



# Battery Park City Authority

## BATTERY PARK CITY AUTHORITY

## INVESTMENT REPORT & GUIDELINES

## FISCAL YEAR ENDED

OCTOBER 31, 2016

January 2017

## **TABLE OF CONTENTS**

<b>1. OVERVIEW OF INVESTMENT GUIDELINES.....</b>	<b>3</b>
1.1. Definitions.....	3
1.2. Purpose and Scope.....	3
1.3. Compliance .....	3
1.4. Roles and Responsibilities.....	3
1.5. Standard of Prudence.....	4
1.6. Conflict of Interest.....	4
1.7. Review, Amendments, Updates and Revisions.....	4
1.8. Diversity –MBE/WBE Participation .....	5
1.9. Oversight – Investment Committee.....	5
<b>2. INVESTMENT MANAGEMENT OBJECTIVES.....</b>	<b>6</b>
2.1. Investment Objectives.....	6
2.2. Authorized Investment Vehicles.....	7
[§ 98. Investment of State Funds (State Finance Law)]	
2.3. Portfolio Diversification.....	10
2.4. Investment Maturity.....	10
<b>3. OPERATING PARAMETERS AND CONTROLS.....</b>	<b>10</b>
3.1. Authorized Officers and Employees .....	10
3.2. Competitive Selection.....	10
3.3. Compliance Audit.....	11
3.4. Written Contracts and Confirmations.....	11
3.5. Safekeeping and Custody.....	11
3.6. Internal Controls .....	12
3.7. Notification of Violations Concerning Guidelines .....	12
<b>4. QUALIFIED FINANCIAL INSTITUTIONS.....</b>	<b>12</b>
4.1. Qualifications for Brokers, Dealers and Agents.....	12
4.2. Qualifications for Investment Advisors/Managers.....	13
4.3. Qualifications for Custodial Banks.....	13
4.4. Ongoing Disclosure.....	13
4.5. Affirmative Action.....	13
<b>5. REPORTING.....</b>	<b>13</b>
5.1. Management Reporting.....	13
5.2. Performance Reporting.....	14
<b>APPENDIX A - OPERATING CONTROLS.....</b>	<b>15</b>
<b>APPENDIX B - INVESTMENT REPORT FYE OCTOBER 31, 2016.....</b>	<b>20</b>
<b>APPENDIX C - FISCAL YEAR ENDED OCTOBER 31, 2016 YEAR IN REVIEW.....</b>	<b>22</b>
<b>APPENDIX D - “REVIEW OF INVESTMENT PERFORMANCE QUARTER ENDED.....</b>	<b>26</b>
<b>OCTOBER 31, 2016”</b> <b><u>(SEPARATE FILE ATTACHED)</u></b>	

## **1. OVERVIEW OF INVESTMENT GUIDELINES**

### **1.1. Definitions**

“Authority” means the Battery Park City Authority, a corporate municipal instrumentality of the State of New York, established pursuant to the Act (“**Act**” shall mean the Battery Park City Authority Act, Title 12 of Article 8 of the Public Authorities Law [constituting Chapter 43-a of the Consolidated Laws of the State of New York] as added by Chapter 343 of the Laws of 1968, as amended).

“Board” means the Members of the Battery Park City Authority Board.

“Investment Funds” means monies and financial resources available for investment by the Authority.

“Investment Securities” means any or all of the investment obligations.

“Rating Agencies” means Standard & Poor’s Corporation, Moody’s Investor Service, and Fitch Ratings.

“State” means the State of New York.

### **1.2. Purpose and Scope**

The purpose of these guidelines (“Guidelines” or “Investment Guidelines”) is to establish the parameters, responsibilities, and controls for the investment and the management of Investment Funds. These Guidelines have been adopted by, and can be changed only by, the Board.

These Guidelines shall govern the investment and reinvestment of Investment Funds and the sale and liquidation of Investment Securities, as well as the monitoring, maintenance, accounting, reporting, and internal controls by and of the Authority with respect to such investment and reinvestment of Investment Funds and sale and liquidation of Investment Securities.

The guidance set forth herein is to be strictly followed by all those responsible for any aspect of the management or administration of these funds.

### **1.3 Compliance**

Section 2925 (6) of the State Public Authorities Law requires the Authority to annually prepare and approve an investment report which describes the Authority’s Investment Guidelines and any amendments to the Guidelines, investment policies and procedures, the results of the annual independent audit, the Authority’s investment income and a list of the fees associated with those investments, as well as commissions or other charges paid to each investment banker, broker, agent, dealer and advisor (**SEE - APPENDIX B – INVESTMENT REPORT FYE OCTOBER 31, 2016**).

### **1.4. Roles and Responsibilities**

It shall be the responsibility of the Chief Financial Officer to ensure that all investments and investment practices meet or exceed all statutes and guidelines governing the investment of public funds in New York and the guidelines established by the State Comptroller’s Office and the Governmental Accounting Standards Board (GASB). The Assistant Treasurer, acting on behalf of the Board as custodian of the Investment Policy, is responsible for ensuring that all aspects of the investment management program are executed in a manner

consistent with the Guidelines. A description of operating controls is attached as Appendix A to these Guidelines.

An investment committee (“Investment Committee”) will be appointed by the Board to develop and execute investment strategy for the Authority’s Investment Funds. In the event that the Board is not fully constituted, the entire Board may meet in lieu of the Investment Committee. The Investment Committee may consult with a qualified investment advisor/manager in the course of fulfilling its responsibilities.

The Authority’s external auditor will conduct an annual audit of the investment management activity to ensure compliance with the Investment Guidelines by Treasury and the external investment manager, if any. The findings of the audit shall be formally documented and submitted annually to the Chief Financial Officer and the Board.

### **1.5. Standard of Prudence**

The standard of prudence to be applied to the investment of the Authority’s Investment Funds shall be the “Prudent Person Rule” that states:

*“Investments shall be made with judgment and care, under circumstances then prevailing which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived.”*

Authorized Authority officials and employees involved in the investment process acting in accordance with the laws of the State, these Guidelines and any other written procedures pertaining to the administration and management of the Investment Funds and who exercise the proper due diligence shall be relieved of personal responsibility for an individual security’s credit risk or market price changes, provided that any negative deviations are reported in a timely fashion to the Chief Financial Officer or another authorized official and that reasonable and prudent action is taken to control and prevent any further adverse developments.

### **1.6. Conflict of Interest**

Authority Officers and employees involved in the investment process (Investment Officials) shall refrain from personal business activity that could conflict with the proper execution and management of the investment program, or that could impair their ability to make impartial decisions. Investment Officials shall not:

1. accept any money, loan, gift, favor, service, or business or professional opportunity that could influence them in the performance of their official duties;
2. accept any business or professional opportunity when they know there is a reasonable likelihood that the opportunity is being afforded to influence them in the performance of their official duties;
3. enter into any personal investment transactions with the same individual with whom business is conducted on behalf of the Authority; or
4. Disclose or use confidential information that is not generally available to the public for their own or another person’s financial benefit.

### **1.7. Review, Amendments, Updates and Revisions**

The Assistant Treasurer and the Chief Financial Officer will review the Guidelines on an annual basis, or as required, to ensure continued effectiveness of the Investment Guidelines. The Guidelines shall be submitted to the Board annually for review and approval. Modifications to the Investment Guidelines may be required as business needs and requirements change. Any amendments must be reviewed and approved by the Chief

Financial Officer and submitted to the Board for final approval. Subsequent to any modifications to the Investment Guidelines, revised Guidelines must be distributed to Authority personnel on the approved distribution list as well as any external investment advisor/manager and Financial Institutions.

### **1.8 Diversity –MBE/WBE Participation**

It is the Authority’s standard practice to reach out to these MBE/WBE brokers/dealers to provide them opportunities to trade for Investment Securities. The Authority required that thirty percentage (30%) of annual costs under the 2015 service agreement for investment advisory services be allocated to a certified MBE/WBE firm.

### **1.9 Oversight – Investment Committee**

An Investment Committee was established to formalize oversight of the Authority’s investment portfolio with the charter below. In the event that the Board is not fully constituted, the entire Board may meet in lieu of the Investment Committee.

## **BATTERY PARK CITY AUTHORITY INVESTMENT COMMITTEE CHARTER**

### **PURPOSE**

Pursuant to Article IV, Section 3 of the Authority’s bylaws, the purpose of the Investment Committee is to assist the Board in fulfilling its oversight responsibilities by establishing the Authority’s investment policies and overseeing its investments.

### **DUTIES OF THE INVESTMENT COMMITTEE**

The Investment Committee’s responsibilities and powers as delegated by the Board are set forth in this Charter. Whenever the Investment Committee takes action, it exercises its independent judgment on an informed basis that the action is in the best interests of BPCA. In doing so, the Investment Committee may rely to a significant extent on information and advice provided by management and independent advisors.

The Investment Committee has the authority, including, but not limited, to:

- Approve the investment and risk limits for the investment portfolio.
- Review the investment policies for BPCA, including, where applicable, asset classes, liquidity, the use of debt, and risk management.
- Approve the annual investment program.
- Authorize investments and ratify investments made pursuant to delegated authorities.
- Review the investment performance of BPCA’s accounts and funds, including benchmarks and attribution.
- Review the organization and staffing of the investment management advisory function.
- Review the quality of the investment services provided to BPCA, such as
  - Oversee the business and investment strategy;
  - Evaluate investment performance, performance benchmarks and attribution; and
  - Review costs, pricing and profitability.

### **COMPOSITION**

The Investment Committee shall be as set forth in Article IV, Section 4 of the Authority's bylaws. The Investment Committee shall consist of at least three (3) Members who shall be appointed by the Chairperson, one of whom the Chairperson shall appoint as Chair of the Investment Committee. The Chairperson shall be an additional non-voting member of the Investment Committee, provided that if there shall be any vacancy or vacancies in the whole number of the Members of the Board as prescribed by law, the Chairperson may serve as a voting member of the Investment Committee. Each member of the Investment Committee shall be an "independent member," as defined in Public Authorities Law § 2825 (2). Members of the Investment Committee shall possess the necessary skills to understand the duties and functions of the Investment Committee and shall be familiar with general investment policies and best practices.

## **MEETINGS**

The Investment Committee shall meet four (4) times a year or more frequently, as may be necessary and appropriate to carry out its responsibilities. The Investment Committee may ask members of management or others to attend the meetings and provide pertinent information as appropriate. Meetings may be in person or by video conference, if necessary.

In addition, the Investment Committee:

- Shall act only on the affirmative vote of a majority of the members present at a meeting.
- Is expected to maintain free and open communication with management and the Board.
- Shall have authority to retain independent legal, accounting or other advisors if determined appropriate, in its sole judgment, provided such consultants are approved by the full Board.
- Submit the minutes of all Investment Committee meetings to the Board and regularly report to the Board on Investment Committee matters, actions taken and issues discussed at its meetings.
- Review and reassess the adequacy of this Charter annually and propose to the Board any changes to the Charter.
- The Investment Committee shall evaluate its performance annually and report its conclusions to the Board.

## **2. INVESTMENT MANAGEMENT OBJECTIVES**

### **2.1. Investment Objectives**

The Authority's Investment Funds shall be managed to accomplish the following hierarchy of objectives:

1. **Legality** - The Authority shall comply with all investment guidelines required for public authorities in the State with regards to general investment practices and the management of public funds.
2. **Safety** - Next to legality, safety of principal is the foremost objective of the investment program. Investments of the Authority shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio.
3. **Liquidity** - The portfolio shall be managed in such a manner that assures that funds are available as needed to meet those immediate and/or future operating requirements of the Authority, including but not limited to payroll, accounts payable, capital projects, debt service and any other payments.

4. **Return** - The Authority's portfolio shall be managed in such a fashion as to maximize the return on all investments (up to the "arbitrage allowance" in bond funds) within the context and parameters set forth by the investment objectives stated above.

## 2.2. Authorized Investment Securities

The investment of Authority funds is limited by the law creating the Authority to "obligations of the State or of the United States of America or obligations the principal of and interest on which are guaranteed by the State or the United States of America" or any other obligations in which the Comptroller of the State of New York is authorized to invest pursuant to section ninety-eight of the State finance law. On October 21, 2003, the Act was amended regarding investments to allow any monies of the Authority, including the proceeds of bonds or notes, not required for immediate use, at the discretion of the Authority to be invested in obligations of the State, U.S. Government and its agencies, or in any other obligations in which the State Comptroller is authorized to invest pursuant to Section 98 of the State Finance Law. The 2003, 2009 and 2013 bond resolutions allow all investments alternatives included in the Act, as follows:

1. Bonds and notes of the United States.
2. Bonds and notes of this State.
  - 2-a. General obligation bonds and notes of any state other than this State, provided that such bonds and notes receive the highest rating of at least one independent rating agency designated by the State Comptroller.
3. Obligations for the payment of which the faith and credit of the United States or of this State are pledged.
  - 3-a. Notes, bonds, debentures, mortgages and other evidences of indebtedness of the United States Postal Service; the federal national mortgage association; federal home loan mortgage corporation; student loan marketing association; federal farm credit system or any other United States government sponsored agency, provided that at the time of the investment such agency or its obligations are rated and the agency receives, or its obligations receive, the highest rating of all independent rating agencies that rate such agency or its obligations, provided, however, that no more than two hundred fifty million dollars may be invested in the obligations of any one agency.
4. Judgments or awards of the court of claims of this state.
5. Stocks, bonds, or notes of any county, town, city, village, fire district or school district of this State issued pursuant to law.
6. Mortgage bonds or any obligations for the payment of money, no matter how designated, secured by another instrument representing a lien on specific real property or a leasehold thereof, heretofore or hereafter and at the time of the assignment thereof to the comptroller insured by the federal housing administrator or any of his successors in office and guaranteed by the United States under the provisions of the national housing act, as amended or supplemented. Any such mortgage bonds or obligations as aforesaid in which the State Comptroller has invested or shall have invested pursuant to this subdivision shall be serviced by the State Comptroller or in his discretion, by mortgages, as such are defined by the national housing act, as amended or supplemented, duly appointed by him and subject to the inspection and supervision of some governmental agency. The State Comptroller may receive and hold such debentures and certificates or other obligations as are pursuant to law.
7. Bonds and notes of the Savings and Loan Bank of the State of New York.
8. Bonds or notes of any housing authority of this State duly issued pursuant to law.

9. Bonds or notes of any regulating district of this State duly issued pursuant to law.
10. Bonds or notes of any drainage improvement district of this State duly issued pursuant to law.
11. Bonds or notes of the authorities or commissions set forth below when issued pursuant to law:
  - a. Port of New York Authority.
  - b. Niagara Frontier Authority.
  - c. Triborough bridge and tunnel authority.
  - d. Thousand Islands Bridge Authority.
  - e. New York State Bridge Authority.
  - f. New York City Tunnel Authority.
  - g. Lake Champlain Bridge Commission.
  - h. Lower Hudson Regional Market Authority.
  - i. Albany Regional Market Authority.
  - [j. *Repealed.*]
  - k. American Museum of Natural History Planetarium Authority.
  - l. Industrial Exhibit Authority.
  - m. Buffalo Sewer Authority.
  - n. Whiteface Mountain Authority.
  - o. Pelham-Portchester Parkway Authority.
  - p. Jones Beach State Parkway Authority.
  - q. Bethpage Park Authority.
  - r. Dormitory Authority.
  - s. Central New York Regional Market Authority.
  - t. Erie County Water Authority.
  - u. Suffolk County Water Authority.
  - v. New York State Thruway Authority.
  - w. Genesee Valley Regional Market Authority.
  - x. Onondaga county water authority.
  - y. Power Authority of the state of New York.
  - z. Ogdensburg Bridge and Port Authority.
  - aa. [See, also, par. aa below] East Hudson Parkway Authority. aa. [See, also, par. aa above] Niagara Frontier Port Authority.
  - bb. Northwestern New York Water Authority.
  - cc. Metropolitan Commuter Transportation Authority.
  - dd. [See, also, par. dd below] Niagara Frontier Transportation Authority. dd. [See, also, par. dd above] New York State Pure Waters Authority.
  - ee. Rochester-Genesee Regional Transportation Authority.
  - ff. [See, also, par. ff below] Capital District Transportation Authority. ff. [See, also, par. ff above] Central New York Regional Transportation Authority.
12. Obligations of the International Bank for Reconstruction and Development duly issued pursuant to law.
13. Obligations of the inter-American Development Bank duly issued pursuant to law.
  - 13-a. Obligations of the Asian Development Bank duly issued pursuant to law.
  - 13-b. Obligations of the African Development Bank duly issued pursuant to law.
  - 13-c. Obligations of the International Finance Corporation duly issued pursuant to law.
14. [See, also, subd. 14 below] Collateral trust notes issued by a trust company, all of the capital stock of which is owned by not less than twenty savings banks of the State of New York.



14. [See, also, subd. 14 above] Bonds and notes issued for any of the corporate purposes of the New York State housing finance agency.
15. Bonds and notes issued for any of the corporate purposes of the New York State medical care facilities finance agency.
16. Bonds and notes issued for any of the corporate purposes of the New York State project finance agency.
17. Bonds and notes issued for any of the corporate purposes of the municipal assistance corporation for New York City.
18. Obligations of any corporation organized under the laws of any state in the United States maturing within two hundred seventy days provided that such obligations receive the highest rating of two independent rating services designated by the State Comptroller and that the issuer of such obligations has maintained such ratings on similar obligations during the preceding six months provided, however, that the issuer of such obligations need not have received such rating during the prior six month period if such issuer has received the highest rating of two independent rating services designated by the State Comptroller and is the successor or wholly owned subsidiary of an issuer that has maintained such ratings on similar obligations during the preceding six month period or if the issuer is the product of a merger of two or more issuers, one of which has maintained such ratings on similar obligations during the preceding six month period, provided, however, that no more than two hundred fifty million dollars may be invested in such obligations of any one corporation.
19. Bankers' acceptances maturing within ninety days which are eligible for purchase in the open market by federal reserve banks and which have been accepted by a bank or trust company, which is organized under the laws of the United States or of any state thereof and which is a member of the federal reserve system and whose short-term obligations meet the criteria outlined in subdivision eighteen of this section. Provided, however, that no more than two hundred fifty million dollars may be invested in such bankers' acceptance of any one bank or trust company.
20. No-load money market mutual funds registered under the Securities Act of 1933, as amended, and operated in accordance with Rule 2a-7 of the Investment Company Act of 1940, as amended, provided that such funds are limited to investments in obligations issued or guaranteed by the United States of America or in obligations of agencies or instrumentalities of the United States of America where the payment of principal and interest are guaranteed by the United States of America (including contracts for the sale and repurchase of any such obligations), and are rated in the highest rating category by at least one nationally recognized statistical rating organization, provided, however, that no more than two hundred fifty million dollars may be invested in such funds.

