

**SOUND TRANSIT  
STAFF REPORT**

**RESOLUTION NO. R2009-07**

**Revising the Asset Liability Management Framework**

<b>Meeting:</b>	<b>Date:</b>	<b>Type of Action:</b>	<b>Staff Contact:</b>	<b>Phone:</b>
Finance Committee	4/16/09	Discussion/Possible Actions	Brian McCartan, CFO <b>Tracy Butler, Treasurer</b>	(206) 398-5100 (206) 398-5146

<b>Contract/Agreement Type:</b>	✓	<b>Requested Action:</b>	✓
Competitive Procurement		Execute New Contract/Agreement	
Sole Source		Amend Existing Contract/Agreement	✓
Agreement with Other Jurisdiction(s)		Budget Amendment	
Real Estate		Property Acquisition	

**PROPOSED ACTION**

(1) Amends the Investment Policy of the Asset Liability Management Framework as provided in Attachment A, and (2) replaces the Glossary of Terms section of the Asset Liability Management Framework as provided in Attachment B.

**KEY FEATURES of PROPOSED ACTION**

The purpose of the revision is to update the Investment Policy to provide investment guidelines in the current market and regulatory environment, to clarify intent and roles and responsibilities, and to realign investment practices and process with the Agency's current objectives.

The major additions and revisions are summarized below:

- Defines unrestricted funds, internally restricted funds and externally restricted funds;
- Adds a new investment objective of attempting to match its investment strategy with the Asset Liability Management Framework, to the existing objectives of safety, liquidity and return on investment;
- Adds a compliance and ongoing monitoring component;
- Clarifies the roles and responsibilities of all parties involved in the investment process;
- Tightens internal control, due diligence, and reporting process;
- Adjusts restrictions and allocation limits on investment instruments to diversify the portfolios and to minimize risks; and
- Increases collateralization and margin requirements to better manage risks and protect investment principles.

**BUDGET IMPACT SUMMARY**

There is no action outside of the Board-adopted budget; there are no contingency funds required, no subarea impacts, or funding required from other parties other than what is already assumed in the financial plan.

**BUDGET and FINANCIAL PLAN DISCUSSION**

This action will have no direct impact on the budget or the financial plan.

**BUDGET TABLE**

Not applicable.

**SMALL BUSINESS PARTICIPATION**

Not applicable.

**PROJECT DESCRIPTION and BACKGROUND for PROPOSED ACTION**

In 2004, the Board adopted Resolution No. R2004-14 to establish an Asset Liability Management Framework for agency resources, including Asset Liability Management, Investment, Debt Management, Debt Swap Policies, and a Glossary of Terms.

The Investment Policy establishes goals for investment objectives, delegation of authority, prudence, ethics and conflicts, authorized dealers, suitable investments, safekeeping, portfolio diversification, maturity structure, internal controls and performance standards and reporting.

The adopted Investment Policy, Section II of the Asset Liability Management Framework, states that “the policy shall be reviewed annually and any significant modification thereto must be approved by the Finance Committee”.

The unprecedented sub-prime mortgage crisis and turmoil in global credit markets, in particular the defaulted short-term investments consisting of asset-backed commercial papers in the King County Investment Pool, alerted Sound Transit finance staff to evaluate and examine the current investment practice and the adequacy of the Investment Policy. Although Sound Transit has always taken a conservative approach and exercised due diligence in managing and investing the funds, we believe that there is room for improvement and some valuable lessons could be learned from the distressed investment pools. In addition, some aspects of the investment management process and guidelines are in need of updating to better serve Sound Transit’s operating and capital needs and to reflect changes in the financial market.

The revisions focused on tightening the internal control and due diligence process, improving the efficiency of resources utilization, clarifying the roles and responsibilities of all parties involved and adjusting the asset allocations and collateral requirements to better manage risks and to diversify the portfolios.

The Glossary of Terms, section V of the Asset Liability Management Framework has also been revised.

**Prior Board/Committee Actions**

<b>Motion or Resolution Number and Date</b>	<b>Summary of Action</b>
Resolution R2004-14 10/28/04	Adoption of Asset Liability Management Framework for Sound Transit.

**CONSEQUENCES of DELAY**

There have been many changes in the market, investment practice and regulations since the Investment Policy was revised in 2004. It is essential to have an updated Investment Policy to provide guidelines in the current market and regulatory environment. Staff recommends adoption of the new policy by June 2009.

**PUBLIC INVOLVEMENT**

Not applicable.

**ENVIRONMENTAL COMPLIANCE**

SSK 3-31-09

**LEGAL REVIEW**

JW 4/10/09

## **SOUND TRANSIT**

### **RESOLUTION NO. R2009-07**

A RESOLUTION of the Finance Committee of the Central Puget Sound Regional Transit Authority (1) amending the Investment Policy of the Asset Liability Management Framework as provided in Attachment A, and (2) amending the Glossary of Terms section of the Asset Liability Management Framework as provided in Attachment B.

WHEREAS, the Central Puget Sound Regional Transit Authority, hereinafter referred to as Sound Transit, has been created for the Pierce, King, and Snohomish Counties region by action of their respective county councils pursuant to RCW 81.112.030; and

WHEREAS, in general elections held within the Central Puget Sound Regional Transit Authority district on November 5, 1996 and November 8, 2008, voters approved local funding to implement a regional high-capacity transportation system for the Central Puget Sound region; and

WHEREAS, the amended Sound Transit Financial Policies took effect upon voter approval of local funding for the Sound Transit 2 Plan on November 8, 2008, per Resolution No. R2008-10; and

WHEREAS, the Financial Policies reflect the Board's policy intent for implementing the financial framework for completing regional transit system plans and for providing the tools to the Board to respond to future conditions; and

WHEREAS, Sound Transit's Investment Policy is one of four distinct but coordinated policies included in the Asset Liability Management Framework, adopted by Resolution No. R2004-14 on October 28, 2004; and

WHEREAS, the Investment Policy should be updated to provide investment guidelines in the current market and regulatory environment, to clarify intent and roles and responsibilities, and to realign investment practices and process with Sound Transits' current objectives; and

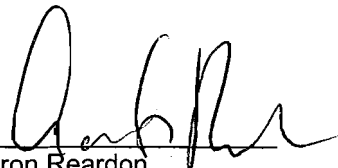
WHEREAS, Section II of the Asset Liability Management Framework requires annual review of the policy and approval of significant modifications by the Finance Committee.

