

#### Report on Risk Analysis of the Treasurer's Investment Pool

County of San Mateo Working Group February 27, 2009

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#### **Engagement Overview**



The primary purpose of this engagement was to identify any securities in the County of San Mateo's Investment Pool (as of January 5, 2009) which have immediate exposure to significant principal losses, and to recommend corrective action, if needed.

The key issues that were to be addressed as part of this assessment include:

- Compliance with the County's current Investment Policy
- Portfolio's overall risk profile, including credit risk, call risk, and security liquidity
- Individual corporate obligations
- External pool holdings (LAIF and money funds)
- Securities lending procedures

# **Report Outline**



Ι.	Investment Policy Compliance	<ul> <li>Our review evaluated Investment Policy compliance based upon three criteria:</li> <li>The Policy's consistency with the requirements of the California Government Code.</li> <li>The Pool's compliance with the requirements of the Government Code and the County's Investment Policy.</li> <li>The Policy's risk management parameters.</li> </ul>
II.	Risk Profile	<ul> <li>The review of the portfolio's overall risk profile looked at the portfolio's exposure to risks by sector, liquidity, maturity, and structure, including callables.</li> </ul>
111.	Evaluation of Individual Investments	• We evaluated individual issuers, taking into consideration the financial condition of each issuer and current market conditions. We assigned each issuer a risk category based on the results of this review.
IV.	External Investment Pools	<ul> <li>The County's only current external investment Pool is LAIF.</li> <li>Our review compared the Policy and holdings of LAIF to the San Mateo County Pool.</li> </ul>
V.	Review of Securities Lending Procedures	<ul> <li>Our review looked at investment policy and risk management aspects of the County's securities lending agreement dated May 2002. We also suggested revisions based on Government Code's requirements for securities lending.</li> </ul>
VI.	Conclusions and Recommendations	<ul> <li>We did not identify any securities in the portfolio, as of January 5, 2009, that represented an immediate risk to the County.</li> <li>We have identified a number of areas that the County should evaluate as part of managing the Pool's investment risk profile going forward.</li> <li>Our specific recommendations are listed within each section.</li> </ul>

# I. Investment Policy Compliance – Overview

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Торіс	Observations
The Investment Policy's compliance with the Government Code	<ul> <li>Overall, the Investment Policy's provisions are in compliance with the California Government Code.</li> <li>There are, however, several provisions that we suggest revising to improve consistency with the Government Code language, as described on page 4.</li> </ul>
The Portfolio's compliance with the County's Investment Policy and the California Government Code	<ul> <li>The portfolio is in compliance with the requirements of the County's Investment Policy.</li> <li>There were several securities that may not be in compliance with the requirements of the California Government Code. Our observations are discussed on page 8.</li> </ul>
Investment Policy Risk Management Considerations	• The County may want to consider revising the Investment Policy's requirements to further the County's risk management objectives, as described on pages 9 and 10.

## I. Investment Policy Compliance – Government Code Requirements



Code Section Requirements	Comments
Section 27133 lists specific requirements for County investment policies, as follows:	
(a) A list of securities or other instruments in which the county treasury may invest, according to law, including the maximum allowable percentage by type of security.	• None
(b) The maximum term of any security purchased by the County Treasury.	• None
(c) The criteria for selecting security brokers and dealers from, to, or through whom the County Treasury may purchase or sell securities or other instruments.	<ul> <li>The Investment Policy's criteria for broker selection is fairly generalized. The County may want to consider providing more specific criteria.</li> </ul>
(d) Limits on the receipt of honoraria, gifts, and gratuities from advisors, brokers, dealers, bankers, or other persons with whom the County Treasury conducts business by any member of the County Treasury Oversight Committee.	• None
(e) A requirement that the County Treasurer provide the County Treasury Oversight Committee with an investment report as required by the Board of Supervisors.	• None
(f) The manner of calculating and apportioning the costs, authorized by Section 27013, of investing, depositing, banking, auditing, reporting, or otherwise handling or managing funds.	None
(g) The terms and conditions under which local agencies and other entities that are not required to deposit their funds in the County Treasury may deposit funds for investment purposes.	• None
(h) Criteria for considering requests to withdraw funds from the County Treasury, pursuant to Section 27136. The criteria shall include an assessment of the effect of a proposed withdrawal on the stability and predictability of the investments in the County Treasury.	<ul> <li>The Investment Policy provides general terms for withdrawals, but does not define the specific criteria to be used.</li> </ul>
Section 53600.3 Specifies that persons authorized to make investment decisions on behalf of those local agencies investing public funds pursuant to this chapter are trustees and therefore fiduciaries subject to the "Prudent Investor" standard.	• The County's Investment Policy uses the term "Prudent Person" while the Government Code uses the term "Prudent Investor." Although the concepts are similar, we recommend the Investment Policy use the term "Prudent Investor" to be consistent with the Government Code.

## I. Investment Policy Compliance – Investment Restrictions Summary



Туре	Maximum Portfolio Allocation	Per Issuer Restrictions	Credit	Maximum Maturity Restrictions
U.S. Treasuries	100%	100%	Full faith and credit of U.S. Government	15 years
U.S. Government Agencies	100%	100%	A or above <sup>1</sup>	15 years
Bankers' Acceptances Domestic Banks Foreign Banks	15% 15%	10% 10%	Issuer: Short-term: A-1/P-1/F-1 <sup>2</sup> , and Long-term: A or better long-term by two ratings agencies <sup>2</sup> 50 largest banks (assets)	180 days
Collateralized Time Deposits	30%	10%	Bank: Short-term: A-1/P-1 or better Long-term: A or better long-term by two rating agencies <sup>1</sup>	1 year
Negotiable Certificates of Deposit	30%	10%	Short-term:A-1/P-1 or better Long-term: A or better long-term by two rating agencies <sup>1</sup>	5 years
Commercial Paper/ Floating-Rate Notes <sup>3</sup>	40%	10%	A-1/P-1/F-1 by two rating agencies <sup>2</sup>	270 days
Repurchase Agreements	100%	50%	None	1 year
Reverse Repos & Securities Lending⁵	20%	20%	None	92 days
Medium-Term Corporate Notes <sup>3</sup>	30%	10%	A or better <sup>2</sup>	5 years
Asset Backed Corporate	30%	10%	Issuer's debt: A or better by two rating agencies Corporation rated : AA or better <sup>1, 4</sup>	5 years

#### I. Investment Policy Compliance – Investment Restrictions Summary



Туре	Maximum Portfolio Allocation	Per Issuer Restrictions	Credit Ratings	Maturity Restrictions
LAIF	State Limit (\$40 million)	State Limit (\$40 million)	None (LAIF is unrated)	NA
Mutual Funds/Money Market Funds	10%	5%	AAA by two rating agencies Investment Advisor with at least 5 years of experience	NA
California Municipal Obligations	Not Permitted	Not Permitted	Not Permitted	Not Permitted
Non-CA Municipal Obligations	Not Permitted	Not Permitted	Not Permitted	Not Permitted
Secured Investments	Not Permitted	Not Permitted	Not Permitted	Not Permitted
Joint Powers Authorities	Not Permitted	Not Permitted	Not Permitted	Not Permitted
Other (as defined by California Code 53601.7)	Not Permitted	Not Permitted	Not Permitted	Not Permitted

#### Notes:

- The acceptable rating agencies are not specified by the Policy. The most commonly used Nationally Recognized Statistical Rating Organizations (NRSRO) are Standard and Poor's, Moody's, and Fitch. However, there are ten firms currently registered with the SEC as NRSROs (some only rate certain classes of credit): A.M. Best Company, Inc., DBRS Ltd., Egan-Jones Rating Company, Fitch, Inc., Japan Credit Rating Agency, Ltd., LACE Financial Corp., Moody's Investors Service, Inc., Rating and Investment Information, Inc., Realpoint LLC, and Standard & Poor's Ratings Services).
- 2. The County's Policy makes reference to three specific NRSROs: Standard & Poor's, Moody's, and Fitch.
- 3. Floating-rate notes should be included in the Medium-Term Corporate Note section.
- 4. If this section refers to securities purchased under 53601(o), the current requirements are inconsistent with the Code's language. The Code limits purchases to securities rated "AA" or better by a NRSRO issued by issuers rated "A" or higher rating for the issuer's debt as provided by a NRSRO.
- Securities lending is not explicitly listed in the Policy's table of authorized investments. However, reverse repurchase agreements, which are governed by the same Government Code requirements as securities lending, are listed. Securities lending is authorized elsewhere within the Policy. The County may want to list securities lending in the table of Authorized Investments.

#### I. Investment Policy Compliance – Investment Pool Compliance Summary



Security Type	Par Value (millions)	Total Sector/ Max Issuer	Max Issuer	Min Security Rating (S&P)	Max Maturity Held	Within Policy Limits
U.S. Treasury	\$50.0	1.9%	1.9%	U.S.T.	4.9 years	$\checkmark$
U.S. Government Agencies	\$1,056.5	39.8%	20.4%	AAA	2.9 years	✓
Bankers' Acceptances	\$50.0	1.9%	1.9%	A-1	147 days	✓
Negotiable CDs	\$150.0	5.7%	2.8%	A-1	191 days	✓
Commercial Paper <sup>1</sup>	\$190.0	7.2%	3.8%	A-1+	91 days	✓
FDIC-Guaranteed Commercial Paper <sup>1</sup>	\$100.0	3.8%	3.8%	A-1+	91 days	✓
Repurchase Agreement	\$390.0	14.7%	14.7%	AAA	1 day	✓
Corporate Obligations <sup>1</sup>	\$732.0	27.8%	3.9%	Α	4.8 years	✓
FDIC-Guaranteed Corporate Notes <sup>1</sup>	\$175.0	6.6%	1.9%	AAA	2.9 years	✓
LAIF	\$37.0	1.4%	1.4%	Unrated	Overnight	✓

Notes:

1. Under the California Government Code, FDIC-Guaranteed obligations could be considered as Federal Agency securities, as they are fully guaranteed as to principal and interest by a Federal Agency, the FDIC. However, given how Federal Agency securities are defined in the County's Investment Policy, we have included FDIC-Guaranteed Corporate Notes in the Corporate Obligation total and FDIC-Guaranteed Commercial Paper in the Commercial Paper total for compliance purposes. They are shown as a separate category for information only.