The State Comptroller, whenever he deems it for the best interest of any of such funds, may dispose of any of the securities therein or investments therefore, in making other investments authorized by law, and he may exchange any such securities for those held in any other of such funds, and the comptroller may take such action as may be necessary to obtain the benefits of the insurance provided for in the national housing act, and may draw his warrant upon the treasurer for the amount required for such investments and exchanges.

Notwithstanding the provisions of any other general or special law, the comptroller shall not invest the moneys of any fund in any security or securities except as above described, provided, however, that:

- a) the comptroller may, in order to maximize the rate of return on investments, invest the moneys belonging to the New York interest on lawyer account fund in notes, securities and deposits of banking institutions which accept IOLA accounts, and

b) the provisions of this section shall not limit the types of investments that may be made with moneys belonging to the volunteer ambulance service award fund established by section two hundred nineteen-h of the general municipal law.

### **2.3. Portfolio Diversification**

The Authority's Investment Funds shall be structured to diversify investments to reduce the risk of loss resulting from over-concentration of assets in a specific maturity, a specific issuer or a specific type of security. The maximum percentage of the aggregate portfolio of Investment Funds, based on book value at the time of purchase, permitted in each eligible security is as follows:

US Treasuries	100%
Federal Agencies	100% (\$250 million max per issuer)
Commercial Paper	Lesser of 5% or \$250 million per issuer
Bankers' Acceptances	Lesser of 5% or \$250 million per issuer
Money Market Funds	Lesser of 25% or \$250 million
Municipal Bonds	20%

- a) Require a minimum "A" category rating for all municipal securities permitted by the Policy (NY State, other states, and issues of local NY governments).
- b) Establish a maximum allocation of no greater than 10% per issuer.

### **2.4. Investment Maturity**

Maintenance of adequate liquidity to meet the cash flow needs of the Authority is essential. Accordingly, the portfolio will be structured in a manner that ensures sufficient cash is available to meet anticipated liquidity needs. Selection of investment maturities must be consistent with the cash requirements of the Authority in order to avoid the forced sale of securities prior to maturity.

Investments shall have a stated maturity or weighted average life of not more than ten (10) years unless specifically approved by the Investment Committee.

## **3. OPERATING PARAMETERS & CONTROLS**

### **3.1. Authorized Officers and Employees**

Investment decisions on behalf of the Authority shall be made by the Chief Financial Officer, or by the Assistant Treasurer or the external investment manager, under the supervision of the Chief Financial Officer. Investment transactions shall be implemented by the Chief Financial Officer, or by the Assistant Treasurer, or the professional investment and advisory management firm on the Investment Committee, under the supervision of the Chief Financial Officer.

### **3.2. Competitive Selection**

For each transaction, a minimum of three quotes shall be obtained and documented from Dealers and/or Banks, except in the purchase of government securities at their initial auction or upon initial offering, and the most favorable quote accepted.

### **3.3. Compliance Audit**

An annual independent audit of all investments will be performed by the external auditors. The Authority's financial statements with respect to investments, which are required to be prepared in conformance with generally accepted accounting principles for governments ("GAAP"), shall contain all of the note disclosures on deposits with financial institutions and investments required by the Governmental Accounting Standards Board Statements No. 3 "Deposits with Financial Institutions, Investments (including Repurchase Agreements), and Reverse Repurchase Agreements", dated April 1986. The Annual Investment Audit:

- Shall determine whether: the Authority complies with its own investment policies; investment assets are adequately safeguarded; adequate accounts and records are maintained which accurately reflect all transactions and report on the disposition of the Authority's assets; and a system of adequate internal controls is maintained.
- Shall determine whether the Authority has complied with applicable laws, regulations and these Investment Guidelines.
- Shall be designed to the extent practical to satisfy both the common interest of the Authority and the public officials accountable to others.

The results of the Annual Investment Audit shall be set forth in a report (the "Annual Investment Audit Report") which shall include, without limitation:

- A description of the scope and objectives of the audit;
- A statement that the audit was made in accordance with generally accepted government auditing standards;
- A statement of negative assurance on items tested;
- A description of any material weakness found in the internal controls;
- A description of any non-compliance with the Authority's own investment policies as well as applicable laws;
- Regulations and the State Comptroller's Investment Guidelines;
- A statement on any other material deficiency or reportable condition as defined by *Governmental Auditing Standards* identified during the audit not covered above; and
- Recommendations, if any, with respect to amendment of these Guidelines

Investment practices and controls will be subject to review and testing by internal auditors on a surprise basis at the discretion of the VP of Administration (who is also the Internal Controls Officer), President, CEO and/or the Board.

### **3.4. Written Contracts and Confirmations**

A written confirmation shall be required for each investment transaction. However, the Authority shall not be required to enter into a formal written contract provided that the Authority's oral instructions to its broker, dealer, agent, investment manager/advisor, or custodian with respect to such transactions are confirmed in writing at the earliest practicable moment.

### **3.5. Safekeeping and Custody**

All investment securities purchased by the Authority or held as collateral on deposits or investments shall be held by a third-party custodian who may not otherwise be a counterparty to the investment transaction.

All securities shall be held in the name of the Authority and will be free and clear of any lien.

All investment transactions will be conducted on a delivery-vs.-payment basis. Payment for investments shall be made only upon receipt by the custodian of the physical security, or in the case of securities in book-entry form, when credited for the custodian's account, which shall be segregated for the Authority's sole use. The custodian shall issue a safekeeping receipt to the Authority listing the specific instrument, rate, maturity and other pertinent information. On a monthly basis, the custodian will also provide reports that list all securities held for the Authority, the book value of holdings and the market value as of month-end.

The custodian may act on oral instructions from the CFO, Assistant Treasurer or investment advisor under the direction of the CFO. Such instructions are to be confirmed in writing immediately by an authorized signatory of the Authority.

Representatives of the custodian responsible for, or in any manner involved with, the safekeeping and custody process of the Authority shall be bonded in such a fashion as to protect the Authority from losses from malfeasance and misfeasance. If required by the Chief Financial Officer, appropriate Authority Officials may also be bonded in such a fashion.

### **3.6. Internal Controls**

An operating procedures manual will be developed to control all Authority investment activity. The manual will be consistent with these Guidelines, shall be approved by the Chief Financial Officer, and shall include the following:

- the establishment and maintenance of a system of internal controls;
- methods for adding, changing or deleting information contained in the investment record, including a description of the document to be created and verification tests to be conducted;
- a data base or record incorporating descriptions and amounts of investments, transaction dates, interest rates, maturities, bond ratings, market prices and related information necessary to manage the portfolio; and
- requirements for periodic reporting and a satisfactory level of accountability.

### **3.7. Notification Concerning Violations of Investment Guidelines**

In the event that these Investment Guidelines are violated, the Chief Financial Officer shall be informed immediately and advised of any corrective action that should be taken, as well as the implication of such action.

## **4. QUALIFIED FINANCIAL INSTITUTIONS**

### **4.1. Qualifications for Brokers, Dealers and Agents**

The Authority's investment manager's Director of Treasury Operations and/or the Authority's Investment Manager shall maintain a list of broker/dealers that are approved for investment purposes ("Qualified Institutions"). Only firms meeting the following requirements will be eligible to serve as Qualified Institutions:

- "primary" dealers and regional dealers that qualify under Securities and Exchange Commission Rule 15C3-1 (uniform net capital rule);
- registered as a dealer under the Securities Exchange Act of 1934;
- member in good standing of the Financial Industry Regulatory Authority (FINRA);
- registered to sell securities in the State; and
- the firm and assigned broker have been engaged in the business of effecting transactions in U.S. Government and agency obligations for at least five (5) consecutive years.

When selecting trading partners, the Authority will also consider the firm's quality, size, and reliability, the Authority's prior experience with the firm, the firm's level of expertise and prior experience with respect to the contemplated transactions.

#### **4.2. Qualifications for Investment Advisors/Managers**

For the purpose of rendering investment management/advisory services to the Authority, the Authority may qualify any bank or trust company organized under the laws of any state of the United States of America, any national banking association, and any partnership, corporation, or person which is:

- Authorized to do business in the State as an investment manager/advisor; and
- Registered with the Securities & Exchange Commission under the Investment Advisor Act of 1940 or exempt from registration.

The Authority shall also consider the firm's capitalization, quality, size and reliability, the Authority's prior experience with the firm, the firm's level of expertise and prior experience with respect to the contemplated engagement.

#### **4.3. Qualifications for Custodial Banks**

To be eligible to hold Investment Securities purchased by the Authority or collateral securing its investments, a custodial bank shall be a member of the Federal Reserve Bank or maintain accounts with member banks to accomplish book-entry transfer of Investment Securities to the credit of the Authority. The custodian should not be the same party that is selling the Investment Securities. To be eligible to perform custodial services, the Chief Financial Officer must affirmatively find that the proposed custodial bank is financially sound. This shall be determined by review of the financial statements and credit ratings of the proposed custodial bank.

#### **4.4. Ongoing Disclosure**

All brokers, dealers and other financial institutions described in sections 4.1, 4.2, and 4.3 shall be provided with current copies of the Authority's Investment Guidelines. A current audited financial statement is required to be on file for each financial institution and broker/dealer with which the Authority has investment transactions.

#### **4.5. Affirmative Action**

Article 15-A of the Executive Law and 9 NYCRR Part 4.21 regarding affirmative action shall apply with respect to the Authority's investment activities. The Authority shall seek to utilize minority and women-owned financial firms in the conduct of the Authority's investment activities. Management reporting is required by the Authority in order to track compliance with policy guidelines, assess the performance of the portfolio and to inform appropriate management personnel.

### **5. REPORTING**

#### **5.1. Management Reporting**

In order to manage the Investment Funds effectively and to provide Authority management with useful information, it is necessary for the Treasury Department to report reliable and timely information regarding the investment transactions that take place.

A Quarterly Management Report on the investment management program shall be prepared and presented to the CFO and the Authority's Board. The Quarterly Management Report shall include:

- An indication of all new investments;
- A portfolio inventory;
- Credit quality of each holding;
- Duration (or average maturity) of each fund;
- Mark-to-market valuations on investments and collateral; and
- A breakdown of the portfolio by counterparty.

An Annual Investment Report shall be submitted to the Authority's Board and filed with the State Division of the Budget, State Comptroller, State Senate Finance Committee, and State Assembly Ways and Means Committee. The Annual Investment Report shall include the following:

- The investment guidelines in compliance with Section 2925(3) of the Public Authorities Law and any amendments since last reported;
- An explanation of the investment guidelines and amendments;
- The results of the Annual Independent Audit (described in Section 3.3.);
- Investment income record of the Authority; and
- A list of the total fees, commissions or other charges paid to each investment banker, broker, agent, dealer and manager/advisor rendering investment associated services to the Authority since the date of the last investment report.

The attached report is being presented to you in accordance with this requirement. After approval of the report, it will be submitted or posted to:

- State Division of the Budget,
- State Department of Audit and Control,
- State Comptroller,
- State Public Authorities Information Reporting System (PARIS),
- Authority website, and
- The Chairmen and Ranking Minority Members of the Senate Finance Committee and Assembly Ways and Means Committee.

## **5.2. Performance Reporting**

In order to ensure the effectiveness of the Authority's investment strategy, it is important to measure the performance of the portfolio. The performance measurement process can be broken into four categories:

- Investment benchmark – The Authority will continuously measure its performance against a benchmark having an average maturity comparable to the portfolios.
- Performance measurement – Each quarter the Authority must measure the performance of its investment portfolio versus its benchmark. By continuously measuring results against this standard benchmark, the Authority can determine a pattern of over/under performance.
- Identify sources of over/under performance – The Performance Reports distributed to the CFO must include information on the source of over/under performance.
- Disseminate results – Results shall be distributed to the CFO and the Board in a timely manner.

## **APPENDIX A – OPERATING CONTROLS**

### **Distribution of the Investment Guidelines**

The guidelines and all subsequent amendments, revisions and updates shall be distributed to Authority personnel per the approval of the Chief Financial Officer.

During the period in which the Authority retains an investment manager, the investment manager must also receive the investment guidelines and all amendments, updates, or revisions to insure compliance with the most current guidelines.

#### ***Exhibit –Investment Guidelines Distribution Matrix***

<b>Distribution List</b>	<b>Frequency</b>
Board of Members	As Necessary
Chief Financial Officer	As Necessary
Controller	As Necessary
Assistant Treasurer	As Necessary

### **Roles and Responsibilities in Executing the Investment Guidelines**

The roles and responsibilities for investment management at the Authority rest primarily with the Finance Department although other departments have important roles. The matrix below defines the roles and responsibilities of all parties involved in the execution of the Investment Guidelines.

#### ***Exhibit –Policy Roles & Responsibility Matrix***

<b>Roles</b>	<b>Responsibility</b>	<b>Frequency</b>
Board	<ul style="list-style-type: none"> <li>• Final Approval of the guidelines</li> <li>• Approval of exceptions to the guidelines (e.g. new investment types)</li> <li>• Approval of revisions to the guidelines</li> </ul>	<ul style="list-style-type: none"> <li>• Annual</li> <li>• As necessary</li> <li>• As necessary</li> </ul>
Chief Financial Officer (“CFO”)	<ul style="list-style-type: none"> <li>• Approval of the guidelines</li> <li>• Approval of investment strategy</li> <li>• Approval of performance measurements</li> <li>• Approval of minor exceptions to the guidelines (i.e. amounts, maturities)</li> </ul>	<ul style="list-style-type: none"> <li>• Annual</li> <li>• Annual</li> <li>• Ongoing</li> <li>• As necessary</li> </ul>
Assistant Treasurer	<ul style="list-style-type: none"> <li>• Serve as custodian of the guidelines</li> <li>• Develop investment strategy</li> <li>• Review investment strategy</li> <li>• Establish performance measurements</li> <li>• Distribution of guidelines and amendments</li> <li>• Annual review of guidelines</li> <li>• Oversight of investment activity</li> <li>• Invest funds as provided for in the guidelines</li> <li>• Keep abreast of developments in the markets</li> <li>• Review performance information</li> <li>• Management reporting</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing</li> <li>• Annual</li> <li>• Ongoing</li> <li>• Ongoing</li> <li>• As necessary</li> <li>• Annual</li> <li>• Ongoing</li> <li>• Ongoing</li> <li>• Ongoing</li> <li>• Ongoing</li> <li>• Monthly</li> <li>• Daily, Weekly</li> <li>• Monthly</li> </ul>

Assistant	<ul style="list-style-type: none"> <li>Collect performance information</li> <li>Distribute performance information</li> <li>Keep abreast of developments in the markets and notify the Assistant Treasurer</li> </ul>	<ul style="list-style-type: none"> <li>Weekly</li> <li>Weekly</li> <li>Ongoing</li> </ul>
Investment Manager	<ul style="list-style-type: none"> <li>Develop investment strategy</li> <li>Review investment strategy</li> <li>Invest funds as provided for in the guidelines</li> <li>Reporting investment portfolio</li> </ul>	<ul style="list-style-type: none"> <li>Annual</li> <li>Ongoing</li> <li>Ongoing</li> <li>Daily, Monthly, Quarterly</li> </ul>

### Segregation of Duties

The Authority requires adequate segregation of duties to prevent possible fraud, operational errors, misappropriation of funds, unauthorized trades, concealment of trades and manipulation of accounting records. Personnel involved in risk monitoring activities should be segregated from risk taking (i.e. executing transactions).

#### *Exhibit – Segregation of Duties Matrix*

Activity to be Performed	Segregation Level
Trade Execution	Individuals who are authorized to execute transactions should not confirm and settle the trades or conduct account reconciliation activities.
Trade Confirmation	Individuals who conduct confirmations should not execute transactions.
Settlement – Disbursing and Receiving Funds	Individuals who handle cash settlement on the trades should not execute the trades. Cash settlement shall be transacted by any one of the authorized Authority signatories who did not participate in the trade execution. Only one signature is required due to the nature of the transaction, i.e., transfer of assets (including transfers in excess of \$25,000).
Account Reconciliation	Account reconciliation activities must be segregated from trade execution activities.

### Management Reporting

#### *Exhibit – Summary of Management Reporting*

Report	Contents	Audience	Frequency
Management Report	Investment portfolio, mark-to-market valuations, collateral, counterparty breakdown	Chief Financial Officer, Board	Quarterly



Annual Investment Report	Investment Guidelines, explanation of Investment Guidelines & amendments, annual investment audit, annual investment income, total fees and commissions paid	Chief Financial Officer, Board (File with Division of the Budget, State Comptroller, State Finance Committee, Assembly Ways and Means Committee)	Annually
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**Exhibit – Summary of Treasury Performance Reporting**

Report	Contents	Audience	Frequency
Performance Report	Investment performance vs. benchmark variance analysis	CFO, Board	Quarterly

**Operating Procedures**

Operating procedures for the administration of the Authority’s investment program should include the following:

- Each disbursement of funds (and corresponding receipt of Investment Securities) or delivery of Investment Securities (and corresponding receipt of funds) shall be based upon proper written authorization. If the authorization is initially given orally, there shall be written or telegraphic confirmation from an authorized signatory of the Authority to the custodian;
- The process of initiating, reviewing and approving requests to buy and sell Investment Securities shall be documented and retained for audit purposes. Dealer limits should be established and reviewed regularly;
- Custodians must have prior authorization from the Authority to deliver obligations and collateral. All transactions must be confirmed in writing to the Authority. Delivery of obligations sold shall only be made upon receipt of funds;
- Custodial banks shall be required to report whenever activity has occurred in the Authority’s custodial account;
- There shall be at least monthly verification of both the principal amount and the market values of all investments and collateral. Appropriate listings shall be obtained from the custodian and compared against the Authority’s records;
- A record of investments shall be maintained. The records shall identify the Investment Security, the fund for which held, the place where kept, date of disposition and amount realized, and the market value and custodian of collateral;
- The establishment and maintenance of a system of internal controls;
- Methods for adding, changing or deleting information contained in the investment record, including a description of the documents to be created and verification tests to be conducted;
- A database of records incorporating descriptions and amounts of investments, transaction dates, interest rates, maturities, bond ratings, market prices, and related information necessary to manage the portfolio; and
- Requirements for periodic reporting and a satisfactory level of accountability.

