NUVEEN CALIFORNIA AMT-FREE MUNICIPAL INCOME FUND Form DEF 14A October 06, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the

Securities Exchange Act of 1934

(Amendment No.)

Filed by the Registrant x Filed by a Party other than the Registrant "

Check the appropriate box:

- " Preliminary Proxy Statement.
- " Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)).
- x Definitive Proxy Statement.
- " Definitive Additional Materials.
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Nuveen California AMT-Free Municipal Income Fund (NKX)

(Name of Registrant as Specified In Its Charter)

 $(Name\ of\ Person(s)\ Filing\ Proxy\ Statement,\ if\ other\ than\ the\ Registrant)$

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	ck box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
1)	Amount Previously Paid:
2)	Form, Schedule or Registration Statement No.:
3)	Filing Party:
4)	Date Filed:

Notice of Annual Meeting

333 West Wacker Drive Chicago, Illinois 60606 (800) 257-8787

of Shareholders to be held on November 15, 2016

October 6, 2016

Nuveen Arizona Premium Income Municipal Fund (NAZ)

Nuveen California AMT-Free Municipal Income Fund (NKX)

Nuveen California Municipal Value Fund, Inc. (NCA)

Nuveen California Municipal Value Fund 2 (NCB)

Nuveen Massachusetts Premium Income Municipal Fund (NMT)

Nuveen Michigan Quality Income Municipal Fund (NUM)

Nuveen New Jersey Dividend Advantage Municipal Fund (NXJ)

Nuveen New Jersey Municipal Value Fund (NJV)

Nuveen Ohio Quality Income Municipal Fund (NUO)

Nuveen Pennsylvania Investment Quality Municipal Fund (NQP)

Nuveen Pennsylvania Municipal Value Fund (NPN)

Nuveen Texas Quality Income Municipal Fund (NTX)

To the Shareholders of the Above Funds:

Notice is hereby given that the Annual Meeting of Shareholders of each of Nuveen Arizona Premium Income Municipal Fund (Arizona Premium), Nuveen California AMT-Free Municipal Income Fund (California AMT-Free), Nuveen California Municipal Value Fund 2 (California Value 2), Nuveen Massachusetts Premium Income Municipal Fund (Massachusetts Premium), Nuveen Michigan Quality Income Municipal Fund (Michigan Quality), Nuveen New Jersey Dividend Advantage Municipal Fund (New Jersey Dividend), Nuveen New Jersey Municipal Value Fund (New Jersey Value), Nuveen Ohio Quality Income Municipal Fund (Ohio Quality), Nuveen Pennsylvania Investment Quality Municipal Fund (Pennsylvania Investment Quality Municipal Fund (Pennsylvania Value) and Nuveen Texas Quality Income Municipal Fund (Texas Quality), each a Massachusetts business trust (each, a Massachusetts Fund and collectively, the Massachusetts Funds), and Nuveen California Municipal Value Fund, Inc. (California Value), a Minnesota corporation (California Value and the Massachusetts Funds are each a Fund and collectively, the Funds), will be held in the offices of Nuveen Investments, Inc., 333 West Wacker Drive, Chicago, Illinois, on Tuesday, November 15, 2016, at 2:00 p.m., Central time (for each Fund, an Annual Meeting and collectively, the Annual Meetings), for the following purposes and to transact such other business, if any, as may properly come before the Annual Meeting.

Matters to Be Voted on by Shareholders:

- 1. To elect Members to the Board of Directors/Trustees (each a Board and each Director or Trustee a Board Member) of each Fund as outlined below:
 - a. For each Massachusetts Fund (except California Value 2, New Jersey Value and Pennsylvania Value), to elect five (5) Board Members.
 - i) three (3) Class I Board Members to be elected by the holders of Common Shares and Preferred Shares, voting together as a single class; and
 - ii) two (2) Board Members to be elected by the holders of Preferred Shares only, voting separately as a single class.
 - b. For California Value, California Value 2, New Jersey Value and Pennsylvania Value, to elect four (4) Class I Board Members.
- 2. To transact such other business as may properly come before the Annual Meeting. Shareholders of record at the close of business on September 19, 2016 are entitled to notice of and to vote at the Annual Meeting.

All shareholders are cordially invited to attend the Annual Meeting. In order to avoid delay and additional expense and to assure that your shares are represented, please vote as promptly as possible, regardless of whether or not you plan to attend the Annual Meeting. You may vote by mail, telephone or over the Internet. To vote by mail, please mark, sign, date and mail the enclosed proxy card. No postage is required if mailed in the United States. To vote by telephone, please call the toll-free number located on your proxy card and follow the recorded instructions, using your proxy card as a guide. To vote over the Internet, go to the Internet address provided on your proxy card and follow the instructions, using your proxy card as a guide.

If you intend to attend the Annual Meeting in person and you are a record holder of a Fund s shares, in order to gain admission you must show photographic identification, such as your driver s license. If you intend to attend the Annual Meeting in person and you hold your shares through a bank, broker or other custodian, in order to gain admission you must show photographic identification, such as your driver s license, and satisfactory proof of ownership of shares of a Fund, such as your voting instruction form (or a copy thereof) or broker s statement indicating ownership as of a recent date. If you hold your shares in a brokerage account or through a bank or other nominee, you will not be able to vote in person at the Annual Meeting unless you have previously requested and obtained a legal proxy from your broker, bank or other nominee and present it at the Annual Meeting.

Gifford R. Zimmerman

Vice President and Secretary

333 West Wacker Drive

Joint Proxy Statement

Chicago, Illinois 60606

(800) 257-8787

October 6, 2016

This Joint Proxy Statement is first being mailed to shareholders on or about October 11, 2016.

Nuveen Arizona Premium Income Municipal Fund (NAZ)

Nuveen California AMT-Free Municipal Income Fund (NKX)

Nuveen California Municipal Value Fund, Inc. (NCA)

Nuveen California Municipal Value Fund 2 (NCB)

Nuveen Massachusetts Premium Income Municipal Fund (NMT)

Nuveen Michigan Quality Income Municipal Fund (NUM)

Nuveen New Jersey Dividend Advantage Municipal Fund (NXJ)

Nuveen New Jersey Municipal Value Fund (NJV)

Nuveen Ohio Quality Income Municipal Fund (NUO)

Nuveen Pennsylvania Investment Quality Municipal Fund (NQP)

Nuveen Pennsylvania Municipal Value Fund (NPN)

Nuveen Texas Quality Income Municipal Fund (NTX)

General Information

This Joint Proxy Statement is furnished in connection with the solicitation by the Board of Trustees or Directors (each a Board and collectively, the Boards, and each Trustee or Director, a Board Member and collectively, the Board Members) of each of Nuveen Arizona Premium Income Municipal Fund (Arizona Premium), Nuveen California AMT-Free Municipal Income Fund (California AMT-Free), Nuveen California Municipal Value Fund 2 (California Value 2), Nuveen Massachusetts Premium Income Municipal Fund (Massachusetts Premium), Nuveen Michigan Quality Income Municipal Fund (Michigan Quality), Nuveen New Jersey Dividend Advantage Municipal Fund (New Jersey Dividend), Nuveen New Jersey Municipal Fund (New Jersey Value), Nuveen Ohio Quality Income Municipal Fund (Ohio Quality), Nuveen Pennsylvania Investment Quality Municipal Fund (Pennsylvania Investment Quality), Nuveen Pennsylvania Municipal Value Fund (Pennsylvania Value) and Nuveen Texas Quality Income Municipal Fund (Texas Quality), each a Massachusetts business trust (each, a Massachusetts Fund and collectively, the Massachusetts Funds), and Nuveen California Municipal Value Fund, Inc. (California Value), a Minnesota corporation (California Value and the Massachusetts Funds are each a Fund and collectively, the Funds), of proxies to be voted at the Annual Meeting of Shareholders to be held in the offices of Nuveen Investments, Inc. (Nuveen or Nuveen Investments), 333 West Wacker Drive, Chicago, Illinois, on Tuesday, November 15, 2016 at 2:00 p.m., Central time (for each Fund, an Annual Meeting and collectively, the Annual Meetings), and at any and all adjournments thereof.

On the matters coming before each Annual Meeting as to which a choice has been specified by shareholders on the proxy, the shares will be voted accordingly. If a properly executed proxy is returned and no choice is specified, the shares will be voted **FOR** the election of the nominees as listed in this Joint Proxy Statement. Shareholders of a Fund who execute proxies may revoke them at any time before they are voted by filing with that Fund a written notice of revocation, by delivering a duly executed proxy bearing a later date, or by attending the Annual Meeting and voting in person. A prior proxy can also be revoked by voting again through the toll-free number or the Internet address listed in the proxy card. Merely attending the Annual Meeting, however, will not revoke any previously submitted proxy.

The Board of each Fund has determined that the use of this Joint Proxy Statement for each Annual Meeting is in the best interest of each Fund and its shareholders in light of the similar matters being considered and voted on by the shareholders.

The following table indicates which shareholders are solicited with respect to each matter:

Matter		Common Shares	Preferred Shares(1)
1(a)(i)	For each Massachusetts Fund (except California Value 2, New Jersey Value and	X	X
	Pennsylvania Value), election of three (3) Class I Board Members by all shareholders.		
1(a)(ii)	For each Massachusetts Fund (except California Value 2, New Jersey Value and		X
	Pennsylvania Value), election of two (2) Board Members by holders of Preferred Shares		
	only.		
1(b)	For California Value, California Value 2, New Jersey Value and Pennsylvania Value,	X	N/A
	election of four (4) Class I Board Members by all shareholders.		

(1) Variable Rate MuniFund Term Preferred Shares (VMTP Shares) for Arizona Premium, Massachusetts Premium, Michigan Quality and Pennsylvania Investment Quality; Institutional MuniFund Term Preferred Shares (iMTP Shares) for California AMT-Free and Texas Quality; and Variable Rate Demand Preferred Shares (VRDP Shares) for California AMT-Free, New Jersey Dividend, Ohio Quality and Pennsylvania Investment Quality are collectively referred to herein as Preferred Shares.

A quorum of shareholders is required to take action at each Annual Meeting. A majority of the shares entitled to vote at each Annual Meeting, represented in person or by proxy, will constitute a quorum of shareholders at that Annual Meeting, except that for the election of the two Board Member nominees by holders of Preferred Shares (for each Fund except California Value, California Value 2, New Jersey Value and Pennsylvania Value), 33 ½ of the Preferred Shares entitled to vote and represented in person or by proxy will constitute a quorum. Votes cast by proxy or in person at each Annual Meeting will be tabulated by the inspectors of election appointed for that Annual Meeting. The inspectors of election will determine whether or not a quorum is present at the Annual Meeting. The inspectors of election will treat abstentions and broker non-votes (i.e., shares held by brokers or nominees, typically in street name, as to which (i) instructions have not been received from the beneficial owners or persons entitled to vote and (ii) the broker or nominee does not have discretionary voting power on a particular matter) as present for purposes of determining a quorum.

VRDP Shares held in street name as to which voting instructions have not been received from the beneficial owners or persons entitled to vote as of one business day before the Annual Meeting, or, if adjourned, one business day before the day to which the Annual Meeting is adjourned, and that would otherwise be treated as broker non-votes may, pursuant to Rule 452 of the New York Stock Exchange (NYSE), be voted by the broker on the proposal in the same proportion as the votes cast by all holders of VRDP Shares as a class who have voted on the proposal or in the same proportion as the votes cast by all holders of the Fund who have voted on that item. Rule 452 permits proportionate voting of VRDP Shares with respect to a particular item if, among other things, (i) a minimum of 30% of the VRDP Shares or shares of a series of VRDP Shares outstanding has been voted by the holders of such shares with respect to such item, (ii) less than 10% of the VRDP Shares or shares of a series of VRDP Shares outstanding has been voted by the holders of such shares against such item and (iii) for any proposal as to which holders of Common Shares and Preferred Shares vote as a single class, holders of Common Shares approve the proposal. For the

purpose of meeting the 30% test, abstentions will be treated as shares voted and, for the purpose of meeting the 10% test, abstentions will not be treated as shares voted against the item.

Broker-dealers who are not members of the NYSE may be subject to other rules, which may or may not permit them to vote your shares without instruction. We urge you to provide instructions to your broker or nominee so that your votes may be counted.

For each Fund, the affirmative vote of a plurality of the shares present and entitled to vote at the Annual Meeting will be required to elect the Board Members of that Fund. For purposes of determining the approval of the proposal to elect Board Members for each Fund, abstentions and broker non-votes will have no effect.

Those persons who were shareholders of record at the close of business on Monday, September 19, 2016 will be entitled to one vote for each share held and a proportionate fractional vote for each fractional vote held. As of September 19, 2016, the shares of the Funds were issued and outstanding as follows:

Fund	Ticker Symbol ⁽¹⁾	Common Shares	Preferred Shares	
Arizona Premium	NAZ	11,581,257	VMTP Series 2019	883
California AMT-Free	NKX	47,728,941	VRDP Series 2	355
			VRDP Series 3	427
			VRDP Series 4	1,090
			VRDP Series 5	1,044
			VRDP Series 6	1,050
			iMTP Series 2018	7,200
California Value	NCA	27,806,098	N/A	
California Value 2	NCB	3,291,459	N/A	
Massachusetts Premium	NMT	9,348,158	VMTP Series 2017	740
Michigan Quality	NUM	20,810,887	VMTP Series 2019	1,730
New Jersey Dividend	NXJ	42,584,678	VRDP Series 1	810
			VRDP Series 2	1,443
			VRDP Series 3	886
New Jersey Value	NJV	1,550,156	N/A	
Ohio Quality	NUO	18,521,954	VRDP Series 1	1,480
Pennsylvania Investment Quality	NQP	37,754,841	VMTP Series 2019	870
			VRDP Series 2	1,125
			VRDP Series 3	1,050
Pennsylvania Value	NPN	1,219,689	N/A	
Texas Quality	NTX	10,027,210	iMTP Series 2018	14,400

⁽¹⁾ The Common Shares of all of the Funds are listed on the NYSE, except New Jersey Value and Pennsylvania Value, which are listed on the NYSE MKT.