NOW, THEREFORE, BE IT RESOLVED by the Finance Committee of the Central Puget Sound Regional Transit Authority approves the following:

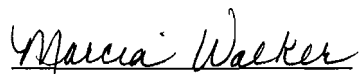
1) amending the Investment Policy as provided in Attachment A; and

2) amending the Glossary of Terms sections of the Asset Liability Management Framework as provided in Attachment B.

ADOPTED by the Finance Committee of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held April 16, 2009.

  
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Aaron Reardon  
Finance Committee Chair

ATTEST:

  
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Marcia Walker  
Board Administrator

**SOUND TRANSIT  
RESOLUTION NO. R2009-07 ATTACHMENT A  
REPLACEMENT OF SECTION II OF THE ASSET LIABILITY MANAGEMENT FRAMEWORK  
ADOPTED BY RESOLUTION NO. R2004-14**

## **II. INVESTMENT POLICY**

### **1. POLICY**

It is the policy of Sound Transit (“the agency”) to invest public funds in a manner which will provide the maximum security with the highest investment return, while meeting daily cash flow requirements and conforming to all state and local statutes governing the investing of public funds.

### **2. SCOPE**

Sound Transit comprises a single proprietary fund, which is accounted for in the agency’s annual Audited Financial Statements. There are specific designated “Funds”, within the single proprietary fund that are dedicated to specific purposes. This Investment Policy applies to all financial resources of the agency with the exception of ORCA regional funds and financial assets managed externally pursuant to insurance policies, fully-defeased lease/leaseback arrangements and retirement plan assets.

#### **Unrestricted Funds**

Operating and Project Funds: to provide for operating and capital project expenditures and to meet daily liquidity need.

#### **Internally restricted Funds**

Operating Reserve and Contingency Funds: to provide liquidity for unforeseen events and expenses. Under the agency’s financial policies, the agency is to maintain an amount that is equal to the forecasted next two months of Operations and Maintenance expenses, and the annual budgeted amount for the System-wide Contingency and Emergency Fund.

Capital Replacement Funds: to provide for the funding for long-term capital replacement. It will be funded annually with the amount budgeted for that year.

#### **Externally Restricted Funds:**

Debt Service Reserve Funds: to be used to pay debt service if pledged revenues are insufficient to satisfy the debt service requirements. This fund is normally funded with bond proceeds at the time of issuance.

Other Externally Restricted Funds: Funds which have an external restriction, whether by statute or otherwise, which governs the management of money held within the funds.

### **3. OBJECTIVES**

The funds will be invested in a manner that is in conformance with federal, state and other legal requirements. In addition, the objectives, in order of priority, of the agency’s investment activities will be as follows:

- 3.1 Safety: Safety of principal is the primary objective of Sound Transit’s investment program. Agency investments shall be undertaken in a manner that seeks to ensure preservation of capital in the overall portfolio. To obtain this objective, the agency will diversify its investments by investing funds among a variety of securities and financial institutions offering independent returns.

- 3.2 Liquidity: Sound Transit's investment portfolio will remain sufficiently liquid to enable the agency to meet all operating and capital spending requirements which might be reasonably anticipated.
- 3.3 Return on Investment: Sound Transit's investment portfolio will be structured with the objective of attaining a benchmark rate of return throughout budgetary and economic cycles, commensurate with the agencies investment risk constraints and the cash flow characteristics of the portfolio.
- 3.4 Integration to the Asset Liability Management Framework: To the extent possible, Sound Transit will attempt to match its investments with anticipated cash flow requirements and ALM management objectives.

#### **4. MATURITY STRUCTURE**

- 4.1 To the extent possible, Sound Transit will attempt to match its investments with anticipated cash flow requirements and Asset Liability Management objectives. Unless matched to a specific cash flow the agency will generally invest in securities maturing five years or less from the date of purchase. The average maturity of all unrestricted securities owned should be no longer than three years.
- 4.2 Restricted funds may be invested in securities exceeding five years if the maturity of such investments is made to coincide as nearly as practicable with the expected use of the funds.
- 4.3 Due to fluctuations in funds balance, minimum and maximum durations may have exceptions for short periods of time. Securities need not be liquidated to realign the portfolio; however, consideration should be given to this matter when future reinvestments occur.
- 4.4 Securities shall generally be held until maturity with the following exceptions:
  - 4.4.1 A security with declining credit may be sold early to minimize loss of principal.
  - 4.4.2 A security exchange that would improve the quality, yield or target duration in the portfolio.
  - 4.4.3 Liquidity needs of the portfolio require that the security be sold.

#### **5. PERFORMANCE STANDARDS**

- 5.1 Market Yield (Benchmark): Sound Transit generally follows an investment strategy that incorporates cash flow requirements, current market rates and the average duration of each fund. Given this strategy, the basis used to determine whether market yields are being achieved shall be to identify a benchmark that is comparable to the related portfolio investment duration (for example if the duration of the portfolio is one year, the one-year Treasury yield would be an appropriate benchmark).
- 5.2 The Treasurer shall periodically review portfolio duration and characteristics to ensure selected benchmarks are relevant and where necessary make appropriate changes.