The procedures below describe in more detail the methods employed by the investment officers (Treasurer and Assistant Treasurer) to formulate and initiate investment transactions and include the records and

documentation used in processing an investment from the time of its initiation to the recording and reconciliation on the Authority's accounting records.

1. The Treasurer or Assistant Treasurer maintains a schedule of all current investments and updates schedule on a timely (daily) basis as securities mature and/or new investments are initiated. A Calendar of investment maturities is maintained and updated as chronological reminder (tickler file) or maturities.
2. All investments are initiated via:
  - a. specific written investment instruction sent to the Trustee or
  - b. verbal investment instructions followed up by written confirmation
3. The Treasurer will initiate the investments by reviewing the investment schedule and calendar on a daily basis to determine investments to be made over the following week based on Investment Committee strategies agreed to by the Investment Committee and weekly phone meetings working group. All investments are available online real time (next day) basis.

The Treasurer considers many factors in forming investment decisions, such as:

- a. existing bond resolution requirements and conditions;
  - b. other existing agreements affecting investments/cash flow (i.e. Settlement Agreement; Agreement and Consent dated September 22, 1988, Agreement for Certain Payments, Lease Agreements etc.);
  - c. HLC BPCA Cash Flow Requirements and Internal Investment Policies;
  - d. current and future market conditions (i.e. interest rates);
  - e. New York State Comptroller's Guidelines; and
  - f. published market surveys, consultant reports, etc., relating to securities available, interest rates and investment strategies.
4. Copies of the bank confirmation letters sent to the Trustee Bank are filed in the Treasurer's chronological file and in a monthly folder for that particular Bank account.
  5. All investments are available to the President and others for review and discussed at Investment Committee Meetings. A copy of the Investment Instructions Memo is retained in the Treasurer's file and a copy is maintained in the bank reconciliation files.

Documentation for securities purchased including the information as to brokers solicited for quotes shall be retained and filed by the Authority, the Trustee, or Investment Advisor. Corporate funds which are not invested are collateralized or insured by FDIC and balances receive compensating interest at the 90 day T-bill rate to mitigate banking fees. Reconciliation of monthly Trustee statements are performed. This includes reconciliation of investment transactions, investment income, and portfolio holdings. Corresponding journal entries are subsequently posted to the Authority's general ledger. The Controller or Senior Accounting Manager initials and dates these reconciliations when reviewed to signify timely approval and completion.

6. Quarterly investment schedules are reviewed by the Investment Committee and made available to the Board. Investment schedules are audited by the Authority's public accountants at year end. The auditors request and receive confirmation of our cash and security holdings as of fiscal year end. In addition, the Authority's Internal Audit department periodically audits investments.

The procedures will be subjected to regular audits by internal and external auditors as required.

Procedures are to be revised and updated on an annual basis and referenced in the Investment Policy and Procedure Statement, approved by the Members, in accordance with Section 2925(6) of the Public Authorities Law.

## **APPENDIX B – INVESTMENT REPORT FYE OCTOBER 31, 2016**

### ***Investments***

The Authority carries all investments at fair value. Inherent risks that could affect the Authority’s ability to provide services and meet its obligations as they become due are reported in accordance with U.S. GAAP. The Authority’s investments in securities are held by the Authority’s financial institutions in the Authority’s name. The Authority’s investments in U.S. Treasury Securities are backed by the full faith and credit of the U.S. government; investments in commercial paper must have the highest rating of two independent rating services; investments in federal agency and mortgage backed securities must have the highest credit rating of [SFI]all rating agencies that rate such agency or its obligations at the time of purchase and are supported by the U.S. government or its agencies; investments in municipal bonds are either issued by the State of New York or a county, town or city of the State, or are general obligations of other states that are rated in the highest category by at least one independent rating agency. All other deposits or investments are fully collateralized or backed by the Federal Deposit Insurance Corporation (“FDIC”) or letters of credit. All investments held in funds and accounts established in accordance with bond resolutions are held as trust assets by the trustee banks in the Authority’s name.

Total investments held by the Authority at October 31, 2016 and 2015 included within the balance sheet accounts: investments, corporate designated, escrowed and OPEB funds, bond resolution funds and residential lease required funds are as follows:

	<b>October 31, 2016</b>			<b>October 31, 2015</b>		
	<b>Cost</b>	<b>Fair value</b>	<b>Weighted average maturity (years) (a)</b>	<b>Cost</b>	<b>Fair value</b>	<b>Weighted average maturity (years) (a)</b>
U.S. Treasury securities:						
Treasury Bills	\$ 20,665,138	20,671,734	0.06	\$ 37,268,232	37,271,691	0.04
Treasury Bonds	170,438,838	170,838,301	2.22	151,291,697	150,739,197	1.87
Treasury Strips	343,043	340,094	8.22	1,922,553	1,924,997	0.79
Total						
U.S. Treasury securities	<u>191,447,019</u>	<u>191,850,129</u>		<u>190,482,482</u>	<u>189,935,885</u>	
Commercial paper	93,543,572	93,666,484	0.03	134,597,671	134,695,588	0.03
Federal agency securities	124,328,268	124,384,920	0.06	25,650,572	25,633,851	0.75
Federal agency mortgage backed securities	8,899,106	9,069,015	2.63	10,510,365	10,726,389	2.98
Municipal bonds	29,683,032	29,869,338	1.65	28,094,684	28,564,699	2.09
Small Business Administration	2,725,428	2,782,895	6.68	2,930,503	2,949,636	6.94
Supra National Agency	<u>24,092,375</u>	<u>24,272,783</u>	2.37	<u>17,902,119</u>	<u>18,045,270</u>	2.34
Total investments	<u>474,718,800</u>	<u>475,895,564</u>	1.14	<u>410,168,396</u>	<u>410,551,318</u>	1.13
Cash and cash equivalents	<u>49,604,358</u>	<u>49,604,358</u>		<u>510,860</u>	<u>510,860</u>	
Total investments	<u>\$ 524,323,158</u>	<u>525,499,922</u>		<u>\$ 410,679,256</u>	<u>411,062,178</u>	

(a) Portfolio weighted average effective duration

As of October 31, 2015, there was \$65,632,000 of bond resolution funds in transit. These bond resolution funds have been excluded from the investment table above and are shown separately in the bond resolution fund receivables in the statement of net position.

As of October 31, 2016 and 2015, restricted assets included cash and cash equivalents and investments with less than 91-day maturities amounting to \$171,107,596 and \$46,306,826, respectively.

The Authority's investment objectives for the portfolio are to generate a rate of return in excess of selected benchmarks, provide diversification to the total portfolio, and provide an appropriate level of liquidity for the Authority's operations.

The Authority's permitted investments include: (i) 100% U.S. government guaranteed securities (U.S. Treasury notes, bonds, strips, T-bills, Ginnie Mae securities); (ii) notes, bonds, debentures, and mortgages of U.S. government-sponsored agencies provided that its obligations receive the highest credit rating at the time of purchase from all rating agencies that rate the obligation; (iii) obligations of any corporation organized under the laws of any state in the United States maturing within 270 days provided that such obligations receive the highest rating of two independent rating services (commercial paper); (iv) municipal bonds issued by the State of New York, its counties, towns and cities and New York authorities; and (v) the general obligations of any state provided that such obligation receives the highest rating by at least one rating agency.

Interest rate risk is the probability of loss on investments from future changes in interest rates, which can adversely affect their fair value. Duration is a measure of a debt investment's exposure to fair value changes arising from changes in interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. Effective duration takes into account the change in cash flow expectations of securities with embedded options such as callable bonds and mortgage-backed securities. The interest rate risk of the Authority's portfolio is measured according to effective duration.

Investments of amounts in funds and accounts established under the various 2003, 2009 and 2013 Revenue Bond Resolutions are presently restricted to obligations of the State, U.S. government and its agencies, or in any other obligations in which the Comptroller of the State of New York is authorized to invest pursuant to Section 98 of the State Finance Law.

Corporate-designated, escrowed, and OPEB funds represent funds designated by the Authority's board of directors for specific purposes such as budget reserves, the Special Fund, project contingency reserves, restoration reserves, insurance reserves, and arbitrage reserves and funds designated for the payment of medical benefits to the Authority's retirees.

Residential lease required funds represent funds held by the Authority in accordance with its residential leases. These funds are largely comprised of security and escrow deposits held by the Authority for the residential buildings.

The Organization maintains its cash in bank deposits which are guaranteed by the FDIC up to \$250,000. Additionally, collateral has been set aside by the custodian bank for balances in excess of \$250,000. All cash balances are placed into overnight interest bearing accounts.

### **Fees**

There were no fees, commissions or other charges paid to investment bankers, brokers, agents, or dealers for rendering investment related services to the Authority during the fiscal year and all investments are competitively bid. Consultant fees in the amount of approximately \$350,000 were paid to PFM Asset Management LLC during the current fiscal year for professional money management advice to the Authority's Investment Committee.

## **APPENDIX C – BPCA FY2016 A Year in Review**

### **BPCA FY2016 A Year in Review**

#### **Summary of Bond Market and Authority Portfolio Strategy**

##### ***First Quarter: November 1, 2015 – January 31, 2016***

###### ***Market Summary***

During the quarter, markets experienced volatility and continued strengthening of the U.S. economy. For the first time since 2006, the Federal Open Market Committee (FOMC) increased the target federal funds rate by 25 basis points (bp) (0.25%) at its December meeting. Although equity markets rebounded at the end of 2015, there was a significant sell off in January due to continued concerns in emerging markets, slowing growth in China, plummeting oil prices, and a Federal Reserve that may continue to tighten monetary policy. Fourth quarter gross domestic product (GDP) expanded at a 1% rate, down from the third quarter due to a reduction in inventory accumulation. The U.S. labor market continued to maintain its strength as the unemployment rate fell to 4.9% in January, its lowest level in almost 8 years. Although the U.S. economy only added 151,000 jobs in the month of January, it did add 2.65 million new jobs in 2015. Additionally, wage inflation edged up modestly, suggesting for the possibility of future inflation.

Leading up to the FOMC rate hike decision in December, short term interest rates rose. However, tempered expectations for global economic and inflation growth since the December 2015 hike sent yields lower on the long end of the yield curve. The 10-year U.S. Treasury fell approximately 22 bps to end the quarter at 1.98%.

###### ***Portfolio Strategy Recap***

- The 2003 Pledged Revenue Fund experienced significant activity as intra-fund transfers related to the beginning of the Authority's fiscal year were initiated. Included in this activity was net outflows totaling \$78 million for the quarter. This activity impacted sector and maturity selection.
- As spreads between U.S. Treasuries and federal agencies fluctuated, federal agencies and supra-nationals were added to portfolios when opportunities to add value developed.
- Due to the Authority's concerns about winter weather at the time funds were deposited, the Insurance Fund's duration was positioned at about 84% of the benchmark duration. As the concern fades, duration would be extended modestly.
- The Authority's longer-term portfolios generally performed in line with benchmarks during the quarter. Longer-term U.S. Treasury yields declined while shorter-term yields increased during the three months ended January 31, 2016, which benefitted the Authority's portfolios managed to a longer 1-10 year strategy more than those managed to a 1-5 year strategy.

##### ***Second Quarter: February 1, 2016 – April 30, 2016***

###### ***Market Summary***

After a volatile start to 2016, fears of a sharp downturn in the U.S. economy began to abate, leading to a rebound in stocks and commodities. Interest rates rose in anticipation of the Federal Reserve's (Fed's) April meeting, amid improving risk-asset sentiment before paring gains after the Fed left the federal funds target rate unchanged. While the Fed appeared ready to embark on a tightening path, other global central banks continued easing monetary policy. The European Central Bank (ECB) expanded its bond purchase program to 80 billion euros per month, including the purchase of corporate bonds, while the Bank of Japan (BoJ) cut rates to negative 0.10%. The Chinese economy continued to slow, stoking concern that weakness in the world's second-largest economy may negatively impact global growth, but especially emerging market countries – those dependent on commodity exports.

U.S. GDP slowed to 0.5% in the first quarter of 2016 as consumers pared spending, business investment remained anemic, and a strong dollar hurt exports. This was the weakest quarter in two years. Although GDP was lackluster, the U.S. labor market added 200,000 new jobs in April, the unemployment rate remained around 5%, and the labor participation rate declined after increasing for four consecutive months to 62.8%. Additionally, inflation remained

below the Fed's 2% target. The Consumer Price Index (CPI) indicated firming prices, rising more than 2% annually for the fifth month in a row in March. Inflation continued to be driven by rising prices in housing and medical care.

U.S. Treasury rates declined across the yield curve due to widespread concern about the global economy and signals from the Fed for a slower pace of rate increases. The two-year Treasury yield fell 4 bps to 0.78%, while the 10-year Treasury yield declined 11 bps to end the quarter at 1.87%.

#### Portfolio Strategy Recap

- The Short-Term portfolios were structured to meet the unique liquidity needs of each fund. Liquidity considerations were the primary determinants of portfolio structure and duration. Where liquidity constraints permitted, portfolios were structured to take advantage of the steepness of the yield curve and maximize duration exposure.
- The Authority's Longer-Term portfolios benefitted from the decline in U.S. Treasury yields during the quarter.
- The Authority's Longer-Term portfolios generally performed in-line with benchmarks during the quarter. Allocations to the municipal sector contributed to relative performance.

### ***Third Quarter: May 1, 2016 – July 31, 2016***

#### Market Summary

Market volatility and uncertainty among domestic and global investors continued during the third quarter. On June 23, the British public voted to leave the European Union (EU) – so-called “Brexit” referendum – after forty-three years of membership. This historic vote was the first of its kind, shocking markets and triggering outsized market reactions. Bond yields fell sharply, sending 10- and 30-year U.S. Treasury yields to all-time lows. Equity indexes saw a sharp pullback following the vote, but pared losses by month-end amid anticipated central bank accommodation.

For the second quarter ended June 30, 2016, the U.S. economy grew at an annual rate of just 1.1%. Consumers continued to drive economic growth, while private investment detracted the most since the financial crisis. The U.S. labor market rebounded strongly in June, adding 287,000 jobs, exceeding nearly all expectations. The unemployment rate ticked higher to 4.9% as the labor force participation rate rose.

The Fed left policy rates unchanged at its June and July meetings. In June, even before the Brexit vote, the Fed once again lowered its expectation for rate hikes in 2016 via the so-called “dot plot”. By the end of June, the market was pricing in less than a 10% chance for a hike in 2016.

U.S. Treasury yields declined across the curve amid the Fed's dovish tone during the quarter and the flight to safety stimulated by the Brexit vote. Declines were led by longer maturity yields, flattening the yield curve. The two-year Treasury yield fell 10 bps to 0.68%, while the 10-year Treasury yield declined 38 bps to 1.49%.

#### Portfolio Strategy Recap

- The relative return of the Short-Term portfolios benefitted from attractive yields in the high quality commercial paper sector. Agency discount notes were also attractive relative to comparable-maturity U.S. Treasuries and contributed to performance.
- During the quarter, the Short-Term portfolios were positioned to accommodate transfers and to prepare for the end of the Authority's fiscal year in October.
- The Authority's Longer-Term portfolios performed in-line or modestly below benchmarks for the quarter. The absolute returns of the portfolios were positively impacted by falling interest rates. Duration was positioned in-line with the relevant benchmark, which helped generate returns from capital appreciation.

## *Fourth Quarter: August 1, 2016 – October 31, 2016*

### Market Summary

The Fed once again left rates unchanged at its September meeting. Given the November U.S. presidential election, the market expected no action at the Fed's November meeting, but as of the end of October, most market participants expected a rate hike in December.

Other global central banks maintained accommodative monetary policies. The ECB kept its benchmark interest rate near 0% and continued its 80-billion-euro monthly bond-buying program. Meanwhile, the BoJ introduced two policies: one kept the 10-year Japanese government bond yields near zero percent; the other expanded money supply until inflation remains above the 2% target. The Bank of England (BoE) joined the easing by cutting its interest rate to 0.25% from 0.50% and enacting a bond purchase program at a targeted 10 billion pounds per month.

The U.S. economy expanded at an annual rate of 3.2% in the third quarter. Business investment and government consumption saw their pace of growth revised downward from the first estimate, demonstrating that the economy remains dependent upon consumers. Additionally, October saw the 73<sup>rd</sup> consecutive month of job growth, with the U.S. labor market adding 161,000 jobs. The unemployment rate remained at 4.9%. In a positive sign, job openings remained near record highs, and initial unemployment claims fell to their lowest levels since 1973. As economic data indicated a strong pace of expansion, and inflation indicators moved toward the coveted 2% level, expectations rose for a Fed interest rate hike in December.

U.S. Treasury yields rose significantly during the quarter, reversing previous-quarter declines spurred by Brexit. Longer maturities led the way and the yield curve steepened: the two-year Treasury yield climbed 19 bps to 0.87%, while the 10-year Treasury yield end the quarter at 1.87%, up 38 bps.

### Portfolio Strategy Recap

- The Pledged Revenue portfolio was positioned to facilitate the movement of funds after the end of the fiscal year to other Authority portfolios.
- The relative return of the Short-Term portfolios continued to benefit from attractive yields in the high quality commercial paper sector.
- All of the Authority's Longer-Term portfolios outperformed their respective benchmark for the quarter. Portfolios were positioned with durations close to benchmarks in an effort to protect them from unpredictable rate moves.
- The Longer-Term portfolios benefitted from allocations to the Government mortgage-backed security (MBS) sector. The MBS sector outperformed the U.S. Treasury sector as interest rates rose during the quarter.

