Moody's Municipal Credit Report

Cambridge, Massachusetts — June 13, 1989

	New Issue	General Obligation/Special Tax
sale:	$12,015,000	Municipal Purpose Loan of 1989
date:	For bids June 14	

Moody's rating: Aa

opinion:

Economic diversity and stability as well as substantial financial resources are derived from the city's prominence as an education and research center. This has combined with successful management initiatives which support strong financial operations to provide high quality security for low levels of rapidly amortized debt. An extensive but well-defined capital plan, consistent with the city's sound debt management program is also noted.

key facts:

Debt Burden:	1.3%
Payout, Ten Years:	100%
Tax Pledge, This Issue: Limited tax.	
F.V. per Capita, 1988:	$80,296
Five Year Capital Plan:	$101.3 million
Population Decline, 1950-86:	24.4%
Unemployment Rate, 1988:	2.4%
State:	3.3%
U.S.:	5.5%
Per Capita Income as % of State, 1985:	107.9%
Unreserved General Fund Balance as % of Revenue, FY 1988:	10.4%
Property Taxes as % of General Fund Revenue, FY 1988:	51.5%
Additional Taxing Capacity, FY 1989:	[1] $12.9 million
Moody's Rating, Bonds dated 7/1/85, MBIA:	Aaa

[1] 13.9% of levy.

analysis:

The City of Cambridge derives economic stability, diversity and strength from its concentration of major educational and research institutions, proximity to Boston, and an extensive transportation network. Sustained residential and commercial building activity throughout the decade has facilitated vigorous tax base growth. This growth is anticipated to slow, however, as the last parcels of available property are being developed. Despite consistently low unemployment rates, the city still has a relatively large poverty level with these citizens having additional service needs.

This economic growth, in conjunction with successful management initiatives, have supported strong financial operations. Property taxes remain the dominant revenue source with significant tax base growth permitting the city to increase its levy while accumulating a large tax margin. However, as new construction slows and city expenditures continue

Cambridge, Massachusetts

to increase, it is anticipated that this tax margin will shrink. Since the enactment of Proposition 2 ½, sustained increases in fiscal aid and development of non-property tax revenue sources have reduced reliance on property taxes. However, this continued increase in funding can no longer be counted upon given the commonwealth's own fiscal constraints and statutory limits on additional sources of revenue. Compounding this problem are delays in commonwealth remittances for general aid payments as well as commonwealth health reimbursements. The City Hospital, which provides indigent care, continues to be a financial drain on general operations. The Massachusetts Water Resources Board (MWRA) will become an increasing financial burden on the residents of the city as the clean-up of the Boston Harbor gets underway. In order to finance these increasing costs, the city has instituted an increasing block rate structure so that the city's largest institutional users will bear an increasing proportion of the costs. The city, however, has been funding various reserve funds in order to provide additional margins for capital and health related costs.

After recording an operating deficit in fiscal year 1987, audited results for 1988 and estimated results for 1989 indicate operating surpluses, which was primarily attributed to conservative budgeting practices. Due to an improving cash position, the city has not been required to issue TANs since 1987, the year of its last revaluation. While the city is currently undergoing another revaluation it is anticipated that tax payments will be made on time through improved valuation techniques and use of estimated bills. With sharply rising property values, the city has been able to mitigate tax increases on the residential sector through the use of multiple rates.

The city is in the midst of addressing its long-neglected capital needs through a multi-year capital plan with a stated emphasis on infrastructure improvements.

This well designed program should not affect the city's strong debt position given the aggressive rate of bond retirement, substantial taxable resources, and significant amount of non-debt revenue sources.

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details of bond sale:

Legal Name of Issuer: City of Cambridge, Massachusetts.

Security: G.O., LT.

Date of Bonds: June 15, 1989.

Denomination: $5,000 or any integral multiple.

Annual Maturities 6/15 ($ 000)

Year	Amount	Year	Amount
1990-92	$1,205	1993-99	$1,200

Interest Rate: To be determined.

Average Life of Issue: 5.4956 years.

Interest Payable: Beginning December 15, 1989 and semiannually thereafter.

Call Features: None.

Registrar: Cede & Co., as bond owner and nominee for the Depository Trust Company, New York.

Paying Agent: Cede & Co., as bond owner and nominee for the Depository Trust Company, New York.

Delivery: On or about June 29.

Bond Counsel: Palmer and Dodge, Boston.

Financial Officer: James P. Maloney, Jr., Assistant City Manager for Fiscal Affairs.

Advisors: Government Finance Research Center, Washington, D.C.

Auditor: Peat, Marwick, Main and Co., Boston (FY 1988).

details of last comparable sale:

Date of Sale: June 15, 1988.