#### **6. AUTHORIZED AND SUITABLE INVESTMENTS**

Care must be taken to ensure that the list of instruments includes only those allowed by law and those that local investment officer(s) are trained and competent to handle. Sound Transit is empowered by statute to invest in any of the securities identified as eligible investments as detailed in the Washington State Treasurer's publication titled "Eligible Investments for Public Funds."

Sound Transit may invest in the following types of investments under this Policy:

- Treasury Securities

- Securities issued with the full faith backing or guarantee of the Federal Government (ie: TLGP or other FDIC fully insured securities)
- Federal Agency Securities (Mortgage-backed securities included)
- Washington State Treasurer's Local Government Investment Pool
- King County Investment Pool
- Non-negotiable Certificates of Deposit (Must be with PDPC-qualified public depository)
- PDPC Financial Institution Sponsored Investment Accounts
- Banker Acceptances
- Repurchase Agreements
- Reverse Repurchase Agreements
- General Obligation Bonds of any state or local government
- Commercial Paper

#### 6.1 Investment pools

A thorough investigation of a prospective investment pool is required prior to investing and on a continual basis. Each prospective investment pool will be required to complete a questionnaire that will include information on the following topics:

- 6.1.1 A description of eligible investment securities and a written statement of investment policies and objectives,
- 6.1.2 A description of interest calculations and how they are distributed and how gains or losses are treated,
- 6.1.3 A description of how investments are safeguarded, including the settlement processes, safekeeping of securities, participant parameters, and frequency of pricing, and how the program is audited,
- 6.1.4 A schedule for receiving statements and investment listings,
- 6.1.5 A fee schedule and when and how it is assessed,
- 6.1.6 Whether the pool is eligible for the acceptance of bond proceeds and if it will accept such proceeds, and
- 6.1.7 A description of experiences of the portfolio manager(s).

Eligible Investment Pools must report no less than quarterly a listing of portfolio holdings, average maturity, modified and effective duration and diversification by issuer. Audited financial reports must also be provided to Sound Transit.

Sound Transit will annually review Investment Pools policy and holdings to ensure the investment practices of the Pools are in compliance with this Policy.

- 6.2 Deposit Bank Notes: Sound Transit may purchase issues that are supported with the full faith and credit or the government or have the FDIC guarantee on the full principal and interest amount. The securities must be allowable investments for the State of Washington investment program and meet the criteria of RCW 36.60.050.

Sound Transit may purchase new issue agency securities for a delayed settlement. These securities typically are issued at par and are available from most of the dealers in the new issue market. It will be at the Investment Officer's discretion to wait to purchase these issues after they "break syndicate" (are "free to trade" at negotiable prices) allowing the agency to ask dealers to offer the securities at a market price that may differ from the initial offering price of par.

#### 6.3 Repurchase agreements and reverse repurchase agreements

- 6.3.1 A signed Public Securities Association (PSA) Master Repurchase Agreement is required.
- 6.3.2 No security will be accepted for repurchase agreement transactions whose market value is not readily available.

- 6.3.3 Collateral will be required on Repurchase Agreements as described in Section 8 of this policy.
- 6.3.4 Investment in reverse repurchase agreements must be approved by the Chief Financial Officer.
- 6.3.5 Proceeds from a reverse repurchase agreement will be limited to an investment which matures at approximately the same time as the reverse repurchase agreement.
  
- 6.4 General obligation bonds of a state or local government must have at the time of investment one of the three highest credit ratings of a nationally recognized statistical rating organization (NRSRO).
  
- 6.5 Commercial paper
  - 6.5.1 Commercial paper must be rated with the highest short-term credit rating of any two NRSROs, at the time of purchase. If the commercial paper is rated by more than two NRSROs, it must have the highest rating from all of the organizations.
  - 6.5.2 Commercial paper holdings may not have maturities exceeding 180 days.
  - 6.5.3 Any commercial paper must also have an underlying long-term credit rating at the time of purchase in one of the two highest rating categories of an NRSRO, no less than AA3 or AA-.
  - 6.5.4 Commercial paper must be purchased in the secondary market and not directly from the issuers.
  - 6.5.5 Asset Backed commercial paper is not allowable under this policy.
  
- 6.6 Certificates of Deposit and bank deposits will only be made with a qualified public depository that has been approved by the Washington Public Depository Protection Commission. Under the provisions of the Commission, eligible depositories must segregate eligible collateral having a value of not less than its maximum liability.
  
- 6.7 Prohibited securities
  - 6.7.1 Derivatives or securities that derive value and/or yield from an underlying asset or an external index are prohibited unless they fall into one of the following categories: zero coupon treasury instruments, zero coupon agency instruments, agency security obligations that have call features, agency security obligations that have step-up features at pre-determined intervals and agency obligations that float with interest rates or external indexes such as treasury bills, LIBOR, COFI, or the Fed Funds rate, and swap debt obligations only as they pertain to the asset liability management program.
  - 6.7.2 Agency obligation inverse floaters are prohibited.
  
- 6.8 Derivative securities not previously utilized must be approved by the Chief Financial Officer.
  
- 6.9 Sound Transit will only invest in securities when the final maturity date is known at the time of purchase.

**7. DIVERSIFICATION AND LIMITS**

Sound Transit will diversify its investments by security type, institution and maturity with the intention to minimize risk, as follows:

- 7.1 Investments with any single securities broker/dealer or financial institution will generally not exceed 50% of the total portfolio except for the Washington State Treasurer’s Local Government Investment Pool (LGIP) which can be up to 100%.
  
