 million to the trust annually between 2018 and 2021.

### 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 consistently strong financial performance, which is supported by very strong management and a healthy and growing economy. We do not expect to change the rating within the next two years because we believe Cambridge will sustain current financial performance and comparably high reserve levels. While unlikely to occur, if the city's fund balance were to deteriorate significantly or if debt levels should substantially weaken, we could lower the rating.

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](http://www.standardandpoors.com) for further information. Complete ratings information is available to subscribers of RatingsDirect at [www.globalcreditportal.com](http://www.globalcreditportal.com). All ratings affected by this rating action can be found on the S&P Global Ratings' public website at [www.standardandpoors.com](http://www.standardandpoors.com). Use the Ratings search box located in the left column.

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## Fitch Rates Cambridge, MA's \$61MM Series 2017 GO Bonds 'AAA'; Outlook Stable

Fitch Ratings-New York-17 February 2017: Fitch Ratings has assigned an 'AAA' rating to the following city of Cambridge, Massachusetts general obligation (GO) bonds:

--Up to \$2,000,000 GO bonds (Minibond Program), series 2017A;

--Up to \$61,372,000 GO municipal purpose loan, series 2017B.

The series 2017 A minibonds are being offered exclusively to residents of Cambridge, although subsequent transfers are not restricted to Cambridge residents. Proceeds of the series A and B bonds will be used to finance various city, sewer and school related projects. The series A bonds are pricing via negotiation during the period Feb. 17 through Feb. 23rd. The series B bonds are expected to sell competitively on March 1st.

In addition, Fitch affirms the 'AAA' rating for the city's outstanding GO bonds totaling approximately \$377 million as well as the city's Issuer Default Rating (IDR).

The Rating Outlook is Stable.

### SECURITY

The bonds are a general obligation of the city and are backed by its full faith and credit and a property tax levy that is limited by state statute.

### KEY RATING DRIVERS

The 'AAA' IDR and GO rating reflect Fitch's expectation for Cambridge to maintain healthy financial flexibility throughout economic cycles, consistent with a history of strong operating performance and strong budget controls. The city's superior financial profile reflects a wealthy property tax base, moderate expenditure growth and a demonstrated ability to reduce expenditures during economic downturns. Fitch expects long-term liabilities to remain low based on manageable capital needs, rapid principal amortization, and a practice of fully funding required pension contributions.

#### Economic Resource Base

Cambridge is located in Middlesex County across the Charles River from the city of Boston and has an estimated 2015 census population of 110,402, which is up 4.9% since 2010.

#### Revenue Framework: 'aaa' factor assessment

Revenues are derived primarily from property taxes. Total general fund revenue growth of about 4.7% annually over the past 10 years has exceeded both U.S. GDP and CPI for the same period reflective of strong growth in Cambridge's economy and tax base. The city maintains significant excess levy capacity under the state's Proposition 2 1/2 law and Fitch expects revenue growth to remain strong.

#### Expenditure Framework: 'aa' factor assessment

The natural pace of spending growth is expected by Fitch to be in line with to below natural revenue growth over time. Carrying costs for long-term liabilities claim a moderate proportion of governmental spending. Principal amortization rates exceed 80% over 10 years and a large portion of debt is self-supporting from user charges.

#### Long-Term Liability Burden: 'aaa' factor assessment

Cambridge's debt and unfunded net pension liabilities are a low 7% of personal income. Fitch anticipates Cambridge's long-term liability burden to remain low based on a manageable capital plan and a record of actuarially-based pension funding.

#### Operating Performance: 'aaa' factor assessment

Careful expenditure management combined with moderate tax levy increases and conservative financial forecasting has led to very high reserves over the past decade. Fitch expects management to maintain a strong level of financial resilience throughout a typical economic cycle, with the reserves supplementing superior inherent budget flexibility.

### RATING SENSITIVITIES

Expenditure Management: The IDR is sensitive to maintenance of the city's solid expenditure flexibility. Material reductions in the city's ability to manage spending, while unexpected, could pressure the rating.

## CREDIT PROFILE

The city is an important economic component for the Boston metropolitan area and Massachusetts as a whole and benefits from the presence of both Harvard University and Massachusetts Institute of Technology. These institutions are the city's two top employers and employ more than 18% of the city's workforce. Other major employers include the city, Biogen, Novartis and Mt. Auburn Hospital.

Cambridge continues to maintain and strengthen its position as a national leader in the life sciences and high tech sectors. Expansions in these sectors has contributed to tax base, employment and resident income growth over the past several years and is projected by the city to continue for the near future.

Cambridge also continues to increase its appeal as a magnet for research and development companies, ranging from startups to international companies. Several major software and internet companies have established research and development operations in Cambridge, including Microsoft, Google, Amazon, Facebook and EMC/VMware.

Assessed value (AV) performance reflects this activity, as well as growth in residential values. AV grew another 14.3% in fiscal 2017 to \$39.6 billion following similar growth in fiscal 2016. AV per capita is a very high \$359,000 per capita. Economic development districts located in the city continue to provide opportunities for current and future economic expansion and new housing opportunities. The city is projecting moderate increases in AV in fiscal years 2018 through 2021, which is considered realistic by Fitch based on new commercial and residential construction underway.

