Moody's Municipal Credit Report

Cambridge, Massachusetts

June 30, 1986

New Issue — **General Obligation/Special Tax**

sale:	$3,360,000	Municipal Purpose Loan of 1986
date:	For bids June 25	

Moody's rating: A (revised from Baa1)

opinion:

Sustained tax base growth in a favorable economic climate allows budgetary flexibility sufficient to service operating demands, including a high level of fixed costs. Implementation of an ambitious capital plan has allowed better definition of future needs and appears consistent with the city's current debt position. The rating is therefore revised from **Baa1** to **A**.

key facts:

Debt Burden:	2.0%
Payout, Ten Years:	95.2%
F.V. per Capita:	$39,079
Population Decline, 1950-84:	23.4%
Unreserved General Fund Balance as % of Revenue, FY 1985:	13.9%
Property Tax as % of General Fund Revenue, FY 1984:	55.8%
Additional Taxing Capacity (est.), FY 1987:	$7.5 million
Debt Service, Pensions, State and County Assessments as % of General Fund Revenue, FY 1985:	26.2%

analysis:

Cambridge has surmounted the initial adverse effects of Proposition 2 1/2 and continues to demonstrate a strengthening financial position. Operating surpluses achieved in six of the last seven fiscal years have produced a sizable and growing fund balance and free cash position. While sustained increases in state aid and development of non-property tax revenue sources have reduced reliance on property taxes, they remain the dominant revenue source. However, large increases in the tax base through a 1984 revaluation and substantial building activity have permitted the city to increase its levy while maintaining a large unused taxing margin.

The favorable regional climate and complex of educational and medical institutions within Cambridge have led to renewed economic growth. Substantial building activity, chiefly residential, is reflected in building permit values of over $665 million since 1982. Trade activity and per capita

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income continue to exceed state and regional averages, while resident employment has increased annually since 1978.

To address the city's long-neglected capital needs, officials are implementing a multi-year capital plan with a stated emphasis on infrastructure improvements. This well-designed program should not affect the city's modest debt position given the aggressive rate of bond retirement and sustained tax base growth. A revaluation in progress for fiscal 1987 is expected to increase the tax base by nearly 17%.

Despite the positive financial and economic trends, the city continues to face pressures due to the substantial levels of fixed and uncontrollable costs, the growing revenue demands of current operations and the uncertain sustainability of current high levels of building activity and tax base growth in this densely settled community.

details of bond sale:

Legal Name of Issuer: City of Cambridge, Massachusetts.

Security: General obligation bonds payable from taxes which may be levied subject to the limit imposed by Chapter 59, Section 21C of the General Laws.

Date of Bonds: July 1, 1986.

Denomination: $5,000 or integral multiples thereof.

Annual Maturities 7/1 ($ 000)

Year	Amount
1987-94	$420

NIC: 6.299%.

Average Life of Issue: 4.0 years.

Interest Payable: January 1, 1987 and semiannually thereafter.

Call Features: Not callable.

Registrar/Paying Agent: BayBank Middlesex, Burlington, Massachusetts.

Delivery: On or about July 15, 1986.

Bond Counsel: Palmer & Dodge, Boston.

Financial Officer: James P. Maloney, Jr., City Treasurer/Collector.

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

Auditor: Peat, Marwick, Mitchell & Co., Boston (FY 1985).

details of last comparable sale:

Date of Sale: June 11, 1985.

Amount: $11,405,000.

Purchaser: Prudential-Bache Securities, Inc. Syndicate.

Net Interest Cost: 6.9798%

Moody's Index: [1] 9.05%

[1] For **Baa** rated issues, as of June 14, 1985.

rating history:

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

analyst: E. Krauss

Cambridge, Massachusetts

debt factors: Better than average debt position. Modest debt burden and rapid payout. Future debt plans should not materially alter this position.

Debt Statement as of 6/30/86 ($ 000)

	Amount	%	
Bonded debt outstanding:			
General obligation			$50,405
Current offering (6/25/86)			3,360
Gross bonded debt:			$53,765
BANs due 7/28/86 [1]			2,663
BANs due 11/14/86			575
Lease-purchase contracts			1,302
Gross direct debt			$58,305
Less:			
BANs now funded			2,663
Direct net debt			[2] $55,642
Overlapping Debt:	**Amount**	**%**	
Middlesex County	$ 14,288	7.26	1,037
Massachusetts Water Resources Authority	156,142	3.30	5,153
MDC Parks [2]	56,708	5.10	2,892
MBTA	168,786	5.34	9,013
Overall net debt			[1] $73,737

[1] State school construction grants receivable as of June 30, 1986, subject to annual legislative appropriation, are estimated at $22.5 million. Relative amounts allocable to principal and interest are not reported.
[2] Debt outstanding as of June 30, 1985.