### Portfolio Performance Update

FY 2016 total returns were strong for the Authority's Short-Term investment strategies, outperforming the benchmark BAML 3-month US Treasury Bill Index return by an average of 12 bps. The Authority's Longer-Term investment strategies were mixed, with three of the funds underperforming by an average of 9 bps, while the other 3 funds outperformed benchmarks by an average of 15 bps. The 2003 Reserve Fund outperformed the benchmark by 20 bps, and the Insurance Fund underperformed by 22 basis points due to liquidity requirements, particularly in the fourth quarter. Over the three year period, all funds outperformed their benchmarks, except for the Insurance Fund, which only slightly underperformed the benchmark. Since inception, all funds have outperformed their benchmarks. The Investment Committee was able to produce strong returns while maintaining a commitment to safety, liquidity, and long-term portfolio objectives.



	1 Year Ending October 31, 2016	3 Years Ending October 31, 2016	Since Inception
<b>Short-Term Strategy:</b>			
<b>2003 Pledged Revenue</b>	<b>0.36%</b>	<b>0.22%</b>	<b>1.23%</b>
<b>2003 Project Operating Fund</b>	<b>0.49%</b>	<b>0.25%</b>	<b>1.23%</b>
<i>BM: Merrill Lynch 3 Month US Treasury Bill Index</i>	0.31%	0.12%	1.15%
<b>Long-Term Strategy:</b>			
<b>2003 Reserve Fund</b>	<b>1.75%</b>	<b>1.51%</b>	<b>3.70%</b>
<i>BM: Merrill Lynch 1-5 Year US Treasury Note Index</i>	1.55%	1.28%	3.55%
<b>BPCPC Operating Reserve Contingency</b>	<b>2.43%</b>	<b>2.18%</b>	<b>4.14%</b>
<b>Insurance Fund</b>	<b>2.08%</b>	<b>1.94%</b>	<b>4.09%</b>
<b>Operating Budget Reserve</b>	<b>2.43%</b>	<b>2.17%</b>	<b>4.27%</b>
<i>BM: Merrill Lynch 1-10 Year US Treasury Note Index</i>	2.30%	1.97%	3.77%
<b>BPCA Other Post Employment Benefits</b>	<b>2.30%</b>	<b>2.02%</b>	<b>3.21%</b>
<i>BM: Merrill Lynch 1-10 Year US Treasury Note Index</i>	2.30%	1.97%	2.96%
<b>BPCPC Other Post Employment Benefits</b>	<b>2.27%</b>	<b>2.00%</b>	<b>2.51%</b>
<i>BM: Merrill Lynch 1-10 Year US Treasury Note Index</i>	2.30%	1.97%	2.60%

Notes:

1. Performance on trade date basis, gross-of-fees in accordance with the CFA Institute's Global Investment Performance Standards.
2. Merrill Lynch Indices provided by Bloomberg Financial Markets.
3. The total returns shown for periods longer than a year are the annualized returns for the stated period.
4. Since inception performance for all portfolios other than 'BPCA Other Post Employment Benefits' and 'BPCPC Other Post Employment Benefits' is calculated from January 31, 2006 to present.
  - Since inception performance for the BPCA Other Post Employment Benefits performance is calculated from January 31, 2008 to present.
  - Since inception performance for the BPCPC Other Post Employment Benefits performance is calculated from February 12, 2010 to present.

**APPENDIX D – SEE ATTACHED “REVIEW OF INVESTMENT PERFORMANCE  
QUARTER ENDED OCTOBER 31, 2016 REPORT”**



HUGH L. CAREY  
BATTERY PARK  
CITY AUTHORITY

# Hugh L. Carey Battery Park City Authority

Review of Investment Performance  
Quarter Ended October 31, 2016



PFM<sup>®</sup>  
PFM Asset Management LLC

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# Table of Contents

- A. Executive Summary
- B. Summary of Aggregate Portfolio
- C. Performance Attributes
- D. Market Commentary



**Section A –  
Executive Summary**

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# Performance Overview

	Past Quarter	Past Quarter Annualized	Past 12 Months	Past 3-Years	Since Inception
<b>Short-Term Strategy:</b>					
<b>2003 Pledged Revenue</b>	<b>0.13%</b>	<b>0.50%</b>	<b>0.36%</b>	<b>0.22%</b>	<b>1.23%</b>
<b>2003 Project Operating Fund</b>	<b>0.14%</b>	<b>0.57%</b>	<b>0.49%</b>	<b>0.25%</b>	<b>1.23%</b>
<i>BM: Merrill Lynch 3 Month US Treasury Bill Index</i>	<i>0.09%</i>	<i>0.37%</i>	<i>0.31%</i>	<i>0.12%</i>	<i>1.15%</i>
<b>Long-Term Strategy:</b>					
<b>2003 Reserve Fund</b>	<b>-0.26%</b>	<b>-1.02%</b>	<b>1.75%</b>	<b>1.51%</b>	<b>3.70%</b>
<i>BM: Merrill Lynch 1-5 Year US Treasury Note Index</i>	<i>-0.34%</i>	<i>-1.34%</i>	<i>1.55%</i>	<i>1.28%</i>	<i>3.55%</i>
<b>BPCPC Operating Reserve Contingency</b>	<b>-0.57%</b>	<b>-2.23%</b>	<b>2.43%</b>	<b>2.18%</b>	<b>4.14%</b>
<b>Insurance Fund</b>	<b>-0.71%</b>	<b>-2.77%</b>	<b>2.08%</b>	<b>1.94%</b>	<b>4.09%</b>
<b>Operating Budget Reserve</b>	<b>-0.60%</b>	<b>-2.34%</b>	<b>2.43%</b>	<b>2.17%</b>	<b>4.27%</b>
<i>BM: Merrill Lynch 1-10 Year US Treasury Note Index</i>	<i>-0.75%</i>	<i>-2.93%</i>	<i>2.30%</i>	<i>1.97%</i>	<i>3.77%</i>
<b>BPCA Other Post Employment Benefits</b>	<b>-0.63%</b>	<b>-2.47%</b>	<b>2.30%</b>	<b>2.02%</b>	<b>3.21%</b>
<i>BM: Merrill Lynch 1-10 Year US Treasury Note Index</i>	<i>-0.75%</i>	<i>-2.93%</i>	<i>2.30%</i>	<i>1.97%</i>	<i>2.96%</i>
<b>BPCPC Other Post Employment Benefits</b>	<b>-0.65%</b>	<b>-2.55%</b>	<b>2.27%</b>	<b>2.00%</b>	<b>2.51%</b>
<i>BM: Merrill Lynch 1-10 Year US Treasury Note Index</i>	<i>-0.75%</i>	<i>-2.93%</i>	<i>2.30%</i>	<i>1.97%</i>	<i>2.60%</i>

Notes:

1. Bank of America/Merrill Lynch (BAML) indices provided by Bloomberg Financial Markets. The total returns shown for periods longer than a year are the annualized returns for the stated period.
2. Since inception performance for all portfolios other than 'BPCA Other Post Employment Benefits' and 'BPCPC Other Post Employment Benefits' is calculated from January 31, 2006 to present
3. For the 'Reserve Fund,' the inception of the BAML 1-5 Year Treasury Index as the performance benchmark is July 31, 2013. For prior periods, the BAML 1-10 Year Treasury Index was utilized.
4. Since inception performance for the 'BPCA Other Post Employment Benefits' is calculated from January 31, 2008 to present.
5. Since inception performance for the 'BPCPC Other Post Employment Benefits' is calculated from February 12, 2010 to present.

# Portfolio Summary

## Short-Term Funds

- The Pledged Revenue and Project Operating fund portfolios have outperformed the BAML 3 Month Treasury Bill index for the quarter and 12 months ending October 31, 2016.
  - The relative return of the Short-Term portfolios has continued to benefit from attractive yields in the high quality commercial paper sector.
  - During the quarter portfolios were positioned to accommodate transfers and to prepare for the end of the fiscal year in October.
  - Liquidity considerations are the primary determinant of portfolio structure and duration positioning.
  - For the 12 months ended October 31, 2016, the Short-Term portfolios outperformed the benchmark by an average of 11 basis points.

## Longer-Term Funds

- All longer-term portfolios have outperformed their respective benchmark for the quarter ending October 31, 2016.
- U.S. Treasury yields rose during the quarter, with the 2-year climbing 19 bps (0.19%) and the 10-year rising 38 bps (0.38%). All U.S. Treasury benchmarks posted negative returns due to the rise in rates.
- Modest allocations to the Government mortgage-backed security (MBS) sector contributed to outperformance versus respective benchmarks. The MBS sector outperformed the U.S. Treasury sector as interest rates rose during the quarter.
- Generally modest allocations to the municipal sector was also a negative for relative return during the quarter.
- Portfolios have been positioned with durations close to benchmarks in an effort to protect them from unpredictable rate moves.
- Most market participants expect a 0.25% increase in the federal funds rate at the Fed's December meeting. Outside the U.S., global central banks continue to administer accommodative monetary policy, keeping rates low and implementing large-scale purchase programs.

# Portfolio Value – Strategy Level

	October 31, 2016			July 31, 2016			Change in Strategy Value Summary			
	Market Value	Effective Duration	% of Total Portfolio	Market Value	Effective Duration	% of Total Portfolio	Net Cash Flows	Market Value Change	Change in Cash Balance	(+/-)
<b>Total Return Accounts</b>										
Longer Term Investment Strategy	\$139,489,016	3.39	29.3%	\$136,933,608	3.21	28.4%	\$3,050,000	\$2,555,408	(\$137,697)	(\$632,289)
Short Term Investment Strategy	\$180,649,333	0.03	37.9%	\$150,568,462	0.27	31.2%	\$29,764,182	\$30,080,871	(\$109,239)	\$207,450
Subtotal of Total Return Accounts	\$320,138,349	1.49	67.1%	\$287,502,070	1.67	59.6%	\$32,814,182	\$32,636,279	(\$246,936)	(\$424,839)
<b>Other BPCA Accounts</b>										
Subtotal of Other BPCA Accounts	\$156,694,386	0.43	32.9%	\$194,799,238	0.33	40.4%	\$3,019,484	(\$38,104,853)	\$35,570,326	(\$5,554,011)
<b>Grand Total BPCA Portfolio</b>	<b>\$476,832,735</b>	<b>1.14</b>	<b>100.0%</b>	<b>\$482,301,309</b>	<b>1.13</b>	<b>100.0%</b>	<b>\$35,833,666</b>	<b>(\$5,468,574)</b>	<b>\$35,323,389</b>	<b>(\$5,978,850)</b>

Notes:

1. "Market Value" includes accrued interest, but does not include cash balances held at the bank.



# Portfolio Value – Total Return Accounts

<i>Total Return Accounts</i>	October 31, 2016		July 31, 2016		Change in Account Value Summary			
	Market Value	Effective Duration	Market Value	Effective Duration	Net Cash Flows	Market Value Change	Change in Cash Balance	(+/-)
<b>Longer Term Investment Strategy</b>								
2003 Reserve Fund	\$73,709,139	3.06	\$72,016,681	2.66	\$1,850,000	\$1,692,458	(\$69,974)	(\$227,516)
BPCPC Operating Reserve Contingency	\$13,758,550	3.77	\$13,820,357	3.85	\$0	(\$61,807)	(\$16,528)	(\$78,335)
Insurance Fund	\$5,652,110	3.76	\$5,684,653	3.81	\$0	(\$32,543)	(\$7,648)	(\$40,191)
Operating Budget Reserve	\$9,600,969	3.78	\$9,636,798	3.82	\$0	(\$35,829)	(\$21,651)	(\$57,480)
BPCA Other Post Employment Benefits	\$23,594,942	3.73	\$22,523,273	3.80	\$1,200,000	\$1,071,669	(\$14,313)	(\$142,643)
BPCPC Other Post Employment Benefits	\$13,173,306	3.77	\$13,251,846	3.83	\$0	(\$78,540)	(\$7,584)	(\$86,124)
<b>Short Term Investment Strategy</b>								
2003 Pledged Revenue	\$172,415,769	0.03	\$143,530,775	0.28	\$28,582,731	\$28,884,994	(\$105,368)	\$196,895
2003 Project Operating Fund	\$8,233,564	0.09	\$7,037,687	0.18	\$1,181,451	\$1,195,877	(\$3,871)	\$10,555
<b>Subtotal of Total Return Accounts</b>	<b>\$320,138,349</b>	<b>1.49</b>	<b>\$287,502,070</b>	<b>1.67</b>	<b>\$32,814,182</b>	<b>\$32,636,279</b>	<b>(\$246,936)</b>	<b>(\$424,839)</b>

Notes:

1. "Market Value" includes accrued interest, but does not include cash balances held at the bank.

# Portfolio Value – Other BPCA Accounts

Other BPCA Accounts	October 31, 2016		July 31, 2016		Net Cash Flows	Market Value Change	Change in Cash Balance	(+/-)
	Market Value	Effective Duration	Market Value	Effective Duration				
Liberty Terr Mariners Cove-K	\$287,089	0.07	\$297,376	0.05	\$0	(\$10,287)	\$338	(\$9,949)
Liberty House Mariners J	\$234,742	0.07	\$234,975	0.05	\$0	(\$233)	\$398	\$165
Rector Park L	\$32,095	0.04	\$31,996	0.05	\$0	\$99	(\$78)	\$22
Hudson View W Towers G	\$165,525	0.07	\$164,985	0.05	\$0	\$541	(\$426)	\$114
Hudson Towers E/F	\$201,632	0.07	\$200,981	0.05	\$0	\$651	(\$514)	\$137
Hudson View Towers C	\$177,561	0.07	\$176,984	0.05	\$0	\$578	(\$455)	\$122
Liberty Ct Mariners Cove B	\$586,855	0.07	\$585,937	0.05	\$0	\$919	(\$506)	\$413
Millenium	\$3,534,722	0.11	\$3,673,171	0.05	\$0	(\$138,449)	\$1,104	(\$137,345)
Liberty Battery Place Assoc 4	\$423,697	0.07	\$443,773	0.05	\$0	(\$20,075)	\$65	(\$20,011)
South Cove Assoc 11	\$384,491	0.07	\$399,574	0.05	\$0	(\$15,083)	\$122	(\$14,960)
Soundings Rector Park A	\$205,656	0.08	\$204,981	0.05	\$0	\$675	(\$532)	\$143
The Regatta Site 10	\$468,752	0.07	\$483,566	0.05	\$0	(\$14,814)	(\$90)	(\$14,904)
Corporate Funds	\$1,905,434	0.25	\$1,702,824	0.04	\$200,000	\$202,609	(\$440)	\$2,169
2000 Arbitrage Rebate	\$790,443	0.58	\$789,036	0.83	\$0	\$1,407	\$0	\$1,407
1993 Unpledged Revenue	\$5,694,442	0.03	\$1,209,683	0.28	\$4,480,850	\$4,484,758	\$324	\$4,232
2003 Residual Fund	\$389,978	0.03	\$37,548,979	0.28	(\$37,190,169)	(\$37,159,001)	(\$83)	\$31,085
Joint Purpose Fund	\$37,204,422	0.01	\$8,994	0.28	\$37,190,169	\$37,195,429	\$571	\$5,831
Special Fund	\$913,928	0.05	\$975,917	0.05	(\$62,422)	(\$61,989)	\$137	\$570
Debt Service Junior Payments	\$7,117,886	0.11	\$29,388,936	0.24	\$0	(\$22,271,050)	\$17,751,393	(\$4,519,658)
2003 Debt Service Senior Payments	\$5,332,442	0.08	\$34,179,504	0.26	\$0	(\$28,847,062)	\$28,712,636	(\$134,426)
BPCPC Operating Reserve	\$988,304	0.63	\$982,173	0.55	\$0	\$6,131	(\$5,289)	\$842
BPCA Millenium Tower Security Fund 2A	\$2,952,550	0.11	\$3,070,412	0.05	\$0	(\$117,862)	\$382	(\$117,480)
BPCA S 16/17 Riverhouse Security Fund	\$6,271,017	0.12	\$6,541,157	0.05	\$0	(\$270,139)	\$978	(\$269,161)
BPCA Goldman Sachs Liberty Contribution Fund	\$0	0.00	\$0	0.00	\$0	\$0	\$0	\$0
BPCA Visionaire Security Fund	\$3,822,798	0.12	\$3,975,732	0.05	\$0	(\$152,934)	\$603	(\$152,331)
BPCA Series 2009A Project Costs	\$6,829,736	0.42	\$5,518,756	0.31	(\$731,211)	\$1,310,981	(\$2,033,378)	\$8,814
BPCA Series 2009B Project Costs	\$1,323,482	0.14	\$1,469,453	0.13	(\$147,699)	(\$145,970)	(\$649)	\$1,079
BPCA Pier A Construction Escrow	\$0	0.00	\$0	0.00	\$0	\$0	\$0	\$0
BPCA Pier A Security Deposit Account	\$402,545	0.07	\$417,562	0.05	\$0	(\$15,017)	\$79	(\$14,938)
BPCA One Rector Park Security Fund	\$936,592	0.07	\$972,332	0.05	\$0	(\$35,740)	(\$141)	(\$35,880)
BPCA Rector Square Security Fund Site D	\$216,689	0.08	\$215,980	0.05	\$0	\$709	(\$559)	\$150
BPCA Insurance Advance	\$0	0.00	\$0	0.00	\$0	\$0	\$0	\$0
BPCA WFC TOWER C RETAIL RENT ESCROW	\$243,769	0.07	\$243,968	0.05	\$0	(\$199)	\$376	\$177
BPCA2013ACDE COI SUB AC	\$0	0.00	\$0	0.00	\$0	\$0	\$0	\$0
BPCA2013B COI SUB AC	\$0	0.00	\$0	0.00	\$0	\$0	\$0	\$0
BPCA2013ACDE PROJ COST SUB AC	\$60,830,911	0.96	\$52,636,141	0.62	(\$720,033)	\$8,194,769	(\$8,857,523)	\$57,279
BPCA2013B PROJ COSTS SUB AC	\$0	0.00	\$0	0.00	\$0	\$0	\$0	\$0
BPCA RIVER & WARREN SEC FUND - SITE 19/	\$5,774,050	0.12	\$6,003,408	0.05	\$0	(\$229,358)	\$1,605	(\$227,753)
BPCA NORTH COVE MARINA SECURITY FUNG	\$50,148	0.04	\$49,994	0.05	\$0	\$155	(\$121)	\$34
<b>Subtotal of Other BPCA Accounts</b>	<b>\$156,694,386</b>	<b>0.43</b>	<b>\$194,799,238</b>	<b>0.33</b>	<b>\$3,019,484</b>	<b>(\$38,104,853)</b>	<b>\$35,570,326</b>	<b>(\$5,554,011)</b>

Notes:

1. "Market Value" includes accrued interest, but does not include cash balances held at the bank.
2. Highlighted funds are managed by Ramirez Asset Management ("RAM"). Market values for these funds are provided by RAM.