Amount: $5,000,000.

Purchaser: Bank of New England, N.A., Boston.

CIC: 6.07118%

Moody's Index: [1] 7.52%

[1] For Aa rated issues as of June 17, 1988.

rating history:

June 1987:	Aa
June 1986:	A
June 1985:	Baa1
July 1981:	Baa
March 1981:	Suspended
Prior to 1981:	Aa

analyst: H. J. Cure

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debt factors:

Debt Statement as of 6/30/89 ($ 000)

	Amount
Bonded debt outstanding	$44,935
Current offering (6/14/89)	12,015
Gross bonded and direct net debt	$56,950
Overlapping debt	37,761
Overall net debt [1]	$94,711

[1] State school construction grants receivables as of June 30, 1989, subject to annual legislative appropriation, are estimated to be $16,805,185 million. Relative amounts allocable to principal and interest is not available.

For additional information please refer to Moody's 1989 Municipal and Government Manual, page 2687.

Security: G.O., LT.

Defaults: No record.

Debt Ratios

Net Debt	Per Capita	[1] Median	% F.V.	Median [1] (%)
Direct	$624	$456	0.8	1.4
Overall	103	784	1.3	2.4

[1] Cities with 50,000-99,999 population.

Rate of Retirement

Principal Amount Due	Amount ($ 000)	% of Total
In 5 years	$39,920	70.1
In 10 years	56,950	100

Use of Proceeds: Building renovations, street and sidewalk improvements, open space improvements, hospital renovations and reservoir cover.

Structure: Declining debt service, rapid retirement.

CIP/Future Borrowing: Authorized but unissued: $28,160,000. Five-year capital plan through fiscal 1994 totals $101.3 million, primarily to finance water and sewer improvements, streets and sidewalks, economic developments, and human resources projects. Major funding sources include $67.8 million bonds, (67% of sources), $7.1 million block grants (7.0%), $5.7 million utility fees (5.6%) and $15 million of General Fund appropriations (15.1%).

administrative factors:

Form of Government: Council/manager; nine-member city council elected at-large for two-year terms. Council selects one of its members as mayor; also appoints a city manager. Mayor also serves as chairman of separately elected school committee. City provides full services which include municipally run hospital subsidized by city. Cambridge Hospital is a modern 182-bed secondary care facility which serves as teaching hospital for Harvard and Tufts Universities. The hospital has a 25% market share of the city and a 63% occupancy rate. City has invested, including a portion of this issue, over $12 million in building and equipment improvements over the last several years to provide modern facilities. Following expiration of the statewide Medicare waiver at December 31, 1986, reimbursements were insufficient to cover all teaching costs. The city has been forced to subsidize hospital operations in varying degrees of $6- $9 million depending upon, among other things, on occupancy rate. The city anticipates the potential of increasing the subsidy, still further if the commonwealth delays various reimbursements.

Rail and bus public transportation for Cambridge are provided by Massachusetts Bay Transportation Authority (MBTA); sewerage disposal service is provided by Massachusetts Water Resources Authority (MWRA).

Public Employees: Approximately 4,100 full- and part-time including school department; 3,079 covered under 19 collective bargaining groups. Five contracts covering 1,020 employees will expire June 30, 1989; negotiations are in progress. Con-

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tracts not resolved prior to their expiration continue in effect under rollover provisions.

City has two retirement systems, recording pension cost for the contributory system on a pay-as-you-go basis (amounts determined annually by the state division of insurance) and for the contributory plan on the basis of actual cash payments to pensioners. Recent actuarial study indicates an unfunded pension liability as of January 1, 1988 of $115.4 million. Officials have indicated that city will not at this time fund pension costs at that level but will allow the buildup of excess earnings in the reserve account. There is no actuarial estimate for the non-contributory system. City pension contributions and payments in fiscal 1986, 1987, and 1988 were $12.0 million, increasing contributions to $12.9 million for fiscal year 1989 and estimating a further increase to $13.7 million in fiscal year 1990.

The city anticipates entering into the State Pension Reserves Investment Trust and benefitting from state grants offered in this program in order to systematically reduce the unfunded pension liability over a 40-year period.

The city over the last six years has been able to maintain increasing taxing margins due to the continued construction within Cambridge. The taxing margin for fiscal year 1989 increased $900,000 over fiscal year 1988 to $12.9 million, which is amongst the highest in the entire state. City officials anticipate the margin to decrease significantly over the next few years as new construction and redevelopment in this fully developed city continues to slow.

School District Data: Grades K-12

Trend of Enrollment: 7,653 reported for 1988-89 school year. After year of steady decline, enrollment is projected to remain stable over next four years.