1. Election of Board Members

Pursuant to the organizational documents of each Fund, each Board is divided into three classes, Class I, Class II and Class III, to be elected by the holders of the outstanding Common Shares and any outstanding Preferred Shares, voting together as a single class to serve until the third succeeding annual meeting subsequent to their election or thereafter, in each case

until their successors have been duly elected and qualified. For Arizona Premium, California AMT-Free, Massachusetts Premium, Michigan Quality, New Jersey Dividend, Ohio Quality, Pennsylvania Investment Quality and Texas Quality, each Massachusetts Fund with Preferred Shares outstanding, under normal circumstances, holders of Preferred Shares are entitled to elect two (2) Board Members. The Board Members elected by holders of Preferred Shares will be elected to serve until the next annual meeting or until their successors have been duly elected and qualified.

- (a) For each Massachusetts Fund, except California Value 2, New Jersey Value and Pennsylvania Value:
 - (i) three (3) Board Members are to be elected by holders of Common Shares and Preferred Shares, voting together as a single class. Board Members Stockdale, Stone and Wolff have been designated as Class I Board Members and as nominees for Board Members for a term expiring at the annual meeting of shareholders to be held in 2019 or until their successors have been duly elected and qualified. Board Members Adams, Cook, Evans, Kundert, Moschner, Nelson and Toth are current and continuing Board Members. Board Members Adams, Kundert, Nelson and Toth have been designated as Class II Board Members for a term expiring at the annual meeting of shareholders in 2017 or until their successors have been duly elected and qualified. Board Members Cook, Evans and Moschner have been designated as Class III Board Members for a term expiring at the annual meeting of shareholders in 2018 or until their successors have been duly elected and qualified.
 - (ii) two (2) Board Members are to be elected by holders of Preferred Shares, voting separately as a single class. Board Members Hunter and Schneider are nominees for election by holders of Preferred Shares for a term expiring at the next annual meeting or until their successors have been duly elected and qualified.
- (b) For California Value, California Value 2, New Jersey Value and Pennsylvania Value: four (4) Board Members are to be elected by all shareholders. Board Members Hunter, Stockdale, Stone and Wolff have been designated as Class I Board Members and as nominees for Board Members for a term expiring at the annual meeting of shareholders in 2019 or until their successors have been duly elected and qualified. Board Members Adams, Cook, Evans, Kundert, Moschner, Nelson, Schneider and Toth are current and continuing Board Members. Board Members Adams, Kundert, Nelson and Toth have been designated as Class II Board Members for a term expiring at the annual meeting of shareholders in 2017 or until their successors have been duly elected and qualified. Board Members Cook, Evans, Moschner and Schneider have been designated as Class III Board Members for a term expiring at the annual meeting of shareholders in 2018 or until their successors have been duly elected and qualified.

It is the intention of the persons named in the enclosed proxy to vote the shares represented thereby for the election of the nominees listed in the table below unless the proxy is marked otherwise. Each of the nominees has agreed to serve as a Board Member of each Fund if elected. However, should any nominee become unable or unwilling to accept nomination for election, the proxies will be voted for substitute nominees, if any, designated by that Fund s present Board.

Class I Board Members: For Pennsylvania Investment Quality, Board Members Stockdale and Stone were last elected to the Fund s Board at the annual meeting of shareholders held on November 22, 2013. For Arizona Premium, Michigan Quality, New Jersey Dividend, Ohio Quality and Texas Quality, Board Members Stockdale and Stone were last elected to the Fund s Board at the annual meeting of shareholders held on November 26, 2013. For Massachusetts Premium, Board Members Stockdale and Stone were last elected to the Fund s Board at the annual meeting of shareholders held on January 3, 2014. For California AMT-Free, Board Members Stockdale and Stone were last elected to the Fund s Board at the annual meeting of shareholders held on February 24, 2014. For California Value, California Value 2, New Jersey Value and Pennsylvania Value, Board Members Hunter, Stockdale and Stone were last elected to the Fund s Board at the annual meeting of shareholders held on November 26, 2013.

Class II Board Members: For Arizona Premium, California AMT-Free, California Value, California Value 2, Michigan Quality, New Jersey Dividend, Ohio Quality and Pennsylvania Investment Quality, Board Members Adams, Kundert, Nelson and Toth were lasted elected to the Fund s Board at the annual meeting of shareholders held on August 5, 2014. For New Jersey Value, Pennsylvania Value and Texas Quality, Board Members Adams, Kundert, Nelson and Toth were lasted elected to the Fund s Board at the annual meeting of shareholders held on August 5, 2014 and adjourned to August 15, 2014. For Massachusetts Premium, Board Members Adams, Kundert, Nelson and Toth were lasted elected to the Fund s Board at the annual meeting of shareholders held on September 11, 2014.

Class III Board Members: For each Fund, Board Member Evans was last elected to the Fund s Board at the annual meeting of shareholders held on November 17, 2015.

Board Members Elected by Holders of Preferred Shares: For Arizona Premium, California AMT-Free, Massachusetts Premium, Michigan Quality, New Jersey Dividend, Ohio Quality, Pennsylvania Investment Quality and Texas Quality, Board Members Hunter and Schneider were lasted elected to the Fund s Board at the annual meeting of shareholders held on November 17, 2015.

Board Member Appointments/Initial Elections: On February 4, 2016, Ms. Wolff was appointed as a Board Member and designated as a Class I Board Member for each Fund, effective February 15, 2016.

On June 22, 2016, Ms. Cook and Mr. Moschner were appointed as Board Members and designated as Class III Board Members for each Fund, effective July 1, 2016.

Other than Board Members Adams and Cook, all Board Member nominees and current and continuing Board Members are not interested persons, as defined in the Investment Company Act of 1940, as amended (the 1940 Act), of the Funds or the Adviser, Nuveen Fund Advisors, LLC (Adviser), and have never been an employee or director of Nuveen, the Adviser s parent company, or any affiliate. Accordingly, such Board Members are deemed Independent Board Members.

The Board unanimously recommends that shareholders vote FOR the election of each Board Member identified in the table below as having an annual term or designated as a Class I Board Member, as applicable.

Board Nominees/Board Members

Name, Address and Year of Birth Nominees/Board Members who are not	Position(s) Held with Fund interested persons	Term of Office and Length of Time Served ⁽¹⁾ of the Funds	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Board Member	Other Directorships Held by Board Member During the Past Five Years
William J. Schneider ⁽²⁾ c/o Nuveen Investments, Inc. 333 West Wacker Drive Chicago, IL 60606 1944	Chairman of the Board; Board Member	Term: Annual or Class III Board Member until 2018 annual shareholder meeting ⁽³⁾	Chairman of Miller-Valentine Partners Ltd., a real estate investment company; Board Member of Med-America Health System and of WDPR Public Radio Station; formerly, Senior Partner and Chief Operating Officer (retired, 2004) of Miller-Valentine Group;	180	None
		Length of Service: Since 1996, Chairman of the Board Since July 1, 2013	formerly, Director, Dayton Development Coalition; formerly, Board Member, Business Advisory Council, Cleveland Federal Reserve Bank and University of Dayton Business School Advisory Council.		
Jack B. Evans c/o Nuveen Investments, Inc. 333 West Wacker Drive Chicago, IL 60606 1948	Board Member	Term: Class III Board Member until 2018 annual shareholder meeting	President, The Hall-Perrine Foundation, a private philanthropic corporation (since 1996); Director, The Gazette Company; Life Trustee of Coe College and Iowa College Foundation; formerly, Director, Federal Reserve Bank of Chicago; formerly, President and	180	Director and Chairman, United Fire Group, a publicly held company; formerly, Director, Alliant Energy.
		Length of Service: Since 1999	Chief Operating Officer, SCI Financial Group, Inc., a regional financial services firm; formerly, Member and President Pro Tem of the Board of Regents for the State of Iowa University System.		

Name, Address and Year of Birth	Position(s) Held with Fund	Term of Office and Length of Time Served ⁽¹⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Board Member	Other Directorships Held by Board Member During the Past Five Years
William C. Hunter c/o Nuveen Investments, Inc. 333 West Wacker Drive Chicago, IL 60606 1948	Board Member	Term: Annual or Class I Board Member until 2016 annual shareholder meeting ⁽³⁾ Length of Service: Since 2004	Dean Emeritus (since 2012), formerly, Dean (2006-2012), Tippie College of Business, University of Iowa; Director (since 2005) and past President (2010-2014), Beta Gamma Sigma, Inc., The International Business Honor Society; Director of Wellmark, Inc. (since 2009); formerly, Director (1997-2007), Credit Research Center at Georgetown University; formerly, Dean and Distinguished Professor of Finance, School of Business at the University of Connecticut (2003-2006); previously, Senior Vice President and Director of Research at the Federal Reserve Bank of Chicago (1995-2003).	180	Director (since 2004) of Xerox Corporation.

Name, Address and Year of Birth	Position(s) Held with Fund	Term of Office and Length of Time Served ⁽¹⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Board Member	Other Directorships Held by Board Member During the Past Five Years
David J. Kundert	Board Member	Term: Class II Board Member	Formerly, Director, Northwestern Mutual Wealth Management	180	None
c/o Nuveen Investments, Inc.		until 2017 annual shareholder	Company (2006-2013); retired (since 2004) as Chairman,		
333 West Wacker Drive		meeting	JPMorgan Fleming Asset Management, President and CEO, Banc One Investment Advisors		
Chicago, IL 60606			Corporation, and President, One Group Mutual Funds; prior		
1942		Length of Service: Since 2005			

Name, Address and Year of Birth	Position(s) Held with Fund	Term of Office and Length of Time Served ⁽¹⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Board Member	Other Directorships Held by Board Member During the Past Five Years
Albin F. Moschner c/o Nuveen Investments, Inc. 333 West Wacker Drive Chicago, Illinois 60606 1952	Board Member	Term: Class III Board Member until 2018 annual shareholder meeting Length of Service: Since 2016	Founder and Chief Executive Officer, Northcroft Partners, LLC, a management consulting firm (since 2012); previously, held positions at Leap Wireless International, Inc., including Consultant (2011-2012), Chief Operating Officer (2008-2011), and Chief Marketing Officer (2004-2008); formerly, President, Verizon Card Services division of Verizon Communications, Inc. (2000-2003); formerly, President, One Point Services at One Point Communications (1999-2000); formerly, Vice Chairman of the Board, Diba, Incorporated (1996-1997); formerly, various executive positions with Zenith Electronics Corporation (1991-1996).	180	Director, USA Technologies, Inc., a provider of solutions and services to facilitate electronic payment transactions (since 2012); formerly, Director, Wintrust Financial Corporation (1996-2016).

Name, Address and Year of Birth	Position(s) Held with Fund	Term of Office and Length of Time Served ⁽¹⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Board Member	Other Directorships Held by Board Member During the Past Five Years
John K. Nelson	Board Member	Term: Class II Board Member	Member of Board of Directors of Core12 LLC (since 2008), a	180	None
c/o Nuveen Investments, Inc.		until 2017 annual shareholder meeting	private firm which develops branding, marketing and communications strategies for		
333 West Wacker Drive		meeting	clients; Director of The Curran Center for Catholic American		
Chicago, IL 60606			Studies (since 2009) and The President's Council, Fordham		
1962		Length of Service: Since 2013	· · · · · · · · · · · · · · · · · · ·		

Name, Address and Year of Birth	Position(s) Held with Fund	Term of Office and Length of Time Served ⁽¹⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Board Member	Other Directorships Held by Board Member During the Past Five Years
Judith M. Stockdale	Board Member	Term: Class I Board Member	Board Member of the U.S. Endowment for Forestry and	180	None
c/o Nuveen Investments, Inc.		until 2016 annual shareholder	Communities (since 2013); Board Member of the Land Trust		
333 West Wacker Drive		meeting	Alliance (since 2013); formerly, Executive Director (1994-2012), Gaylord and Dorothy Donnelley		
Chicago, IL 60606			Foundation; prior thereto, Executive Director, Great Lakes		
1947		Length of Service: Since 1997	Protection Fund (1990-1994).		
Carole E. Stone	Board Member	Term: Class I Board Member	Director, Chicago Board Options Exchange, Inc. (since 2006); Director, C2 Options Exchange, Incorporated (since 2009);	180	Director,
c/o Nuveen Investments, Inc.		until 2016 annual shareholder			CBOE Holdings, Inc. (since 2010).
333 West Wacker Drive		meeting	formerly, Commissioner, New York State Commission on Public Authority Reform (2005-2010).		
Chicago, IL 60606			Authority Reform (2003-2010).		
1947		Length of Service: Since 2007			

Name, Address and Year of Birth	Position(s) Held with Fund	Term of Office and Length of Time Served ⁽¹⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Board Member	Other Directorships Held by Board Member During the Past Five Years
Terence J. Toth ⁽⁴⁾	Board Member	Term: Class II Board Member	Managing Partner, Promus Capital (since 2008); Director,	180	None
c/o Nuveen Investments, Inc.		until 2017 annual shareholder meeting	Fulcrum IT Service LLC (since 2010), Quality Control Corporation (since 2012);		
333 West Wacker Drive		meeting	formerly Director, LogicMark LLC (2012-2016); formerly,		
Chicago, IL 60606			Director, Legal & General Investment Management America,		
1959		Length of Service: Since 2008	Inc. (2008-2013); formerly, CEO and President, Northern Trust Global Investments (2004-2007); Executive Vice President, Quantitative Management & Securities Lending (2000-2004); prior thereto, various positions with Northern Trust Company (since 1994); Member, Chicago Fellowship Board (since 2005), Catalyst Schools of Chicago Board (since 2008) and Mather Foundation Board (since 2012) and Chair of its investment committee; formerly, Member, Northern Trust Mutual Funds Board (2005-2007), Northern Trust Global Investments Board (2004-2007), Northern Trust Japan Board (2004-2007), Northern Trust Securities Inc. Board (2003-2007) and Northern Trust Hong Kong Board (1997-2004).		