Wealth levels are above state and national averages and the unemployment rate is consistently below state and national averages.

### Revenue Framework

Revenues are derived primarily from property taxes which make up approximately 64% of fiscal 2016 general fund revenues. Sewer use charges and other departmental charges accounted for 9% and 11% respectively of revenues. Excise taxes, for hotel and meals as well as motor vehicle charges, and payment in lieu of taxes add an additional 6% to the general fund revenue base.

Fitch expects revenue growth to continue to be strong based on the city's strong underlying economic fundamentals and expectations for future tax base growth from new commercial and residential projects.

Pursuant to state law, Proposition 2 1/2 limits the city's ability to levy property taxes by a "levy ceiling", an absolute cap on the level of property taxation, set at 2.5% of the overall property tax valuation (primary limit), and a levy limit which restricts the annual growth in taxation to a 2.5% increase over the previous year's levy plus the value of new growth (secondary limit). Taxation in excess of the levy limit (plus any new growth) requires voter approval.

Management has typically levied below the ceiling each year. Any excess in levy capacity is carried forward and available for use at any time. The city's excess tax levy limit increased from \$155 million in fiscal 2016 to \$168 million in fiscal 2017. This excess levy capacity totals 29% of the fiscal 2017 operating budget and provides for substantial revenue raising flexibility if needed.

### Expenditure Framework

Education is the city's largest expenditure comprising 35% of fiscal 2016 general fund expenses. Public safety follows at 21%.

General fund expenditure growth has historically been in line with or slower than revenue growth and the city has flexibility to reduce expenditures if necessary. Fitch expects growth to continue at this same pace.

Carrying costs for debt service, pensions and other post-employment benefit (OPEB) contributions were a moderate 16% of fiscal 2016 governmental spending and Fitch expects such costs to remain moderate going forward. Employee salary and benefit costs continue to drive annual increases as well as moderate annual increases in debt service. Management has negotiated increases in health care contributions from certain employee groups which should help control growth in these costs. Education will continue to be a driver of spending and management is planning approximately 6% annual increases in education spending over the next five years as part of its commitment to the overall improvement of its school system and to accommodate projected enrollment growth.

Approximately 75% of the city's 3,500 employees belong to a union or collective bargaining group. Management has the ability to impose employee layoffs and furloughs if necessary. Public safety contracts are subject to binding arbitration, although city council has the ability to vote down an award. In such a case, both parties continue bargaining within the arbitration process.

### Long-Term Liability Burden

Long-term liabilities for debt and unfunded pension liabilities are low at 7% of estimated personal income and are expected to

grow marginally based on pension funded levels and future debt plans. Management is projecting the issuance of an additional \$369 million in additional debt (about 75% of current debt levels) over the next four fiscal years with roughly 25% to be supported from user fees. The city's principal amortization rate for bonds and notes outstanding is very rapid at over 80% over 10 years supporting Fitch's expectation for debt levels to remain low. Outstanding debt net of self-supporting debt accounts for half of the liability metric, with unfunded pension liabilities making up the remainder.

The city is one of four employers participating in the Cambridge Retirement System. The city has paid annual contributions slightly in excess of 100% of its actuarially determined contribution (ADC) since fiscal 2010 to improve funding levels. The fiduciary net position to total pension liabilities for the city's portion was reported at 80% as of June 30, 2016. Using Fitch's more conservative 7% return rate, the estimated funded ratio was 74%.

The city's unfunded OPEB liability totaled \$550 million as of June 30, 2016, and represented 6% of personal income. City management created an OPEB trust fund in December 2009 and has made annual contributions totaling \$11 million since that time. Management projects a \$2 million annual contribution for each of the next four fiscal years, based on the city's current financial forecast.

#### Operating Performance

Fitch expects the city to maintain strong financial resilience throughout an economic cycle given its historically strong revenue performance, conservative budgeting practices and high degree of inherent budget flexibility. The city's steady growth in revenues has supported surplus operations over the past five fiscal years and a buildup of reserves to high levels.

During times of economic weakness management has controlled spending and staffing levels to offset reductions in revenues. The city's strong budget monitoring practices and financial planning bolster the city's operating environment.

The general fund had a fiscal 2016 net operating surplus of \$25.2 million (4.5% of spending on a GAAP basis) due in part to positive variances in excise taxes, payment-in-lieu-of-tax payments, and license and permit fees. Conservative expenditure assumptions resulted in savings in most categories. Unrestricted fund balance improved to \$299 million or a very high 54% of spending.

The fiscal 2017 operating budget of \$575 million was up 4.8% over the fiscal adjusted 2016 budget. Increases in spending were associated in part with higher salary and pension costs and increases in debt service. Fitch expects the city to continue to manage its budgets in a way that supports an exceptionally strong financial position throughout the economic cycle.

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

U.S. Tax-Supported Rating Criteria (pub. 18 Apr 2016) (<https://www.fitchratings.com/site/re/879478>)

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