Capacity: Excess at all levels; however, renovations needed at various school buildings. 13 elementary schools, one high school, one administrative building, three miscellaneous buildings.

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property valuation and tax data:

Cambridge

Fiscal Year	[1] Assessed Valuation (000)	% Change	[3] Tax Rate/ $1,000 A.V.	[4] Net Levy (000)	[5] % Current Collected	[6] % Total Collected
1987	$5,975,032	[1] 65.2	9.81 *20.76*	80,678	[8] 49.9	97.7
1988	6,147,944	2.9	9.79 *21.15*	84,893	97.3	100.3
1989 [2]	7,327,847	[9] 19.2%	9.23 *20.06*	[7] 92,500	In process	-

[1] Assessed value/reflect full market

[2] Residential 59.8%, commercial-industrial 38.3%.

[3] Reflects tax rates for residential; figures in italics represents commercial-industrial property, respectively.

[4] Net of overlay reserve for abatement.

[5] Taxes due annually November 1, and May 1, delinquent after 30 days.

[6] As of April 30, 1989.

[7] City has approximately $12.9 million of additional tax margin available for 1988.

[8] Due to delay in 1987 revaluation, secured-half bills were mailed after June 15, 1987 and were not payable until after the close of the fiscal year.

[9] Of 19.2% assessed value increase new growth represents approximately 5.35%.

1989 Full Valuation:	$7,327,846,922	Average Annual Growth F.V., 1985-89:	24.2%
1989 Equalization Rate:	100.0%	1989 F.V. per Capita:	$80,296

Largest Taxpayers [1]	Business	1989 A.V. ($ 000)
Harvard University	Taxable real estate	$186,918
Boston Properties	Real estate	182,945
Commonwealth Energy	Utility	156,205
Massachusetts Institute of Technology	Taxable real estate	150,619
Prudential Insurance	Commercial	135,324
Robert Jones & K. George Najarian	Commercial	116,231

[1] Ten largest taxpayers account for 24.4% of total levy.

economic factors:

Population:

Year	Population	% Change
1960	107,716	-10.8
1970	100,361	-6.8
1980	95,322	-5.0
1986 (est.)	91,260	-4.5

Source: U.S. Census Bureau.

Location: Middlesex County. Across the Charles River from Boston.

Area: 6.30 square miles

Population Density: 14,486 per square mile

Cambridge, Massachusetts

Population and Housing Characteristics: Cambridge

	1970	1980	Norms [2] 1980	U.S. 1980
Population:				
Median age	27.6	28.6	31.3	30.0
% school age	14.6	11.5	18.7	20.9
% working age	67.8	72.8	61.3	60.7
% 65 and over	11.7	11.4	13.7	11.3
No. persons/household	2.8	2.1	2.6	2.75
Income:				
Median family income	$9,815	$17,845	$19,331	$19,908
% below poverty level	12.8	15.1	11.7	12.5
Per capita income	$3,896	$8,010	$6,932	$7,313
Housing:				
% owner occupied	19.2	22.8	49.9	64.4
% built before 1939	-	67.7	51.8	26.1
% built since last census	8.9	10.6	12.7	25.9
Owner occupied median value	$24,738	$61,400	$47,787	$47,300
Median gross rent	$134	$257	$248	$243
Occupied housing units	36,416	[1] 38,836	-	-

Source: U.S. Census Bureau.

[1] 1970-80 % change: 6.6%.

[2] Norms are for all cities with population greater than 20,000 in the New England Region.

Per Capita Income	1969	1979	1985
Cambridge	$3,896	$8,010	$13,494
State	3,408	7,457	12,510
Cambridge as % of State	114.3	107.4	107.9

Labor Market Characteristics: Cambridge City

Year	Labor Force	Total Employment	% Unemployed City	% Unemployed State	% Unemployed U.S.
1980 [1]	51,868	49,234	5.1	5.6	7.1
1981 [1]	53,042	49,956	5.8	6.4	7.6
1982 [1]	53,827	50,243	6.7	7.9	9.7
1983 [1]	53,375	50,311	5.7	6.9	9.6
1984 [1]	55,591	53,362	4.0	4.8	7.5
1985 [1]	55,790	53,945	3.3	3.9	7.2
1986	55,732	53,941	3.2	3.8	7.0
1987	53,538	52,221	2.5	3.2	6.2
1988	54,266	52,976	2.4	3.3	5.5
3/88 [2]	54,798	53,459	2.4	3.6	5.9
3/89 [2]	54,136	52,780	2.5	4.1	5.2

Source: Department of Labor, Bureau of Labor Statistics.