Name, Address and Year of Birth	Position(s) Held with Fund	Term of Office and Length of Time Served ⁽¹⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Board Member	Other Directorships Held by Board Member During the Past Five Years
Margaret L. Wolff c/o Nuveen Investments, Inc. 333 West Wacker Drive Chicago, Illinois 60606 1955	Board Member	Term: Class I Board Member until 2016 annual shareholder meeting Length of Service: Since 2016	Formerly, Of Counsel (2005-2014), Skadden, Arps, Slate, Meagher & Flom LLP (Mergers & Acquisitions Group); Member of the Board of Trustees of New York-Presbyterian Hospital (since 2005); Member (since 2004) and Chair (since 2015) of the Board of Trustees of The John A. Hartford Foundation (a philanthropy dedicated to improving the care of older adults); formerly, Member (2005-2015) and Vice Chair (2011-2015) of the Board of Trustees of Mt. Holyoke College.	180	Member of the Board of Directors (since 2013) of Travelers Insurance Company of Canada and The Dominion of Canada General Insurance Company (each, a part of Travelers Canada, the Canadian operation of The Travelers Companies,
Nominees/Board Members who are	interested persons of	the Funds			Inc.).
William Adams IV ⁽⁵⁾ c/o Nuveen Investments, Inc. 333 West Wacker Drive Chicago, IL 60606 1955	Board Member	Term: Class II Board Member until 2017 annual shareholder meeting Length of Service: Since 2013	Co-Chief Executive Officer and Co-President (since March 2016), formerly, Senior Executive Vice President, Global Structured Products of Nuveen Investments, Inc. (2010-2016); Co-Chief Executive Officer (since 2016), formerly, Senior Executive Vice President of Nuveen Securities, LLC; Co-President of Nuveen Fund Advisors, LLC (since 2011); President (since 2011), formerly, Managing Director (2010-2011), of Nuveen Commodities Asset	180	None
			Management, LLC; Board Member of the Chicago Symphony Orchestra and of Gilda s Club Chicago.		

Name, Address and Year of Birth	Position(s) Held with Fund	Term of Office and Length of Time Served ⁽¹⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Board Member	Other Directorships Held by Board Member During the Past Five Years
Margo L. Cook ⁽⁵⁾	Board Member	Term: Class III Board Member	Co-Chief Executive Officer and Co-President (since March 2016),	180	None
c/o Nuveen Investments, Inc.		until 2018 annual shareholder	formerly, Senior Executive Vice President of Nuveen Investments,		
33 West Wacker Drive	meeting	Inc.; Senior Executive Vice President of Nuveen Fund			
Chicago, IL 60606			Advisors, LLC (Executive Vice President since 2011); Co-Chief Executive Officer (since 2015),		
1964		Length of Service: Since	formerly, Executive Vice President (2013 2015), of Nuveen		
		2016	Securities, LLC; formerly, Managing Director Investment		
			Services of Nuveen Commodities		
			Asset Management, LLC		
			(2011-2016); Chartered Financial		
			Analyst.		

- (1) Length of Time Served indicates the year in which the individual became a Board Member of a fund in the Nuveen fund complex.
- (2) Mr. Schneider is one of several owners and managing members in two limited liability companies and a general partner and one member of the governing body of a general partnership, each engaged in real estate ownership activities. In connection with their ordinary course of investment activities, court appointed receivers have been named for certain individual properties owned by such entities. The individual properties for which a receiver has been appointed represent an immaterial portion of the portfolio assets owned by these entities.
- (3) For California Value, California Value 2, New Jersey Value and Pennsylvania Value, Board Member Hunter serves as a Class I Board Member and Board Member Schneider serves as a Class III Board Member.
- (4) Mr. Toth serves as a director on the Board of Directors of the Mather Foundation (the Foundation) and is a member of its investment committee. The Foundation is the parent of the Mather LifeWays organization, a non-profit charitable organization. Prior to Mr. Toth joining the Board of the Foundation, the Foundation selected Gresham Investment Management (Gresham), an affiliate of the Adviser, to manage a portion of the Foundation s investment portfolio, and pursuant to this selection, the Foundation has invested that portion of its investment portfolio in a private commodity pool managed by Gresham.
- (5) Each of Board Members Adams and Cook is an interested person as defined in the 1940 Act by reason of his/her respective position(s) with Nuveen Investments, Inc. and/or certain of its subsidiaries.

Board Member Investments in the Funds

In order to create an appropriate identity of interests between Board Members and shareholders, the Boards of Directors/Trustees of the Nuveen funds have adopted a governance principle pursuant to which each Board Member is expected to invest, either directly or on a deferred basis, at least the equivalent of one year of compensation in the funds in the Nuveen fund complex.

The dollar range of equity securities beneficially owned by each Board Member in each Fund and all Nuveen funds overseen by the Board Member as of July 31, 2016 is set forth in Appendix A. The number of shares of each Fund beneficially owned by each Board Member and by the Board Members and officers of the Funds as a group as of July 31, 2016 is also set

forth in Appendix A. On July 31, 2016, Board Members and executive officers as a group beneficially owned approximately 1.7 million shares of all funds managed by the Adviser (including shares held by the Board Members through the Deferred Compensation Plan for Independent Board Members and by executive officers in Nuveen s 401(k)/profit sharing plan). As of September 19, 2016, each Board Member s individual beneficial shareholdings of each Fund constituted less than 1% of the outstanding shares of the Fund. As of September 19, 2016, the Board Members and executive officers as a group beneficially owned less than 1% of the outstanding shares of each Fund. As of September 19, 2016, no shareholder beneficially owned more than 5% of any class of shares of any Fund, except as provided in Appendix B.

Compensation

Prior to January 1, 2016, each Independent Board Member received a \$160,000 annual retainer plus: (a) a fee of \$5,250 per day for attendance in person or by telephone at regularly scheduled meetings of the Board; (b) a fee of \$3,000 per meeting for attendance in person or by telephone at special, non-regularly scheduled meetings of the Board where in-person attendance was required and \$2,000 per meeting for attendance by telephone or in person at such meetings where in-person attendance was not required; (c) a fee of \$2,500 per meeting for attendance in person or by telephone at Audit Committee meetings where in-person attendance was required and \$2,000 per meeting for attendance by telephone or in person at such meetings where in-person attendance was not required; (d) a fee of \$2,500 per meeting for attendance in person or by telephone at Compliance, Risk Management and Regulatory Oversight Committee meetings where in-person attendance was required and \$2,000 per meeting for attendance by telephone or in person at such meetings where in-person attendance was not required; (e) a fee of \$1,000 per meeting for attendance in person or by telephone at Dividend Committee meetings; (f) a fee of \$2,500 per meeting for attendance in person or by telephone at Closed-End Funds Committee meetings where in-person attendance was required and \$2,000 per meeting for attendance by telephone or in person at such meetings where in-person attendance was not required, provided that no fees were received for meetings held on days on which regularly scheduled Board meetings were held; and (g) a fee of \$500 per meeting for attendance in person or by telephone at all other committee meetings (\$1,000 for shareholder meetings) where in-person attendance was required and \$250 per meeting for attendance by telephone or in person at such committee meetings (excluding shareholder meetings) where in-person attendance was not required, and \$100 per meeting when the Executive Committee acted as pricing committee for IPOs, plus, in each case, expenses incurred in attending such meetings, provided that no fees were received for meetings held on days on which regularly scheduled Board meetings were held. In addition to the payments described above, the Chairman of the Board received \$75,000, the chairpersons of the Audit Committee, the Dividend Committee, the Compliance, Risk Management and Regulatory Oversight Committee and the Closed-End Funds Committee received \$12,500 each and the chairperson of the Nominating and Governance Committee received \$5,000 as additional annual retainers. Independent Board Members also received a fee of \$3,000 per day for site visits to entities that provide services to the Nuveen funds on days on which no Board meeting was held. When ad hoc committees were organized, the Nominating and Governance Committee at the time of formation determined compensation to be paid to the members of such committees; however, in general, such fees were \$1,000 per meeting for attendance in person or by telephone at ad hoc committee meetings where in-person attendance was required and \$500 per meeting for attendance by telephone or in person at such meetings where in-person

attendance was not required. The annual retainer, fees and expenses were allocated among the Nuveen funds on the basis of relative net assets, although management may have, in its discretion, established a minimum amount to be allocated to each fund.

Effective January 1, 2016, each Independent Board Member receives a \$170,000 annual retainer plus: (a) a fee of \$5,550 per day for attendance in person or by telephone at regularly scheduled meetings of the Board; (b) a fee of \$3,000 per meeting for attendance in person or by telephone at special, non-regularly scheduled meetings of the Board where in-person attendance is required and \$2,000 per meeting for attendance by telephone or in person at such meetings where in-person attendance is not required; (c) a fee of \$2,500 per meeting for attendance in person or by telephone at Audit Committee meetings where in-person attendance is required and \$2,000 per meeting for attendance by telephone or in person at such meetings where in-person attendance is not required; (d) a fee of \$2,500 per meeting for attendance in person or by telephone at Compliance, Risk Management and Regulatory Oversight Committee meetings where in-person attendance is required and \$2,000 per meeting for attendance by telephone or in person at such meetings where in-person attendance is not required; (e) a fee of \$1,000 per meeting for attendance in person or by telephone at Dividend Committee meetings; (f) a fee of \$2,500 per meeting for attendance in person or by telephone at Closed-End Funds Committee meetings where in-person attendance is required and \$2,000 per meeting for attendance by telephone or in person at such meetings where in-person attendance is not required, provided that no fees are received for meetings held on days on which regularly scheduled Board meetings are held; and (g) a fee of \$500 per meeting for attendance in person or by telephone at all other committee meetings (\$1,000 for shareholder meetings) where in-person attendance is required and \$250 per meeting for attendance by telephone or in person at such committee meetings (excluding shareholder meetings) where in-person attendance is not required, and \$100 per meeting when the Executive Committee acts as pricing committee for IPOs, plus, in each case, expenses incurred in attending such meetings, provided that no fees are received for meetings held on days on which regularly scheduled Board meetings are held. In addition to the payments described above, the Chairman of the Board receives \$80,000, the chairpersons of the Audit Committee, the Dividend Committee, the Compliance, Risk Management and Regulatory Oversight Committee, the Closed-End Funds Committee and the Nominating and Governance Committee receive \$12,500 each as additional annual retainers. Independent Board Members also receive a fee of \$3,000 per day for site visits to entities that provide services to the Nuveen funds on days on which no Board meeting is held. When ad hoc committees are organized, the Nominating and Governance Committee will at the time of formation determine compensation to be paid to the members of such committee; however, in general, such fees will be \$1,000 per meeting for attendance in person or by telephone at ad hoc committee meetings where in-person attendance is required and \$500 per meeting for attendance by telephone or in person at such meetings where in-person attendance is not required. The annual retainer, fees and expenses are allocated among the Nuveen funds on the basis of relative net assets, although management may, in its discretion, establish a minimum amount to be allocated to each fund.

The Funds do not have retirement or pension plans. Certain Nuveen funds (the Participating Funds) participate in a deferred compensation plan (the Deferred Compensation Plan) that permits an Independent Board Member to elect to defer receipt of all or a portion of his or her compensation as an Independent Board Member. The deferred compensation of a participating Independent Board Member is credited to a book reserve account of the Participating Fund when the compensation would otherwise have been paid to such

Independent Board Member. The value of an Independent Board Member s deferral account at any time is equal to the value that the account would have had if contributions to the account had been invested and reinvested in shares of one or more of the eligible Nuveen funds. At the time for commencing distributions from an Independent Board Member s deferral account, the Independent Board Member may elect to receive distributions in a lump sum or over a period of five years. The Participating Fund will not be liable for any other fund s obligations to make distributions under the Deferred Compensation Plan.

The Funds have no employees. The officers of the Funds and the Board Members of each Fund who are not Independent Board Members serve without any compensation from the Funds.

The table below shows, for each Independent Board Member, the aggregate compensation paid by each Fund to the Independent Board Member/nominee for its last fiscal year.