For additional information please refer to Moody's 1986 Municipal and Government Manual, page 2347 .

Security: General obligations, limited tax.

Use of Proceeds: City's share of $9,275,000 public parking garage; remainder funded by UDAG, CDBG and commonwealth grant.

Structure: Declining debt service; rapid retirement.

Debt History/Trend: Annual issuer of debt.

CIP/Future Borrowing: $9,825 million authorized but unissued. Five-year capital plan through fiscal 1991 totals $79.9 million primarily to finance streets and sidewalks, economic development, human resources and water and sewer system improvements. City plans to issue $49.75 million general obligation bonds (62.3% of sources) to finance its share of this program over the next five years. Other major anticipated financing sources include $6.1 million community development block grants (7.6%), $5 million utility fees (6.3%) and $15 million of General Fund appropriations (18.8%).

Borrowing Restrictions: The normal debt limit (2 1/2% of state equalized value) is about $73.0 million against which $15.9 million will be outstanding after this sale. The city may authorize debt up to twice this amount with approval of the State Emergency Finance Board. Many categories of debt are exempt from the limits.

Short-term Borrowing: Following this sale, only $575,000 BANs will be outstanding. Yearly revenue anticipation borrowing, which peaked at $50 million in fiscal 1978, declined to $10 million in 1986.

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Selected Debt Service G.O. Bonds [1]

Fiscal Year	($ 000)
1987	$10,915
1988	10,209
1990	7,964
1992	6,343
1995	2,674
1998 [2]	1,221
Overall Total: [3]	$69,817

Source: Official Statement

[1] Interest on this issue estimated at 6.2%.
[2] Final maturity of all bonds outstanding.
[3] Detail incomplete; does not add to total.

Debt Ratios

Net Debt	Per Capita [1]	Median	% F.V.	[1] Median (%)
Direct	$601	$369	1.5	1.6
Overall	797	645	2.0	2.7

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

Rate of Retirement

Bonds Due	Amount ($ 000)	% of Total
In 5 years	$33,345	62.0
In 10 years	51,165	95.2

administrative factors:

Council/manager form; nine-member city council elected at large for two-year terms. Council selects one of its own members as mayor; also appoints a city manager. Mayor also serves as chairman of separately elected school committee. School enrollments declining at reduced rate of 4% between 1982 and 1986; school department projects stable to slightly growing overall enrollments through 1990. City provides full services which include municipally-run hospital subsidized by city.

For fiscal 1987, city has budgeted contribution of $4.8 million, the same as for 1986. City has entered into agreement with Massachusetts General Hospital (Boston) to provide certain contractual services in Cambridge. Agreement expected to increase revenues at Cambridge Hospital and stabilize contributions. City is self-insured for personal and property liabilities but maintains no claim reserve.

Public Employees: Approximately 4,100 full-and part-time including school department; 2,945 covered under 17 collective bargaining groups. Ten contracts covering 2,032 employees expire June 30, 1986 and negotiations are in progress. One contract covering 220 nurses expired June 30, 1985 and has not been renegotiated. Contracts 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 noncontributory plan on the basis of actual cash payments to pensioners. Latest unfunded pension liability for the contributory system was $123.9 million as of January 1, 1983 up $31 million since 1979. There is no actuarial estimate for the non-contributory system. City pension contributions and payments in fiscal 1986 were $12.0 million, with $12.2 million budgeted for 1987. Since fiscal 1984, the city has been appropriating $1 million annually toward funding its accumulated pension liability. The 1986 budget included funding for outside actuarial study of system which is in progess. City intends to begin 30-year funding of its pension liability by fiscal 1988.

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Impact of Proposition 2 1/2: Following enactment of Proposition 2 1/2, city faced a potential loss of over 50% of its 1981 tax levy. In 1982, it reduced the levy by the maximum 15% requirement. To offset the approximate $12 million loss in tax revenues, city received additional state aid, imposed and increased local fees and charges and reduced the work force by about 10%. In 1983, a voter referendum overrode another 15% levy reduction while a property revaluation effective for 1984 has permitted a levy increase in that and subsequent years. Over the 1982-86 period, state aid more than doubled from $17 to $37 million, and officials project $42 million for fiscal 1987.