- 7.2 Security limitations by type will follow these guidelines:  
 Treasury Securities.....100%



Washington State Treasurer's Local Government Investment Pool .....	100%
Federal Agency Securities .....	75%
Individual issues may not exceed 25% of security portfolio and portfolio would not hold more than 50% of its agency securities in the securities of any one agency	
Deposit Bank notes issued as with the full faith and credit of the federal government.....	20%
Individual issuers may not issue more than 50% of security portfolio	
King County Investment Pool.....	50%
PDPC Financial Institution Sponsored Investment Accounts.....	25%
General Obligation bonds of any state or local government.....	25%
Individual issuers may not issue more than 50% of security portfolio	
Repurchase Agreements.....	25%
Individual banks may not issue more than 50% of security portfolio	
Non-negotiable Certificates of Deposit.....	10%
Individual banks may not issue more than 50% of security portfolio	
Banker Acceptances (A1/P1/F1).....	10%
Individual banks may not issue more than 50% of security portfolio	
Reverse Repurchase Agreements.....	10%
Individual banks may not issue more than 50% of security portfolio	
Commercial Paper (A1/P1/F1).....	10%
Individual issuers may not issue more than 50% of security portfolio	

Due to fluctuations in the aggregate surplus funds balance, maximum percentages for a particular issue, issuer or investment type may be exceeded at a point in time subsequent to the purchase of additional securities. Securities need not be liquidated to realign the portfolio; however, consideration should be given to this matter when future purchases are made.

## **8. COLLATERALIZATION**

- 8.1 Collateral will be required on Repurchase Agreements, and will be limited to treasury, agency and money market securities. Collateral shall be delivered to Sound Transit's safekeeping agent, or through a tri-party arrangement in which the proper documents delineating the responsibilities of the parties have been executed. A clearly-marked evidence of ownership (safekeeping receipt) must be supplied to Sound Transit and retained.
- 8.2 Any required margin (the amount by which the market value of the securities collateralizing the transaction exceeds the transaction value) will be determined at the time of the transaction, as specified in the Master Repurchase Agreement. Any such required margins shall not be less than 102% of the current market value of the collateral. Such collateral shall be revalued on a periodic basis, but not less than quarterly, in order to maintain market protection.
- 8.3 Collateral for repurchase agreements using longer-dated investments may not exceed five years.

## **9. SAFEKEEPING AND CUSTODY**

All security transactions, including collateral for repurchase agreements, entered into by Sound Transit will be conducted on a delivery versus payment (DVP) basis. Securities will be held by a third-party custodian designated by the Treasurer and evidenced by safekeeping receipts with a written custodial agreement.

## **10. DUE DILLIGENCE AND CREDIT REVIEW**

10.1 Ongoing monitoring the credit ratings: the Investment Policy sets forth minimum credit ratings for each type of security. These credit limits apply to the initial purchase of a security and does not automatically trigger the sale of a security in the event of credit rating downgrade.

10.1.1 When a credit rating downgrade occurs, the Treasurer will evaluate the downgrade on a case-by-case situation to determine whether to hold or sell the security after further analysis of the credit rating on an ongoing basis.

10.1.2 Treasurer will report to the CFO and the Finance Committee in the quarterly report any credit ratings downgrade of the securities. In the same manner the CFO and board will be informed on the decision to buy or sell.

10.2 At a minimum, an annual review and update of the approved list of securities shall be completed.

10.3 An asset allocation report with respect to credit quality will be produced on a monthly basis.

10.4 This report will show the current ratings and identify any securities that are impacted by ratings.

10.5 Credit quality assessments should be conducted prior to investment purchases and as an ongoing effort to evaluate exiting securities. The assessment process should include:

10.5.1 An objective test, such as the ratings of Nationally Recognized Statistical Rating Organizations (NRSRO).

10.5.2 A subjective test, the Treasurer and Investment Officer will supplement the rating credit with an internal analysis based on publicly available information.

10.5.3 Ongoing monitoring of rating changes, sector change, industry shifts and economic development that may impact credit.

## **11. REPORTING**

The Investment Officer and Investment Advisor will provide the Chief Financial Officer and the Treasurer with monthly investment reports. Quarterly reports will be provided to the agency's Finance Committee, or its subcommittee, the Audit and Reporting Subcommittee. Included in the quarterly reports will be an executive summary, benchmark comparison, total return and duration analysis, market overview, portfolio performance analysis, interest revenue year-to-date, market versus book analysis, policy compliance and ongoing investment strategy guidelines.

## **12. DELEGATION OF AUTHORITY**

Authority to manage Sound Transit's investment program is derived from Resolution No. 85 which delegates responsibility for the agency's investment program to the Chief Financial Officer as required in RCW 81.112.120.

12.1 Management responsibility for the investment program is hereby delegated to the Chief Financial Officer who shall be responsible for all transactions undertaken and shall establish a system of controls to regulate the activities of subordinate officials and their procedures in the absence of the Chief Financial Officer. No one person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the Chief Financial Officer.

- 12.2 Daily operational responsibility for the investment program is hereby delegated to the Treasurer, who shall establish written procedures for the operation of the investment program consistent with the Investment Policy. Procedures should reference the following: safekeeping, banking contracts, repurchase agreements, wire transfer agreements, and depository/custodial agreements, and glossary of investment terms. Procedures shall also include explicit delegation of authority to individuals responsible for investment transactions.
- 12.3 The Treasurer will be responsible for delegating authority to Investment Officer(s) and Investment Advisor and defining their roles.
- 12.4 The Agency may enter into contracts with third-party investment advisory firms when their services are deemed to be beneficial to the Agency. The Advisor must comply with the Investment Policy and RCW legislation. The advisor may have authority to transact investments on behalf of the Agency, however, the advisor may only act on a non-discretionary basis. Therefore, the advisor must present investment recommendations and receive approval from the Treasurer or investment officer, prior to making purchases or sells of securities on behalf of the agency.