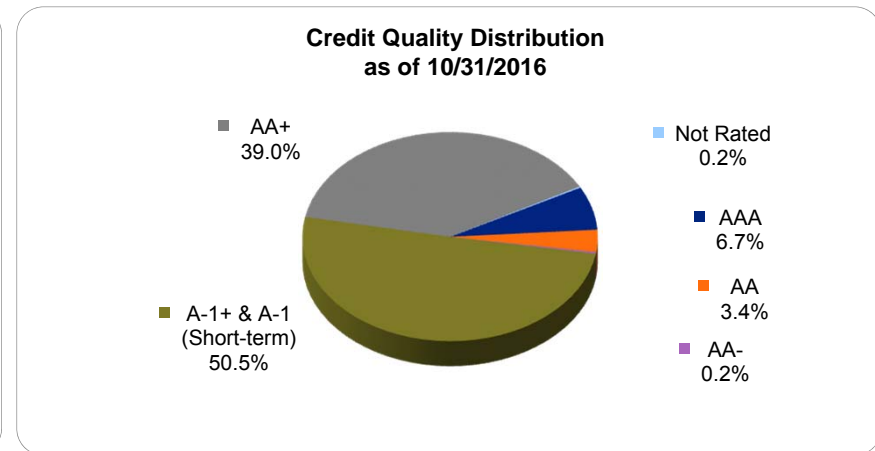
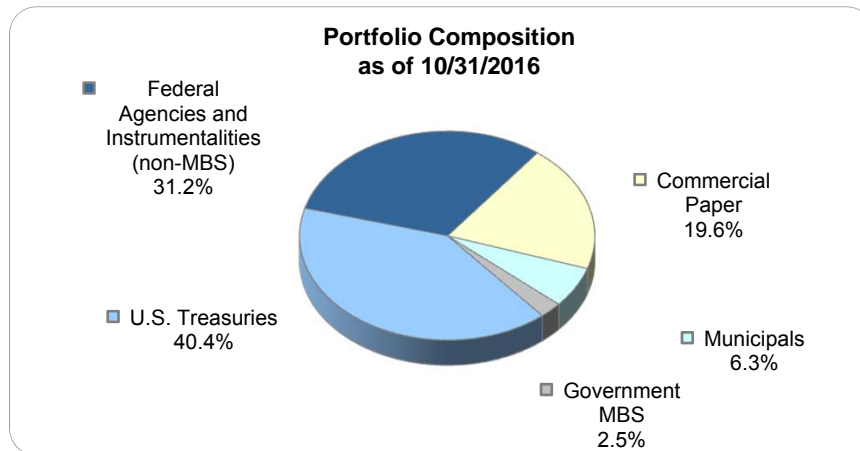


**Section B –  
Summary of Aggregate Portfolio**

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# Aggregate Portfolio Composition and Credit Quality

Security Type <sup>1</sup>	October 31, 2016	% of Portfolio	Effective Duration	July 31, 2016	% of Portfolio	Effective Duration
U.S. Treasuries	\$192,477,770	40.4%	2.00	\$205,573,489	42.6%	1.58
Federal Agencies and Instrumentalities (non-MBS)	\$148,714,809	31.2%	0.44	\$196,632,017	40.8%	0.55
Commercial Paper	\$93,666,484	19.6%	0.03	\$37,449,446	7.8%	0.26
Municipals	\$30,072,315	6.3%	1.65	\$29,774,515	6.2%	1.83
Government MBS	\$11,901,356	2.5%	3.60	\$12,871,841	2.7%	3.65
<b>Totals</b>	<b>\$476,832,735</b>	<b>100.0%</b>	<b>1.14</b>	<b>\$482,301,309</b>	<b>100.0%</b>	<b>1.13</b>



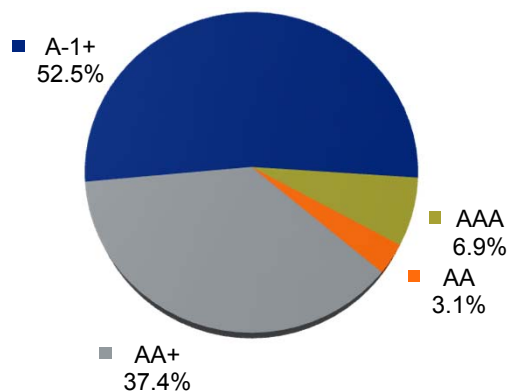
**Notes:**

- End of quarter trade-date market values of portfolio holdings, including accrued interest.
- Government MBS includes Freddie Mac, Fannie Mae, Ginnie Mae, and Small Business Administration MBS.

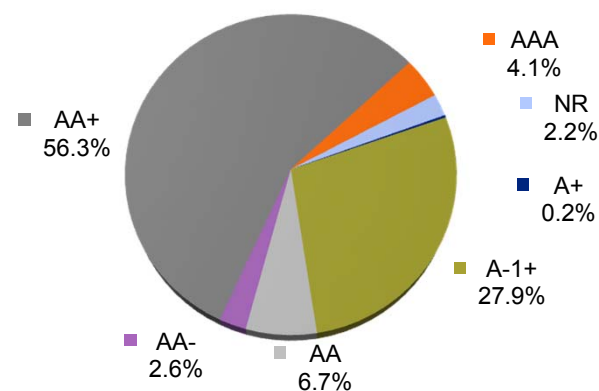
# Aggregate Portfolio Composition and Credit Quality by Advisor

Security Type <sup>1</sup>	PFM Asset Management	% of Advisor	% of Total Portfolio	Effective Duration	Ramirez Asset Management	% of Advisor	% of Total Portfolio	Effective Duration
U.S. Treasuries	\$170,212,041	38.9%	35.7%	2.25	\$22,265,729	55.9%	4.7%	0.06
Federal Agencies and Instrumentalities (non-MBS)	\$148,214,889	33.9%	31.1%	0.44	\$499,920	1.3%	0.1%	0.08
Commercial Paper	\$83,067,225	19.0%	17.4%	0.03	\$10,599,259	26.6%	2.2%	0.01
Municipals	\$23,751,104	5.4%	5.0%	2.00	\$6,321,212	15.9%	1.3%	0.34
Government MBS	\$11,764,170	2.7%	2.5%	3.60	\$137,186	0.3%	0.0%	1.76
<b>Totals</b>	<b>\$437,009,429</b>	<b>100%</b>	<b>91.6%</b>	<b>1.24</b>	<b>\$39,823,306</b>	<b>100.0%</b>	<b>8.4%</b>	<b>0.10</b>

**PFMAM Credit Quality Distribution  
as of 10/31/2016**



**RAM Credit Quality Distribution  
as of 10/31/2016**



**Notes:**

1. End of quarter trade-date market values of portfolio holdings, including accrued interest.
2. Government MBS includes Freddie Mac, Fannie Mae, Ginnie Mae, and Small Business Administration MBS.

# Aggregate Portfolio Issuer Breakdown

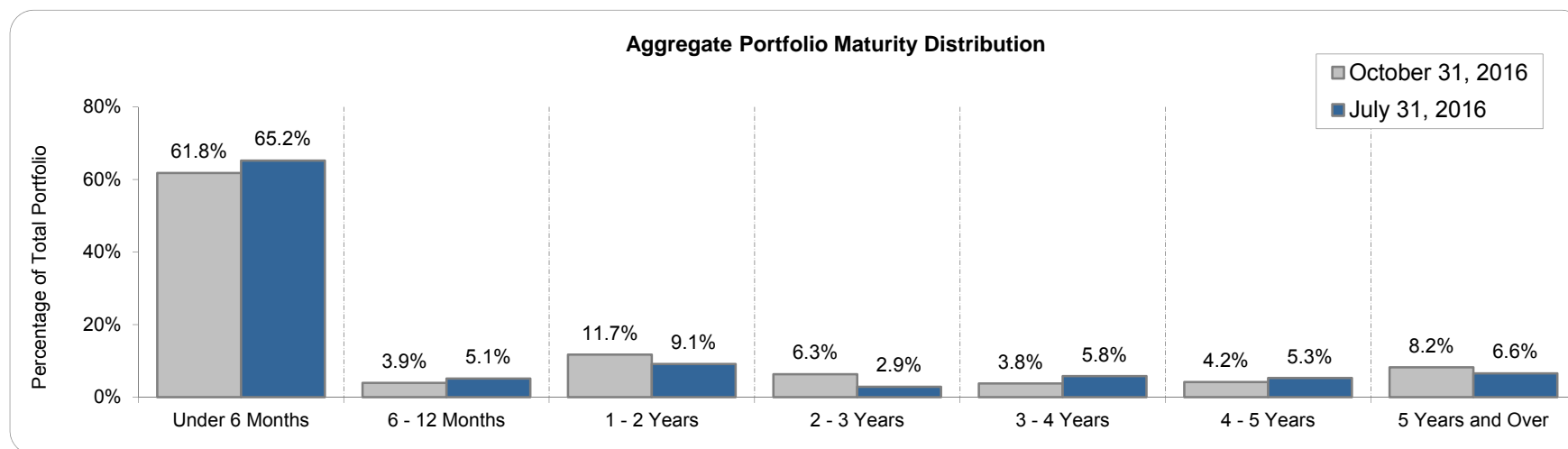
Security Type	October 31, 2016	% of Portfolio	July 31, 2016	% of Portfolio	QoQ % Change
<b>United States Treasury<sup>2</sup></b>					
U.S. Treasury	\$192,477,770	40.4%	\$205,573,489	42.6%	(2.3%)
Ginnie Mae	\$6,857,540	1.4%	\$7,633,404	1.6%	(0.1%)
Small Business Administration	\$2,806,257	0.6%	\$2,835,086	0.6%	0.0%
<b>Federal Agencies and Instrumentalities (includes Mortgage-Backed Securities)<sup>2</sup></b>					
Freddie Mac	\$2,966,841	0.6%	\$31,755,839	6.6%	(6.0%)
Fannie Mae	\$33,953,010	7.1%	\$86,380,845	17.9%	(10.8%)
Federal Home Loan Bank	\$89,714,375	18.8%	\$59,184,226	12.3%	6.5%
International Bank of Recon and Development	\$13,330,417	2.8%	\$10,807,674	2.2%	0.6%
International American Development Bank	\$3,333,567	0.7%	\$1,829,269	0.4%	0.3%
Asian Development Bank	\$5,613,974	1.2%	\$5,668,151	1.2%	0.0%
African Development Bank	\$2,040,185	0.4%	\$3,409,365	0.7%	(0.3%)
<b>Commercial Paper<sup>2</sup></b>					
General Electric Capital Tsy Services	\$14,998,485	3.1%	\$0	0.0%	3.1%
General Electric Company	\$3,499,610	0.7%	\$0	0.0%	0.7%
Prudential Funding LLC	\$16,888,668	3.5%	\$3,924,639	0.8%	2.7%
Exxon Mobil Corporation	\$20,191,162	4.2%	\$0	0.0%	4.2%
Toyota Motor Credit Corporation	\$20,617,481	4.3%	\$20,076,090	4.2%	0.2%
US Bank NA	\$17,471,078	3.7%	\$13,448,717	2.8%	0.9%
<b>Municipal Issuers<sup>2</sup></b>					
Delaware State	\$0	0.0%	\$2,757,695	0.6%	(0.6%)
Nassau County, New York	\$3,056,728	0.6%	\$3,056,848	0.6%	0.0%
New York City	\$15,955,444	3.3%	\$15,427,775	3.2%	0.1%
New York City Transitional Finance Authority	\$7,000,984	1.5%	\$7,162,875	1.5%	(0.0%)
NY State Dorm Authority	\$626,209	0.1%	\$332,651	0.1%	0.1%
Triborough Bridge & Tunnel Authority	\$95,462	0.0%	\$0	0.0%	0.0%
Maryland State	\$1,025,000	0.2%	\$1,036,671	0.2%	0.0%
Metropolitan Transportation Authority	\$1,021,047	0.2%	\$0	0.0%	0.2%
New York State Throughway Authority	\$401,827	0.1%	\$0	0.0%	0.1%
West Islip NY Union Free SD	\$889,614	0.2%	\$0	0.0%	0.2%
<b>TOTAL</b>	<b>\$476,832,735</b>	<b>100.0%</b>	<b>\$482,301,309</b>	<b>100.0%</b>	

Notes:

- End of quarter trade-date market values of portfolio holdings, including accrued interest.
- Pursuant to the Authority's Investment Policy, investments in obligations other than those backed by the full faith and credit of the U.S. Government are limited to the following: (1) Federal Agencies - \$250 million per issuer, (2) Commercial Paper - the lesser of 5% or \$250 million per issuer, (3) Bankers' Acceptances - the lesser of 5% or \$250 million per issuer and (4) Municipal Bonds - 10%.

# Aggregate Portfolio Maturity Structure

Security Type <sup>1</sup>	October 31, 2016	% of Portfolio	July 31, 2016	% of Portfolio	QoQ % Change
Under 6 Months	\$294,559,191	61.8%	\$314,434,296	65.2%	(3.4%)
6 - 12 Months	\$18,708,340	3.9%	\$24,747,653	5.1%	(1.2%)
1 - 2 Years	\$55,957,246	11.7%	\$44,068,669	9.1%	2.6%
2 - 3 Years	\$30,242,738	6.3%	\$13,784,601	2.9%	3.5%
3 - 4 Years	\$18,080,066	3.8%	\$28,038,321	5.8%	(2.0%)
4 - 5 Years	\$19,989,852	4.2%	\$25,553,418	5.3%	(1.1%)
5 Years and Over	\$39,295,303	8.2%	\$31,674,351	6.6%	1.7%
<b>Totals</b>	<b>\$476,832,735</b>	<b>100.0%</b>	<b>\$482,301,309</b>	<b>100.0%</b>	



**Notes:**

1. End of quarter trade-date market values of portfolio holdings, including accrued interest.



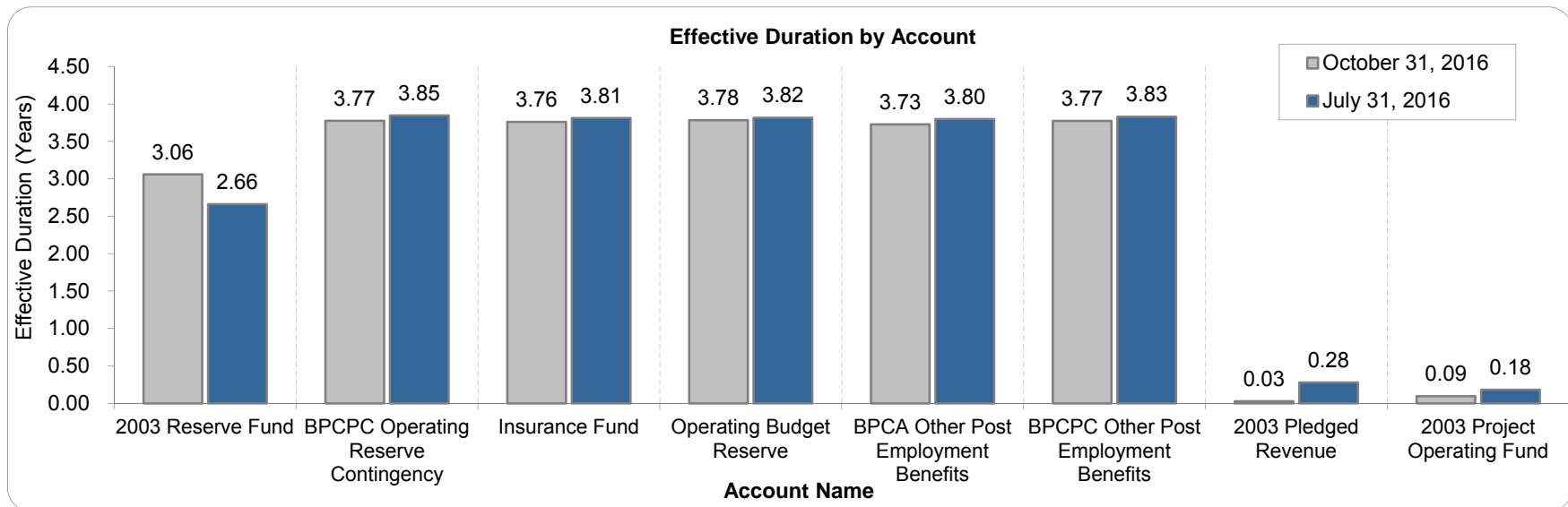
**Section C –  
Performance Attributes**

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# Total Return Portfolio Attributes

Yields	Effective Duration (in years)		Yield To Maturity - At Market		Yield To Maturity - On Cost	
	October 31, 2016	July 31, 2016	October 31, 2016	July 31, 2016	October 31, 2016	July 31, 2016
<b>Longer Term Investment Strategy</b>						
2003 Reserve Fund	<b>3.06</b>	2.66	<b>1.22%</b>	0.97%	<b>1.68%</b>	1.67%
BPCPC Operating Reserve Contingency	<b>3.77</b>	3.85	<b>1.44%</b>	1.22%	<b>2.12%</b>	2.12%
Insurance Fund	<b>3.76</b>	3.81	<b>1.29%</b>	1.05%	<b>1.75%</b>	1.74%
Operating Budget Reserve	<b>3.78</b>	3.82	<b>1.36%</b>	1.13%	<b>2.00%</b>	2.01%
BPCA Other Post Employment Benefits	<b>3.73</b>	3.80	<b>1.31%</b>	1.09%	<b>1.87%</b>	1.90%
BPCPC Other Post Employment Benefits	<b>3.77</b>	3.83	<b>1.32%</b>	1.09%	<b>1.81%</b>	1.80%
<b>Short Term Investment Strategy</b>						
2003 Pledged Revenue	<b>0.03</b>	0.28	<b>0.26%</b>	0.44%	<b>0.41%</b>	0.42%
2003 Project Operating Fund	<b>0.09</b>	0.18	<b>0.50%</b>	0.62%	<b>0.52%</b>	0.59%