Aggregate Compensation from the Funds ⁽¹⁾											
				Albin	1	Judith			Virginia		Margaret
	Jack B.	William C.	David J.	F.	John K.	William J.	Μ.	Carole E.	L.	Terence J.	L.
Fund Name	Evans	Hunter	KunderM	oschne	er ⁽²⁾ Nelson	Schneider	Stockdale	Stone	Stringer(3)	Toth	Wolff(4)
Arizona Premium	\$ 692	\$ 666	\$ 638	\$	\$ 670	\$ 752	\$ 615	\$ 683	\$ 624	\$ 698	\$
California AMT-Free	2,953	2,876	2,549		2,894	2,901	2,586	2,798	2,696	2,888	
California Value	736	716	635		720	722	645	704	671	719	
California Value 2	157	151	145		152	171	139	155	142	158	
Massachusetts Premium	612	584	570		602	661	548	602	406	610	79
Michigan Quality	1,327	1,290	1,144		1,298	1,301	1,163	1,268	1,210	1,296	
New Jersey Dividend	2,804	2,677	2,630		2,759	2,983	2,506	2,754	1,858	2,777	362
New Jersey Value	71	68	66		70	78	64	70	48	71	8
Ohio Quality	1,258	1,223	1,084		1,230	1,233	1,102	1,202	1,146	1,228	
Pennsylvania Investment											
Quality	2,461	2,350	2,309		2,421	2,619	2,200	2,417	1,634	2,438	316
Pennsylvania Value	56	54	52		55	62	50	56	38	56	7
Texas Quality	628	605	580		609	783	658	620	567	634	
Total Compensation from											
Nuveen Funds Paid to Board											
Members/Nominees	\$ 325,003	\$ 302,125	\$ 278,174	\$	\$ 303,750	\$ 310,742	\$ 284,850	\$ 306,421	\$ 278,625	\$ 320,925	\$

⁽¹⁾ Includes deferred fees. Pursuant to the Deferred Compensation Plan with certain Participating Funds, deferred amounts are treated as though an equivalent dollar amount has been invested in shares of one or more Participating Funds. Total deferred fees for the Participating Funds (including the return from the assumed investment in the Participating Funds) payable are:

				Albin			Judith				
	Jack B.	William C.	David J.	F.	John K.	William J.	Μ.	Carole E.	Virginia L	Terence J.	Margaret L.
Fund Name	Evans	Hunter	Kundert	Moschne	er Nelson	Schneider	Stockdale	Stone	Stringer	Toth	Wolff
Arizona Premium	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
California AMT-Free	264		2,549			2,901	595	1,324		1,081	
California Value	67		635			722	150	336		269	
California Value 2											
Massachusetts Premium											
Michigan Quality	121		1,144			1,301	270	606		485	
New Jersey Dividend	278		2,630			2,983	520	1,373		816	119
New Jersey Value											
Ohio Quality	115		1,084			1,233	256	575		459	
Pennsylvania Investment Quality	244		2,309			2,619	457	1,205		718	104
Pennsylvania Value											

Texas Quality

⁽²⁾ Mr. Moschner was appointed on June 22, 2016 to the Board of Trustees/Directors of the Nuveen Funds effective July 1, 2016. Mr. Moschner received no compensation from the Funds for the last fiscal year.

⁽³⁾ Ms. Stringer retired from the Board of Trustees/Directors of the Nuveen Funds effective December 31, 2015.

⁽⁴⁾ Ms. Wolff was appointed to the Board of Trustees/Directors of the Nuveen Funds effective February 15, 2016.

Board Leadership Structure and Risk Oversight

The Board of each Fund oversees the operations and management of the Fund, including the duties performed for the Fund by the Adviser. The Board has adopted a unitary board structure. A unitary board consists of one group of board members who serves on the board of every fund in the complex. In adopting a unitary board structure, the Board Members seek to provide effective governance through establishing a board, the overall composition of which will, as a body, possess the appropriate skills, independence and experience to oversee the Funds business. With this overall framework in mind, when the Board, through its Nominating and Governance Committee discussed below, seeks nominees for the Board, the Board Members consider, not only the candidate s particular background, skills and experience, among other things, but also whether such background, skills and experience enhance the Board s diversity and at the same time complement the Board given its current composition and the mix of skills and experiences of the incumbent Board Members. The Nominating and Governance Committee believes that the Board generally benefits from diversity of background, experience and views among its members, and considers this a factor in evaluating the composition of the Board, but has not adopted any specific policy on diversity or any particular definition of diversity.

The Board believes the unitary board structure enhances good and effective governance, particularly given the nature of the structure of the investment company complex. Funds in the same complex generally are served by the same service providers and personnel and are governed by the same regulatory scheme which raises common issues that must be addressed by the Board Members across the fund complex (such as compliance, valuation, liquidity, brokerage, trade allocation or risk management). The Board believes it is more efficient to have a single board review and oversee common policies and procedures which increases the Board s knowledge and expertise with respect to the many aspects of fund operations that are complex-wide in nature. The unitary structure also enhances the Board s influence and oversight over the Adviser and other service providers.

In an effort to enhance the independence of the Board, the Board also has a Chairman that is an Independent Board Member. The Board recognizes that a chairman can perform an important role in setting the agenda for the Board, establishing the boardroom culture, establishing a point person on behalf of the Board for Fund management, and reinforcing the Board s focus on the long-term interests of shareholders. The Board recognizes that a chairman may be able to better perform these functions without any conflicts of interests arising from a position with Fund management. Accordingly, the Board Members have elected William J. Schneider as the independent Chairman of the Board. Specific responsibilities of the Chairman include: (i) presiding at all meetings of the Board and of the shareholders; (ii) seeing that all orders and resolutions of the Board Members are carried into effect; and (iii) maintaining records of and, whenever necessary, certifying all proceedings of the Board Members and the shareholders.

Although the Board has direct responsibility over various matters (such as advisory contracts, underwriting contracts and Fund performance), the Board also exercises certain of its oversight responsibilities through several committees that it has established and which report back to the full Board. The Board believes that a committee structure is an effective means to permit Board Members to focus on particular operations or issues affecting the Funds, including risk oversight. More specifically, with respect to risk oversight, the Board has delegated matters relating to valuation and compliance to certain committees (as summarized below) as

well as certain aspects of investment risk. In addition, the Board believes that the periodic rotation of Board Members among the different committees allows the Board Members to gain additional and different perspectives of a Fund s operations. The Board has established six standing committees: the Executive Committee, the Dividend Committee, the Audit Committee, the Compliance, Risk Management and Regulatory Oversight Committee, the Nominating and Governance Committee and the Closed-End Funds Committee. The Board may also from time to time create ad hoc committees to focus on particular issues as the need arises. The membership and functions of the standing committees are summarized below.

Executive Committee. The Executive Committee, which meets between regular meetings of the Board, is authorized to exercise all of the powers of the Board. The members of the Executive Committee are William J. Schneider, Chair, William Adams IV and Terence J. Toth. The number of Executive Committee meetings of each Fund held during its last fiscal year is shown in Appendix C.

Dividend Committee. The Dividend Committee is authorized to declare distributions on each Funds shares including, but not limited to, regular and special dividends, capital gains and ordinary income distributions. The members of the Dividend Committee are William C. Hunter, Chair, Judith M. Stockdale and Terence J. Toth. The number of Dividend Committee meetings of each Fundheld during its last fiscal year is shown in Appendix C.

Audit Committee. The Board has an Audit Committee, in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934 (1934 Act.), that is composed of Independent Board Members who are also independent as that term is defined in the listing standards pertaining to closed-end funds of the NYSE or NYSE MKT, as applicable. The Audit Committee assists the Board in: the oversight and monitoring of the accounting and reporting policies, processes and practices of the Funds, and the audits of the financial statements of the Funds; the quality and integrity of the financial statements of the Funds compliance with legal and regulatory requirements relating to the Funds financial statements; the independent auditors qualifications, performance and independence; and the pricing procedures of the Funds and the internal valuation group of Nuveen. It is the responsibility of the Audit Committee to select, evaluate and replace any independent auditors (subject only to Board and, if applicable, shareholder ratification) and to determine their compensation. The Audit Committee is also responsible for, among other things, overseeing the valuation of securities comprising the Funds portfolios. Subject to the Board s general supervision of such actions, the Audit Committee addresses any valuation issues, oversees the Funds pricing procedures and actions taken by Nuveen s internal valuation group which provides regular reports to the Audit Committee, reviews any issues relating to the valuation of the Funds securities brought to its attention, and considers the risks to the Funds in assessing the possible resolutions of these matters. The Audit Committee may also consider any financial risk exposures for the Funds in conjunction with performing its functions.

To fulfill its oversight duties, the Audit Committee receives annual and semi-annual reports and has regular meetings with the external auditors for the Funds and the internal audit group at Nuveen. The Audit Committee also may review, in a general manner, the processes the Board or other Board committees have in place with respect to risk assessment and risk management as well as compliance with legal and regulatory matters relating to the Funds—financial statements. The Audit Committee operates under a written Audit Committee Charter (the Charter) adopted and approved by the Board, which Charter conforms to the listing standards of the NYSE or NYSE MKT, as applicable. Members of the Audit Committee are in-

dependent (as set forth in the Charter) and free of any relationship that, in the opinion of the Board Members, would interfere with their exercise of independent judgment as an Audit Committee member. The members of the Audit Committee are Jack B. Evans, Chair, David J. Kundert, John K. Nelson, Carole E. Stone and Terence J. Toth, each of whom is an Independent Board Member of the Funds. A copy of the Charter is available at www.nuveen.com/CEF/Shareholder/ FundGovernance.aspx. The number of Audit Committee meetings of each Fund held during its last fiscal year is shown in Appendix C.

Compliance, Risk Management and Regulatory Oversight Committee. The Compliance, Risk Management and Regulatory Oversight Committee (the Compliance Committee) is responsible for the oversight of compliance issues, risk management and other regulatory matters affecting the Funds that are not otherwise under or within the jurisdiction of the other committees. The Board has adopted and periodically reviews policies and procedures designed to address the Funds compliance and risk matters. As part of its duties, the Compliance Committee: reviews the policies and procedures relating to compliance matters and recommends modifications thereto as necessary or appropriate to the full Board; develops new policies and procedures as new regulatory matters affecting the Funds arise from time to time; evaluates or considers any comments or reports from examinations from regulatory authorities and responses thereto; and performs any special reviews, investigations or other oversight responsibilities relating to risk management, compliance and/or regulatory matters as requested by the Board.

In addition, the Compliance Committee is responsible for risk oversight, including, but not limited to, the oversight of risks related to investments and operations. Such risks include, among other things, exposures to: particular issuers, market sectors, or types of securities; risks related to product structure elements, such as leverage; and techniques that may be used to address those risks, such as hedging and swaps. In assessing issues brought to the Compliance Committee s attention or in reviewing a particular policy, procedure, investment technique or strategy, the Compliance Committee evaluates the risks to the Funds in adopting a particular approach or resolution compared to the anticipated benefits to the Funds and their shareholders. In fulfilling its obligations, the Compliance Committee meets on a quarterly basis, and at least once a year in person. The Compliance Committee receives written and oral reports from the Funds Chief Compliance Officer (CCO) and meets privately with the CCO at each of its quarterly meetings. The CCO also provides an annual report to the full Board regarding the operations of the Funds and other service providers compliance programs as well as any recommendations for modifications thereto. The Compliance Committee also receives reports from the investment services group of Nuveen regarding various investment risks. Notwithstanding the foregoing, the full Board also participates in discussions with management regarding certain matters relating to investment risk, such as the use of leverage and hedging. The investment services group therefore also reports to the full Board at its quarterly meetings regarding, among other things, Fund performance and the various drivers of such performance. Accordingly, the Board directly and/or in conjunction with the Compliance Committee oversees matters relating to investment risks. Matters not addressed at the committee level are addressed directly by the full Board. The Compliance Committee operates under a written charter adopted and approved by the Board. The members of the Compliance Committee are John K. Nelson, Chair, William C. Hunter, Albin F. Moschner, Judith M. Stockdale and Margaret L. Wolff. The number of Compliance Committee meetings of each Fund held during its last fiscal year is shown in Appendix C.

Nominating and Governance Committee. The Nominating and Governance Committee is responsible for seeking, identifying and recommending to the Board qualified candidates for election or appointment to the Board. In addition, the Nominating and Governance Committee oversees matters of corporate governance, including the evaluation of Board performance and processes, the assignment and rotation of committee members, and the establishment of corporate governance guidelines and procedures, to the extent necessary or desirable, and matters related thereto. Although the unitary and committee structure has been developed over the years and the Nominating and Governance Committee believes the structure has provided efficient and effective governance, the committee recognizes that, as demands on the Board evolve over time (such as through an increase in the number of funds overseen or an increase in the complexity of the issues raised), the committee must continue to evaluate the Board and committee structures and their processes and modify the foregoing as may be necessary or appropriate to continue to provide effective governance. Accordingly, the Nominating and Governance Committee has a separate meeting each year to, among other things, review the Board and committee structures, their performance and functions, and recommend any modifications thereto or alternative structures or processes that would enhance the Board s governance over the Funds business.