## I. Investment Policy Compliance – Investment Pool Compliance

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Торіс	Observations
Sector Allocation	<ul> <li>The sector allocations are all sectors within the County's Policy limits. The largest sector allocation is to Federal Agency securities at 39.8%.</li> </ul>
Credit Analysis	All securities are within the Policy's credit rating requirements.
	<ul> <li>The County's lowest rated corporate note is McDonald's Corporation at A/A3/A (S&amp;P/Moody's/Fitch). No security is rated below A-, or its equivalent, by any rating agency.</li> </ul>
Maturity Distribution	<ul> <li>The maximum maturities of all investments are within the Policy requirements. The longest maturity for all securities is a 4.5 year U.S. Treasury Note. The longest maturity for a corporate security is a 4.8 year, AA-rated corporate note issued by BP Capital Markets.</li> </ul>
	<ul> <li>The weighted average maturity for the overall portfolio, at 325 days, is well below the Policy's maximum average maturity o 5.0 years.</li> </ul>
Issuer	The following securities may not comply with the Government Code's issuer requirements, as follows:
	<ul> <li>California Government Code Section 53601(k) requires securities to be "issued by corporations organized and operating within the United States." See the Appendix – Corporate Securities. The two securities listed below were not issued by companies organized in the U.S.</li> </ul>
	BP CAPITAL MARKETS PLC - A company organized and operating in the UK.
	DEUTSCHE BANK AG LONDON - The London branch of a German bank.
	<ul> <li>Pfizer Inc CP, which matured on February 18, 2009, may not have been eligible for purchase by the County because it is a Private Placement issued under regulation sections 4(2) and/or 144A, which may only be sold to "Accredited Investors" and/or a "Qualified Institutional Buyer(QIB)." It is unclear whether the County meets the regulatory definition o "Qualified Institutional Buyer." See the Appendix – Pfizer Commercial Paper and QIBs</li> </ul>

# I. Investment Policy Compliance – Risk Management Considerations

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Торіс	Observations
Maximum Maturity and Average Maturity	<ul> <li>The Policy currently allows a maximum maturity of 15 years for any individual security (certain investment types only) and a maximum weighted average maturity of 5 years for the entire pool.</li> </ul>
	• The Policy's maturity restrictions are much longer than we typically see with comparable public agencies. While the Policy provides for longer individual and average maturity limits, we understand that the County's general practice and the Fitch rating requirements provide for shorter maturity limits. For example, the longest maturity in the County's portfolio was 4.9 years, with a weighted average maturity for the entire pool of approximately 0.89 years, as of January 5, 2009. Given the greater market risk with longer-term investments, we recommend the County revise the Policy to match its current investment practices and establish a maximum maturity for any individual security of 5 years. The maximum average maturity limit for the Pool should be dictated by the County's investment objectives. However, the County may still want to permit the use of longer-maturity securities for special purpose investments, which are suited to longer-term investments.
Per Issuer Requirements	<ul> <li>The Policy has a maximum per issuer limit of 10%, which equates to approximately \$265.5 million per issuer. Furthermore, the Policy's issuer limits do not appear to aggregate across sector types. For example, while the Policy lists a maximum issuer holding limit of 10% for most sectors, it would be permissible to have as much as 40% in one corporate name when aggregated across sectors (CDs, BAs, commercial paper and corporate notes).</li> </ul>
	<ul> <li>Given the portfolio's size, we recommend the County consider a maximum per corporate issuer limit of 5% to be aggregated by issuer name/issuer family across all sectors, excluding Repurchase Agreements. Within the maximum limits, we would encourage the County to limit the amount invested with any one corporate issuer to enhance portfolio diversification.</li> </ul>
Investment Types	<ul> <li>The County currently permits the purchase of Federal Agency debt rated A or above, which would allow the purchase of subordinated debt. We recommend the County limit purchases to "AAA" rated senior debt obligations.</li> </ul>
	• The County's Investment Policy currently permits the use of both mutual funds and money market funds. While money market funds strive to maintain a stable net asset value, mutual funds have variable net asset values. As a result, an investor in a mutual fund should expect that the price per share of a mutual fund will vary each day and, therefore, the investor is highly likely to experience either a gain or a loss each time funds are withdrawn. Due to this risk, along with the wide availability of alternative investments, we do not believe mutual funds are an appropriate investment for most public sector investors.
	• The County's Investment Policy currently permits the use of private-issue Mortgage-Backed Securities (private corporations other than U.S. Government Agencies). Due to the potential complexity of the issues, the varying nature of the underlying pools, the lack of governmental support, and the severe distress of this sector in the current market, we do not recommend the County permit the use of private-issue Mortgage-Backed Securities.

# I. Investment Policy Compliance – Risk Management Considerations

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Торіс	Observations
Investment Types (continued)	• While we understand the County's current investment practice is to limit collateral for Repurchase Agreements to U.S. Treasuries, the Policy currently permits the use of any investment type permitted by the Policy to be used as collateral. To bring the Policy more in line with current practice and to ensure the additional protection that would be provided to the County in the event of a Counterparty bankruptcy, we recommend the Policy restrict collateral to U.S. Treasuries and Federal Agency securities only. The bankruptcy code provides specific remediation for the collateral types listed in the code.
	<ul> <li>In addition to the Policy's issuer requirements, we recommend that the County develop a list of approved corporate issuers. The County's credit process should require regular credit assessment and formal annual review of issuers on the Approved List. The list will help define the criteria that the County uses to select corporate issues and enhance transparency among Pool participants.</li> </ul>
	• The Policy should include additional guidelines and limits for the County's securities lending program that correspond with state law, include credit standards to minimize risk of borrower default, describe acceptable collateral, limit reinvestment to securities otherwise permitted under the Policy, standards to mitigate the risks associated with such reinvestment, and appropriate reporting.
Policy Structure	<ul> <li>We recommend the County restructure the Policy to consolidate the investment requirements for each investment type into one section. Currently, requirements for individual investment types may be found in several different sections. Although County staff may be very familiar with the Policy's requirements, the current structure could lead to confusion among other parties, such as brokers or voluntary participants.</li> </ul>

#### **II. Risk Profile**



We evaluated the following factors to determine the Portfolio's overall risk profile:

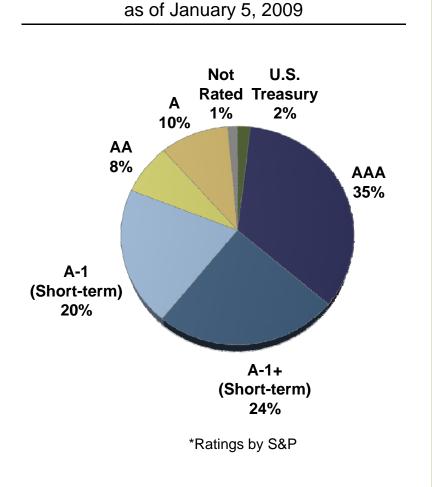
- A. Credit Quality
- B. Market Risk
- C. Call Risk
- D. Liquidity Risk
- E. Sector Diversification Risk Factors by Sector
  - U.S. Treasuries
  - Federal Agencies
  - FDIC-Guaranteed Corporate Notes
  - FDIC-Guaranteed Commercial Paper
  - Negotiable Certificates of Deposit
  - Repurchase Agreements
  - Commercial Paper
  - Bankers' Acceptances
  - Corporate Notes
- F. Issuer Exposure
- G. Maturity Breakdown
  - Overall
  - Sector
  - Credit Quality

#### II.A. Risk Profile – Overall Credit Quality



#### **County Investment Pool Credit Analysis**

- 60% of the County's portfolio is invested in U.S. Treasuries or securities rated in Standard & Poor's top ratings category (AAA/A-1+).
- The average credit quality of the portfolio is approximately AA. The average credit quality is determined by assigning every credit rating a numerical value from 1 up. For example, U.S. Treasuries and securities rated AAA/A-1+ are assigned the best value, 1; AA+ securities are 2; AA are 3; etc. Securities that are not rated, such as LAIF, are assigned an 8.
- This overall credit profile is consistent with a short-term, high-quality portfolio. In normal market circumstances, having an allocation of 18% to AA and A rated securities would not pose significant concern. However, in the current market, with conditions far worse than any recent period, this allocation will need to be closely managed.
- The County should consider the trade-offs between continuing to hold securities that could be downgraded, but probably will not default, and selling these securities now at losses due to their depressed market values.



**Credit Quality Distribution\*** 

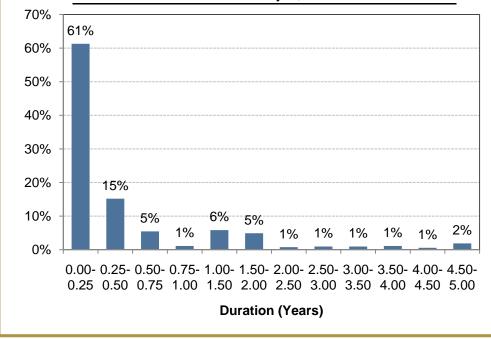
#### **II.B.** Risk Profile – Market Risk – Maturity/Duration

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Duration	• The average effective duration of the County's Pool was 0.54 years as of January 5, 2009.			
	<ul> <li>Effective duration is the change in the price of a security or portfolio for a 1% change in yield, while also taking into account the impact of options such as calls and Mortgage-Backed Security pay downs.</li> </ul>			
Conclusion	• The current duration of the County's investments appears reasonable for the purpose and objectives of the County's Pool.			
	• The short duration will provide a buffer against the effect of interest rate changes on market value. The horizon analysis below illustrates how different changes in interest rates will impact the market value of the portfolio. A 1.00% increase in interest rates will cause a market value loss of approximately only ½ of 1% of market value or \$14 million.			