### **13. AUTHORIZED FINANCIAL DEALERS & INSTITUTIONS**

- 13.1 The Treasurer or their designee will maintain on file a current listing of financial institutions authorized and prepared by the Washington Public Deposit Protection Commission (PDPC) to provide depository services in the state of Washington. In addition, a list will also be maintained of approved security broker/dealers who maintain an office in the state of Washington. From this list, a minimum of four approved security broker/dealers will be selected by the agency to provide investment services in accordance with the evaluation criterion outlined in 13.1. These may include primary dealers, or regional dealers that qualify under Securities and Exchange Commission Rule 15C3-1 (uniform net capital rule) and investment departments of local banks. Approved security broker/dealers will be selected based on the following criteria:
- financial condition, strength and capability to fulfill commitments,
  - regulatory status of the dealer, and
  - background and expertise of the individual representative.
- 13.2 Prospective broker/dealers must provide the Treasurer with the following: Financial Industry Regulatory Authority, Inc. (FINRA) certification, proof of Washington State registration, and written certification that the prospective broker/dealer understands and will adhere to this Investment Policy.
- 13.3 An annual review of the financial condition and registrations of the selected qualified financial institutions and broker/dealers will be conducted by the Treasurer. A current audited financial statement is required to be on file for each financial institution and broker/dealer in which the entity invests.
- 13.4 Sound Transit will use a competitive bid process where its selected FINRA broker/dealers will compete for investment transactions but it is recognized that this may not be appropriate for every investment decision.
- 13.5 Sound Transit reserves the right to remove any broker/dealer from the list of approved broker/dealers if services from them are lacking or if any broker/dealer fails to comply with documentation requirements.
- 13.6 If an investment advisor is authorized to transact buys and sells on behalf of the Agency, the advisor's approved dealer list will be provided to the Agency. Buys and sells may be transacted

with any dealer on the advisor's approved list. Sound Transit reserves the right to modify advisor's list of approved broker/dealers.

#### **14. PRUDENCE**

The Investment Officer(s) and Investment Advisor shall act responsibly and prudently in order to maintain the safety of the public's funds.

14.1 The standard of prudence that shall be practiced at all times without exception shall be the "Prudent Person Rule" which reads: "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."

14.2 Investment Officer(s) acting in accordance with written procedures, the Investment Policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes. Should any such loss occur, however, the Investment Officer(s) shall report it to the Chief Financial Officer and Treasurer immediately, who shall then take appropriate action to prevent any future occurrences.

14.3 Purchase of securities shall be made for investment and not speculation.

#### **15. INTERNAL CONTROL**

The Controller shall establish an annual process of independent review by an external auditor. This review will examine internal controls over investment activities for compliance with policies and procedures.

#### **16. ETHICS AND CONFLICTS OF INTEREST**

It is the policy of Sound Transit to conduct investment transactions in accordance with the agency's Resolution No. 81, which details the Code of Ethics for Board Members, Officers, and Employees. Officers and employees involved in the investment process shall refrain from personal business activity that could conflict with proper execution of the investment program, or which could impair their ability to make impartial investment decisions. Employees and Investment Officer(s) shall disclose to the Chief Executive Officer and agency Finance Committee any material financial interests in financial institutions that conduct business with the agency, and they shall also disclose any large personal financial/investment positions that could be related to the performance of the agency.

#### **17. INVESTMENT POLICY ADOPTION**

The policy shall be reviewed by the Chief Financial Officer annually and any significant modification thereto must be approved by the Finance Committee.

#### **18. GLOSSARY**

A glossary of investment terms is included as an appendix to these policies.

**SOUND TRANSIT  
RESOLUTION NO. R2009-07 ATTACHMENT B**

**REPLACEMENT OF SECTION V OF THE ASSET LIABILITY MANAGEMENT FRAMEWORK  
ADOPTED BY RESOLUTION NO. R2004-14**

## **V. GLOSSARY OF TERMS**

**Accrued Interest** – (1) The dollar amount of interest accrued on an issue, based on the stated interest rate on that issue, from its issue date to the date of delivery to the original purchaser. This is usually paid by the original purchaser to the issuer as part of the purchase price of the issue;  
(2) Interest deemed to be earned on a security but not yet paid to the investor.

**Accrued Interest** – (1) The dollar amount of interest accrued on an issue, based on the stated interest rate on that issue, from its issue date to the date of delivery to the original purchaser. This is usually paid by the original purchaser to the issuer as part of the purchase price of the issue; (2) Interest deemed to be earned on a security but not yet paid to the investor.

**Agency Security Obligations** – U.S. Government issued security that was not issued by the Treasury Department. These issues include: Federal Home Loan Bank Bonds (FHLB), Federal National Mortgage Association (FNMA), Federal Farm Credit Bank (FFCB) and Federal Home Loan Mortgage Corporation (Freddie Mac).

**ALM Management:** Integrates Sound Transit's current assets and its liabilities for purposes of financial decision making.

**Amortization** – Liquidation of a debt through installment payments. The allocation of the premium or discount from 100 on the price of a security from the time of purchase to the maturity date. The amortization is part of the monthly earnings on an accrual accounting basis.

**Arbitrage** – the difference between interest earned on funds borrowed at a lower tax-exempt rate and interest on funds that are invested at a higher-yielding taxable rate. Under the Tax Reform Act of 1986, with very few exceptions, arbitrage earnings must be rebated back to the federal government.

**Ask Price** – Price being sought for the security by the seller. Also called the offer.

**Asset/Liability Matching** – Matching the term and amount of assets and liabilities in order to mitigate the impact of changes in interest rates.

**Average Maturity** – A weighted average of the maturity dates for a portfolio of debt securities. The market value volatility can be managed by shortening or lengthening the average maturity of its portfolio.

**Bank Wire** – A virtually instantaneous electronic transfer of funds between two financial institutions.

**Bankers Acceptance (BAs)** – Bankers Acceptances generally are created based on a letter of credit used in a foreign trade transaction. They are used to finance the shipment of commodities between countries as well as the shipment of some specific goods within the United States. BAs are short-term, non-interest-bearing notes sold at a discount and redeemed by the accepting bank at maturity for full face value. These notes trade at a rate equal to or slightly higher than Certificates of Deposit (CDs), depending on market supply and demand. Bankers Acceptances are sold in amounts that vary from \$100,000 to \$1,000,000 or more with maturities ranging from 30 to 270 days. They offer liquidity to the investor, as it is possible to sell BAs prior to maturity at the current market price.