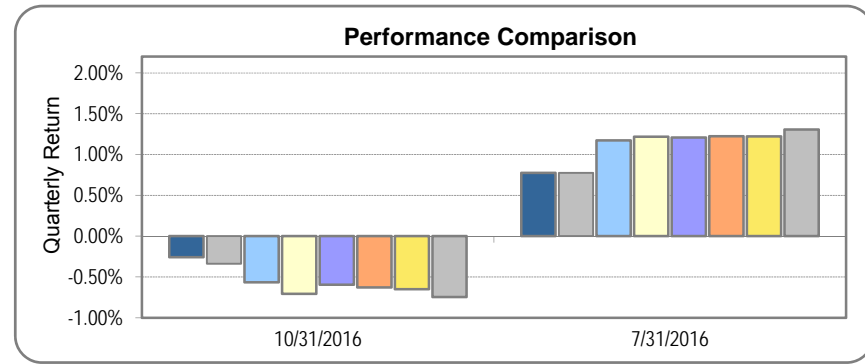
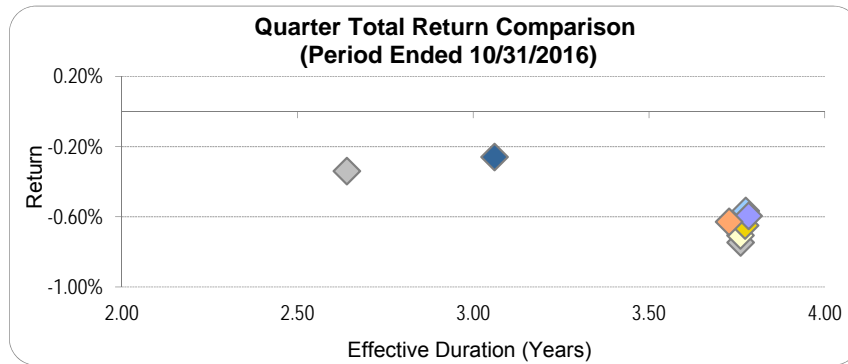
**Portfolios Managed with a  
Longer-Term Investment Strategy**

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# Longer-Term Investment Strategy

Total Return <sup>1,2,4,5</sup>	October 31, 2016	Annualized Quarter	Annualized Since Inception
2003 Reserve Fund	(0.26%)	(1.02%)	3.70%
<b>BM: Merrill Lynch 1-5 Year US Treasury Note Index</b>	<b>(0.34%)</b>	<b>(1.34%)</b>	<b>3.55%</b>
BPCPC Operating Reserve Contingency	(0.57%)	(2.23%)	4.14%
Insurance Fund	(0.71%)	(2.77%)	4.09%
Operating Budget Reserve	(0.60%)	(2.34%)	4.27%
<b>BM: Merrill Lynch 1-10 Year US Treasury Note Index</b>	<b>(0.75%)</b>	<b>(2.93%)</b>	<b>3.77%</b>
BPCA Other Post Employment Benefits	(0.63%)	(2.47%)	3.21%
<b>BM: Merrill Lynch 1-10 Year US Treasury Note Index</b>	<b>(0.75%)</b>	<b>(2.93%)</b>	<b>2.96%</b>
BPCPC Other Post Employment Benefits	(0.65%)	(2.55%)	2.51%
<b>BM: Merrill Lynch 1-10 Year US Treasury Note Index</b>	<b>(0.75%)</b>	<b>(2.93%)</b>	<b>2.60%</b>

Effective Duration (in years) <sup>3</sup>	October 31, 2016	July 31, 2016
2003 Reserve Fund	3.06	2.66
<b>BM: Merrill Lynch 1-5 Year US Treasury Note Index</b>	<b>2.64</b>	<b>2.65</b>
BPCPC Operating Reserve Contingency	3.77	3.85
Insurance Fund	3.76	3.81
Operating Budget Reserve	3.78	3.82
BPCA Other Post Employment Benefits	3.73	3.80
BPCPC Other Post Employment Benefits	3.77	3.83
<b>BM: Merrill Lynch 1-10 Year US Treasury Note Index</b>	<b>3.76</b>	<b>3.80</b>



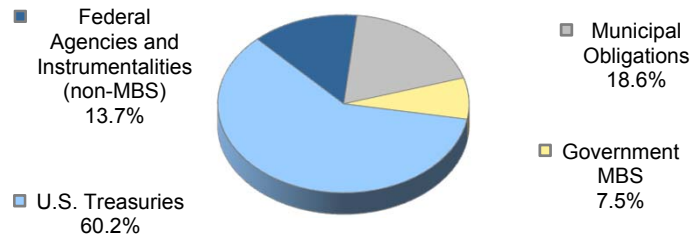
Notes:

- Performance on trade-date basis, gross-of-fees in accordance with the CFA Institute's Global Investment Performance Standards.
- Bank of America/Merrill Lynch (BAML) indices provided by Bloomberg Financial Markets. The total returns shown for periods longer than a year are the annualized returns for the stated period.
- Duration is the change in the value of a security that will result from a 1% change in interest rates, stated in years.
- Periodic performance numbers are presented both as the periodic return and on an annualized basis. The annualized return assumes the periodic return is compounded at the same rate and is presented for reference only. The actual annual return will be the result of chaining the most recent four quarterly returns.
- Since inception performance for all portfolios other than 'BPCA Other Post Employment Benefits' and 'BPCPC Other Post Employment Benefits' is calculated from January 31, 2006 to present. For the 'Reserve Fund,' the inception of the BAML 1-5 Year Treasury Index as the performance benchmark is July 31, 2013. For prior periods, the BAML 1-10 Year Treasury Index was utilized. Since inception performance for the 'BPCA Other Post Employment Benefits' is calculated from January 31, 2008 to present. Since inception performance for the 'BPCPC Other Post Employment Benefits' is calculated from February 12, 2010 to present.

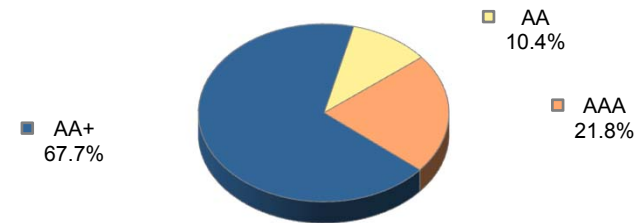
# 2003 Reserve Fund Portfolio

Security Type <sup>1</sup>	October 31, 2016	% of Portfolio	July 31, 2016	% of Portfolio	QoQ % Change
U.S. Treasuries	\$44,374,170	60.2%	\$40,558,051	56.3%	3.9%
Federal Agencies and Instrumentalities (non-MBS)	\$10,104,919	13.7%	\$11,545,550	16.0%	(2.3%)
Commercial Paper	\$0	0.0%	\$0	0.0%	0.0%
Municipal Obligations	\$13,694,800	18.6%	\$13,839,949	19.2%	(0.6%)
Government MBS	\$5,535,250	7.5%	\$6,073,131	8.4%	(0.9%)
<b>Totals</b>	<b>\$73,709,139</b>	<b>100.0%</b>	<b>\$72,016,681</b>	<b>100.0%</b>	

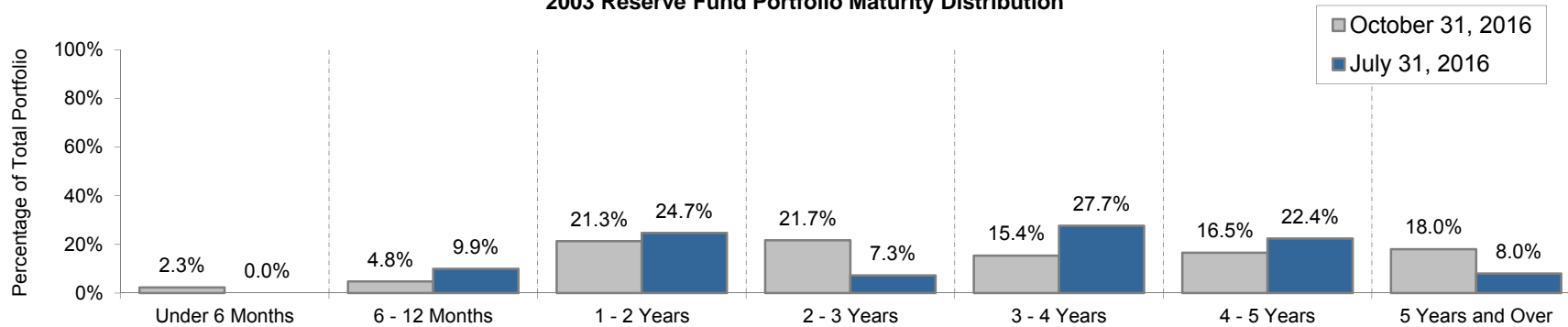
**Portfolio Composition as of 10/31/2016**



**Credit Quality Distribution as of 10/31/2016**



**2003 Reserve Fund Portfolio Maturity Distribution**

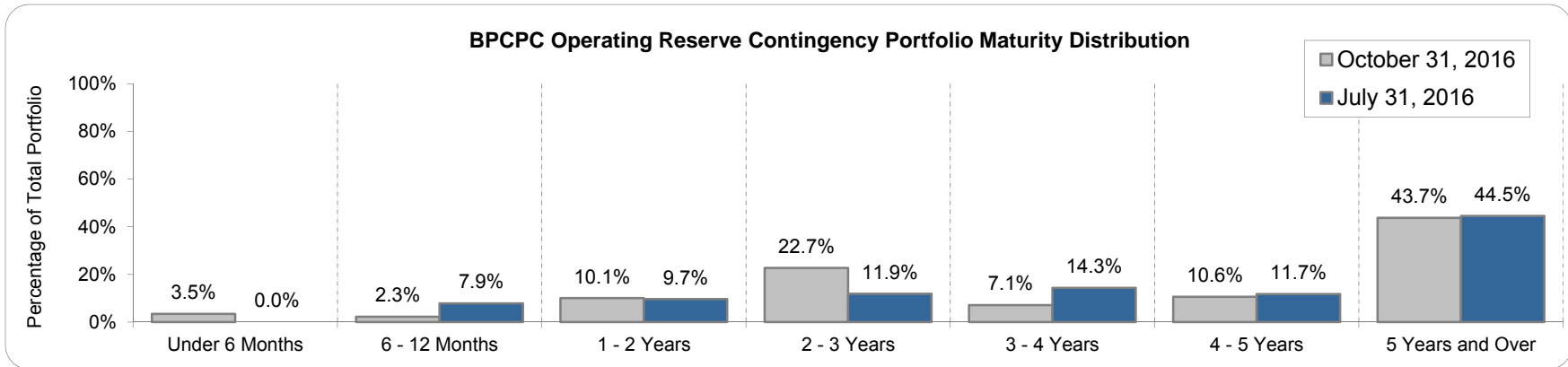
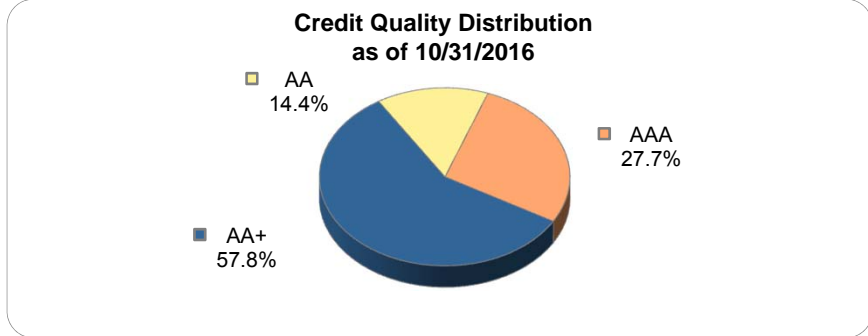
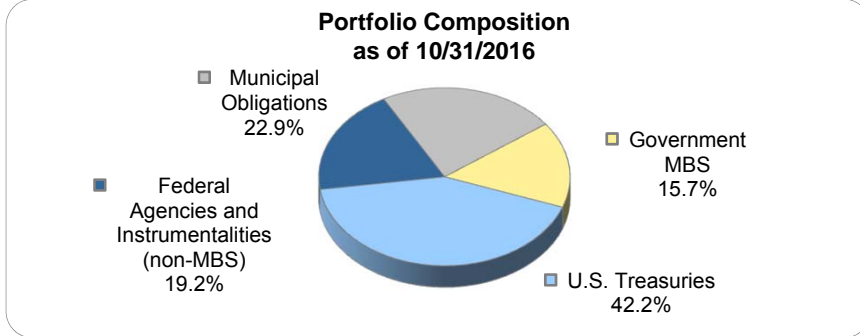


**Notes:**

1. End of quarter trade-date market values of portfolio holdings, including accrued interest.
2. Government MBS includes Freddie Mac, Fannie Mae, Ginnie Mae, and Small Business Administration MBS.

# BPCPC Operating Reserve Contingency Portfolio

Security Type <sup>1</sup>	October 31, 2016	% of Portfolio	July 31, 2016	% of Portfolio	QoQ % Change
U.S. Treasuries	\$5,800,726	42.2%	\$5,579,614	40.4%	1.8%
Federal Agencies and Instrumentalities (non-MBS)	\$2,648,024	19.2%	\$2,753,209	19.9%	(0.7%)
Commercial Paper	\$0	0.0%	\$0	0.0%	0.0%
Municipal Obligations	\$3,156,424	22.9%	\$3,192,153	23.1%	(0.2%)
Government MBS	\$2,153,376	15.7%	\$2,295,381	16.6%	(1.0%)
<b>Totals</b>	<b>\$13,758,550</b>	<b>100.0%</b>	<b>\$13,820,357</b>	<b>100.0%</b>	



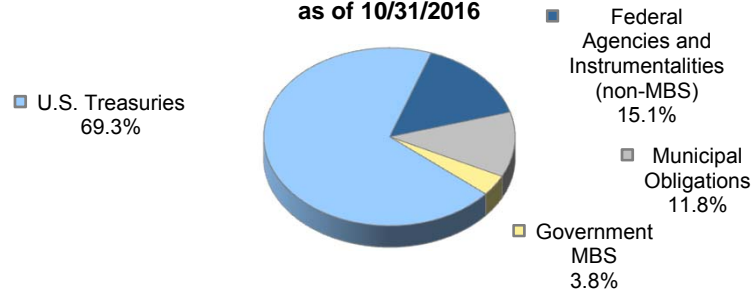
**Notes:**

1. End of quarter trade-date market values of portfolio holdings, including accrued interest.
2. Government MBS includes Freddie Mac, Fannie Mae, Ginnie Mae, and Small Business Administration MBS.

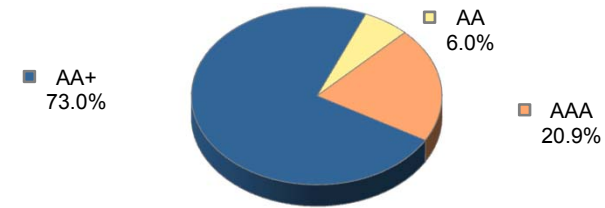
# Insurance Fund Portfolio

Security Type <sup>1</sup>	October 31, 2016	% of Portfolio	July 31, 2016	% of Portfolio	QoQ % Change
U.S. Treasuries	\$3,915,998	69.3%	\$3,916,773	68.9%	0.4%
Federal Agencies and Instrumentalities (non-MBS)	\$853,904	15.1%	\$862,356	15.2%	(0.1%)
Commercial Paper	\$0	0.0%	\$0	0.0%	0.0%
Municipal Obligations	\$669,424	11.8%	\$678,580	11.9%	(0.1%)
Government MBS	\$212,784	3.8%	\$226,943	4.0%	(0.2%)
<b>Totals</b>	<b>\$5,652,110</b>	<b>100.0%</b>	<b>\$5,684,653</b>	<b>100.0%</b>	

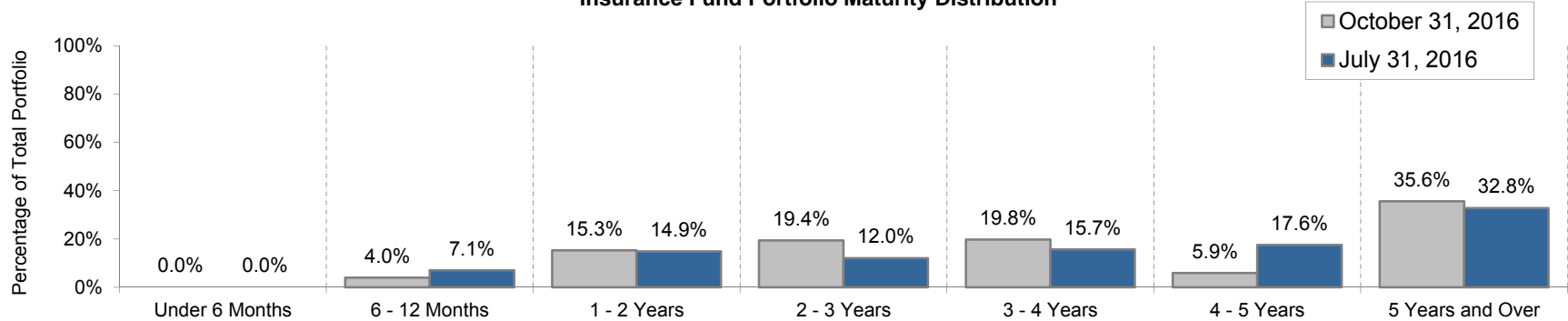
**Portfolio Composition as of 10/31/2016**



**Credit Quality Distribution as of 10/31/2016**



**Insurance Fund Portfolio Maturity Distribution**



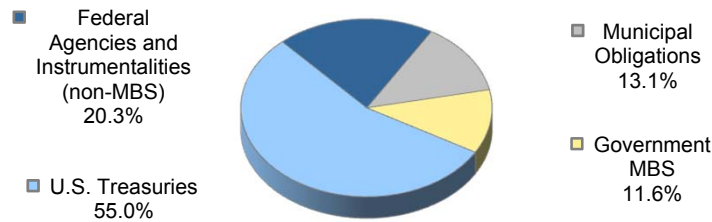
**Notes:**

- End of quarter trade-date market values of portfolio holdings, including accrued interest.
- Government MBS includes Freddie Mac, Fannie Mae, Ginnie Mae, and Small Business Administration MBS.