In addition, the Nominating and Governance Committee, among other things; makes recommendations concerning the continuing education of Board Members; monitors performance of legal counsel and other service providers; establishes and monitors a process by which security holders are able to communicate in writing with Board Members; and periodically reviews and makes recommendations about any appropriate changes to Board Member compensation. In the event of a vacancy on the Board, the Nominating and Governance Committee receives suggestions from various sources, including shareholders, as to suitable candidates. Suggestions should be sent in writing to Lorna Ferguson, Manager of Fund Board Relations, Nuveen Investments, 333 West Wacker Drive, Chicago, Illinois 60606. The Nominating and Governance Committee sets appropriate standards and requirements for nominations for new Board Members and each nominee is evaluated using the same standards. However, the Nominating and Governance Committee reserves the right to interview any and all candidates and to make the final selection of any new Board Members. In considering a candidate s qualifications, each candidate must meet certain basic requirements, including relevant skills and experience, time availability (including the time requirements for due diligence site visits to internal and external sub-advisers and service providers) and, if qualifying as an Independent Board Member candidate, independence from the Adviser, sub-advisers, underwriters or other service providers, including any affiliates of these entities. These skill and experience requirements may vary depending on the current composition of the Board, since the goal is to ensure an appropriate range of skills, diversity and experience, in the aggregate. Accordingly, the particular factors considered and weight given to these factors will depend on the composition of the Board and the skills and backgrounds of the incumbent Board Members at the time of consideration of the nominees. All candidates, however, must meet high expectations of personal integrity, independence, governance experience and professional competence. All candidates must be willing to be critical within the Board and with management and yet maintain a collegial and collaborative manner toward other Board Members. The Nominating and Governance Committee operates under a written charter adopted and approved by the Board, a copy of which is available on the Funds website at www.nuveen.com/CEF/Shareholder/FundGovernance.aspx, and is composed entirely of Independent Board Members, who are also independent as defined by NYSE or

NYSE MKT listing standards, as applicable. The members of the Nominating and Governance Committee are William J. Schneider, Chair, Jack B. Evans, William C. Hunter, David J. Kundert, Albin F. Moschner, John K. Nelson, Judith M. Stockdale, Carole E. Stone, Terence J. Toth and Margaret L. Wolff. The number of Nominating and Governance Committee meetings of each Fund held during its last fiscal year is shown in Appendix C.

Closed-End Funds Committee. The Closed-End Funds Committee is responsible for assisting the Board in the oversight and monitoring of the Nuveen funds that are registered as closed-end management investment companies (Closed-End Funds). The Closed-End Funds Committee may review and evaluate matters related to the formation and the initial presentation to the Board of any new Closed-End Fund and may review and evaluate any matters relating to any existing Closed-End Fund. The Closed-End Funds Committee operates under a written charter adopted and approved by the Board. The members of the Closed-End Funds Committee are Carole E. Stone, Chair, William Adams IV, Jack B. Evans, Albin F. Moschner, John K. Nelson, William J. Schneider and Terence J. Toth. The number of Closed-End Funds Committee meetings of each Fund held during its last fiscal year is shown in Appendix C.

Board Member Attendance. The number of regular quarterly meetings and special meetings held by the Board of each Fund during the Fund s last fiscal year is shown in Appendix C. During the last fiscal year, each Board Member attended 75% or more of each Fund s Board meetings and the committee meetings (if a member thereof) held during the period for which such Board Member was a Board Member. The policy of the Board relating to attendance by Board Members at annual meetings of shareholders of the Funds and the number of Board Members who attended the last annual meeting of shareholders of each Fund is posted on the Funds website at www.nuveen.com/CEF/Shareholder/Fund Governance.aspx.

Board Diversification and Board Member Qualifications. In determining that a particular Board Member was qualified to serve on the Board, the Board considered each Board Member s background, skills, experience and other attributes in light of the composition of the Board with no particular factor controlling. The Board believes that Board Members need to have the ability to critically review, evaluate, question and discuss information provided to them, and to interact effectively with Fund management, service providers and counsel, in order to exercise effective business judgment in the performance of their duties, and the Board believes each Board Member satisfies this standard. An effective Board Member may achieve this ability through his or her educational background; business, professional training or practice; public service or academic positions; experience from service as a board member or executive of investment funds, public companies or significant private or not-for-profit entities or other organizations; and/or other life experiences. Accordingly, set forth below is a summary of the experiences, qualifications, attributes, and skills that led to the conclusion, as of the date of this document, that each Board Member should serve in that capacity. References to the experiences, qualifications, attributes and skills of Board Members are pursuant to requirements of the Securities and Exchange Commission (SEC), do not constitute holding out the Board or any Board Member as having any special expertise or experience and shall not impose any greater responsibility or liability on any such person or on the Board by reason thereof.

William Adams IV

Mr. Adams, an interested Board Member of the Funds, has been Co-Chief Executive Officer and Co-President of Nuveen Investments since March 2016, prior to which he had been Senior Executive Vice President, Global Structured Products of Nuveen Investments since November 2010. Mr. Adams is a member of the Senior Leadership Team of TIAA Global Asset Management (TGAM), as well as co-chair of Nuveen Investments Management and Operating Committees. He has also served as Co-President of Nuveen Fund Advisors, LLC since January 2011. Prior to that, he was Executive Vice President, U.S. Structured Products from December 1999 until November 2010 and served as Managing Director of Structured Investments from September 1997 to December 1999 and Vice President and Manager, Corporate Marketing from August 1994 to September 1997. He is currently Co-Chief Executive Officer (since 2016), formerly, Senior Executive Vice President of Nuveen Securities, LLC. Mr. Adams earned his Bachelor of Arts degree from Yale University and his Masters of Business Administration (MBA) from the University of Chicago s Graduate School of Business. He is an Associate Fellow of Yale s Timothy Dwight College and is currently on the Board of the Chicago Symphony Orchestra and of Gilda s Club Chicago. Mr. Adams joined the Board in 2013.

Margo L. Cook

Ms. Cook, appointed to serve as an interested Board Member of the Funds, has been Co-Chief Executive Officer and Co-President of Nuveen Investments since March 2016, prior to which she had been Senior Executive Vice President of Nuveen Investments since July 2015. Ms. Cook is a member of the Senior Leadership Team of TGAM, as well as co-chair of Nuveen Investments Management and Operating Committees. She is Senior Executive Vice President (since 2015) of Nuveen Fund Advisors, LLC and Co-Chief Executive Officer (since 2015) of Nuveen Securities, LLC. Since joining in 2008, she has held various leadership roles at Nuveen Investments, including as Head of Investment Services, responsible for investment-related efforts across the firm. Ms. Cook also serves on the Board of Nuveen Global Fund Investors. Before joining Nuveen Investments, she was the Global Head of Bear Stearns Asset Management s institutional business. Prior to that, she spent over 20 years within BNY Mellon s asset management business, including as Chief Investment Officer for Institutional Asset Management and Head of Institutional Fixed Income. Ms. Cook earned her Bachelor of Science degree in finance from the University of Rhode Island, her Executive MBA from Columbia University, and is a Chartered Financial Analyst. She serves as Vice Chair of the University of Rhode Island Foundation Board of Trustees, and Chair of the All Stars Project of Chicago Board. Ms. Cook joined the Board in 2016.

Jack B. Evans

President of the Hall-Perrine Foundation, a private philanthropic corporation, since 1996, Mr. Evans was formerly President and Chief Operating Officer of the SCI Financial Group, Inc., a regional financial services firm headquartered in Cedar Rapids, Iowa. Formerly, he was a member of the Board of the Federal Reserve Bank of Chicago, a Director of Alliant Energy and a Member and President Pro Tem of the Board of Regents for the State of Iowa University System. Mr. Evans is Chairman of the Board of United Fire Group, sits on the Board of The

Gazette Company and is a Life Trustee of Coe College. He has a Bachelor of Arts degree from Coe College and an MBA from the University of Iowa. Mr. Evans joined the Board in 1999.

William C. Hunter

Mr. Hunter became Dean Emeritus of the Henry B. Tippie College of Business at the University of Iowa on June 30, 2012. He was appointed Dean of the College on July 1, 2006. He was previously Dean and Distinguished Professor of Finance at the University of Connecticut School of Business from 2003 to 2006. From 1995 to 2003, he was the Senior Vice President and Director of Research at the Federal Reserve Bank of Chicago. While there he served as the Bank s Chief Economist and was an Associate Economist on the Federal Reserve System s Federal Open Market Committee (FOMC). In addition to serving as a Vice President in charge of financial markets and basic research at the Federal Reserve Bank in Atlanta, he held faculty positions at Emory University, Atlanta University, the University of Georgia and Northwestern University. A past Director of the Credit Research Center at Georgetown University, SS&C Technologies, Inc. (2005) and past President of the Financial Management Association International, he has consulted with numerous foreign central banks and official agencies in Western, Central and Eastern Europe, Asia, Central America and South America. From 1990 to 1995, he was a U.S. Treasury Advisor to Central and Eastern Europe. He has been a Director of the Xerox Corporation since 2004 and Wellmark, Inc. since 2009. He is a Director and past President of Beta Gamma Sigma, Inc., The International Business Honor Society. Mr. Hunter joined the Board in 2003.

David J. Kundert

Mr. Kundert retired in 2004 as Chairman of JPMorgan Fleming Asset Management, and as President and CEO of Banc One Investment Advisors Corporation, and as President of One Group Mutual Funds. Prior to the merger between Bank One Corporation and JPMorgan Chase and Co., he was Executive Vice President, Bank One Corporation and, since 1995, the Chairman and CEO, Banc One Investment Management Group. From 1988 to 1992, he was President and CEO of Bank One Wisconsin Trust Company. Mr. Kundert recently retired as a Director of the Northwestern Mutual Wealth Management Company (2006 to 2013). He started his career as an attorney for Northwestern Mutual Life Insurance Company. Mr. Kundert has served on the Board of Governors of the Investment Company Institute and he is currently a member of the Wisconsin Bar Association. He is on the Board of the Greater Milwaukee Foundation and chairs its Investment Committee. He is a Regent Emeritus and a Member of the Investment Committee of Luther College. He is also a Member of the Board of Directors (Milwaukee), College Possible and a Member of the Board of Trustees, Milwaukee Repertory Theater. He received his Bachelor of Arts degree from Luther College and his Juris Doctor from Valparaiso University. Mr. Kundert joined the Board in 2005.

Albin F. Moschner

Mr. Moschner is a consultant in the wireless industry and, in July 2012, founded Northcroft Partners, LLC, a management consulting firm that provides operational, management and governance solutions. Prior to founding Northcroft Partners, LLC, Mr. Moschner held various positions at Leap Wireless International, Inc., a provider of wireless services, where he was a

consultant from February 2011 to July 2012, Chief Operating Officer from July 2008 to February 2011, and Chief Marketing Officer from August 2004 to June 2008. Before he joined Leap Wireless International, Inc., Mr. Moschner was President of the Verizon Card Services division of Verizon Communications, Inc. from 2000 to 2003, and President of One Point Services at One Point Communications from 1999 to 2000. Mr. Moschner also served at Zenith Electronics Corporation as Director, President and Chief Executive Officer from 1995 to 1996, and as Director, President and Chief Operating Officer from 1994 to 1995. Since 2012, Mr. Moschner has been a member of the Board of Directors of USA Technologies, Inc. and, from 1996 until 2016, he was a member of the Board of Directors of Wintrust Financial Corporation. In addition, he currently serves on the Advisory Boards of the Kellogg School of Management (since 1995) and the Archdiocese of Chicago Financial Council (since May 2012). Mr. Moschner received a Bachelor of Engineering degree in Electrical Engineering from The City College of New York in 1974 and a Master of Science degree in Electrical Engineering from Syracuse University in 1979. Mr. Moschner joined the Board in 2016.

John K. Nelson

Mr. Nelson currently serves on the Board of Directors of Core 12 LLC (since 2008), a private firm which develops branding, marketing, and communications strategies for clients. He was formerly a senior external advisor to the financial services practice of Deloitte Consulting LLP. Mr. Nelson has served in several senior executive positions with ABN AMRO Holdings N.V. and its affiliated entities and predecessors, including LaSalle Bank Corporation from 1996 to 2008. From 2007 to 2008, Mr. Nelson was Chief Executive Officer of ABN AMRO N.V. North America, and Global Head of its Financial Markets Division. He was a member of the Foreign Exchange Committee of the Federal Reserve Bank of the United States, and during his tenure with ABN AMRO, served as the bank s representative on various committees of the Bank of Canada, European Central Bank, and the Bank of England. At Fordham University, he currently serves as a director of The Curran Center for Catholic American Studies and The President s Council. He is also a member of The Economic Club of Chicago and was formerly a member of The Hyde Park Angels and a Trustee at St. Edmund Preparatory School in New York City. He is former chair of the Board of Trustees of Marian University. Mr. Nelson received his MBA from Fordham University. Mr. Nelson joined the Board in 2013.

William J. Schneider

Mr. Schneider, the Board s Independent Chairman, is currently Chairman, formerly Senior Partner and Chief Operating Officer (retired, December 2004) of Miller-Valentine Partners, a real estate investment company. He is an owner in several other Miller-Valentine entities. He is currently a member of the Board of WDPR Public Radio Station and of Med-America Health System. He was formerly a Director and Past Chair of the Dayton Development Coalition. He was formerly a member of the Community Advisory Board of the National City Bank in Dayton as well as a former member of the Business Advisory Council of the Cleveland Federal Reserve Bank. Mr. Schneider was also a member of the Business Advisory Council for the University of Dayton College of Business. He also served as Chair of the Miami Valley Hospital and as Chair of the Finance Committee of its parent holding company. Mr. Schneider was an independent trustee of the Flagship Funds, a group of municipal open-end funds. Mr. Schneider has a Bachelor of Science in Community Planning from the University of Cincinnati

and a Masters of Public Administration from the University of Dayton. Mr. Schneider joined the Board in 1996.