**Basis Point** – The smallest measure used in quoting yields on bonds and notes. One basis point is 0.01% of yield. For example, a bond's yield that changed from 3.50% to 3.00% would be said to have moved 50 basis points.

**Benchmark Security** – A bond whose terms are used for comparison with other bonds of similar maturity. The global financial market typically looks to U.S Treasury securities as benchmarks.

**Benchmark for Performance** – A basket of securities that are similar to the investment criteria of the investment portfolio that is used to compare total return and yield performance over periods of time.

**Bid** – Price at which a buyer is willing to purchase a security.

**Bid/Ask Spread** – The difference between the bid price (at which a market maker is willing to buy) and the ask price (at which a market maker is willing to sell).

**Bill** – A short-term direct obligation of the U.S. Treasury that has a maturity of not more than one year (for example, 13-, 26- or 52-week maturity).

**Bond** – (1) The written evidence of debt, bearing a stated rate or stated rates of interest, or stating a formula for determining that rate, and maturing on a certain date, on which date and upon presentation a fixed sum of money plus interest is payable to the holder or owner. A municipal bond issue is usually comprised of many bonds that mature over a period of years; (2) Long-term securities with a maturity of greater than one year.

**Bond Swap** – The sale of a bond and the purchase of another bond of similar market value. Swaps generally are done in order to adjust the average maturity of the portfolio, upgrade credit quality, or to increase liquidity in the portfolio.

**Book Entry** – U.S. Government and federal agency securities that do not exist in definitive (paper) form; they exist only in computerized files maintained by the Federal Reserve Bank.

**Book Value** – The amount at which an asset is carried on the books of the owner. The book value of an asset does not necessarily have a significant relationship to the market value of the security.

**Bullet** – A security with a fixed maturity and no call feature.

**Call Protection** – Bonds that are not callable for a defined period of time before their call date.

**Call Risk** – The risk that declining interest rates may accelerate the redemption of a callable security, causing an investor's principal to be returned sooner than expected. As a consequence, investors may have to reinvest their principal at a lower rate of interest.

**Call Option** – The right to buy an underlying asset (e.g., a municipal bond) after a certain date and at a certain price. A call option is frequently embedded in a municipal bond, giving the issuer the right to buy, or redeem, the bonds at a certain price.

**Callable** – A bond that is subject to payment of the principal amount (and accrued interest) prior to the stated maturity date, with or without payment of a call premium. Bonds can be callable under a number of different circumstances, including at the option of the issuer, or on a mandatory or extraordinary basis.

**Certificates of Deposit (CDs)**– Certificates issued against funds deposited in a bank for a definite period of time and earning a specified rate of return. Certificates of Deposit bear rates of interest in line with money market rates current at the time of issuance.

**Collateral** – Assets pledged to secure an obligation. The assets are potentially subject to seizure in the event of default.

**Collateralized Mortgage Obligation** – A derivative security created by dividing the cash flows of a pool of mortgages into obligations having different maturities than the mortgages. CMOs present certain risks because of the relationship between interest rates and mortgage prepayments. When interest rates fall, more mortgages are paid off, impacting the cash flows of CMOs and overall return.

**Competitive Quote Process** – A process by which two or more institutions are contacted to obtain prices for specific securities.

**Convexity** – A measure of the change in a security's duration with respect to changes in interest rates. The more convex a security is, the more its duration will change with interest rate changes.

**Coupon** – The rate of interest payable annually. Where the coupon is blank, it may indicate that the bond is a "zero-coupon," or a new issue where the coupon has yet to be determined, or that it is a variable-rate bond.

**Credit Risk** – the risk that another party to an investment transaction will not fulfill its obligations. Credit risk can be associated with the issuer of a security, a financial institution holding the entity's deposit, or a third party holding securities or collateral. Credit risk exposure can be affected by a concentration of deposits or investments in any one investment type with any one party.

**Credit Spread** – A yield difference, typically in relation to a comparable U.S. Treasury security, that reflects the issuer's credit quality. Credit spread also refers to the difference between the value of two securities with similar interest rates and maturities when one is sold at a higher price than the other is purchased.

**Current Yield** – The ratio of interest to the actual market price of the bond, stated as a percentage. For example, a bond with a current market price of \$1,000 that pays \$60 per year in interest would have a current yield of 6%.

**CUSIP** – The Committee on Uniform Security Identification Procedures, which was established under the auspices of the American Bankers Association to develop a uniform method of identifying municipal, U.S. government, and corporate securities. CUSIP numbers are unique nine-digit numbers assigned to each series of securities.

**Custodian** – An independent third party (usually a bank or trust company) that holds securities in safekeeping as an agent for the entity who purchases investments.

**Debenture** – An unsecured debt obligation, issued against the general credit of a corporation, rather than against a specific asset.

**Defeasance** – Termination of the rights and interests of the trustee and bondholders under a trust agreement or indenture upon final payment or provision for payment of all debt service and premiums, and other costs, as specifically provided for in the trust instrument.

**Delivery** – The providing of a security in an acceptable form to the entity or to an agent acting on behalf of the entity and independent of the seller. Acceptable forms can be physical securities or the transfer of book-entry securities. The important distinction is that the transfer accomplishes absolute ownership control by the purchasing entity.

**Delivery vs. Payment** – There are two methods of delivery of securities: delivery vs. payment and delivery vs. receipt (also called free). Delivery vs. payment is delivery of securities with an exchange of money for the securities. Delivery vs. receipt is delivery of securities with an exchange or a signed receipt for the securities.