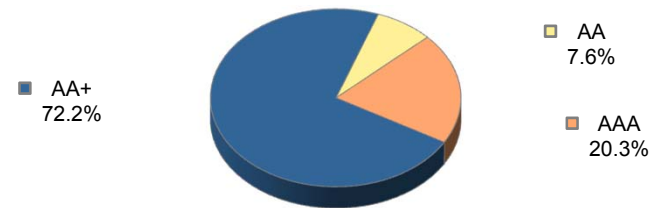
# Operating Budget Reserve Portfolio

Security Type <sup>1</sup>	October 31, 2016	% of Portfolio	July 31, 2016	% of Portfolio	QoQ % Change
U.S. Treasuries	\$5,278,997	55.0%	\$5,216,753	54.1%	0.9%
Federal Agencies and Instrumentalities (non-MBS)	\$1,948,382	20.3%	\$1,967,345	20.4%	(0.1%)
Commercial Paper	\$0	0.0%	\$0	0.0%	0.0%
Municipal Obligations	\$1,258,869	13.1%	\$1,271,074	13.2%	(0.1%)
Government MBS	\$1,114,721	11.6%	\$1,181,626	12.3%	(0.7%)
<b>Totals</b>	<b>\$9,600,969</b>	<b>100.0%</b>	<b>\$9,636,798</b>	<b>100.0%</b>	

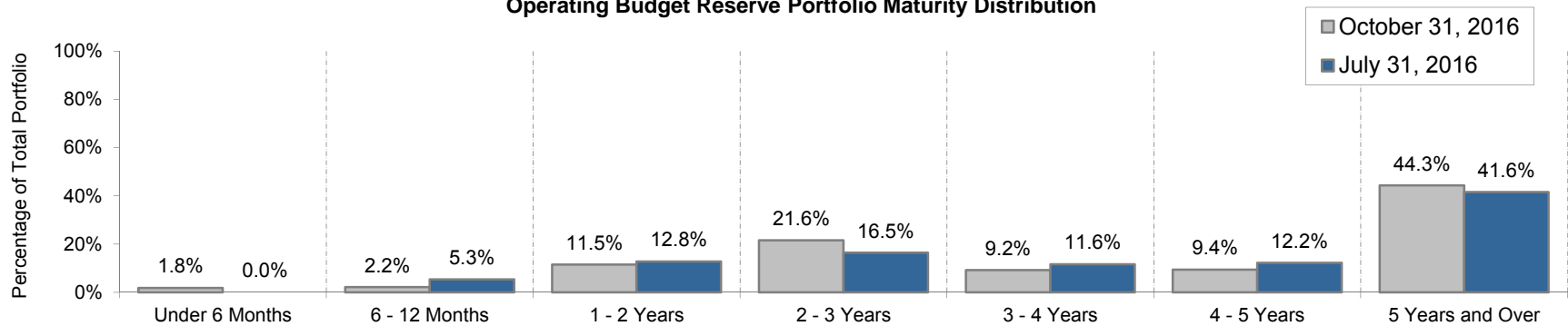
**Portfolio Composition as of 10/31/2016**



**Credit Quality Distribution as of 10/31/2016**



**Operating Budget Reserve Portfolio Maturity Distribution**

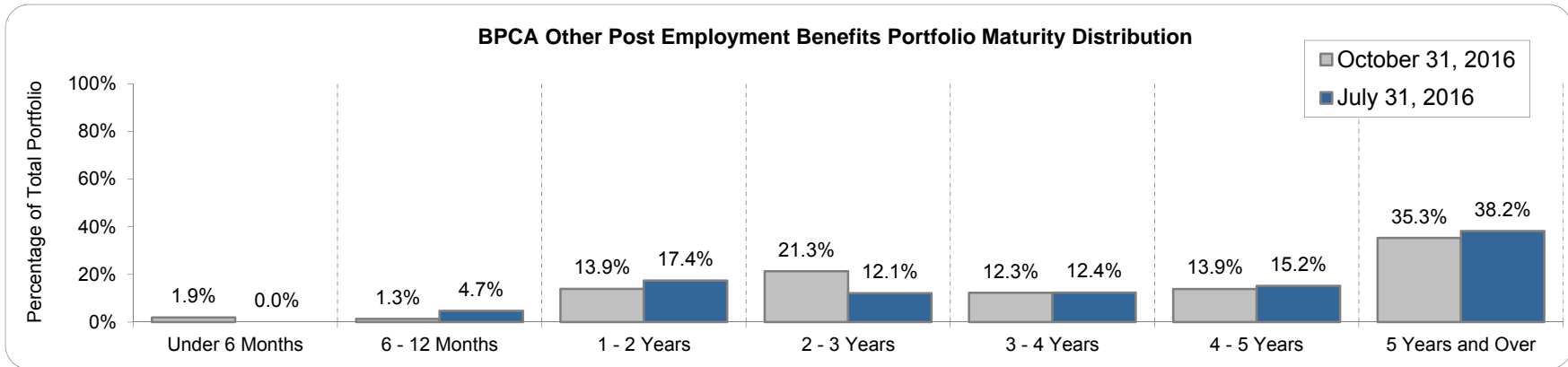
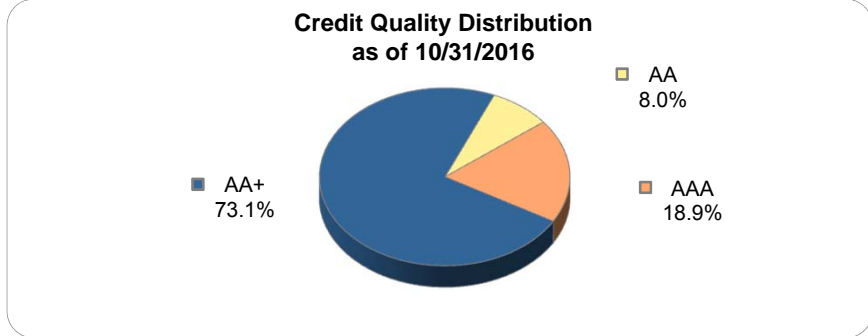
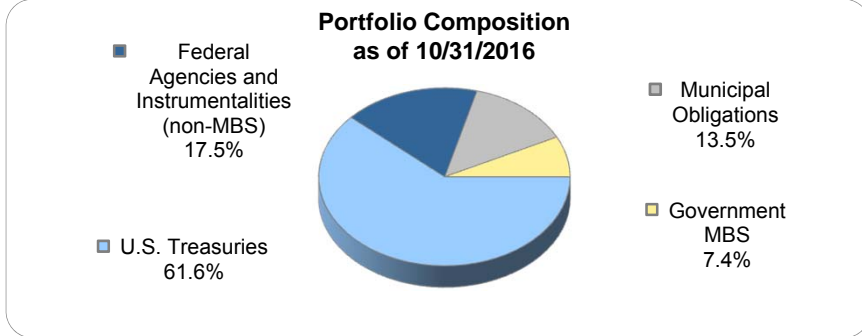


**Notes:**

- End of quarter trade-date market values of portfolio holdings, including accrued interest.
- Government MBS includes Freddie Mac, Fannie Mae, Ginnie Mae, and Small Business Administration MBS.

# BPCA OPEB Portfolio

Security Type <sup>1</sup>	October 31, 2016	% of Portfolio	July 31, 2016	% of Portfolio	QoQ % Change
U.S. Treasuries	\$14,545,145	61.6%	\$13,297,005	59.0%	2.6%
Federal Agencies and Instrumentalities (non-MBS)	\$4,127,556	17.5%	\$4,141,615	18.4%	(0.9%)
Commercial Paper	\$0	0.0%	\$0	0.0%	0.0%
Municipal Obligations	\$3,180,392	13.5%	\$3,215,757	14.3%	(0.8%)
Government MBS	\$1,741,849	7.4%	\$1,868,896	8.3%	(0.9%)
<b>Totals</b>	<b>\$23,594,942</b>	<b>100.0%</b>	<b>\$22,523,273</b>	<b>100.0%</b>	



Notes:

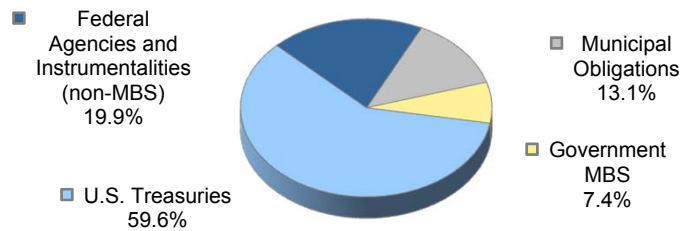
1. End of quarter trade-date market values of portfolio holdings, including accrued interest.
2. Government MBS includes Freddie Mac, Fannie Mae, Ginnie Mae, and Small Business Administration MBS.



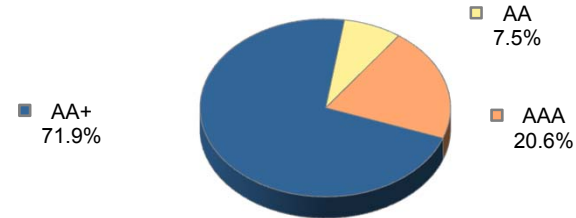
# BPCPC OPEB Portfolio

Security Type <sup>1</sup>	October 31, 2016	% of Portfolio	July 31, 2016	% of Portfolio	QoQ % Change
U.S. Treasuries	\$7,848,630	59.6%	\$7,840,517	59.2%	0.4%
Federal Agencies and Instrumentalities (non-MBS)	\$2,616,348	19.9%	\$2,612,370	19.7%	0.1%
Commercial Paper	\$0	0.0%	\$0	0.0%	0.0%
Municipal Obligations	\$1,727,827	13.1%	\$1,748,250	13.2%	(0.1)%
Government MBS	\$980,501	7.4%	\$1,050,709	7.9%	(0.5)%
<b>Totals</b>	<b>\$13,173,306</b>	<b>100.0%</b>	<b>\$13,251,846</b>	<b>100.0%</b>	

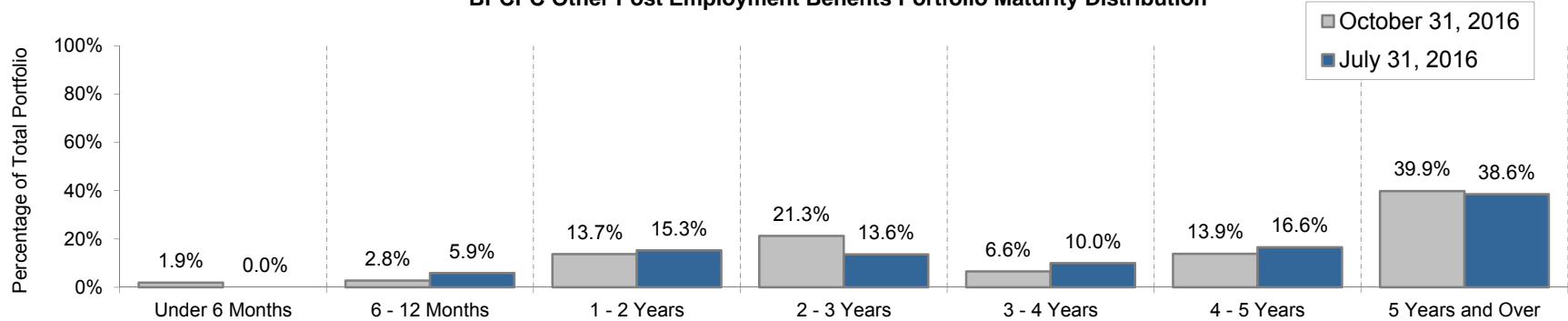
**Portfolio Composition as of 10/31/2016**



**Credit Quality Distribution as of 10/31/2016**



**BPCPC Other Post Employment Benefits Portfolio Maturity Distribution**



**Notes:**

- End of quarter trade-date market values of portfolio holdings, including accrued interest.
- Government MBS includes Freddie Mac, Fannie Mae, Ginnie Mae, and Small Business Administration MBS.



**Portfolios Managed with a  
Shorter-Term Investment Strategy**

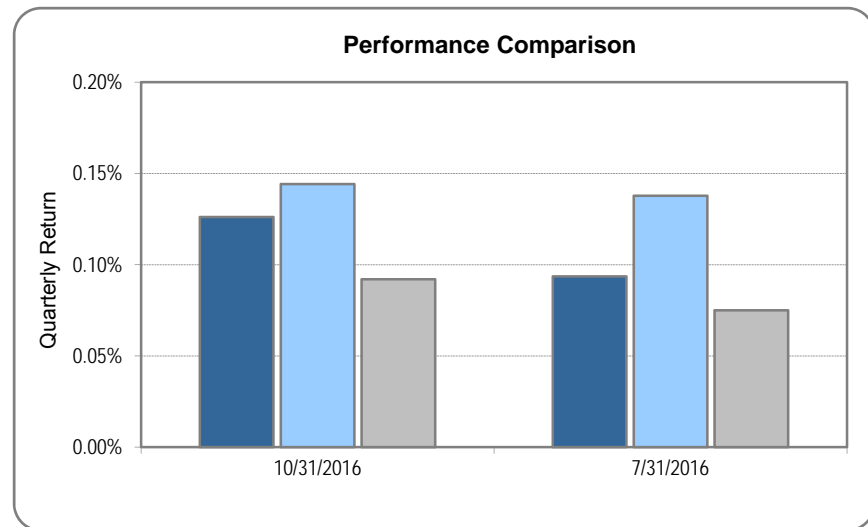
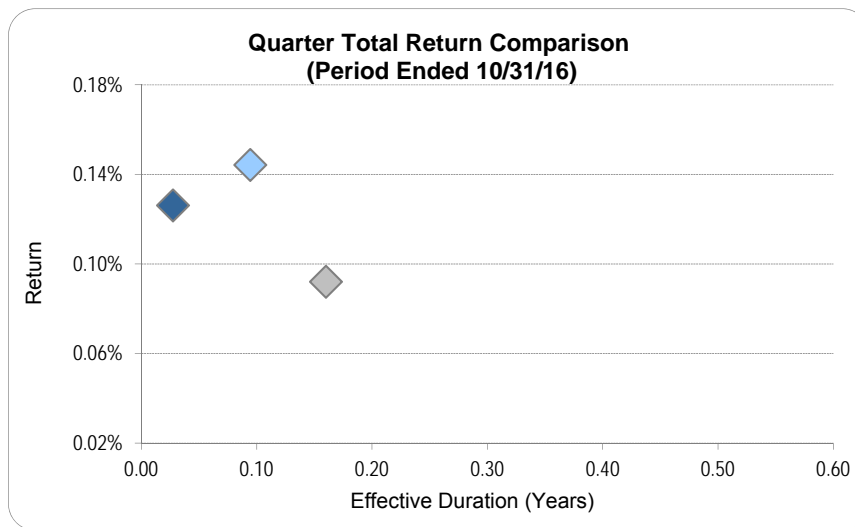
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# Shorter-Term Investment Strategy

<u>Total Return</u> <sup>1,2,4,5</sup>	<u>October 31, 2016</u>	<u>Annualized Quarter</u>	<u>Annualized Since Inception</u>
■ 2003 Pledged Revenue	0.13%	0.50%	1.23%
■ 2003 Project Operating Fund	0.14%	0.57%	1.23%
■ <b>BM: Merrill Lynch 3 Month US Treasury Bill Index</b>	0.09%	0.37%	1.15%

<u>Effective Duration (in years)</u> <sup>3</sup>	<u>October 31, 2016</u>	<u>July 31, 2016</u>
■ 2003 Pledged Revenue	0.03	0.28
■ 2003 Project Operating Fund	0.09	0.18
■ <b>BM: Merrill Lynch 3-Month US Treasury Bill Index</b>	0.16	0.16



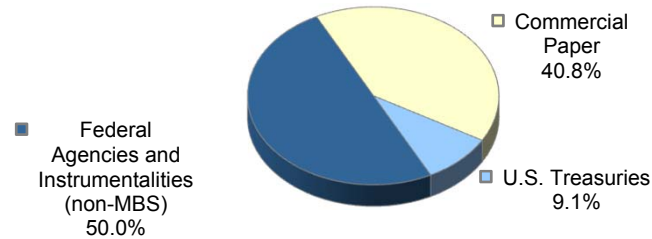
**Notes:**

1. Performance on trade-date basis, gross-of-fees in accordance with the CFA Institute's Global Investment Performance Standards.
2. Bank of America/Merrill Lynch (BAML) indices provided by Bloomberg Financial Markets. The total returns shown for periods longer than a year are the annualized returns for the stated period.
3. Duration is the change in the value of a security that will result from a 1% change in interest rates, stated in years.
4. Periodic performance numbers are presented both as the periodic return and on an annualized basis. The annualized return assumes the periodic return is compounded at the same rate and is presented for reference only. The actual annual return will be the result of chaining the most recent four quarterly returns.
5. Since inception performance is calculated from January 31, 2006 to present.