#### **Duration Distribution**

as of January 5, 2009



#### Horizon Analysis as of January 5, 2009

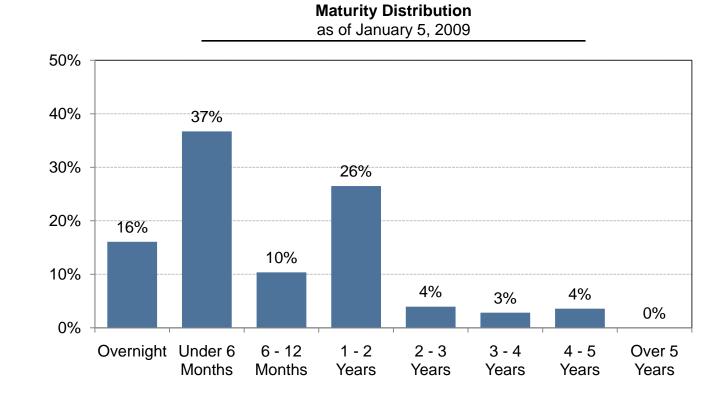
Change in Interest Rates	% Change in Market Value	\$ Change in Market Value
Rise 1.00%	-0.54%	-\$14,192,893
Rise 0.75%	-0.40%	-\$10,644,670
Rise 0.50%	-0.27%	-\$7,096,447
Rise 0.25%	-0.13%	-\$3,548,223
No Change	0.00%	\$0
Fall 0.25%	0.13%	\$3,548,223
Fall 0.50%	0.27%	\$7,096,447
Fall 0.75%	0.40%	\$10,644,670
Fall 1.00%	0.54%	\$14,192,893

An approximate horizon analysis for a portfolio of \$2.6 billion with an effective duration of 0.54 years.

#### II.B. Risk Profile – Market Risk – Maturity

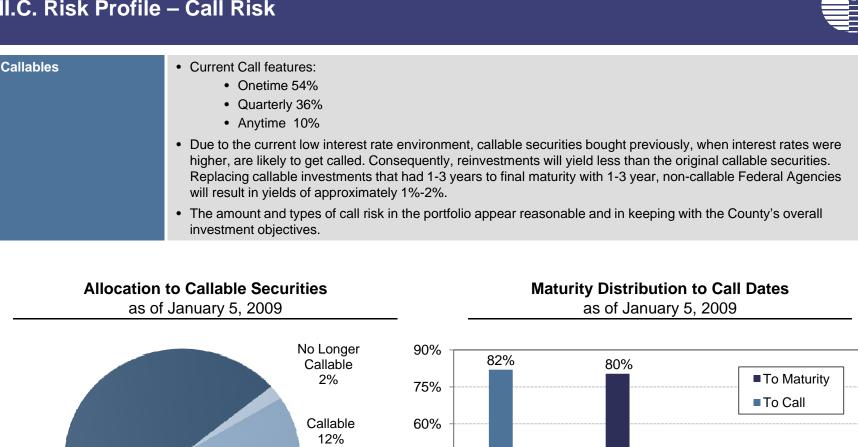
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Weighted Average Maturity ("WAM")	• The overall weighted average maturity ("WAM") of the portfolio is 325 days (considering all securities to their final maturity date). The WAM shortens significantly, to 204 days, when call dates and interest rate reset dates are taken into consideration.
Conclusion	<ul> <li>The Pool's WAM is in compliance with the County's Investment Policy which stipulates a WAM of no more than five years. The Pool's current WAM is reasonable given the County's primary investment objectives of safety and preservation of principal.</li> </ul>



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#### II.C. Risk Profile – Call Risk



45%

30%

15%

0%

0%

Under 6

Months

18%

3%

6-12

Months

17%

0%

1-2 Years 2-3 Years 3-4 Years 4-5 Years

0% 0%

0%

Not

Callable

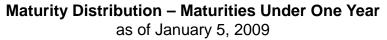
86%

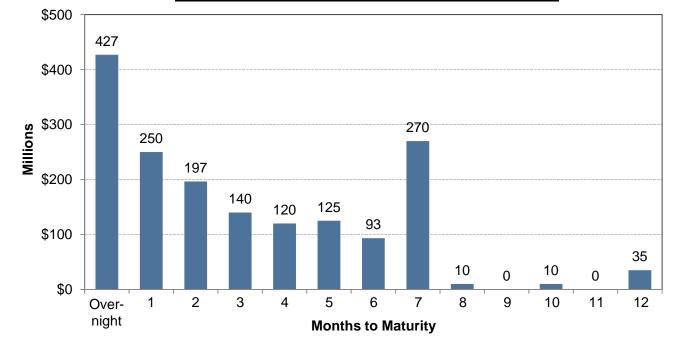
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### II.D. Risk Profile – Liquidity

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Overall Liquidity	<ul> <li>The Pool's liquidity can be defined by several factors:         <ul> <li>The amount of funds immediately available (pools/accounts that allow daily withdrawal)</li> <li>The amount in very short-term maturities (1-30 days)</li> <li>The ability to sell certain securities with minimal impact on value (U.S. Treasuries and Federal Agencies)</li> </ul> </li> </ul>
Conclusion	<ul> <li>The portfolio appears to maintain adequate liquidity. 16% of securities are allocated towards "overnight" liquid vehicles, such as repurchase agreements and LAIF. Another 9% of the portfolio matures within 1 month.</li> <li>The percentage of voluntary participants and the criteria for withdrawals could have a significant impact on the Pool's liquidity.</li> </ul>





## II.D. Risk Profile – Liquidity



Ability to sell securities with minimal price impact	<ul> <li>U.S. Treasuries, Federal Agencies, repurchase agreements, commercial paper, and other short-term investments are considered to be very liquid since they may generally be sold easily at an equitable price.</li> <li>Longer-term corporate notes and floating-rate corporate notes are less liquid, especially in the current market environment. Due to the turmoil in the financial markets many corporate securities are trading at a discount to historical prices, generating unrealized losses on those securities.</li> <li>Liquidity risk can also be demonstrated by the difference between the price offered to buy a security and the price offered for the sale of the same security. When this difference (bid/ask spread) is wide, the security is considered to be less liquid.</li> </ul>
Conclusion	<ul> <li>Several of the corporate holdings in the County's portfolio have unrealized losses.</li> <li>The 10 largest current unrealized losses on corporate securities totals \$14.3 million, less than ¾% of the County's portfolio. This risk needs to be carefully monitored for changes on market or credit conditions and managed, especially given highly volatile market conditions.</li> </ul>

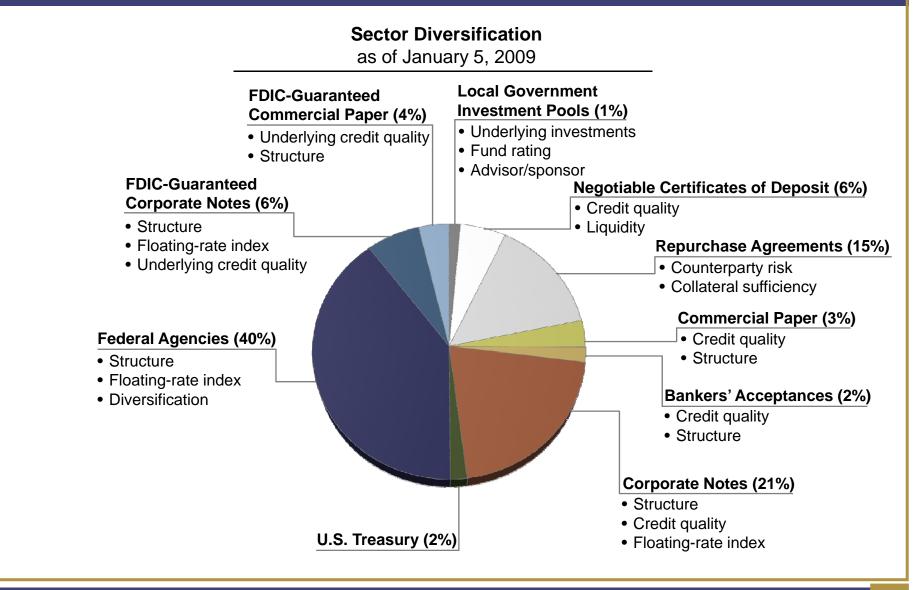
#### **Unrealized Losses on Select Corporate Securities**

as of January 5, 2009

Security	Maturity	Par	Total Cost	Market Value	Unrealized Loss	Loss as a % of Total Cost
Morgan Stanley	1/18/11	\$10,000,000	\$10,000,000	\$8,518,000	-\$1,482,000	-14.8%
Morgan Stanley	11/2/12	\$25,000,000	\$24,944,750	\$22,650,000	-\$2,294,750	-9.2%
Wells Fargo	1/24/12	\$25,000,000	\$25,000,000	\$22,760,000	-\$2,240,000	-9.0%
SunTrust Bank	5/21/12	\$25,000,000	\$25,000,000	\$22,807,500	-\$2,192,500	-8.8%
Morgan Stanley	1/15/10	\$25,000,000	\$25,000,000	\$22,980,000	-\$2,020,000	-8.1%
ING	10/9/09	\$10,000,000	\$10,000,000	\$9,240,000	-\$760,000	-7.6%
Morgan Stanley	5/7/10	\$20,000,000	\$20,000,000	\$18,724,000	-\$1,276,000	-6.4%
Merrill Lynch	8/4/10	\$15,000,000	\$15,189,630	\$14,578,500	-\$611,130	-4.0%
Oracle Corp	5/14/10	\$25,000,000	\$25,000,000	\$24,187,500	-\$812,500	-3.3%
Deutsche Bank	5/20/13	\$20,000,000	\$19,972,800	\$19,524,000	-\$448,800	-2.2%