**Depository Bank** – A local bank used as the point of deposit for cash receipts.

**Depository Insurance** – Insurance on deposits with financial institutions. For purposes of this policy statement, depository insurance includes: a) Federal depository insurance funds, such as those maintained by the Federal Deposit Insurance Corporation (FDIC) and Federal Savings and Loan Insurance Corporation (FSLIC); and b) the Washington State Public Deposit Protection Commission (PDPC).

**Derivative** – A financial instrument whose value is based on, and determined by, another security or benchmark.

**Discount** – (1) Amount (stated in dollars or a percent) by which the selling or purchase price of a security is less than its face amount; (2) Amount by which the amount bid for an issue is less than the aggregate principal amount of that issue.

**Discount Note** – Short-term obligations issued at a discount from face value, with maturities ranging from overnight to 360 days. They have no periodic interest payments; the investor receives the note's face value at maturity.

**Discount Rate** – The rate the Federal Reserve charges on loans to member banks.

**Diversification** – Dividing available funds among a variety of securities and institutions so as to minimize market risk.

**Downgrade** – A negative change in credit ratings.

**Duration** – The weighted maturity of a fixed-income investment's cash flows, used in the estimation of the price sensitivity of fixed-income securities for a given change in interest rates.

**Effective Rate** – The yield received on a debt security over a period of time taking into account any compounding effect.

**Embedded Option** – A provision within a bond giving either the issuer or the bondholder an option to take some action against the other party. The most common embedded option is a call option, giving the issuer the right to call, or retire, the debt before the scheduled maturity date.

**Event Risk** – The risk that an issuer's ability to make principal and interest payments changes dramatically and unexpectedly because of unanticipated factors, such as a corporate restructuring, a regulatory change or a natural disaster.

**Face Value** – The par value (i.e., principal, or maturity, value) of a security appearing on the face of the instrument; thus, the redemption value at maturity.

**Federal Agency Securities** – Federal agency securities can be classified by the type of issuer: those issued by Federally Related Institutions, and those issued by Government Sponsored Enterprises.

Federally Related Institutions are branches of the federal government and generally do not issue securities directly in the marketplace. The major issuers have been the Tennessee Valley Authority (TVA) and the Government National Mortgage Association (Ginnie Mae). With the exception of securities of the TVA and the Private Export Funding Corporation, the full faith and credit of the United States government back these securities.

Government Sponsored Enterprises (GSEs) are privately owned, publicly chartered entities. They were created by Congress to reduce the cost of capital for certain borrowing sectors of the economy deemed to be important enough to warrant assistance. Today there are four GSEs that issue securities: Federal Farm Credit Bank System (FFCB), Federal Home Loan Bank System (FHLB), Federal National Mortgage Association (Fannie Mae), and Federal Home Loan Bank Corporation (Freddie Mac). These Federal Government-sponsored agencies were established by the U.S. Congress to undertake various types of



financing without tapping the public treasury. In order to do so, the agencies have been given the power to borrow money by issuing securities, generally under the authority of an act of Congress. These securities are highly acceptable and marketable for several reasons, though mainly because they are exempt from state and local income taxes. Furthermore, agency securities must offer a higher yield than direct Treasury debt of the same maturity in order to attract investors, partly because these securities are not direct obligations of the Treasury.

**Federal Deposit Insurance Corporation** – A federal institution that insures bank deposits. The current limit of deposit insurance is \$100,000 per deposit.

**Federal Funds Rate** – The rate of interest at which Federal Funds are traded between banks. Federal Funds are excess reserves held by banks that desire to invest or lend them to banks needing reserves. The particular rate is heavily influenced through the open market operations of the Federal Reserve Board. Also referred to as the “Fed Funds rate.”

**Federal Reserve System** – The central bank of the United States, which has regulated credit in the economy since its inception in 1913. The system includes the Federal Reserve Bank, 12 district banks and the member banks of the Federal Reserve.

**Federal Savings and Loan Insurance Corporation (FSLIC)** – A federal institution that insures savings and loan deposits. The current limit of deposit insurance is \$100,000 per deposit.

**FINRA: Financial Industry Regulatory Authority** - The largest self-regulatory securities industry organization in the United States and is the combined oversight of the NASD and NYSE,

**Flexible Repurchase Agreement (Flex Repos)** – Similar to a term repurchase agreement a flex repo is a contractual transfer of U.S. Government securities during the investment period, whereby the Seller agrees to repurchase the collateral securities from the Buyer on the Buyer’s demand, subject to provisions of the agreement. The Seller is generally a financial institution such as a securities dealer or a bank. As buyers, most issuers require over-collateralization, marking-to-market of collateral and delivery vs. payment of collateral.

**Floating-Rate Bond** – A bond for which the interest rate is adjusted periodically according to a predetermined formula, usually linked to an index.

**Forward Starting Swap** – Interest rate swaps that start at some time in the future. Used to lock-in current interest rates.

**General Obligation Bond (GO)** – A municipal bond secured by the pledge of the issuer’s full faith and credit, and backed by their taxing authority.

**Government Security** – Any debt obligation issued by the U.S. Government, its agencies or instrumentalities. Certain securities, such as Treasury bonds and Ginnie Maes, are backed by the government as to both principal and interest payments. Other securities, such as those issued by the Farm Credit Bank System and Freddie Macs, are backed by the issuing agency.

**Hedge** – A transaction that reduces the interest rate risk of an underlying security.

**Interest** – the compensation paid or to be paid for the use of money, usually expressed as an annual percentage rate. Interest rates change in response to a number of things including revised expectations about inflation, and such changes in the prevailing level of interest rates affects the value of all outstanding bonds.

**Inverse Floater** – Structured notes or derivatives designed to rise in yield as interest rates fall. Also called a Reverse Floater. These are very volatile securities.

**Inverted, or Negative, Yield Curve** – The interest rate structure which exists when short-term interest rates are higher than long-term interest rates.

**Letter of Credit (LOC)** – A commitment, usually issued by a bank, used to guarantee the payment of principal and interest on debt issues. The Letter of Credit is drawn down if the issuer is unable to make the principal and/or interest payments on a timely basis.