Judith M. Stockdale

Ms. Stockdale retired at the end of 2012 as Executive Director of the Gaylord and Dorothy Donnelley Foundation, a private foundation working in land conservation and artistic vitality in the Chicago region and the Lowcountry of South Carolina. She is currently a board member of the U.S. Endowment for Forestry and Communities (since 2013) and rejoined the board of the Land Trust Alliance in June 2013. Her previous positions include Executive Director of the Great Lakes Protection Fund, Executive Director of Openlands, and Senior Staff Associate at the Chicago Community Trust. She has served on the Advisory Council of the National Zoological Park, the Governor s Science Advisory Council (Illinois) and the Nancy Ryerson Ranney Leadership Grants Program. She has served on the Boards of Brushwood Center and the Donors Forum. Ms. Stockdale, a native of the United Kingdom, has a Bachelor of Science degree in geography from the University of Durham (UK) and a Master of Forest Science degree from Yale University. Ms. Stockdale joined the Board in 1997.

Carole E. Stone

Ms. Stone retired from the New York State Division of the Budget in 2004, having served as its Director for nearly five years and as Deputy Director from 1995 through 1999. Ms. Stone is currently on the Board of Directors of the Chicago Board Options Exchange, CBOE Holdings, Inc. and C2 Options Exchange, Incorporated. She has also served as the Chair of the New York Racing Association Oversight Board, as Chair of the Public Authorities Control Board, as a Commissioner on the New York State Commission on Public Authority Reform and as a member of the boards of directors of several New York State public authorities. Ms. Stone has a Bachelor of Arts in Business Administration from Skidmore College. Ms. Stone joined the Board in 2006.

Terence J. Toth

Mr. Toth is a Managing Partner of Promus Capital (since 2008). From 2008 to 2013, he served as a Director of Legal & General Investment Management America, Inc. From 2004 to 2007, he was Chief Executive Officer and President of Northern Trust Global Investments, and Executive Vice President of Quantitative Management & Securities Lending from 2000 to 2004. He also formerly served on the Board of the Northern Trust Mutual Funds. He joined Northern Trust in 1994 after serving as Managing Director and Head of Global Securities Lending at Bankers Trust (1986 to 1994) and Head of Government Trading and Cash Collateral Investment at Northern Trust from 1982 to 1986. He currently serves on the Boards of Chicago Fellowship, Fulcrum IT Service LLC (since 2010), Quality Control Corporation (since 2012), LogicMark LLC (since 2012) and Catalyst Schools of Chicago. He is on the Mather Foundation Board (since 2012) and is Chair of its investment committee. Mr. Toth graduated with a Bachelor of Science degree from the University of Illinois, and received his MBA from New York University. In 2005, he graduated from the CEO Perspectives Program at Northwestern University. Mr. Toth joined the Board in 2008.

Margaret L. Wolff

Ms. Wolff retired from Skadden, Arps, Slate, Meagher & Flom LLP in 2014 after more than 30 years of providing client service in the Mergers & Acquisitions Group. During her legal career, Ms. Wolff devoted significant time to advising boards and senior management on U.S. and international corporate, securities, regulatory and strategic matters, including governance, shareholder, fiduciary, operational and management issues. Since 2013, she has been a Board member of Travelers Insurance Company of Canada and The Dominion of Canada General Insurance Company (each of which is a part of Travelers Canada, the Canadian operation of The Travelers Companies, Inc.). Ms. Wolff has been a trustee of New York-Presbyterian Hospital since 2005 and, since 2004, she has served as a trustee of The John A. Hartford Foundation (a philanthropy dedicated to improving the care of older adults) where she currently is the Chair. From 2005 to 2015, she was a trustee of Mt. Holyoke College and served as Vice Chair of the Board from 2011 to 2015. Ms. Wolff received her Bachelor of Arts from Mt. Holyoke College and her Juris Doctor from Case Western Reserve University School of Law. Ms. Wolff joined the Board in 2016.

Board Member Terms. For each Fund, shareholders will be asked to elect Board Members as each Board Member s term expires, and with respect to Board Members elected by holders of Common Shares such Board Member shall be elected for a term expiring at the time of the third succeeding annual meeting of shareholders subsequent to their election or thereafter in each case when their respective successors are duly elected and qualified. These provisions could delay for up to two years the replacement of a majority of the Board.

The Officers

The following table sets forth information with respect to each officer of the Funds. Officers receive no compensation from the Funds. The officers are elected by the Board on an annual basis to serve until successors are elected and qualified.

Name, Address and Year of Birth	Position(s) Held with Fund	Term of Office and Length of Time Served ⁽¹⁾	Principal Occupation(s) During Past 5 Years ⁽²⁾	Number of Portfolios in Fund Complex Served by Officer ⁽²⁾⁽³⁾
Cedric H. Antosiewicz 333 West Wacker Drive Chicago, Illinois 60606 1962	Chief Administrative Officer	Term: Annual Length of Service: Since 2007	Managing Director (since 2004) of Nuveen Securities LLC; Managing Director (since 2014) of Nuveen Fund Advisors, LLC; Managing Director (since 2010) of Nuveen Investments Holdings, Inc.	77
Lorna C. Ferguson 333 West Wacker Drive Chicago, Illinois 60606 1945	Vice President	Term: Annual Length of Service: Since 1998	Managing Director of Nuveen Investments Holdings, Inc.	181
Stephen D. Foy 333 West Wacker Drive Chicago, Illinois 60606 1954	Vice President and Controller	Term: Annual Length of Service: Since 1993	Managing Director (since 2014), formerly, Senior Vice President (2013 2014) and Vice President of Nuveen Fund Advisors, LLC; Chief Financial Officer of Nuveen Commodities Asset Management, LLC (since 2010); Managing Director (since 2016) of Nuveen Securities, LLC; Certified Public Accountant.	181
Nathaniel T. Jones 333 West Wacker Drive Chicago, Illinois 60606 1979	Vice President and Treasurer	Term: Annual Length of Service: Since 2016	Senior Vice President (since 2016), formerly, Vice President (2011-2016) of Nuveen Investments Holdings, Inc.; Chartered Financial Analyst.	181
Walter M. Kelly 333 West Wacker Drive Chicago, Illinois 60606 1970	Chief Compliance Officer and Vice President	Term: Annual Length of Service: Since 2003	Senior Vice President (since 2008) of Nuveen Investments Holdings, Inc.	181
David J. Lamb	Vice President	Term: Annual	Senior Vice President of Nuveen Investments Holdings, Inc. (since 2006), Vice President prior	77
333 West Wacker Drive	3 West Wacker Drive		to 2006.	
Chicago, Illinois 60606		2015		
1963				

Name, Address and Year of Birth	Position(s) Held with Fund	Term of Office and Length of Time Served ⁽¹⁾	Principal Occupation(s) During Past 5 Years ⁽²⁾	Number of Portfolios in Fund Complex Served by Officer ⁽²⁾⁽³⁾
Tina M. Lazar 333 West Wacker Drive Chicago, Illinois 60606 1961	Vice President	Term: Annual Length of Service: Since 2002	Senior Vice President of Nuveen Investments Holdings, Inc. and Nuveen Securities, LLC.	181
Kevin J. McCarthy 333 West Wacker Drive Chicago, Illinois 60606 1966	Vice President and Assistant Secretary	Term: Annual Length of Service: Since 2007	Executive Vice President, Secretary and General Counsel (since March 2016), formerly, Managing Director and Assistant Secretary of Nuveen Investments, Inc.; Executive Vice President (since March 2016), formerly, Managing Director, and Assistant Secretary (since 2008) of Nuveen Securities, LLC; Executive Vice President and Secretary (since March 2016), formerly, Managing Director (2008-2016) and Assistant Secretary (2007-2016), and Co-General Counsel (since 2011) of Nuveen Fund Advisors, LLC; Executive Vice President and Secretary (since March 2016), formerly, Managing Director and Assistant Secretary (2011-2016), and Associate General Counsel (since 2011) of Nuveen Asset Management, LLC; Executive Vice President and Secretary of Nuveen Investments Advisers, LLC; Vice President (since 2007) and Secretary (since 2016) of NWQ Investment Management Company, LLC, Symphony Asset Management LLC, Santa Barbara Asset Management, LLC, Winslow Capital Management, LLC (since 2010) and Tradewinds Global Investors, LLC (since 2016); Vice President (since 2010) and Secretary (since March 2016), formerly, Assistant Secretary of Nuveen Commodities Asset Management, LLC.	181

Name, Address and Year of Birth	Position(s) Held with Fund	Term of Office and Length of Time Served ⁽¹⁾	Principal Occupation(s) During Past 5 Years ⁽²⁾	Number of Portfolios in Fund Complex Served by Officer ⁽²⁾⁽³⁾
Kathleen L. Prudhomme 901 Marquette Avenue Minneapolis, Minnesota 55402 1953	Vice President and Assistant Secretary	Term: Annual Length of Service: Since 2011	Managing Director and Assistant Secretary of Nuveen Securities, LLC (since 2011); Managing Director, Assistant Secretary and Co-General Counsel (since 2011) of Nuveen Fund Advisors, LLC; Managing Director, Assistant Secretary and Associate General Counsel (since 2011) of Nuveen Asset Management, LLC; formerly, Deputy General Counsel, FAF Advisors, Inc. (2004-2010).	181
Christopher M. Rohrbacher 333 West Wacker Drive Chicago, Illinois 60606 1971	Vice President and Assistant Secretary	Term: Annual Length of Service: Since 2008	Senior Vice President (since 2011) formerly, Vice President (2008-2011) and Assistant General Counsel (since 2008) of Nuveen Investments Holdings, Inc.; Vice President and Assistant Secretary (since 2010) of Nuveen Commodities Asset Management, LLC.	181
Joel T. Slager 333 West Wacker Drive Chicago, Illinois 60606 1978	Vice President and Assistant Secretary	Term: Annual Length of Service: Since 2013	Fund Tax Director for Nuveen Funds (since 2013); previously, Vice President of Morgan Stanley Investment Management, Inc., Assistant Treasurer of the Morgan Stanley Funds (from 2010 to 2013).	181

Name, Address and Year of Birth	Position(s) Held with Fund	Term of Office and Length of Time Served ⁽¹⁾	Principal Occupation(s) During Past 5 Years ⁽²⁾	Number of Portfolios in Fund Complex Served by Officer ⁽²⁾⁽³⁾
Gifford R. Zimmerman 333 West Wacker Drive Chicago, Illinois 60606 1956	Vice President and Secretary	Term: Annual Length of Service: Since 1988	Managing Director (since 2002) and Assistant Secretary of Nuveen Securities, LLC; Managing Director (since 2002), Assistant Secretary (since 1997) and Co-General Counsel (since 2011) of Nuveen Fund Advisors, LLC; Managing Director (since 2004) and Assistant Secretary (since 1994) of Nuveen Investments, Inc.; Managing Director, Assistant Secretary and Associate General Counsel of Nuveen Asset Management, LLC (since 2011); Managing Director and Assistant Secretary of Symphony Asset Management LLC (since 2003) and Nuveen Investments Advisers, LLC (since 2002); Vice President and Assistant Secretary of NWQ Investment Management Company, LLC, Santa Barbara Asset Management, LLC (since 2006) and of Winslow Capital Management, LLC (since 2010); Vice President and Assistant Secretary (since 2013), formerly, Chief Administrative Officer and Chief Compliance Officer (2006-2013) of Nuveen Commodities Asset Management, LLC; Chartered Financial Analyst	181

⁽¹⁾ Length of Time Served indicates the year the individual became an officer of a fund in the Nuveen fund complex.

⁽²⁾ Information as of October 1, 2016.

⁽³⁾ Each officer also serves as an officer of the Diversified Real Asset Income Fund, a closed-end management investment company advised by the Adviser, but not overseen by the Board.

Audit Committee Report

The Audit Committee of each Board is responsible for the oversight and monitoring of (1) the accounting and reporting policies, processes and practices, and the audit of the financial statements, of each Fund, (2) the quality and integrity of the Fund's financial statements and (3) the independent registered public accounting firm's qualifications, performance and independence. In its oversight capacity, the Audit Committee reviews each Fund's annual financial statements with both management and the independent registered public accounting firm and the committee meets periodically with the independent registered public accounting firm and internal auditors to consider their evaluation of each Fund's financial and internal controls. The Audit Committee also selects, retains, evaluates and may replace each Fund's independent registered public accounting firm. The Audit Committee is currently composed of five Independent Board Members and operates under a written charter adopted and approved by each Board. Each Audit Committee member meets the independence and experience requirements, as applicable, of the NYSE, NYSE MKT, Section 10A of the 1934 Act and the rules and regulations of the SEC.

The Audit Committee, in discharging its duties, has met with and held discussions with management and each Fund s independent registered public accounting firm. The Audit Committee has also reviewed and discussed the audited financial statements with management. Management has represented to the independent registered public accounting firm that each Fund s financial statements were prepared in accordance with generally accepted accounting principles. The Audit Committee has also discussed with the independent registered public accounting firm the matters required to be discussed by Statement on Auditing Standards (SAS) No. 114 (The Auditor s Communication With Those Charged With Governance), which supersedes SAS No. 61 (Communication with Audit Committees). Each Fund s independent registered public accounting firm provided to the Audit Committee the written disclosure required by Public Company Accounting Oversight Board Rule 3526 (Communications with Audit Committees Concerning Independence), and the Audit Committee discussed with representatives of the independent registered public accounting firm their firm s independence. As provided in the Audit Committee Charter, it is not the Audit Committee s responsibility to determine, and the considerations and discussions referenced above do not ensure, that each Fund s financial statements are complete and accurate and presented in accordance with generally accepted accounting principles.