**II.E. Risk Profile – Sector Diversification** 





## II.E. Risk Profile – Sector Diversification – Risk Factors by Sector/Security Type

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Risk Factor	Definition and comments				
Overall Diversification	• The risk that a large allocation to a particular sector will not be spread among various issuers in that sector.				
	• The portfolio is generally well diversified by sector/security type. The highest allocations are to Federal Agencies (40%), corporate notes (21%), and repurchase agreements (15%). These allocations are generally well diversified and have high credit quality.				
	<ul> <li>The County should carefully monitor issuer concentrations among corporate related securities to ensure appropriate diversification. The Pool's largest allocation to any one issuer, across all sectors, is General Electric at 7.3%.</li> </ul>				
Structure	• The risk posed by the underlying structure of the investment (i.e. floating-rate, callable, asset-backed, mortgage-backed, extendable).				
Floating-Rate Index	• The risk posed by a large allocation to securities with the same floating-rate index, and, therefore, a large exposure to that particular index.				
Credit Quality	<ul> <li>The risk posed by the possibility of credit events such as bankruptcies and credit rating downgrades, which may lead to significant price declines.</li> </ul>				
	• The credit profile of the portfolio is generally high. It seems unlikely that current issues or issuers would default. A greater concern would be the potential impact of further credit deterioration in the marketplace, and with the portfolio's specific securities, that would lead to further rating downgrades.				
	<ul> <li>Additional detail on credit quality will be reviewed in the specific sections regarding each security type, with emphasis on the corporate securities.</li> </ul>				
Underlying Credit Quality	• The risk that the credit quality of the securities or issuers backing a particular investment will have their credit ratings downgraded.				
	<ul> <li>In this project, underlying credit quality applies to corporate investments (commercial paper and corporate notes) backed by the FDIC through the TLGP and the LAIF portfolio. Given the government backing of the TLGP issues, we have little concern about these.</li> </ul>				
Counterparty	• The risk that the other party engaged with the investor in an investment agreement (i.e. repurchase agreement) is not able to deliver the securities or interest to the investor according to the terms of the agreement.				
	Counterparty risk was reviewed specifically for repurchase agreements, see page 28.				
Collateral Sufficiency	• The risk that the securities posted as collateral against an investment contract will not have sufficient value to cover the contract payments should one of the parties be unable to deliver funds.				

## II.E. Risk Profile – Risk Factors by Sector – U.S. Treasuries

Торіс	Observations		
Risk	• As expected, securities issued by the U.S. Treasury pose minimal risk of default given their full faith and credit backing by the U.S. Government. However, given the dramatic decline in Treasury yields as investors worldwide have sought the safe-haven provided by Treasuries, they have significant potential for market value losses as interest rates rise.		
	• It is widely believed that yields on U.S. Treasuries will have to rise in the short- to intermediate-term to entice buyers needed to finance bailout and stimulus programs. If, for example, the rate on a 2-year Treasury were to rise just 50 basis points, the related market value decline would completely offset the income paid by the note.		
Value	• U.S. Treasury yields are at or near historic lows. The U.S. Treasury may have to issue \$1.5 trillion or more of new debt in the current Federal fiscal year. Some investors worry that U.S. Treasuries are the next "bubble" asset class that may burst upon the dramatic increase in supply anticipated in 2009.		
	• The chart below shows the yields on Treasuries maturing from three months to ten years as of December 31, the historical ranges of yields for those maturities, and their 10-year averages.		
	- The vertical lines represent the range of yields for each maturity over the past ten years ended December 31, 2008.		
	<ul> <li>The diamonds are the 10-year average yield for each maturity.</li> </ul>		
	• The position of the yield curve (dotted line) relative to the 10-year average yield (diamond) and range (vertical line), which is generally at the very bottom, shows how little value remains in U.S. Treasury yields.		
Conclusions	• The County maintains a very low allocation to Treasuries, the security type with the least amount of credit risk. Generally, we recommend diversified portfolios that include Treasury securities. Although low risk from a credit perspective, at current rates, there is more interest rate risk than usual in Treasury securities.		
Source: Bloomberg	U.S. Treasury Yields Ten Years Ended December 31, 2008		

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## II.E. Risk Profile – Risk Factors by Sector – Federal Agencies

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Торіс	Observations		
Structure	<ul> <li>Bullet <ul> <li>Maturity – 1 day</li> <li>Not callable</li> <li>Coupon bearing</li> <li>Typically rated A</li> </ul> </li> <li>Callable <ul> <li>Maturity – 1 day</li> <li>Specific call rest</li> <li>Coupon bearing</li> <li>Typically rated A</li> </ul> </li> <li>Discount <ul> <li>Maturity – 1 day</li> <li>Not callable</li> <li>Not callable</li> <li>Non-coupon bearing</li> <li>Typically rated A</li> </ul> </li> </ul>	AA to 30 years riction which grants option to the issuer to redeem AA	
	Agency Issuers January 5, 2009	Federal Agency Structures as of January 5, 2009	Federal Agency Credit Quality* as of January 5, 2009
FILMC 5% Floating-Rate 5% Floating-Rate 5% Bullet 2% Callable 28% A-1+ 38% A-1+ 38% AAA 62%			

## II.E. Risk Profile – Risk Factors by Sector – Federal Agencies (continued)



Торіс	Observations
Structure (continued)	<ul> <li>Floating-Rate         <ul> <li>Maturity – 1 day to 30 years</li> <li>Coupon bearing; coupon rate resets at a regular frequency relative to an index</li> <li>Typically rated AAA</li> </ul> </li> </ul>
Floating-rate	<ul> <li>The County holds two floating-rate Federal Agency securities.</li> <li>– FHLB notes resetting daily against the Fed Funds effective rate.</li> <li>– FNMA notes resetting quarterly against the 3-month London Interbank Offered Rate (LIBOR).</li> </ul>
Diversification	• The County's Federal Agency holdings make up 40% of the overall portfolio and are well diversified among different issuers. With half of the portfolio's agency exposure with FHLMC (thereby, 20% of the overall portfolio) the County should consider establishing a maximum allocation per agency to ensure diversification.
Recent Federal Action	<ul> <li>With the passage and signing of the recent Housing Recovery Bill, Fannie Mae and Freddie Mac have additional government support in place to bolster their activities. Specifically the bill and other measures include: <ul> <li>The Federal Reserve may lend directly to Fannie Mae and Freddie Mac at the primary credit rate that it makes available to investment banks. This lending facility would be in place for 18 months, but could be extended if needed.</li> <li>The GSEs' line of credit to the Treasury, which now totals \$2.25 billion, has been increased as much as \$300 billion. This line would be used to provide liquidity to the agencies if needed.</li> <li>The Treasury is now permitted to make direct equity investments in the two GSEs in unlimited amounts if necessary.</li> <li>The Federal Reserve will assume a "consultative role" in regulating the agencies.</li> <li>The Treasury will also offer a temporary large line of credit to the Federal Home Loan Banks.</li> </ul> </li> <li>The Fed has started to purchase agency securities in the open market. This provides additional support to the agency sector. As a result, agency spreads have dropped dramatically. Fannie Mae, Freddie Mac, and FHLB will likely be used as policy tools to help stabilize the mortgage and housing markets.</li> </ul>
Quality of Mortgage Portfolios	<ul> <li>Agency mortgage portfolios remain well diversified and, historically, have experienced significantly lower credit losses than bank portfolios.</li> <li>It is likely that both Fannie Mae and Freddie Mac will experience further losses, but those losses are likely to be much lower than other financial institutions.</li> </ul>

## II.E. Risk Profile – Risk Factors by Sector – Federal Agencies (continued)

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Торіс	Observations
Access to Capital Markets	<ul> <li>The agencies benefit from preferential access to the capital markets and are generally able to borrow at substantial discounts when compared to other financial institutions. As a result, the agencies pay a much lower cost to fund their operations. Recently, spreads on agency debt have risen well above historic levels.</li> <li>In addition, the pool of potential investors for agency debt is very large and diverse. Both FNMA and FHLMC have had no</li> </ul>
	difficulty in accessing capital markets.
Conclusions	<ul> <li>PFM believes these agencies are suitable investments for all public investors. Although the Federal Agencies are challenged by current market conditions, they benefit from preferential borrowing ability and strong governmental support measures. However, they are not risk free, as spread changes can result in market value volatility.</li> </ul>

## II.E. Risk Profile – Risk Factors by Sector – FDIC-Guaranteed Corporate Notes

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Торіс	Observations		
Background	<ul> <li>Through the Temporary Liquidity Guarantee Program, the Federal Deposit Insurance Corporation (FDIC) is guaranteeing newly-issued senior unsecured bank debt, for those participants who elected to join the program, issued through June 30, 2009.</li> </ul>		
	- The current expiration date of the FDIC's guarantee is the earlier of the maturity date of the debt or June 30, 2012.		
	<ul> <li>Principal and interest is guaranteed by the FDIC and is backed by the full faith and credit of the United States.</li> </ul>		
	<ul> <li>Moody's, Fitch, and S&amp;P assign a rating of "AAA" to corporate notes issued under the FDIC's TLGP.</li> </ul>		
	• FDIC-guaranteed debt has developed an active secondary market since over \$150 billion has been issued to date.		
	Further details are available at www.fdic.gov/TLGP.		
Floating Rate	The General Electric notes reset quarterly against 3-Month LIBOR.		
Diversification	The County's FDIC-Guaranteed Corporate Note holdings are diversified across four issuers.		
	<ul> <li>General Electric Capital Corp (FDIC) constitutes 5.6% of the overall portfolio's FDIC-Guaranteed debt, a higher portion than other FDIC issuers since the County holds both FDIC-Guaranteed GECC Commercial Paper as well as FDIC-Guaranteed corporate notes from GECC.</li> <li>JP Morgan Chase (FDIC) and Bank of America (FDIC) each constitute 1.9% of the overall portfolio.</li> <li>Wells Fargo (FDIC) makes up an additional 0.9% of the County's portfolio.</li> <li>The County has additional exposure to all four FDIC guaranteed issuers through other types of investments vehicles.</li> </ul>		
Conclusions	• Debt issued under the TLGP has been widely accepted by the market, and there are no current problems with these holdings.		
	Monitor percent allocation per issuer.		
	FDIC-Guaranteed Corporate Notes Structures       FDIC-Guaranteed Corporate Notes Credit Quality*         of January 5, 2009       as of January 5, 2009       as of January 5, 2009		
JP Morgan Chase (FDIC) 29% Wells Fargo (FDIC) 14%	General Electric Capital Corp (FDIC) 29% Bank of America (FDIC) 29%		