[1] Data not consistent with preceding years due to changes in the benchmarking process.

[2] Monthly data not seasonally adjusted.

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Largest Employers

	Employees 1989
Harvard University	9,361
Massachusetts Institute of Technology	7,947
Polaroid [1]	2,079
Draper Laboratory [1]	2,142
Bolt, Beeranek and Newan, Inc. [1]	1,730
Lotus Development Corp.	1,700
U.S. Department of Transportation [1]	1,117
Arthur D. Little, Inc. [1]	1,200
Mt. Auburn Hospital	1,840
Youville Hospital	800

Source: Official statement.

[1] Companies engaged in research and development.

financial factors:

Operating Funds Financial Performance (fiscal years ended 6/30 $ 000) [1]

	1987	1988	% Change 1987-88
Revenues	$151,145	$173,052	14.5
Expenditures	154,717	158,814	8.4
Operating surplus (deficit)	(3,572)	4,238	-

[1] General Fund (modified accrual method of accounting).

1988 Sources of Revenue	%
Property taxes [1]	51.5
Intergovernmental	25.8
Health department	3.4
Sewer charges	4.0
Motor vehicle excise	1.7
Hotel/motel excise tax	1.4

[1] Includes $2.7 million payments in lieu of tax receipts.

1988 Items of Expenditure	%
Education [1]	29.5
Public safety	19.5
General government	12.9
Public works	12.6
Debt service [2]	7.4
MBTA and MWRA	5.7

[1] Excludes debt service.

[2] Includes $5,994,182 for schools and for hospital purposes.

General Fund Financial Position (fiscal years ended 6/30 $ 000)

	1987	1988
Cash and investments	$ 7,136	$39,365
Operating loans	10,900	-
Other current liabilities	21,106	24,412
Year-end cash surplus (deficit)	$(24,867)	14,953
Receivables (net)	[2] $ 41,024	4,602
Fund balance	$ 20,919	25,156
Unreserved fund balance	$14,290	17,973
Undesignated fund balance [1]	9,790	13,473

[1] $4.5 million appropriated to fiscal 1989 budget.

[2] Includes taxes receivable, net of uncollectibles of $35.2 million.

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	[2] 1986	1987	1988
Surplus revenue [1]	$15,727	$14,290	$20,618
Free cash [1]	10,694	12,255	17,390

[1] Free cash is surplus revenues less overdue property taxes. Surplus revenue is the amount by which unrestricted cash, accounts receivable, and other assets exceed liabilities and reserves. It is not reduced by overlay deficits (tax abatements in excess of the overlay reserve) or revenue deficits (non-property tax receipts being less than estimates), both of which are added to the next tax levy.

[2] Does not include $4.5 million to cover appropriations from free cash in 1988. Officials estimate free cash balance of $16.5 million for fiscal 1988, after million appropriation to 1990 budget.

Total Budget ($ 000)

	[1] 1989	1990
Revenues	$211,734	$231,300
Expenditures	216,234	235,800
Appropriated surplus	4,500	4,500

[1] Officials estimate $2.5 million General Fund operating surplus fiscal year 1989

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CITY OF CAMBRIDGE

CAMBRIDGE, MASSACHUSETTS 02139
TEL. 498-9011

EXECUTIVE DEPARTMENT
ROBERT W. HEALY
City Manager

RICHARD C. ROSSI
Deputy City Manager

June 26, 1989

To the Honorable, the City Council:

I am pleased to inform the City Council and the Citizens of Cambridge that, unlike the unfortunate downgrade of the Commonwealth's credit rating, the City of Cambridge has retained its favorable Aa rating.

I am enclosing a complete copy of the credit report, but will highlight some of the comments in this communication:

> "Sustained residential and commercial building activity throughout the decade has facilitated vigorous tax base growth. This growth is anticipated to slow, however.
>
> "This economic growth in conjunction with successful management initiatives, have supported strong financial operations.
>
> "The City is in the midst of addressing its long-neglected capital needs through a multi-year capital plan with stated emphasis on infrastructure improvements. This well-designed program should not affect the city's strong debt position given the aggressive rate of bond retirement, substantial taxable resources, and significant amount of non-debt revenue sources."

I commend and thank the City Council for approving my conservative financial recommendations over the past eight years which have enabled us to progress from no credit rating on July 1, 1981 to the favorable position retained today.

Very truly yours,

Robert W. Healy
City Manager

RWH/mbf
Enc.

Agenda Item No. 2 F-292

Re: the City of Cambridge retaining its favorable Aa rating.

In City Council,

June 26, 1989

6-26-89

Placed on File.