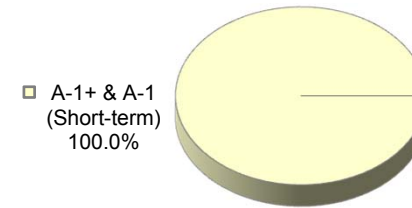
# 2003 Pledged Revenue Portfolio

Security Type <sup>1</sup>	October 31, 2016	% of Portfolio	July 31, 2016	% of Portfolio	QoQ % Change
U.S. Treasuries	\$15,750,512	9.1%	\$85,939	0.1%	9.1%
Federal Agencies and Instrumentalities (non-MBS)	\$86,280,107	50.0%	\$115,029,448	80.1%	(30.1%)
Commercial Paper	\$70,385,151	40.8%	\$28,415,387	19.8%	21.0%
Municipal Obligations	\$0	0.0%	\$0	0.0%	0.0%
Government MBS	\$0	0.0%	\$0	0.0%	0.0%
<b>Totals</b>	<b>\$172,415,769</b>	<b>100.0%</b>	<b>\$143,530,775</b>	<b>100.0%</b>	

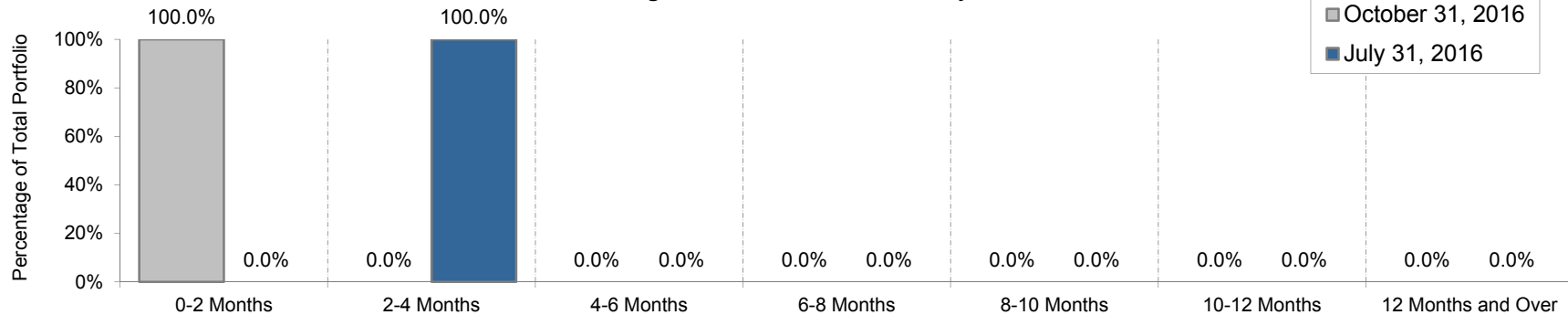
Portfolio Composition as of 10/31/2016



Credit Quality Distribution as of 10/31/2016



2003 Pledged Revenue Portfolio Maturity Distribution



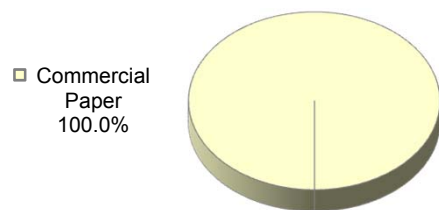
Notes:

- End of quarter trade-date market values of portfolio holdings, including accrued interest.
- Government MBS includes Freddie Mac, Fannie Mae, Ginnie Mae, and Small Business Administration MBS.

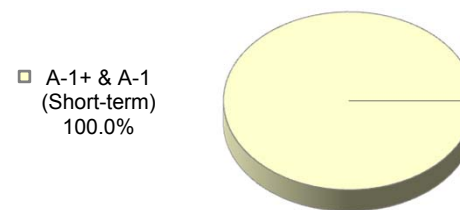
# 2003 Project Operating Fund Portfolio

Security Type <sup>1</sup>	October 31, 2016	% of Portfolio	July 31, 2016	% of Portfolio	QoQ % Change
U.S. Treasuries	\$0	0.0%	\$0	0.0%	0.0%
Federal Agencies and Instrumentalities (non-MBS)	\$0	0.0%	\$0	0.0%	0.0%
Commercial Paper	\$8,233,564	100.0%	\$7,037,687	100.0%	0.0%
Municipal Obligations	\$0	0.0%	\$0	0.0%	0.0%
Government MBS	\$0	0.0%	\$0	0.0%	0.0%
<b>Totals</b>	<b>\$8,233,564</b>	<b>100.0%</b>	<b>\$7,037,687</b>	<b>100.0%</b>	

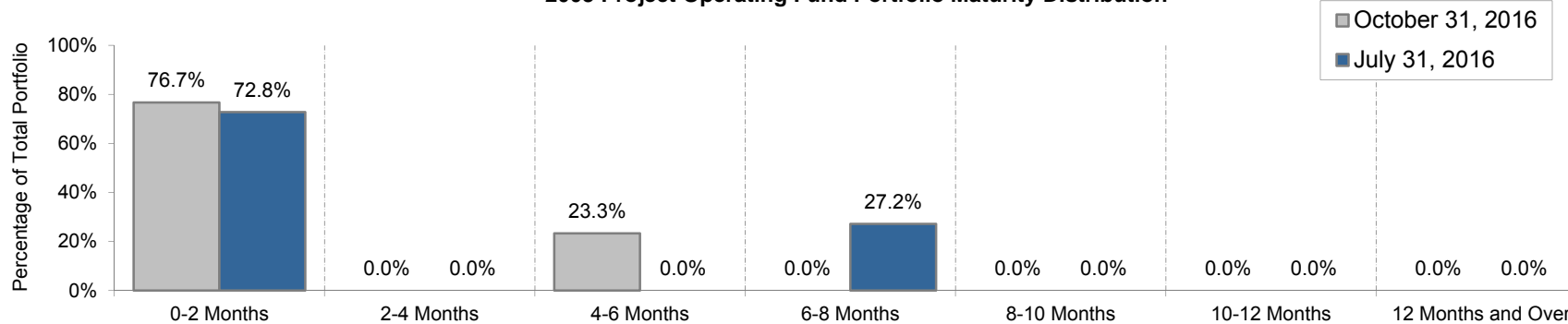
**Portfolio Composition  
as of 10/31/2016**



**Credit Quality Distribution  
as of 10/31/2016**



**2003 Project Operating Fund Portfolio Maturity Distribution**



**Notes:**

- End of quarter trade-date market values of portfolio holdings, including accrued interest.
- Government MBS includes Freddie Mac, Fannie Mae, Ginnie Mae, and Small Business Administration MBS.



**Section D –  
Market Commentary**

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# Summary of Economic and Market Conditions

## Summary

- The Federal Reserve (Fed) left rates unchanged at its September meeting. Given the upcoming U.S. presidential election, the market expects no action at the Fed's November meeting, but as of the end of October, most market participants expect a rate hike in December.
- Other central banks continued to implement accommodative monetary policy. The European Central Bank (ECB) kept its benchmark interest rate near 0% and continued its 80-billion-euro monthly bond-buying program. Meanwhile, the Bank of Japan (BoJ) introduced two policies: one keeps 10-year Japanese government bond yields near zero percent; the other expands money supply until inflation remains above the 2% target. The Bank of England (BoE) joined the easing by cutting its interest rate to 0.25% from 0.50% and enacting a bond purchase program to the tune of 10 billion pounds a month.

## Economic Snapshot

- Economic data released in October generally met or exceeded expectations, indicating a continuing rebound in growth from the slow pace in the first half of the year.
- In the first estimate of third quarter growth, the U.S. economy expanded at an annual rate of 2.9%, making it the strongest quarter since the third quarter of 2014. Business investment contributed to growth for the first time in a year, and inventories grew for the first quarter since the start of 2015. However, third-quarter consumer spending fell from the second quarter's pace.
- October saw the 73<sup>rd</sup> consecutive month of job growth, with the U.S. labor market adding 161,000 jobs – fewer than the median estimate of 173,000. The unemployment rate fell back to 4.9%. In a positive sign, job openings remained near record highs, and initial unemployment claims fell to their lowest level since 1973.
- As economic data indicated a stronger pace of expansion, and inflation indicators moved toward the coveted 2% level, expectations rose for a Fed interest rate hike.

## Interest Rates

- Interest rates rose significantly in the quarter ending October 31, reversing previous-quarter declines spurred by Brexit. Longer maturities lead the way and the yield curve steepened. The two-year Treasury yield climbed 19 basis points (bps), while the yield on the 10-year Treasury rose 38 bps.
- In the money market space, shorter-term Treasury yields rebounded from their second-quarter compression. Short-term credit instruments, like commercial paper and negotiable bank certificates of deposit (CDs), continued to offer significant added income, although yields slightly narrowed in October from near widest levels of the year as issuers and investors adjusted to money market reform, which became effect October 14.

## Sector Performance

- Returns declined for U.S. Treasury indexes for the quarter as yields rose, decreasing market values. The declines offset previous-quarter gains. Shorter maturity issues outperformed longer maturities.
- Non-callable federal agency spreads drifted tighter during the quarter, leading to the sector's outperformance relative to comparable-maturity Treasuries.
- Corporate yield spreads tightened throughout most of the third quarter, reaching their lowest levels of the year, as Brexit fears abated and investors' search for yield continued. The sector modestly outperformed Treasuries.
- Mortgage-backed (MBS) and asset-backed securities (ABS) outperformed Treasuries as rising interest rates decreased prepayment risk.

# Economic Snapshot

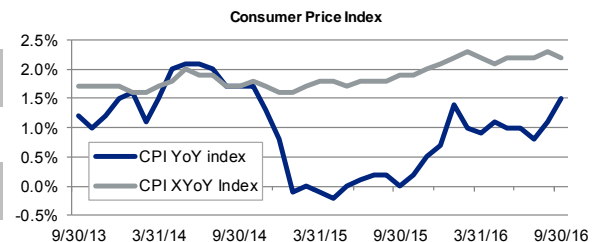
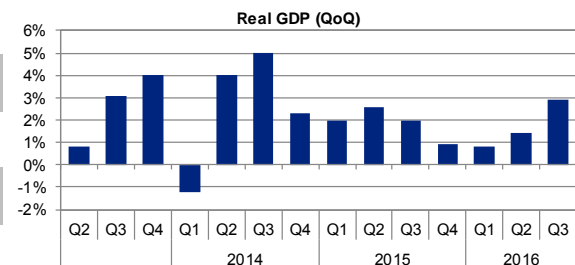
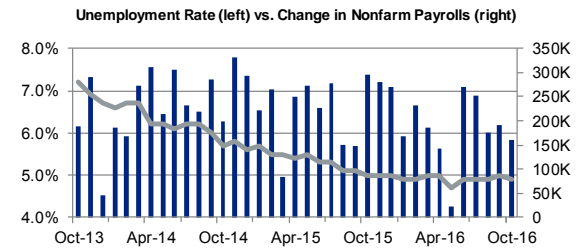
Labor Market		Latest	Jul 2016	Oct 2015
Unemployment Rate	Oct	4.9%	4.9%	5.0%
Change In Non-Farm Payrolls	Oct	161,000	252,000	295,000
Average Hourly Earnings (YoY)	Oct	2.8%	2.7%	2.6%
Personal Income (YoY)	Sep	3.2%	3.2%	3.9%
Initial Jobless Claims	Nov 05	254,000	267,000	278,000

Growth				
Real GDP (QoQ SAAR)	Q3	2.9%	1.4% <sup>1</sup>	2.0% <sup>2</sup>
GDP Personal Consumption (QoQ SAAR)	Q3	2.1%	4.3% <sup>1</sup>	2.7% <sup>2</sup>
Retail Sales (YoY)	Sep	2.7%	2.4%	1.6%
ISM Manufacturing Survey	Oct	51.9	52.6	49.4
Existing Home Sales (millions)	Sep	5.47	5.38	5.29

Inflation / Prices				
Personal Consumption Expenditures (YoY)	Sep 16	1.2%	0.8%	0.3%
Consumer Price Index (YoY)	Sep 16	1.5%	0.8%	0.2%
Consumer Price Index Core (YoY)	Sep 16	-0.1%	-2.2%	-4.0%
Crude Oil Futures (WTI, per barrel)	Oct 31	\$46.86	\$41.60	\$46.59
Gold Futures (oz)	Oct 31	\$1,273	\$1,349	\$1,141



1. Data as of Second Quarter 2016 (June 2016), 2. Data as of Third Quarter 2015 (September 2015)

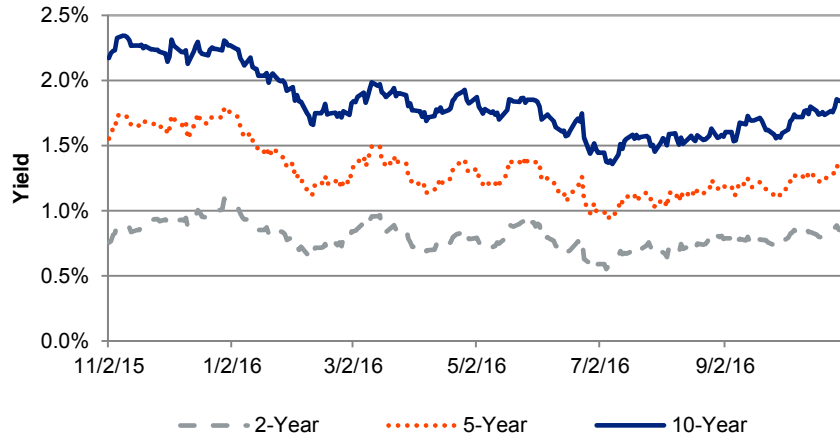
Note: YoY = year over year, QoQ = quarter over quarter, SAAR = seasonally adjusted annual rate, WTI = West Texas Intermediate crude oil

Source: Bloomberg

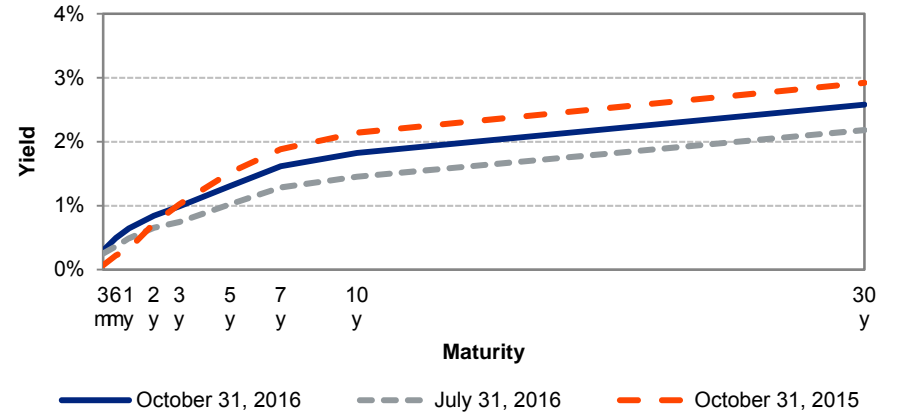


# Interest Rate Overview

U.S. Treasury Note Yields



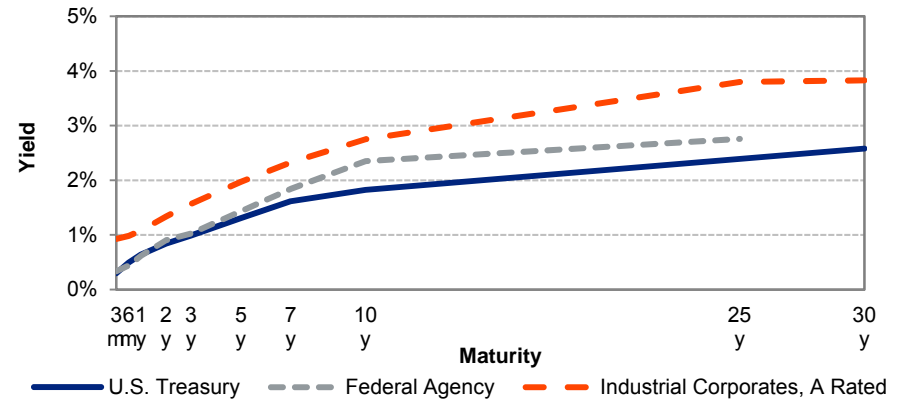
U.S. Treasury Note Yield Curve



U.S. Treasury Note Yields

Maturity	10/31/16	7/31/16	Change over Quarter	10/31/15	Change over Year
3-month	0.45%	0.41%	0.04%	0.23%	0.22%
1-year	0.65%	0.54%	0.12%	0.42%	0.23%
2-year	0.87%	0.68%	0.19%	0.79%	0.09%
5-year	1.36%	1.05%	0.31%	1.57%	(0.21%)
10-year	1.87%	1.49%	0.38%	2.21%	(0.33%)
30-year	2.59%	2.24%	0.36%	2.95%	(0.36%)

Yield Curves as of 10/31/16



Source: Bloomberg

# Bank of America Merrill Lynch Index Returns

	As of 10/31/2016		Periods Ended 10/31/2016		
	Duration	Yield	3 Month	1 Year	3 Years
<b>1-3 Year Indices</b>					
U.S. Treasury	1.89	0.86%	(0.12%)	0.91%	0.79%
Federal Agency	1.76	0.96%	0.05%	0.98%	0.89%
U.S. Corporates, A-AAA Rated	1.89	1.55%	0.02%	1.91%	1.50%
Agency MBS (0 to 3 years)	2.14	1.44%	0.24%	1.69%	1.69%
Municipals	1.82	0.99%	(0.37%)	0.59%	0.80%
<b>1-5 Year Indices</b>					
U.S. Treasury	2.70	1.00%	(0.34%)	1.55%	1.28%
Federal Agency	2.20	1.06%	(0.05%)	1.38%	1.28%
U.S. Corporates, A-AAA Rated	2.74	1.76%	(0.16%)	2.75%	2.18%
Agency MBS (0 to 5 years)	3.31	1.93%	0.20%	2.73%	2.74%
Municipals	2.44	1.11%	(0.52%)	0.93%	1.21%
<b>Master Indices</b>					
U.S. Treasury	6.45	1.43%	(1.90%)	3.50%	3.12%
Federal Agency	3.93	1.38%	(0.58%)	2.65%	2.50%
U.S. Corporates, A-AAA Rated	7.06	2.60%	(1.29%)	6.10%	4.61%
Agency MBS	3.76	2.09%	0.10%	3.23%	3.23%
Municipals	6.79	2.04%	(1.19%)	4.44%	5.23%

Returns for periods greater than one year are annualized

Source: Bloomberg

# Important Disclosures

## **Important Disclosures**

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