Property valuation and tax data:

Since fiscal 1984, the city has experienced significant A.V. growth due to substantial new building and trending adjustments. Tax collection performance is satisfactory.

Revaluation in progress for fiscal 1987, expected to result in $4.225 billion valuation, a 16.8% increase over 1986. Increase is expected to comprise $519 million in increased property values and $90 million of new construction. Revaluation expected to be completed late 1986 and estimated first half bills will be sent on schedule. 1984 revaluation resulted in significant increase in abatements. In spite of a 25% increase in overlay reserves beginning in fiscal 1984, a cumulative deficit of $2.35 million was funded in the fiscal 1985 and 1986 levies. City annually adjusts property value (trending) to mitigate triennial impacts.

City of Cambridge

FY	A.V.(000)	Equalization Rate (%)	[1] Full Value (000)	% Change	Tax Rate/ $1000 A.V.	[4] Net Levy (000)	[5] % Total Collected
1981	$347,055	$26.9	$1,291,000	-	$230.40	$78,123	99.1
1982	340,176	26.3	-	-	199.80	66,125	100.3
1983	343,269	17.1	2,004,000	-	198.00	66,128	97.1
1984	2,901,631	100.0	2,901,631	[3]	23.99	67,260	98.7
1985	3,083,419	100.0	3,083,419	6.3	23.47	70,146	In process
1986	3,616,211	100.0	3,616,211	17.3	[2] 20.55	72,327	-

[1] Since fiscal 1984, full value is reflected by that year's assessment; for earlier years, state equalized value.
[2] Average of rates for residential and commercial/industrial properties; actual rates are $14.29 residential, $30.83 industrial/commercial.
[3] Revaluation.
[4] Net of overlay reserve for abatements.
[5] As of March 31, 1986.

Average Annual Growth F.V., FYs 1984-86: 12.3%

FY 1986 Full Value per Capita: $39,079

Year-end Current Delinquency:

1984: 4.7%
1985: 3.2%

Hypothetical Tax Bill for a $50,000 Market Value Home: $714 (1986)

Tax Base Composition 1986	%	% of Levy
Residential	58.9	38.4
Commercial	27.5	41.2
Industrial	10.5	15.8
Personal	3.1	4.6

Cambridge, Massachusetts

Property Tax Base: Real and personal property.

Exemptions: Blind, elderly, veterans.

Assessing Agent: City.

Reassessment Procedures: Revaluation for fiscal 1987; being completed state law now requires revaluation every three years.

Basis of Assessment: One hundred percent of full value.

Collecting Agent: City.

Taxes Due: Installments November 1 and May 1.

Penalties: Fourteen percent per annum.

Rate and Levy Limitations: Subject to "Proposition 2 1/2" limitations.

Largest Taxpayers [1]	Business	FY 1986 A.V. ($ 000)
Commonwealth Energy [2]	Utility	$93,930
Harvard University	Taxable real estate	85,566
Prudential Insurance	Commercial	80,973
Massachusetts Institute of Technology	Taxable real estate	66,244
Boston Properties	Real estate	57,400
Jones & Najarian	Commercial	40,156
New England Telephone	Utility	39,430

Source: Official Statement.

[1] Ten largest taxpayers account for 21.6% of total levy.

[2] $10 million reduction from 1985 values reflects distribution of land to another taxpayer.

economic factors:

Densely settled city with a heavily service-oriented economy focused on education, health, research, finance and consulting. Construction of commercial and industrial property has surged in recent years, evidenced by $655 million in building permit values for the fiscal 1982 through 1986 period. About 73% of building permits were for non-residential purposes. Although many projects built at the start of the current building surge were initially benefitted by tax abatements, officials report that none of the more recent projects are so benefitted. A $600 million rapid transit project to extend the MBTA Red Line from Harvard Square to the Alewife District was the major public improvement completed in the city in 1985.

Declining population since 1950, although its rate has diminished. Manufacturing and wholesale trade sectors weakened in this period, while retail sales activity proved resilient. Despite this, 1982 per capita retail and wholesale trade remained significantly above the state and 122% above the state's per capita, respectively. Unemployment rates since 1978 have bettered state and national averages, marking a turnaround from the situation of the mid-1970s. While a low median family income and high proportion of persons below poverty reflect the presence of education institutions, per capita income and housing levels exceed both state and regional norms.