Based on the Audit Committee s review and discussions with management and the independent registered public accounting firm, the representations of management and the report of the independent registered public accounting firm to the Audit Committee, the Audit Committee has recommended that the audited financial statements be included in each Fund s Annual Report.

Jack B. Evans

David J. Kundert

John K. Nelson

Carole E. Stone

Terence J. Toth

Audit and Related Fees. The following tables provide the aggregate fees billed during each Fund s last two fiscal years by each Fund s independent registered public accounting firm for engagements directly related to the operations and financial reporting of each Fund including those relating (i) to each Fund for services provided to the Fund and (ii) to the Adviser and certain entities controlling, controlled by, or under common control with the Adviser that provide ongoing services to each Fund (Adviser Entities).

	Audit	Fees(1)	Au	dit Related	Fees(2)			Tax	Fees(3)			All Oth	er Fees ⁽⁴	1)
						viser				iser				viser
	_	_	_			nd	_			nd	_	_		nd
	Fu	ınd	Fu	nd	Adviser	Entitle	s Fu	ınd	Adviser	Entitle	s F	und	Adviser	Entitles
	Fiscal	Fiscal	Fiscal	Fiscal	Fiscal	Fiscal	Fiscal	Fiscal	Fiscal	Fiscal	Fiscal	Fiscal	Fiscal	Fiscal
	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
	Ended	Ended	Ended	Ended	Ended	Ended	Ended	Ended	Ended	Ended	Ended	Ended	Ended	Ended
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Arizona Premium	\$ 25,500	\$ 26,375	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$0	\$ 193	\$ 0	\$ 0
California AMT-Free	25,500	26,375	20,000	0	0	0	0	0	0	0	0	808	0	0
California Value	22,500	23,270	0	4,000	0	0	0	0	0	0	0	50	0	0
California Value 2	22,500	23,270	0	0	0	0	0	0	0	0	0	64	0	0
Massachusetts Premium	22,500	23,270	0	0	0	0	0	0	0	0	0	79	0	0
Michigan Quality	25,500	26,375	0	0	0	0	0	0	0	0	0	172	0	0
New Jersey Dividend	22,500	23,270	0	0	0	0	0	0	0	0	0	157	0	0
New Jersey Value	20,500	21,200	0	0	0	0	0	0	0	0	0	21	0	0
Ohio Quality	25,500	26,375	0	0	0	0	0	0	0	0	0	257	0	0
Pennsylvania Investment														
Quality	22,500	23,270	0	0	0	0	0	0	0	0	0	987	0	0
Pennsylvania Value	20,500	21,200	0	0	0	0	0	0	0	0	0	7	0	0
Texas Quality	25,500	26,375	0	12,000	0	0	0	0	0	0	0	43	0	0

- (1) Audit Fees are the aggregate fees billed for professional services for the audit of the Fund s annual financial statements and services provided in connection with statutory and regulatory filings or engagements.
- (2) Audit Related Fees are the aggregate fees billed for assurance and related services reasonably related to the performance of the audit or review of financial statements that are not reported under Audit Fees. These fees include offerings related to the Fund s Common Shares and leverage.
- (3) Tax Fees are the aggregate fees billed for professional services for tax advice, tax compliance, and tax planning. These fees include: all global withholding tax services; excise and state tax reviews; capital gain, tax equalization and taxable basis calculation performed by the principal accountant.
- (4) All Other Fees are the aggregate fees billed for products and services other than Audit Fees , Audit-Related Fees and Tax Fees. These fees represent all Agreed-Upon Procedures engagements pertaining to the Fund s use of leverage.

	Billed Fiscal Year	n-Audit Fees to Fund Fiscal Year	Bi to Advi Adviser (Engagem Directly to the and Fi Repo of F		Bil to Advi Adviser (All Other F Fiscal Year	-Audit Fees lled sers and · Entities Engagements) Fiscal YearFi		
Arizona Premium	Ended 2015 \$ 0	Ended 2016 \$193	Ended 2015	Ended 2016 \$ 0	Ended 2015 \$ 0	Ended 2016E1	1ded 201 \$ 0	5Ended 2016 \$ 193
California AMT-Free	0	808	0	0	0	0	0	808
California Value	0	50	0	0	0	0	0	50
California Value 2	0	64	0	0	0	0	0	64
Massachusetts Premium	0	79	0	0	0	0	0	79
Michigan Quality	0	172	0	0	0	0	0	172
New Jersey Dividend	0	157	0	0	0	0	0	157
New Jersey Value	0	21	0	0	0	0	0	21
Ohio Quality	0	257	0	0	0	0	0	257
Pennsylvania Investment Quality	0	987	0	0	0	0	0	987
Pennsylvania Value	0	7	0	0	0	0	0	7
Texas Quality	0	43	0	0	0	0	0	43

Audit Committee Pre-Approval Policies and Procedures. Generally, the Audit Committee must approve each Fund s independent registered public accounting firm s engagements (i) with the Fund for audit or non-audit services and (ii) with the Adviser and Adviser Entities for non-audit services if the engagement relates directly to the operations and financial reporting of the Fund. Regarding tax and research projects conducted by the independent registered public accounting firm for each Fund and the Adviser and Adviser Entities (with respect to the operations and financial reporting of each Fund), such engagements will be (i) pre-approved by the Audit Committee if they are expected to be for amounts greater than \$10,000; (ii) reported to the Audit Committee chairman for his verbal approval prior to engagement if they are expected to be for amounts under \$10,000 but greater than \$5,000; and (iii) reported to the Audit Committee at the next Audit Committee meeting if they are expected to be for an amount under \$5,000.

The Audit Committee has approved in advance all audit services and non-audit services that the independent registered public accounting firm provided to each Fund and to the Adviser and Adviser Entities (with respect to the operations and financial reporting of each Fund). None of the services rendered by the independent registered public accounting firm to each Fund or the Adviser or Adviser Entities were pre-approved by the Audit Committee pursuant to the pre-approval exception under Rule 2.01(c)(7)(i)(C) or Rule 2.01(c)(7)(ii) of Regulation S-X.

Additional Information

Appointment of the Independent Registered Public Accounting Firm

The Board of each Fund has appointed KPMG LLP (KPMG) as independent registered public accounting firm to audit the books and records of the Fund for its current fiscal year. A representative of KPMG will be present at the Annual Meetings to make a statement, if such representative so desires, and to respond to shareholders—questions. KPMG has informed each Fund that it has no direct or indirect material financial interest in the Funds, Nuveen, the Adviser or any other investment company sponsored by Nuveen.

Section 16(a) Beneficial Interest Reporting Compliance

Section 30(h) of the 1940 Act and Section 16(a) of the 1934 Act require Board Members and officers, the Adviser, affiliated persons of the Adviser and persons who own more than 10% of a registered class of a Fund s equity securities to file forms reporting their affiliation with that Fund and reports of ownership and changes in ownership of that Fund s shares with the SEC and the NYSE or NYSE MKT, as applicable. These persons and entities are required by SEC regulation to furnish the Funds with copies of all Section 16(a) forms they file. Based on a review of these forms furnished to each Fund, each Fund believes that its Board Members and officers, Adviser and affiliated persons of the Adviser have complied with all applicable Section 16(a) filing requirements during its last fiscal year. To the knowledge of management of the Funds, no shareholder of a Fund owns more than 10% of a registered class of a Fund s equity securities, except as provided in Appendix B.

Information About the Adviser

The Adviser, located at 333 West Wacker Drive, Chicago, Illinois 60606, serves as investment adviser and manager for each Fund. The Adviser is a wholly-owned subsidiary of Nuveen. Nuveen is an operating division of TGAM, the investment management arm of Teachers Insurance and Annuity Association of America (TIAA). TIAA is a life insurance company founded in 1918 by the Carnegie Foundation for the Advancement of Teaching and is the companion organization of College Retirement Equities Fund.

Shareholder Proposals

To be considered for presentation at the annual meeting of shareholders for the Funds to be held in 2017, shareholder proposals submitted pursuant to Rule 14a-8 of the 1934 Act must be received at the offices of that Fund, 333 West Wacker Drive, Chicago, Illinois 60606, not later than June 13, 2017. A shareholder wishing to provide notice in the manner prescribed by Rule 14a-4(c)(1) of a proposal submitted outside of the process of Rule 14a-8 for the annual meeting must, pursuant to each Fund s By-Laws, submit such written notice to the Fund not later than August 27, 2017 or prior to August 12, 2017. Timely submission of a proposal does not mean that such proposal will be included in a proxy statement.

Shareholder Communications

Fund shareholders who want to communicate with the Board or any individual Board Member should write to the attention of Lorna Ferguson, Manager of Fund Board Relations, Nuveen, 333 West Wacker Drive, Chicago, Illinois 60606. The letter should indicate that you are a Fund shareholder and note the Fund or Funds that you own. If the communication is intended for a specific Board Member and so indicates, it will be sent only to that Board Member. If a communication does not indicate a specific Board Member, it will be sent to the Independent Chairman and the outside counsel to the Independent Board Members for further distribution as deemed appropriate by such persons.

Expenses of Proxy Solicitation

The cost of preparing, printing and mailing the enclosed proxy, accompanying notice and proxy statement and all other costs in connection with the solicitation of proxies will be paid by the Funds pro rata based on the number of shareholder accounts. Additional solicitation may be made by letter or telephone by officers or employees of Nuveen or the Adviser, or by dealers and their representatives. Any additional costs of solicitation will be paid by the Fund that requires additional solicitation.

Fiscal Year

The last fiscal year end for each Fund except Massachusetts Premium, New Jersey Dividend, New Jersey Value, Pennsylvania Investment Quality and Pennsylvania Value was February 29, 2016. The last fiscal year end for New Jersey Dividend, New Jersey Value, Pennsylvania Investment Quality and Pennsylvania Value was April 30, 2016. The last fiscal year end for Massachusetts Premium was May 31, 2016.

Shareholder Report Delivery

Shareholder reports will be sent to shareholders of record of each Fund following the applicable period. Each Fund will furnish, without charge, a copy of its annual report and/or semi-annual report as available upon request. Such written or oral requests should be directed to such Fund at 333 West Wacker Drive, Chicago, Illinois 60606 or by calling 1-800-257-8787.

Important Notice Regarding the Availability of Proxy Materials for the Shareholder Meeting To Be Held on November 15, 2016:

Each Fund s proxy statement is available at http://www.nuveenproxy.com/Closed-End-Fund-Proxy-Information/. For more information, shareholders may also contact the applicable Fund at the address and phone number set forth above.

Please note that only one annual report, semi-annual report or proxy statement may be delivered to two or more shareholders of a Fund who share an address, unless the Fund has received instructions to the contrary. To request a separate copy of an annual report, semi-annual report or proxy statement, or for instructions as to how to request a separate copy of such documents or as to how to request a single copy if multiple copies of such documents are received, shareholders should contact the applicable Fund at the address and phone number set forth above.

General

Management does not intend to present and does not have reason to believe that any other items of business will be presented at the Annual Meetings. However, if other matters are properly presented to the Annual Meetings for a vote, the proxies will be voted by the persons acting under the proxies upon such matters in accordance with their judgment of the best interests of the Fund.

A list of shareholders entitled to be present and to vote at each Annual Meeting will be available at the offices of the Funds, 333 West Wacker Drive, Chicago, Illinois, for inspection by any shareholder during regular business hours beginning ten days prior to the date of the Annual Meeting.

Failure of a quorum to be present at any Annual Meeting will necessitate adjournment and will subject that Fund to additional expense. The persons named in the enclosed proxy may also move for an adjournment of any Annual Meeting to permit further solicitation of proxies with respect to the proposal if they determine that adjournment and further solicitation is reasonable and in the best interests of the Funds. Under each Fund s By-Laws, an adjournment of a meeting with respect to a matter requires the affirmative vote of a majority of the shares entitled to vote on the matter present in person or represented by proxy at the meeting.

IF YOU CANNOT BE PRESENT AT THE MEETING, YOU ARE REQUESTED TO FILL IN, SIGN AND RETURN THE ENCLOSED PROXY PROMPTLY. NO POSTAGE IS REQUIRED IF MAILED IN THE UNITED STATES.

Gifford R. Zimmerman

Vice President and Secretary

October 6, 2016

APPENDIX A

Beneficial Ownership

The following table lists the dollar range of equity securities beneficially owned by each Board Member nominee in each Fund and in all Nuveen funds overseen by the Board Member/nominee as of July 31, 2016. The information as to beneficial ownership is based on statements furnished by each Board Member/nominee.