#### \*Ratings by S&P

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# II.E. Risk Profile – Risk Factors by Sector – FDIC-Guaranteed Commercial Paper

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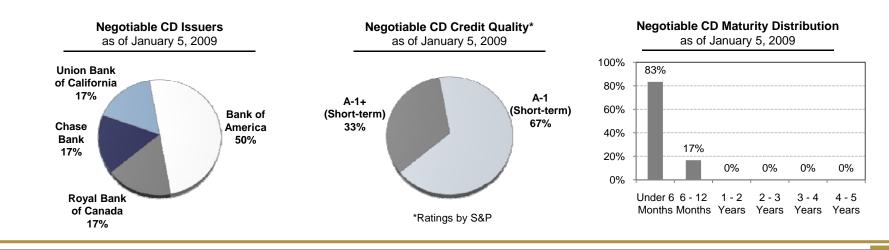
Торіс	Observations		
Background	• This commercial paper is issued under the same Temporary Liquidity Guaranteed Program as described in the FDIC- Guaranteed Corporate Note section above. The rating agencies use the issuer's underlying rating for commercial paper issued under the TLGP, rather than automatically assigning the highest rating due to the government backing. The rating agencies rationale is that the government may need a few days to pay investors in the event of a default. This is in large part a very technical issue and reflects issues of timing of payment rather than safety or guarantee that payment will be made.		
Diversification (as a percent of combined holdings)	<ul> <li>The Pool's overall allocation to GE Capital Corp, across all investment types, is 7.3%. Given that the GECC commercial paper holding is FDIC-guaranteed, the 4.0% in this specific instrument represents minimal risk.</li> </ul>		
Conclusions	<ul> <li>Debt issued under the TLGP has been widely accepted by the market, and there are no current problems with these holdings.</li> </ul>		
	• Monitor percent allocation per issuer. Set a per agency limit high enough to allow adequate flexibility for investing.		
	<ul> <li>Additional FDIC-guaranteed commercial paper issuers would present minimal risk to the portfolio and should be considered for investment for overall diversification and safety purposes.</li> </ul>		
Comm	DIC-GuaranteedFDIC-Guaranteednercial Paper IssuersCommercial Paper Credit Quality*of January 5, 2009as of January 5, 2009		
General Electric Capital Corp (FDIC) 100%	A-1+ (Short-term) 100%		
Ratings by S&P 2009 PFM Asset Management L			

#### **II.E.** Risk Profile – Risk Factors by Sector – Negotiable Certificates of Deposit



Issuing Bank	Short-Term Credit Rating	Long-Term Credit Rating	Liquidity
Bank of America	A-1/P-1/F1+	A+/Aa2/A+	<ul><li>Frequent issuer in the market</li><li>Issuer is only buyer in secondary market</li></ul>
Royal Bank of Canada	A-1+/P-1/F1+	AA-/Aaa/AA	<ul><li>Frequent issuer in the market</li><li>Active secondary market</li></ul>
Chase Bank	A-1/P-1/F1+	NR/NR/NR	<ul><li>Frequent issuer in the market</li><li>Issuer is only buyer in secondary market</li></ul>
Union Bank of California	A-1/P-1/F1	A+/Aa3/AA-	<ul><li>Frequent issuer in the market</li><li>Active secondary market</li></ul>
Conclusions	<ul> <li>The credit profile of CDs meets the criteria established.</li> <li>The County should maintain a list of approved issuers to ensure that all future purchases are consistent with the County's credit criteria.</li> </ul>		

• All banks and financials are challenged by current market conditions. Emerging conditions cold cause bank issuers to suffer additional downgrades.



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## II.E. Risk Profile – Risk Factors by Sector – Negotiable Certificates of Deposit

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	Observations and Conclusions
Overall Banking Industry	<ul> <li>National and regional banks have received \$240 billion of capital infusions from the Federal Government through the Troubled Asset Relief Program (TARP).</li> </ul>
	• Since January 2008, there were 39 bank failures, with the most recent occurring on February 20, 2009.
	<ul> <li>On November 25, 2008, the FDIC announced that their "problem list" of banks had increased to 171, "the largest number since 1995." The assets of banks on the FDIC's "problem list" grew from \$78.3 billion to \$115.6 billion in the third quarter of 2008.</li> </ul>
	<ul> <li>FDIC has also indicated that it may need to take a loan from the Treasury to meet liquidity needs related to additional bank failures.</li> </ul>
Large Corporate Banks	• Given the size and quality of these banks, the County should have a relatively high degree of comfort in these CD holdings.
Bank of America	<ul> <li>Going forward, the County should be confident in purchasing CDs from the largest banks, provided there is sufficient available public information, based on the following:</li> </ul>
<ul><li> Royal Bank of Canada</li><li> Chase Bank</li></ul>	<ul> <li>Consistent ratings agency information – the County should invest in CDs from banks with high ratings from two major ratings agencies.</li> </ul>
Union Bank of California	<ul> <li>Big banks can more easily withstand economic uncertainties; the Fed will most likely offer help to these banks over smaller banks in rough economic periods.</li> </ul>
	<ul> <li>Future purchases of CDs should be diversified into other large corporate banks.</li> </ul>
Other Types of Banks	<ul> <li>Smaller and community banks are still under enormous pressure as a group. We view this sector as the one that may have the most risk for investors not covered by FDIC insurance.</li> </ul>
	<ul> <li>In the current market environment, it is less likely that the Fed will be able to help smaller community banks from failing if they realize large losses. There is a market expectation that community banks could be the hardest hit of banking institutions.</li> </ul>
	<ul> <li>Inconsistent ratings agencies information – most smaller public banks are not well followed by analysts, therefore, information regarding these companies is often sparse, and bad news is often highly unexpected.</li> </ul>
	Investing in smaller public community banks increases the uncertainty of unforeseen risks in the County's portfolio.
	<ul> <li>Additional scrutiny of banks in this category could include: ensuring there is access to daily, detailed information and news; and that at least two rating agencies rate the banks.</li> </ul>
	<ul> <li>An additional strategy that the County may wish to employ is limiting the maturity of CDs from these banks and timing maturities to earning reports.</li> </ul>

## II.E. Risk Profile – Risk Factors by Sector – Repurchase Agreements



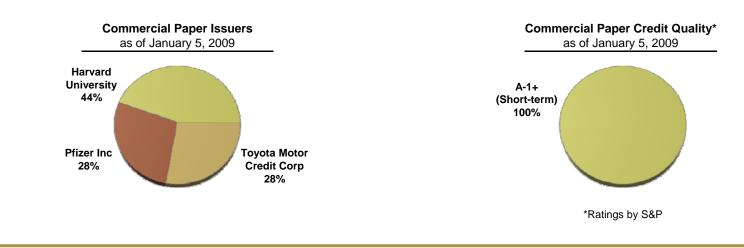
	Counterparty Risk	Collateral Sufficiency
Description	<ul> <li>The risk to each party of a contract that the counterparty will not live up to its contractual obligations.</li> <li>In general, counterparty risk can be reduced by having an organization with extremely good credit act as an intermediary (custodian) between the two parties.</li> </ul>	<ul> <li>Collateral sufficiency refers to the collateral underlying repo agreements. Repo documents usually dictate the percentage of collateral that must be committed by the counterparty to a repo agreement.</li> <li>The repo documentation and collateral are very important — a important as the credit of the counterparty</li> </ul>
Observation	<ul> <li>The allocations of the County Investment Pool to repo are fully exposed to Bank of America.</li> <li>Bank of America is among the U.S.'s largest banks and has received considerable support from the federal government in the current market environment. It is likely that this support will be continued even if Bank of America experiences difficulty sustaining its business.</li> </ul>	The County's Policy permits any type of investment permitted by the Policy to be used as collateral.
Conclusion	<ul> <li>The County executes repo agreements with a well supported counterparty. Bank of America currently represents an appropriate counterparty.</li> <li>The County may benefit from maintaining a relationship with more than one counterparty.</li> </ul>	<ul> <li>Limit collateral to Treasury and Agency securities only</li> <li>The County should monitor the market value of collateral on a daily basis to ensure the committed amount and type is sufficient.</li> </ul>
	Repurchase Agreement Issuer as of January 5, 2009 Bank of America 100%	Repurchase Agreement Credit Quality* as of January 5, 2009 A-1+ (Short-term) 100%
ngs by S&P		

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### II.E. Risk Profile – Risk Factors by Sector – Commercial Paper

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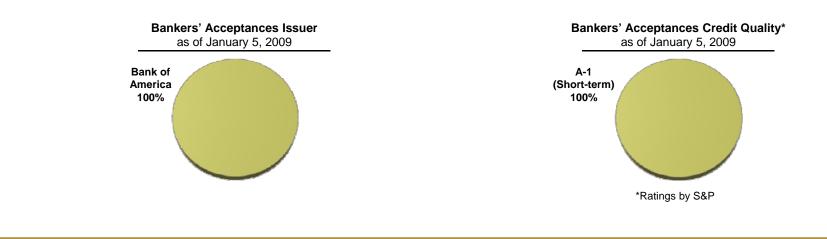
Risk Factor	Observations
Credit quality	<ul> <li>All commercial paper in the County's portfolio is rated A-1+/P-1. The highest level and step for short-term debt according to Standard &amp; Poor's and Moody's. Pfizer is also rated F1+ by Fitch; Harvard and Toyota Motor Corp are not rated by Fitch.</li> </ul>
Structure	<ul> <li>All commercial paper held in the County's portfolio is unsecured, general obligations of the issuer. They are not asset-backed commercial paper programs.</li> </ul>
Diversification	• The overall portfolio's allocation to commercial paper is only 3%. Issuer concentrations are reasonable and the County's commercial paper holdings are well diversified among issuers. Each issuer makes up less than 2% of the overall portfolio.
Conclusion	<ul> <li>Although the County's current commercial paper holdings are highly rated, the County should maintain a list of approved issuers to ensure that all purchases are consistent with the County's credit criteria.</li> </ul>