Location: Across the Charles River from Boston.

Population

	Cambridge			% Change in Population		
Year	Population	Area (sq. mi.)	Density	City	State	U.S.
1950	120,740	6.20	19,474	8.9	8.7	14.5
1960	107,716	6.20	17,374	-10.8	9.8	18.5
1970	100,361	6.20	16,187	-6.8	10.5	13.3
1980	95,322	6.20	15,374	-5.0	0.8	11.4
1984 [1]	92,535	6.20	14,925	-2.9	-	-

Source: U.S. Census Bureau.

[1] Estimate.

Cambridge, Massachusetts

Population and Housing Characteristics: Cambridge

	City 1970	City 1980	[2] Norms 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	2.75	2.13	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	79.7	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.

Labor Market Characteristics: Cambridge City

Year	Civilian 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]	55,144	52,923	4.0	4.8	7.5
1985 [1]	55,725	53,874	3.3	3.9	7.2
3/85 [1]	55,449	53,347	3.8	4.7	7.5
3/86	56,112	54,169	3.5	4.3	7.5

Source: Department of Labor, Bureau of Labor Statistics

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

Largest Employers

	1/86 Employees
Harvard University	7,400
Massachusetts Institute of Technology	6,700
City of Cambridge	4,100
Polaroid Corporation [1]	2,590
Draper Laboratory	2,000
Mt. Auburn Hospital	1,700
Bolt, Beranek & Newman	1,600
Arthur D. Little, Inc.	1,110
ABT Associates	835
Middlesex County	790

Source: Official Statement.
[1] 4,200 reported in 1985.

Cambridge, Massachusetts

Year-End Surplus Revenue and Free Cash ($ 000)

	1981	1982	1983	1984	1985
Surplus Revenue [1]	$3,342	$1,273	$6,177	$10,943	$17,660
Free Cash (deficit) [1]	(818)	(3,228)	128	7,868	13,607

[1] Free cash is surplus revenue 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.

General Fund Update ($ 000): [1]

	Revised Budget [2] FY 1986	Budget FY 1986
Revenues and interfund transfers	$174,605	[3] $185,805
Expenditures	174,605	185,805

[1] General Fund and all other operating funds. Budgetary basis. Not comparable with presentation above.
[2] City is projecting a free cash surplus of $10.4 million at June 30, 1986.
[3] Include $4.5 million appropriation of prior year free cash to reduce the tax levy and finance capital projects.

Comment: Budget increases are expected to be financed by double-digit increase in state aid, 4% tax levy increase, and $700,000 additional from first full year of hotel/motel tax imposed in mid-fiscal 1987. Water and sewer charges are expected to increase one-third to cover increased capital and MWRA charges. Federal revenue sharing was reduced by $1 million to $500,000, reflecting phase-out of this program.

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EXECUTIVE DEPARTMENT
ROBERT W. HEALY
City Manager

RICHARD C. ROSSI
Deputy City Manager

CITY OF CAMBRIDGE

CAMBRIDGE, MASSACHUSETTS 02139
TEL. 498-9011

August 4, 1986

To the Honorable, the City Council:

This is to inform the City Council that on June 25, 1986, the City sold $3,360,000 in general obligation bonds. The bonds sold at an interest cost of 6.135%. The sale proceeds will be used to help finance the cost of the second City-owned parking garage in the East Cambridge Development area. As the Council was notified at their last meeting, Moody's Investor Services raised the City's bond rating in conjunction with this sale.

I have enclosed a copy of Moody's analysis of the City's financial position for your review. The analysis by this corporation is something that the City Council should take great pride in.

Very truly yours,

Robert W. Healy
Robert W. Healy
City Manager

RWH/mbf
Enc.

8/4/86 - CHARTER RIGHTED BY COUNCILLOR DANEHY

9/8/86 - PLACED ON FILE ON MOTION OF MAYOR WALTER SULLIVAN

Agenda Item No. 18 #11329

Re: sale of general obligation bonds in the amount of $3,360,000. to help finance the cost of the second City-owned parking garage in the East Cambridge Development Area.

In City Council,

August 4, 1986

C. Danehy

Charter Right

VMV

MS

NF

9/8/86

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placed on file