	A mi	izona	Range of Equity S California AMT-	California	California	Massachusetts	Michigan	New Jersev
Board Member/Nominees		ızona mium	Free	Value	Value 2	Premium	Quality	Dividend
Dour a Member/Monniecs	110	11114111	1100	v aruc	value 2	1 i ciliiuiii	Quanty	Dividend
Board Members/Nominees who are not in	nterested persons of	of the Fu	ınds					
Jack B. Evans	:	\$0	\$0	\$0	\$0	\$0	\$0	\$0
William C. Hunter	:	\$0	\$0	\$0	\$0	\$0	\$0	\$0
David J. Kundert	:	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Albin F. Moschner ⁽²⁾	:	\$0	\$0	\$0	\$0	\$0	\$0	\$0
John K. Nelson	:	\$0	\$0	\$0	\$0	\$0	\$0	\$0
William J. Schneider	:	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Judith M. Stockdale	:	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Carole E. Stone	:	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Terence J. Toth	:	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Margaret L. Wolff	:	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Board Members/Nominees who are inter-	ested persons of th	e Funds						
William Adams IV		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Margo L. Cook(2)		\$0	\$0	\$0	\$0	\$0	\$0	\$0

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			Dollar Range of I	Equity Securities		
Board Member/Nominees	New Jersey Value	Ohio Quality	Pennsylvania	Pennsylvania Value	Texas Quality	Aggregate Range of Equity Securities in All Registered Investment Companies Overseen by Board Member Nominees in Family of Investment Companies ⁽¹⁾
Board Members/Nominees						
who are not interested						
persons of the Funds	40	40	40	40	40	4400.000
Jack B. Evans	\$0	\$0	\$0	\$0	\$0	over \$100,000
William C. Hunter	\$0	\$0	\$0	\$0	\$0	over \$100,000
David J. Kundert	\$0	\$0	\$0	\$0	\$0	over \$100,000
Albin F. Moschner ⁽²⁾	\$0	\$0	\$0	\$0	\$0	None
John K. Nelson	\$0	\$0	\$0	\$0	\$0	over \$100,000
William J. Schneider	\$0	over \$100,000	\$0	\$0	\$0	over \$100,000
Judith M. Stockdale	\$0	\$0	\$0	\$0	\$0	over \$100,000
Carole E. Stone	\$0	\$0	\$0	\$0	\$0	over \$100,000
Terence J. Toth	\$0	\$0	\$0	\$0	\$0	over \$100,000
Margaret L. Wolff	\$0	\$0	\$0	\$0	\$0	None
Board Members/Nominees						
who are interested persons						
of the Funds						
William Adams IV	\$0	\$0	\$0	\$0	\$0	over \$100,000
Margo L. Cook(2)	\$0	\$0	\$0	\$0	\$0	over \$100,000

⁽¹⁾ The amounts reflect the aggregate dollar range of equity securities of the number of shares beneficially owned by the Board Member/nominee in the Funds and in all Nuveen funds overseen by each Board Member/nominee.

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⁽²⁾ Board Members Cook and Moschner were appointed on June 22, 2016 to the Board of Trustees/Directors of the Nuveen Funds, effective July 1, 2016.

The following table sets forth, for each Board Member/nominee and for the Board Member/nominees and officers as a group, the amount of shares beneficially owned in each Fund as of July 31, 2016. The information as to beneficial ownership is based on statements furnished by each Board Member/nominee and officer.

Fund Shares Owned By Board Members And Officers(1)

		California AMT-	California	California	Massachusetts	Michigan
Board Member/Nominees	Arizona Premium	Free	Value	Value 2	Premium	Quality
Board Members/Nominees who are not interested personal	ons of the Funds					
Jack B. Evans	0	0	0	0	0	0
William C. Hunter	0	0	0	0	0	0
David J. Kundert	0	0	0	0	0	0
Albin F. Moschner ⁽²⁾	0	0	0	0	0	0
John K. Nelson	0	0	0	0	0	0
William J. Schneider	0	0	0	0	0	0
Judith M. Stockdale	0	0	0	0	0	0
Carole E. Stone	0	0	0	0	0	0
Terence J. Toth	0	0	0	0	0	0
Margaret L. Wolff	0	0	0	0	0	0
Board Members/Nominees who are interested persons	of the Funds					
William Adams IV	0	0	0	0	0	0
Margo L. Cook ⁽²⁾	0	0	0	0	0	0
All Board Members/Nominees and Officers as a Group	0	0	0	0	0	0

Fund Shares Owne	ed By Board M	embers And Of	ficers ⁽¹⁾	D 1		
Board Member/Nominees	New Jersey Dividend	New Jersey Value	Ohio Quality	Pennsylvania Investment Quality	Pennsylvania Value	Texas Quality
Board Members/Nominees who are not interested persons of the Fur	nds					
Jack B. Evans	0	0	0	0	0	0
William C. Hunter	0	0	0	0	0	0
Albin F. Moschner ⁽²⁾	0	0	0	0	0	0
David J. Kundert	0	0	0	0	0	0
John K. Nelson	0	0	0	0	0	0
William J. Schneider	0	0	19,980	0	0	0
Judith M. Stockdale	0	0	0	0	0	0
Carole E. Stone	0	0	0	0	0	0
Terence J. Toth	0	0	0	0	0	0
Margaret L. Wolff	0	0	0	0	0	0
Board Members/Nominees who are interested persons of the Funds						
William Adams IV	0	0	0	0	0	0
Margo L. Cook ⁽²⁾	0	0	0	0	0	0
All Board Members/Nominees and Officers as a Group	0	0	19,980	0	0	0

⁽¹⁾ The numbers include share equivalents of certain Nuveen funds in which the Board Member/nominee is deemed to be invested pursuant to the Deferred Compensation Plan for Independent Board Members as more fully described in the Proxy Statement.

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⁽²⁾ Board Members Cook and Moschner were appointed on June 22, 2016 to the Board of Trustees/Directors of the Nuveen Funds, effective July 1, 2016.

APPENDIX B

List of Beneficial Owners Who Own More Than 5% of Any Class of Shares in Any Fund

The following chart lists each shareholder or group of shareholders who beneficially owned more than 5% of any class of shares for each Fund as of September 19, 2016^* :

Fund and Class Arizona Premium VMTP Shares	Shareholder Name and Address Wells Fargo & Company ^(a) 420 Montgomery Street San Francisco, CA 94104	Number of Shares Owned 883	Percentage Owned 100%
California AMT-Free VRDP Shares (Series 4)	Wells Fargo Municipal Capital Strategies, LLC ^(a) 375 Park Avenue New York, NY 10152 Citigroup Global Markets Inc. ^(e) Citigroup Financial Products Inc. ^(e)	160	14.7%
	Citigroup Inc. ^(e)		
	388 Greenwich Street		
California Value Common Shares	New York, NY 10013 First Trust Portfolios L.P.(b) First Trust Advisors L.P.(b) The Charger Corporation(b) 120 East Liberty Drive, Suite 400 Wheaton, IL 60187	1,367,151	5.23%
Massachusetts Premium Common Shares	Gerald Fels ^(c) Marilyn Fels ^(c) 271 Thompson Road Webster, Massachusetts 05170	1,200,000	12.84%
MassachusettsPremium VMTP Shares	Wells Fargo & Company ^(a) 420 Montgomery Street San Francisco, CA 94104	740	100%
	Wells Fargo Municipal Capital Strategies, LLC ^(a) 375 Park Avenue New York, NY 10152		
Michigan Quality VMTP Shares	Wells Fargo & Company ^(d) 420 Montgomery Street San Francisco, CA 94104	1,730	100%

Wells Fargo Municipal Capital Strategies, $LLC^{(d)}\,375\;Park$

Avenue

New York, NY 10152

168,585

10.88%

Wells Fargo Bank, National Association(d)

101 N. Phillips Street Sioux Falls, SD 57104

New Jersey Value First Trust Portfolios L.P.^(b)
Common Shares First Trust Advisors L.P.^(b)

First Trust Advisors L.P.^(b) The Charger Corporation^(b) 120 East Liberty Drive, Suite 400

Wheaton, IL 60187

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Fund and Class	Shareholder Name and Address	Number of Shares Owned	Percentage Owned
Pennsylvania Investment Quality VMTP Shares	Wells Fargo & Company ^(a) 420 Montgomery Street San Francisco, CA 94104	870	100%
	Wells Fargo Municipal Capital Strategies, LLC ^(a) 375 Park Avenue New York, NY 10152		

- * The information contained in this table is based on Schedule 13D and 13G filings made on or before September 19, 2016.
- (a) Wells Fargo & Company and Wells Fargo Municipal Capital Strategies, LLC filed their Schedule 13D jointly and did not differentiate holdings as to each entity.
- (b) First Trust Portfolios L.P., First Trust Advisors L.P. and The Charger Corporation filed their Schedule 13G jointly and did not differentiate holdings as to each entity.
- (c) Gerald Fels and Marilyn Fels filed their Schedule 13G jointly and share voting power with respect to 1,200,000 Common Shares. In addition, Mr. Fels has sole voting power with respect to an additional 132,557 Common Shares and Mrs. Fels has sole voting power with respect to an additional 210,025 Common Shares.
- (d) Wells Fargo & Company, Wells Fargo Municipal Capital Strategies, LLC and Wells Fargo, National Association filed their Schedule 13D jointly. Wells Fargo & Company has shared voting power with respect to 1,730 VMTP Shares, Wells Fargo Municipal Capital Strategies, LLC has shared voting power with respect to 851 VMTP Shares and Wells Fargo, National Association has shared voting power with respect to 879 VMTP Shares.
- (e) Citigroup Global Markets Inc., Citigroup Financial Products Inc., Citigroup Global Markets Holdings Inc. and Citigroup Inc. filed their Schedule 13G jointly and did not differentiate holdings as to each entity.

VRDP Shares are designed to be eligible for purchase by money market funds. Based on information provided by remarketing agents for the VRDP Shares, money market funds within certain fund complexes may hold, in the aggregate, greater than 5% of the outstanding VRDP Shares of one or more Funds, and individual money market funds within such complexes may beneficially own an indeterminable amount of VRDP Shares exceeding 5% of the outstanding VRDP Shares of one or more Funds. Information with respect to aggregate holdings of these VRDP Shares associated with fund complexes identified by the remarketing agents as holding greater than 5% of the outstanding VRDP Shares of a Fund, including the number of VRDP Shares associated with the fund complex and percentage of total outstanding, is as follows: California AMT-Free (Series 2): The Vanguard Group (355 shares (100.0%)); California AMT-Free (Series 3): JP Morgan (265 shares (62.1%)), The Vanguard Group (162 shares (37.9%)); California AMT-Free (Series 5): JP Morgan (491 shares (47.0%)), Schwab (553 shares (53.0%)); New Jersey Dividend (Series 1): Deutsche Bank (243 shares (30.0%)), Federated (30 shares (3.7%)), Schwab (100 shares (12.3%)), The Vanguard Group (267 shares (33.0%)), Wells Fargo (170 shares (21.0%)); New Jersey Dividend (Series 2): Federated (185 shares (12.8%)), JP Morgan (250 shares (17.3%)), Schwab (265 shares (18.4%)), The Vanguard Group (743 shares (51.5%)); New Jersey Dividend (Series 3): JP Morgan (306 shares (34.5%)), The Vanguard Group (580 shares (65.5%)); Ohio Quality (Series 1): Deutsche Bank (130 shares (8.8%)), Federated (58 shares (3.9%)), JP Morgan (70 shares (4.7%)), RBC (622 shares (42.0%)), The Vanguard Group (600 shares (40.5%)); Pennsylvania Investment Quality (Series 2): Federated (90 shares (8.0%)), JP Morgan (175 shares (15.6%)), RBC (230 shares (20.4%)), Schwab (70 shares (6.2%)), The Vanguard Group (560 shares (49.8%)); and Pennsylvania Investment Quality (Series 3): JP Morgan (190 shares (18.1%)), Schwab (55 shares (5.2%)), The Vanguard Group (805 shares (76.7%)). The Funds have received no information from the remarketing

agents regarding any shareholders or groups of shareholders that beneficially own greater than 5% of the outstanding VRDP Shares of California AMT-Free (Series 4) or California AMT-Free (Series 6).

iMTP Shares are designed to be eligible for purchase by institutional investors. Based on information provided by the initial purchasers for the iMTP Shares, money market funds within certain fund complexes may hold, in the aggregate, greater than 5% of the outstanding iMTP Shares of a Fund, and individual money market funds within such complexes may beneficially own an indeterminable amount of iMTP Shares exceeding 5% of the outstanding iMTP Shares of a Fund. The Funds have received no information from the purchasers regarding any shareholders or groups of shareholders that beneficially own greater than 5% of the outstanding iMTP Shares of California AMT-Free or Texas Quality.

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APPENDIX C

NUMBER OF BOARD AND COMMITTEE MEETINGS

HELD DURING EACH FUND S LAST FISCAL YEAR

Fund	Regular Board Meeting	Special Board Meeting	Executive Committee Meeting	Dividend Committee Meeting	Compliance, Risk Management and Regulatory Oversight Committee Meeting	Audit Committee Meeting	Nominating and Governance Committee Meeting	Closed- End Funds Committee
Arizona Premium	6	7	0	4	5	4	6	4
California AMT-Free	6	7	0	4	5	4	6	4
California Value	6	7	0	4	5	4	6	4
California Value 2	6	7	0	4	5	4	6	4
Massachusetts Premium	6	10	0	4	5	4	6	4
Michigan Quality	6	7	0	4	5	4	6	4
New Jersey Dividend	6	9	0	4	5	3	6	4
New Jersey Value	6	9	0	4	5	3	6	4
Ohio Quality	6	7	0	4	5	4	6	4
Pennsylvania Investment								
Quality	6	9	0	4	5	3	6	4
Pennsylvania Value	6	9	0	4	5	3	6	4
Texas Quality	6	7	1	4	5	4	6	4

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