### **II.E.** Risk Factors by Sector – Bankers' Acceptances

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Risk Factor	Observations
Credit quality	<ul> <li>The County maintains exposure to Bankers' Acceptances from just one issuer, Bank of America. The credit rating of Bank America's short term obligations remains very high at A-1 (from Standard &amp; Poor's). Diligent monitoring of the credit ratings and developments of Bank for America is important given the ongoing credit issues related to Bank of America specifically and the banking sector in general. As with the Pool's other Bank of America holdings, ongoing support measures from the Federal Government lend significant support to this Bankers' Acceptance credit.</li> </ul>
Diversification	<ul> <li>At 2% of overall assets, Bankers' Acceptances constitute a very small portion of the County pool. Therefore, it is not a concern that the only Bankers' Acceptance issuer is Bank of America. Further, half of the Bank of America Bankers' Acceptances exposure matured on January 9, 2009. The remaining issue matures in June 2009.</li> </ul>
	<ul> <li>The County pool's overall exposure to Bank of America, excluding the repurchase agreement, is approximately 4.7%; whether Bank of America exposure is lessened in the Bankers' Acceptance sector or elsewhere, this high non-government issuer concentration should be reduced to diversify the single issuer risk presented by Bank of America.</li> </ul>
Conclusion	<ul> <li>The County should continue to consider Bankers' Acceptances along with other short-term high quality money market instruments for the County pool. Greater diversification of issuer names would be to the pool's benefit.</li> </ul>

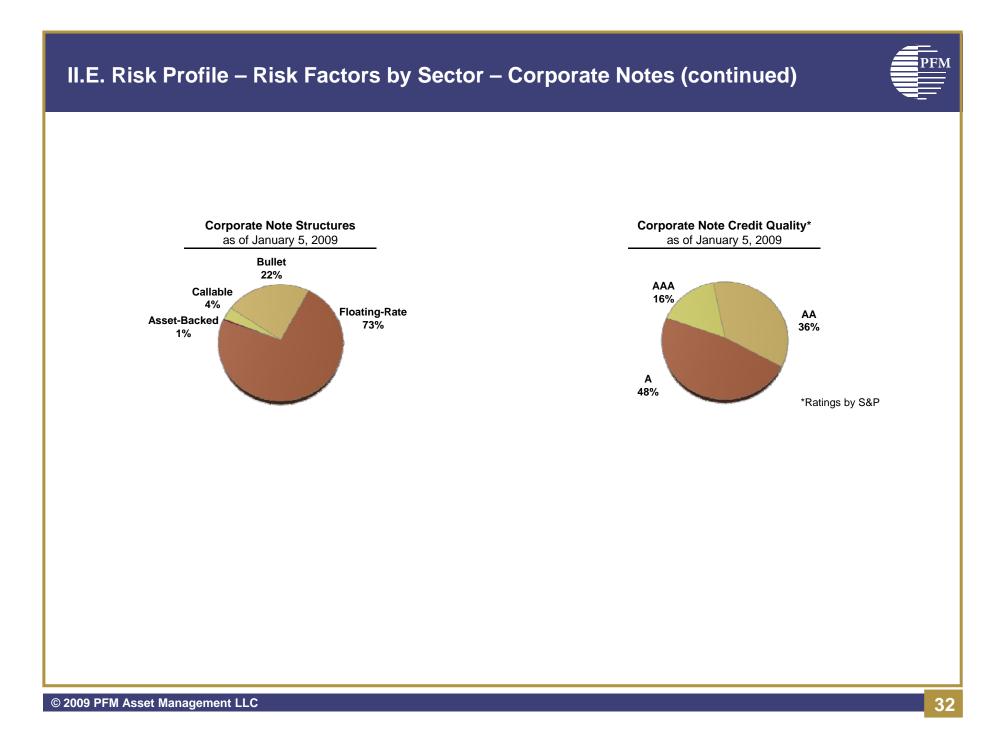


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## II.E. Risk Profile – Risk Factors by Sector – Corporate Notes

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Risk Factor	Observations
Credit quality	<ul> <li>The average credit quality of the corporate holdings is "AA"</li> <li>The portfolio's largest allocation to corporate securities is to securities rated "A ."</li> </ul>
	<ul> <li>The majority of the corporate securities will mature within two years. However, the Pool does have exposure to corporate securities with maturities out to five years.</li> </ul>
	<ul> <li>The Bank of Ireland Floater (recently sold) was rated "AAA," however it exposed the County to some foreign credit risk. Although the Bank of Ireland became licensed in the U.S. in 2006 and has one branch in Connecticut and one representative, non-depository office in California, it should be noted that it is not a member of the FDIC and the credit exposure is to a foreign issuer for which there is sovereign risk – the risk that international economic conditions, political developments or changes in a foreign government's policies make it unable or unwilling to fulfill international obligations to U.S. debt holders.</li> </ul>
Structure	<ul> <li>The corporate securities in the Pool utilize a variety of structures.</li> <li>The portfolio has only a small allocation to asset-backed structures.</li> </ul>
Floating-rate	<ul> <li>All floating-rate corporate holdings, except one, reset quarterly against 3-Month LIBOR.</li> <li>The other floating-rate corporate resets monthly against 1-Month LIBOR.</li> </ul>
Liquidity	<ul> <li>Although the Portfolio's overall liquidity is good, the Pool's allocation to lower-rated corporate securities and longer-term securities should be carefully managed.</li> </ul>
Conclusion	• The current corporate note holdings are well diversified among issuers, credit rating, and structure. There is a large allocation to securities rated "A," which represent heightened credit risk in the current market.
	• The portfolio's longer-term corporates (3-5 years) have significant exposure to spread risk which can cause their market values to fluctuate significantly.
	• The floating-rate securities immunize the portfolio against interest rate movements, but do not avoid basis risk relative to the index that they float off of. Furthermore, they are exposed to credit risk consistent with their final maturities.
	• The County should maintain a list of approved issuers to ensure that all future purchases are consistent with the County's credit criteria.



#### **II.E.** Risk Profile – Risk Factors by Sector – Corporate Notes (continued)



as of January 5, 2009				
Issuer	Percentage of Holdings <sup>2</sup>	Standard & Poor's	Moody's	Fitch
Morgan Stanley	4.0%	А	A2	А
Wells Fargo	3.1%	AA	Aa3	AA
Deutsche Bank	1.7%	AA	Aa1	AA-
General Electric Capital Corp	1.6%	AAA	Aaa	Not Rated
PNC Bank	1.3%	AA-	Aa3	AA-
JP Morgan Chase	1.1%	A+	Aa3	Not Rated
Bank of Ireland	0.9%	AAA	Aaa	AAA
IBM	0.9%	A+	A1	A+
Oracle Corp	0.9%	А	A2	А
SunTrust Bank	0.9%	AA-	Aa3	A+
Toyota Motor Credit Corp	0.8%	AAA	Aaa	AA
Union Bank of California	0.8%	A+	Aa3	A+
BP Capital Markets	0.6%	AA	Aa1	AA+
Merrill Lynch	0.6%	A+	A1	A+
ING	0.4%	AA	Aa2	Not Rated
John Deere Capital Corp	0.4%	А	A2	Not Rated
McDonald's Corporation	0.4%	А	A3	А
UBS	0.4%	AA+	Aa2	A+
Cisco Systems	0.2%	А	A1	Not Rated
Nissan	0.1%	AAA	Aaa	Not Rated

#### List of All Medium-Term Corporate Note Holdings<sup>1</sup>

1. Medium-term notes only. Excludes commercial paper, Negotiable CDs, and FDIC-Guaranteed obligations.

2. As a percentage of the overall portfolio.

### II.F. Risk Profile – Issuer Exposure



Issuers Making Up 2% or More of Overall Portfolio	Par Value of Issuer Allocation	Percent of Overall Portfolio
FHLMC	\$541,500,000	20.4%
FNMA	\$265,000,000	10.0%
General Electric Capital Corp including FDIC-Guaranteed Issues	\$193,320,000	7.3%
General Electric Capital Corp FDIC-Guaranteed Issues	\$150,000,000	5.6%
FHLB	\$180,000,000	6.8%
Bank of America including FDIC-Guaranteed Issues <sup>1</sup>	\$125,000,000	4.7%
Bank of America FDIC-Guaranteed Issues	\$50,000,000	1.9%
Wells Fargo including FDIC-Guaranteed Issues	\$106,000,000	4.0%
Wells Fargo FDIC-Guaranteed Issues	\$25,000,000	0.9%
Morgan Stanley	\$105,000,000	4.0%
JP Morgan Chase including FDIC-Guaranteed Issues	\$105,000,000	4.0%
JP Morgan Chase FDIC-Guaranteed Issues	\$50,000,000	1.9%
FFCB	\$70,000,000	2.6%

1. Excludes the repurchase agreement with Bank of America as counterparty.

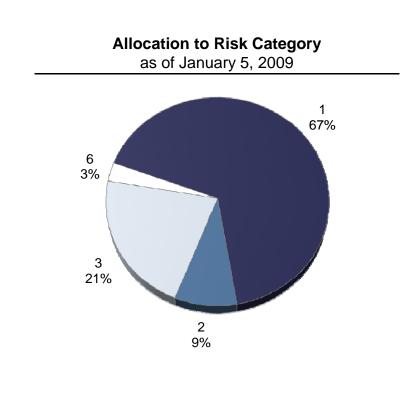
### III. Evaluation of Individual Investments

