EATON VANCE CALIFORNIA MUNICIPAL BOND FUND II Form N-CSRS May 25, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED

MANAGEMENT INVESTMENT COMPANIES

Investment Company Act File Number: 811-21217

Eaton Vance California Municipal Bond Fund II

(Exact Name of Registrant as Specified in Charter)

Two International Place, Boston, Massachusetts 02110

(Address of Principal Executive Offices)

Maureen A. Gemma

Two International Place, Boston, Massachusetts 02110

(Name and Address of Agent for Services)

(617) 482-8260

(Registrant s Telephone Number)

September 30

Date of Fiscal Year End

March 31, 2016

Date of Reporting Period

Item 1. Reports to Stockholders

Municipal Bond Funds

Semiannual Report

March 31, 2016

Municipal II (EIV) California II (EIA) Massachusetts (MAB) Michigan (MIW)

New Jersey (EMJ) New York II (NYH) Ohio (EIO) Pennsylvania (EIP)

Commodity Futures Trading Commission Registration. Effective December 31, 2012, the Commodity Futures Trading Commission (CFTC) adopted certain regulatory changes that subject registered investment companies and advisers to regulation by the CFTC if a fund invests more than a prescribed level of its assets in certain CFTC-regulated instruments (including futures, certain options and swap agreements) or markets itself as providing investment exposure to such instruments. Each Fund has claimed an exclusion from the definition of the term—commodity pool operator—under the Commodity Exchange Act. Accordingly, neither the Funds nor the adviser with respect to the operation of the Funds is subject to CFTC regulation. Because of its management of other strategies, each Fund—s adviser is registered with the CFTC as a commodity pool operator and a commodity trading advisor.

Fund shares are not insured by the FDIC and are not deposits or other obligations of, or guaranteed by, any depository institution. Shares are subject to investment risks, including possible loss of principal invested.

Semiannual Report March 31, 2016

Eaton Vance

Municipal Bond Funds

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Municipal Bond Fund II

March 31, 2016

Performance^{1,2}

Portfolio Manager Cynthia J. Clemson

% Average Annual Total Returns	Inception Date	Six Months	One Year	Five Years	Ten Years
Fund at NAV	11/29/2002	6.23%	7.29%	13.09%	5.79%
Fund at Market Price		10.21	10.79	7.82	5.68
Barclays Long (22+) Year Municipal Bond Index		4.73%	5.19%	8.30%	5.32%
% Premium/Discount to NAV ³					
					4.61%
Distributions ⁴					
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Total Distributions per share for the period	\$0.359
Distribution Rate at NAV	4.94%
Taxable-Equivalent Distribution Rate at NAV	8.73%
Distribution Rate at Market Price	5.18%
Taxable-Equivalent Distribution Rate at Market Price	9.15%

% Total Leverage⁵ Auction Preferred Shares (APS)

2.08% Institutional MuniFund Term Preferred (iMTP) Shares 17.53 Residual Interest Bond (RIB) Financing 18.37

Fund Profile

Credit Quality (% of total investments)^{6,7}

See Endnotes and Additional Disclosures in this report.

Past performance is no guarantee of future results. Returns are historical and are calculated by determining the percentage change in net asset value (NAV) or market price (as applicable) with all distributions reinvested and includes management fees and other expenses. Fund performance at market price will differ from its results at NAV due to factors such as changing perceptions about the Fund, market conditions, fluctuations in supply and demand for Fund shares, or changes in Fund distributions. Investment return and principal value will fluctuate so that shares, when sold, may be worth more or less than their original cost. Performance less than or equal to one year is cumulative. Performance is for the stated time period only; due to market volatility, current Fund performance may be lower or higher than the quoted return. For performance as of the most recent month-end, please refer to eatonvance.com.

California Municipal Bond Fund II

March 31, 2016

Performance^{1,2}

Portfolio Manager Craig R. Brandon, CFA

% Average Annual Total Returns	Inception Date	Six Months	One Year	Five Years	Ten Years
Fund at NAV	11/29/2002	5.85%	6.94%	12.53%	5.44%
Fund at Market Price		8.45	8.46	11.68	5.33
Barclays Long (22+) Year Municipal Bond Index		4.73%	5.19%	8.30%	5.32%
% Premium/Discount to NAV ³					
					1.92%

Distributions ⁴	
Total Distributions per share for the period	\$0.338
Distribution Rate at NAV	4.59%
Taxable-Equivalent Distribution Rate at NAV	9.35%
Distribution Rate at Market Price	4.68%
Taxable-Equivalent Distribution Rate at Market Price	9.54%

% Total Leverage ⁵	
APS	1.07%
iMTP Shares	29.51
RIB Financing	6.96
Fund Desfile	

Fund Profile

Credit Quality (% of total investments)^{6,7}

See Endnotes and Additional Disclosures in this report.

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Massachusetts Municipal Bond Fund

March 31, 2016

Performance^{1,2}

Portfolio Manager Craig R. Brandon, CFA

% Average Annual Total Returns	Inception Date	Six Months	One Year	Five Years	Ten Years
Fund at NAV	11/29/2002	7.59%	8.27%	10.81%	6.05%
Fund at Market Price		12.71	8.22	9.32	5.25
Barclays Long (22+) Year Municipal Bond Index		4.73%	5.19%	8.30%	5.32%
% Premium/Discount to NAV ³					
					5.24%
Distributions ⁴					
Total Distributions per share for the period					\$0.353
Distribution Rate at NAV					4.10%
Taxable-Equivalent Distribution Rate at NAV					7.63%
Distribution Rate at Market Price					4.33%
Taxable-Equivalent Distribution Rate at Market Price					8.06%
% Total Leverage ⁵					
APS					1.45%
iMTP Shares					30.13
RIB Financing					3.19
Fund Profile					

Credit Quality (% of total investments)6,7

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Michigan Municipal Bond Fund

March 31, 2016

Performance^{1,2}

Portfolio Manager Cynthia J. Clemson

% Average Annual Total Returns	Inception Date	Six Months	One Year	Five Years	Ten Years
Fund at NAV	11/29/2002	7.57%	9.05%	10.10%	6.40%
Fund at Market Price		15.31	13.80	6.43	5.81
Barclays Long (22+) Year Municipal Bond Index		4.73%	5.19%	8.30%	5.32%

% Premium/Discount to NAV³

6.58%

$Distributions^4\\$

Total Distributions per share for the period	\$0.375
Distribution Rate at NAV	4.53%
Taxable-Equivalent Distribution Rate at NAV	8.36%

Distribution Rate at Market Price