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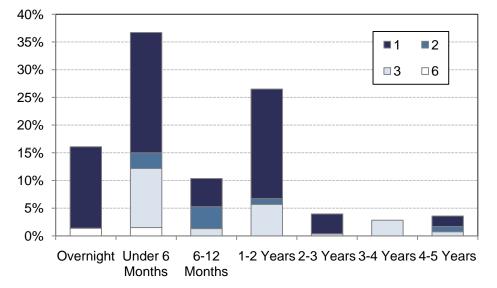
Categorization of investments based	<ul> <li>The categorization of issuers is based on current market conditions. PFM's opinion may change as market conditions continue to evolve. PFM's categorization of an issuer is not a recommendation to add additional exposure to that issuer.</li> </ul>
on risk	<ul> <li>It is expected that credit conditions in general will continue to deteriorate through 2009. S&amp;P estimates that 936 firms' ratings are now under review for downgrade. Continued economic weakness and growing consumer defaults will make 2009 a difficult operating environment for financial firms. Dramatic and persistent declines in economic activity will also pressure companies in the industrial and technology sectors.</li> </ul>
	<ul> <li>Given the difficult environment, it is likely that the financial condition of firms across all sectors will weaken, leading to increased credit rating downgrades. It is also probable that credit markets in general will experience higher default rates over the next several quarters. It is difficult to judge both the extent of the economic downturn and its effect on the issuers in the County's portfolio over future quarters.</li> </ul>
Category 1	<ul> <li>Securities that are issued by the United States Government and its Agencies. The Category also includes obligations of issuers that carry a full faith and credit guarantee of the United States. We judge these securities to have little or no credit risk. It is also unlikely that these securities will experience rating downgrades in the future.</li> </ul>
Category 2	<ul> <li>Securities issued by companies that have received significant support from the United States Government, but not full guarantees. This category also includes securities that have received substantial support from foreign governments of a varying degree. Companies with strong operating profiles that have not received government support, either domestically or foreign, are also included in this category. We judge this category to have low credit risk. Future credit downgrades could occur if the company's operating environment deteriorates further.</li> </ul>
Category 3	• Securities in this category are experiencing a higher degree of stress in the current environment. Companies in this category may have received direct or indirect United States or foreign government support. A default is unlikely, but future credit rating downgrades are likely. The primary concern of securities in this category is the risk of a rating downgrade.
Category 4	<ul> <li>Securities in this category are experiencing significant stress. The issue may have already been downgraded several times. Securities in this category have a higher probability of default or severe impairment.</li> </ul>
Category 5	Default or significant impairment appears to be imminent.
Category 6	• Uncategorized investments and investments from issuers that will all have matured by the time of the report.

## **III. Evaluation of Individual Investments**





Maturity Distribution by Risk Category as of January 5, 2009





Category 1	Category 2	Category 3	Category 4	Category 5	Category 6
U.S. Treasury	Bank of Ireland	Bank of America	No Issuers	No Issuers	LAIF
FHLB	BP Capital Markets	Chase Bank			Harvard University
FNMA	Cisco Systems	Deutsche Bank			
FHLMC	IBM	General Electric Capital Corp			
Bank of America (FDIC)	John Deere Capital Corp	ING			
General Electric Capital Corp (FDIC)	McDonald's Corporation	JP Morgan Chase			
JP Morgan Chase (FDIC)	Nissan Auto Lease Trust	Merrill Lynch			
Wells Fargo (FDIC)	Oracle Corp	Morgan Stanley			
	Royal Bank of Canada	Pfizer Inc			
	Union Bank of California	SunTrust Bank			
		Toyota Motor Credit Corp			
		UBS			
		Wells Fargo			

\*Please see the categorization definitions on page 35.

## **IV. External Investment Pools – LAIF – Investment Policy Comparisons**



• The current investment policy for LAIF, although more restrictive than what would be allowed by the Government Code, is generally less conservative than the County's Policy. However, LAIF is more restrictive with respective to maturity limits. LAIF restricts the maximum maturity of any investment to a maximum of five years and its limit for the average for the entire portfolio is 18 months.

	San Mateo County Policy		PMIA Investment Policy		
Туре	Portfolio/	Min. Credit Ratings/	Portfolio/	Credit Ratings/	
	Issuer Allocations	Maximum Maturity	Issuer Allocations	Maximum Maturity	
U.S. Treasuries	100%	N.A	100%	N.A.	
	100%	15 years	100%	5 years	
U.S. Government	100%	N.A.	100%	N.A.	
Agencies	100%	15 years	100%	5 years	
Bankers' Acceptances	15%/10% Domestic	ST: A-1/ LT: A	100%/100%	None	
	15%/10% Foreign	180 days	100%/100%	180 days	
Collateralized Time	30%	ST: A-1/ LT: A	100%	"D" or better by bank rating	
Deposits	10% /net worth of institution	1 year	Net worth of institution	5 years	
Negotiable Certificates of	30%	ST: A-1/ LT: A	100%	None	
Deposit	10%	5 years	100%	5 years	
Commercial Paper	40% 10%	A-1 by two rating agencies 180 days	30% 10% outstanding	A-3 or better	
Repurchase Agreements	100%	None	100%	None	
	50%	1 year	100%	1 year	
Reverse Repos &	20%	None	10%	None	
Securities Lending	20%	92 days	10%	1 year	
Medium-Term Corporate	30%	A or better	100%	A or better	
Notes	10%	5 years	100%	5 years	
AB 55 Loans	N.A.	N.A	Limit set by state controller. Can't loan LAIF funds	PMIB Approval 364 days	
State GF Loans	N.A.	N.A.	Limit set by state controller. Can't loan LAIF funds	PMIB Approval Typically 30 days	

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### **IV. External Investment Pools – LAIF – Portfolio Holdings Comparisons**



- Our review compared holdings of the LAIF pool, as of December 31, 2008 to the County Pool holdings as of January 5, 2009.
- Compared to the County Pool, LAIF has less assets devoted to corporate holdings, but has over 30% of the portfolio allocated to General Fund and AB 55 loans, the percentage of which has increased significantly over the past year.
- The State does not list the credit ratings for the pool's holdings.
- Many public agencies in the State use LAIF, some for investment purposes, some for liquidity. Because it is unrated, and its holdings can change rapidly, PFM can not provide an opinion on its use. The County should closely monitor LAIF's holdings.

Sector Allocations <sup>1</sup>	LAIF	SM County	Difference
U.S. Treasury	18.0%	1.9%	-16.1%
Repurchase Agreements <sup>2</sup>		14.9%	14.9%
Federal Agency	25.5%	40.3%	14.9%
Corporate Bonds	0.5%	21.3%	20.8%
FDIC-Guaranteed Corporate		6.7%	6.7%
Commercial Paper	3.1%	3.5%	0.5%
FDIC-Guaranteed CP		3.8%	3.8%
Negotiable CDs	6.2%	5.7%	-0.5%
Bankers' Acceptances		1.9%	1.9%
Time Deposits	13.0%		-13.0%
AB 55 Loans	18.7%		-18.7%
General Fund Loans	15.0%		-15.0%
TOTAL	100.0%	100.0%	0.0%

1. Excludes the County's holdings in LAIF and securities lending. Percentage of each pools' overall assets

2. The County's Repurchase Agreement was collateralized by U.S. Treasury securities as of January 4, 2009.

## **V. Review of Securities Lending Procedures**



- The County is currently engaged in a securities lending agreement with Bank of New York. According to the Treasurer's staff, the securities lending agreement provided supplemental income of approximately \$3.1 million during the fiscal year 2007-2008.
- PFM has reviewed the standing agreement with Bank of New York from May 2002. Our comments and observations regarding the policies and practices of the County's securities lending agreements are on pages 40 through 42.

Risk	Description	Observation
Counterparty	• The risk that the Borrower (a third party) will not be able to return the Loaned Securities to the Lender (the County).	• Section 5a of Article IV of the County's May 2002 Securities Lending Agreement and Guaranty with the Bank of New York states that the Bank will work to replace the Loaned Securities, or their value, should the Borrower be unable to return the securities because of its insolvency.
		<ul> <li>To minimize the risk of Borrower default, the County should consider establishing an approved list or minimum credit ratings for Borrowers. In any case, the County should monitor the credit standing of Bank of New York closely since Bank of New York has committed to back Borrower obligations to returned loaned securities.</li> </ul>
Collateral	<ul> <li>The risks that the investments made with the cash proceeds of a loan: <ul> <li>May not be a legal investment for the Lender (the County) to own</li> <li>Is encumbered or liened by a party other than the Lender (the County)</li> <li>May default and the ownership of the investments made with Cash Collateral, if pooled, may be complicated if the investments are through a pooled investment vehicle</li> </ul> </li> </ul>	<ul> <li>The maturities of any Government Securities received as collateral should be consistent with the California Government Code and the County's own Policy. The Agreement does not specify this.</li> <li>Although we understand the County does not accept LOCs as collateral for this Agreement, the County may want to remove this as acceptable collateral from the Agreement, since according to the Agreement the Borrower could potentially deliver an LOC as collateral.</li> <li>The Agreement does not specify that any securities provided as collateral or purchased with Cash Collateral must be free of liens and encumbrances by parties other than the County. This could complicate the County's claim on the collateral or investments made with the collateral should the securities default.</li> </ul>

# V. Review of Securities Lending Procedures

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Risk	Description	Observation
Approved Investments	<ul> <li>The risk that the value of Approved Investments held in the Collateral Account will fall below the amount due to be returned to the Borrower. If this were to occur, the Lender (the County) must still pay the Borrower the cash to cover the difference.</li> <li>If the investments made with the collateral were to default, the Lender (the County) would still have to pay the Borrower an amount equal to the value of the collateral.</li> </ul>	<ul> <li>The Approved Investments Schedule in the Agreement permit: <ul> <li>Government securities</li> <li>Securities issued by the central government of any OECD (Organization for Economic Co-operation and Development) country and their agencies or instrumentalities</li> <li>Commercial paper rated A-1/P-1 or better</li> <li>Medium-term corporate notes rated A/A2 or better</li> <li>Asset-backed securities with the highest credit rating</li> <li>CDs and bank deposits of domestic and foreign banks rated A-1/P-1 or better</li> <li>Repurchase and reverse repurchase agreements involving the aforementioned security types</li> <li>Money market funds, short-term investment funds, pools, or trusts</li> </ul> </li> <li>Certain investments in the list of Approved Investments are not allowed by the California Government Code or the County's investment policy.<ul> <li>"Securities issued by the central government of any OECD country and their agencies or instrumentalities" are not legal investments for the County under California Government Code Section 53601.</li> </ul> </li> <li>As the County could be exposed to the default or any short fall in the value of the Approved Investment, we recommend that the County only allow securities that are permitted by the County's investment policy and California Government Code.</li> <li>We noted that the County has already provided the Bank with instruction prohibiting the use of asset-backed securities.</li> </ul>

# V. Review of Securities Lending Procedures



Risk	Description	Observation
Compliance with California Government Code	<ul> <li>California Government Code Section 53601 (j) outlines the conditions under which California local agencies may participate in securities lending, which are: <ul> <li>"The security to be sold has been owned and fully paid for by the local agency for a minimum of 30 days prior to sale."</li> <li>"The total of all agreements on investments owned by the local agency does not exceed 20 percent of the base value of the portfolio. "</li> <li>"The agreement does not exceed a term of 92 days, unless the agreement includes a written codicil guaranteeing a minimum earning or spread for the entire period between the sale of a security and the final maturity date of the same security. "</li> <li>"Funds obtained obtained from selling a security to a counterparty shall not be used to purchase another security with a maturity longer than 92 days from the initial settlement date of the agreement, unless the agreement includes a written codicil guaranteeing or spread for the entire period between the sale of the same security with a maturity longer than 92 days from the initial settlement date of the same security and the final maturity and the final maturity date of the same security with a maturity longer than 92 days from the initial settlement date of the same security and the final maturity and the final maturity date of the same security with a maturity longer than 92 days from the initial settlement date of the agreement, unless the agreement includes a written codicil guaranteeing a minimum earning or spread for the entire period between the sale of a security and the final maturity date of the same security. "</li> </ul> </li> </ul>	<ul> <li>The County's agreement with Bank of New York does not include the conditions stipulated by the California Government Code for the use of securities lending agreements.</li> <li>To ensure compliance with California Government Code, we recommend the County revise the agreement to conform to the limits in 53601 (j).</li> </ul>

### Appendix – Pfizer Commercial Paper And QIBs



- From our review of the County's holdings, it appears that the County's Pfizer commercial paper issue (ID: 71708EPJ8) is a (4(2) 144A program, which is a private placement issue (see Bloomberg screen below).
- Under SEC regulations, private placements may only be sold to a "Qualified Institutional Buyer" or "QIB." In brief, a Qualified Institutional Buyer is an investing entity owning and investing large amounts of securities on a discretionary basis of at least \$100 million of securities. Additionally, Qualified Institutional Buyers must be entities that fall under one of several categories including an insurance company, investment company, employee benefit plan, trust fund, Business Development Company, 501(c)(3) not-for-profit organization, corporation, partnership, business trust, or investment adviser. It is not clear if the County qualifies as a QIB, which would qualify it to purchase private placements. Additional information may be found at: http://www.law.uc.edu/CCL/33ActRIs/rule144A.html.
- Pfizer also issues (3)a(3) commercial paper, which is available to the general public (see the following page).

ISSUER INFORMATION	SECURITY INFORMATION	Options	5
Name PFIZER INC	Maturity <u>2/18/09</u>	2)Credit	Profile
Industry Medical-Drugs	Issue date 10/21/08	3)Issuer	Info
PROGRAM INFORMATION	Coupon	4)Related	d Security
Ticker (Issuer )PFEPP Series:	1st Coupon Date	5)Related	d Programs
Program Type (CP_)U.S. CP		6)Custom	Notes
Reg Type 4(2) 144A	ID: 71708EP38	7)Involve	ed Parties
Coupen Ereq ( )		8)Company	y News
Day Type (2) ACT/360	Min Piece/Increment		Web Page
Calc Type ( 6)DISC/CD YLD	250000.00/ 1000.00		-
	Discount CP Base CUSIP		
Country/Curr US / <mark>USD</mark>	YEARS 1&2 71708E		
Program Size 14000 (MM)	YEARS 3&4 71708F		
Guarantor	Delivery DTC		
Туре	-		
LOC Amount (M) Exp:	Issuer/Debt Ratings		Program
Paying Agent JPM	Long Short	Outlook	Ratings
Dealer BAS CITI JPM ML	S&P AAA *- A-1+	NR	A-1+
MS	MDY Aa1 *- P-1	NR	P-1
	FITCH AA 🛛 *- F1+ *-	- NR	F1+ *-

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• For comparison to the private placement program on the prior page, Pfizer also has a 3(a)3 commercial paper program (ID: 71708CP32), which is available to the general public (see the Bloomberg screen below).

ISSUER INFORMATION	SECURITY INFORMATION	Options
Name PFIZER INC		2)Credit Profile
Industry Medical-Drugs	Issue date 10/21/08	3)Issuer Info
PROGRAM INFORMATION	Coupon	4)Related Security
Ticker (Issuer )PFE Series:	1st Coupon Date	5)Related Programs
Program Type (CP )U.S. CP		6)Custom Notes
 Reg Type 3(a)3	ID: 71708CP32	7)Involved Parties
Coupon Freq ( )		8)Company News
Day Type (2) ACT/360	Min Piece/Increment	9)Issuer Web Page
Calc Type ( 6)DISC/CD YLD	100000.00/ 1000.00	
	Discount CP Base CUSIP	
Country/Curr US / <mark>USD</mark>	YEARS 1&2 71708C	
	) YEARS 3&4 71708D	
Guarantor	Delivery DTC	
Туре	,	
LOC Amount (M) Exp:	Issuer/Debt Ratings	Program
Paying Agent JPM	Long Short	Outlook Ratings
Dealer CITI MS	S&P AAA *- A-1+	NR A-1+
	MDY Aa1 *- P-1	NR P-1
	FITCH AA *- F1+ *	-NR NR



- Government Code Section 53601(k) limits the purchase of corporate medium-term to corporations organized and operation in the United States (emphasis added) as follows: "(k) Medium-term notes, defined as all corporate and depository institution debt securities with a maximum remaining maturity of five years or less, issued by corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States. Notes eligible for investment under this subdivision shall be rated "A" or better by a nationally recognized rating service. Purchases of medium-term notes shall not include other instruments authorized by this section and may not exceed 30 percent of the agency's money that may be invested pursuant to this section."
- From our review of the County's portfolio, we identified the following two securities, that while denominated in U.S. Dollars, appear to be issued by corporations organized outside the United States (see the Bloomberg Screens on the following pages).

-	DEUTSCHE BANK AG LONDON	2515A0NY5
_	BP CAPITAL MARKETS PLC	05565QBF4

- While each of these corporations have U.S. based units, Bloomberg identifies these particular securities as being issued by corporations organized outside the United States.
- The County owns other medium-term corporate securities that are subsidiaries organized in the United States of foreign companies and therefore comply with the Government Code requirements. For example: Deutsche Bank NY, Nissan, Toyota Motor Credit Corporation, and UBS AG Stamford Ct.



#### DEUTSCHE BANK AG LONDON

CUSIP: 2515A0NY5

	SECURITY DESCRIPT	ION P	age 1/ 1
	DEUTSCHE BK LOND DB 4 78 05/20/13	99.381/99.381 (5	.04/5.04) TRAC
	ISSUER INFORMATION	IDENTIFIERS	D Additional Sec Info
	Name DEUTSCHE BANK AG LONDON	Common 036584491	2) ALLQ
	Type Money Center Banks	ISIN US2515A0NY54	3) TRACE Trade Recap
		Wertpap. AOV8YN	4 Corporate Actions
loguer Country	SECHRITY INFORMATION	RATINGS	5) Cds Spreads/RED Info
Issuer Country DE : Germany		Moody's Aal	0 Ratings
DE . Germany		S&P A+	7) Custom Notes
		Fitch AA- *-	
		Composite AA-	% Identifiers
	NORMAL	ISSUE SIZE	10 Fees/Restrictions
	· · · · · · · · · · · · · · · · · · ·	Amt Issued/Outstanding	
	<u> </u>	USD 3,000,000.00 (M)/	
		USD 3,000,000.00 (M)	
		Min Piece/Increment	
	1st Settle Date 5/20/08	1,000.00/ 1,000.00	
	1st Coupon Date 11/20/08	Par Amount 1,000.00	
	Iss Pr 99.86400	BOOK RUNNER/EXCHANGE	
	SPR @ ISS 180.00 vs T 3 <sup>1</sup> <sub>8</sub> 04/13	DB	65) Old DES
	HAVE PROSPECTUS DTC	TRACE	66) Send as Attachment

Appendix – Corporate Securities: BP Capital Markets PLC



#### **BP CAPITAL MARKETS PLC**

CUSIP: 05565QBF4

SECURITY DESCRIPTION

Page 1/ 1

	BP CAPITAL PLC BPLN 5 1/13	106.338/106.338 (3	.77/3.77) TRAC
	ISSUER INFORMATION	IDENTIFIERS	D Additional Sec Info
Issuer Country GB : Great Britain	Name BP CAPITAL MARKETS PLC	Common 039858231	2) ALLQ
	Type Finance-Other Services	ISIN US05565QBF46	3) TRACE Trade Recap
	Market of Issue Global	Sedol B3FDJ63	4 Corporate Actions
	SECURITY INFORMATION	RATINGS	5) Cds Spreads/RED Info
	country GD Currency USD	Moody's Aal	0 Ratings
	Corrateral type Company Guarnt	S&P AA	7) Custom Notes
		Fitch AA+	& Covenant/Default
	Maturity 11/ 7/2013 Series	Composite AA	9 Identifiers
	NORMAL	ISSUE SIZE	10 Fees/Restrictions
		Amt Issued/Outstanding	
		USD 3,000,000.00 (M)/	
		USD 3,000,000.00 (M)	13) Involved Parties
		Min Piece/Increment	14 Issuer Information
	1st Settle Date 11/ 7/08	1,000.00/ 1,000.00	5
	1st Coupon Date 5/ 7/09	Par Amount 1,000.00	10 Related Securities
	Iss Pr 99.93500	BOOK RUNNER/EXCHANGE	
	SPR @ ISS 275.00 vs T 2 34 10/13	JOINT LEADS	65) Old DES
	HAVE PROSPECTUS DTC	Multiple	66) Send as Attachment