**Leverage** – The use of borrowed money to increase investing power.

**LIBOR (London Interbank Offered Rate)** – The rate banks charge each other for short-term Eurodollar loans. LIBOR is frequently used as the base for resetting rates on floating-rate securities.

**Liquidity** – The ease and speed with which an asset can be converted into cash without a substantial loss in value.

**Liquidity Support** – An agreement by a bank to make payment on a variable rate security to assure investors that the security can be sold.

**Local Government Investment Pool (LGIP)** – The aggregate of all funds from political subdivisions that are placed in the custody of the State Treasurer for investment.

**Long** – Securities that are owned by a dealer or investor.

**Loss** – The excess of the cost or book value of an asset over its selling price.

**Market Price** – For securities traded through an exchange, the last reported price at which a security was sold; for securities traded “over-the-counter,” the current price of the security in the market.

**Market Risk** – The risk that the market value of an investment, collateral protecting a deposit, or securities underlying a repurchase agreement will decline.

**Marketability** – A measure of the ease with which a security can be sold in the primary and secondary market without an undue price concession.

**Master Agreement** – An agreement which is controlling over all transactions covered by it on an open-ended basis. A new contract is not required for each new transaction.

**Maturity Date** – The date when the principal amount of a security becomes due and payable, if not subject to prior call or redemption.

**Medium-Term Note** – A debt security issued under a program that allows an issuer to offer notes continuously to investors through an agent. The size and terms of medium-term notes may be customized to meet investors’ needs. Maturities can range from one year to 30 years.

**Modified Duration** – The approximate percentage change in a bond’s price for a 100 basis point change in yield *assuming that the bond’s expected cash flows do not change when the yield changes*.

**Negative Convexity** – A characteristic of callable or prepayable securities that causes investors to have their principal returned sooner than expected in a declining interest rate environment or later than expected in a rising interest rate environment. In the former scenario, investors may have to reinvest their funds at lower rates (“call risk”); in the latter, they may miss an opportunity to earn higher rates (“extension risk”).

**Net Interest Costs:** Total interest earnings on cash and cash equivalents less interest paid on outstanding debt obligations.

**Net Interest Exposure;** Net interest paid on liabilities (debt service) and interest paid on assets (cash and cash equivalents).

**Notes** – Short-term promises to pay specified amounts of money, usually secured by specific sources of future revenues, such as taxes, federal and state aid payments, and bond proceeds.

**Notional Amount** – The amount used to determine the interest payments on a swap.

**Off-the-Run Treasuries** – Treasury securities sold in the secondary market rather than “on-the-run” Treasury securities, which are the most recently issued securities by the Treasury.

**Offer** – The price at which a seller will sell a security.

**Offsetting Swap** – Secondary interest rate swap that is placed in an opposite direction from the primary interest rate swap. The offsetting swap is used to minimize swap risks associated with the use of interest rate swaps and potentially gain monetary value from the transaction.

**Option-Adjusted Duration** (effective duration) – A measure of the bond’s movement for a shift in the yield curve. For non-callable bonds modified duration and effective duration are the same.

**Option-Adjusted Spread** (OAS) – The average spread over the AAA spot curve, based on potential paths that can be realized in the future for interest rates. The potential paths of the cash flows are adjusted to reflect the options (puts/calls) embedded in the bond.

**Par Value** – The nominal or face value of a debt security; that is, the value at maturity.

**Performance** – An investment’s return (usually total return), compared to a benchmark that is comparable to the risk level or investment objectives of the investment. The return incorporates both interest earnings and price change over a specified period of time.

**Premium** – The amount by which a bond sells above its par value.

**Primary Dealers** – A group of government securities dealers that submit daily reports of market activity and positions and monthly financial statements to the Federal Reserve Bank of New York and are subject to its informal oversight. Primary dealers include Securities and Exchange Commission registered securities broker-dealers and banks.

**Prime Rate** – The interest rate a bank charges on loans to its most creditworthy customers. Frequently cited as a standard for general interest rate levels in the economy.

**Principal** – The invested amount on which interest is charged or earned.

**Put Bond** – A bond that gives the holder the right to require the issuer or the issuer’s agent to purchase the bonds at a price, usually at par, at some date or dates prior to the final stated maturity.

**Put Option** – A put option allows the holder of a bond to “put,” or present, the bond to an issuer (or trustee) and demand payment at a stated time before the final stated maturity of the bond.

**Qualified Public Depository** – A financial institution which does not claim exemption from the payment of any sales or compensating use or ad valorem taxes under the laws of this state, which has segregated for the benefit of the commission eligible collateral having a value of not less than its maximum liability and which has been approved by the Public Deposit Protection Commission to hold public deposits.

**Refunding** – Sale of a new issue, the proceeds of which are to be used, immediately or in the future, to retire an outstanding issue by essentially replacing the outstanding issue with the new issue. Refundings are done to save interest cost, extend the maturity of the debt, or to relax existing restrictive covenants.

**Registered Bond** – A bond whose owner is registered with the issuer or its agent. Transfer of ownership can only be accomplished when the securities are properly endorsed by the registered owner.

**Reinvestment Risk** – The risk that interest income or principal repayments will have to be reinvested at lower rates in a declining rate environment.

**Repricing** – The revaluation of the market value of securities.

**Repurchase Agreement (Repo)** – A Repurchase Agreement is a contractual transaction between an investor and an issuing financial institution (not a secured loan). The investor exchanges cash for temporary ownership of specific securities, with an agreement between the parties that on a future date the financial institution will repurchase the securities at a predetermined price. An “open repo” does not have a specified repurchase date and the repurchase price is established by a formula computation.

**Reverse Repurchase Agreement** – The opposite of the transaction undertaken through a regular Repurchase Agreement. In a “Reverse Repo”, the entity initially owns securities and the bank or dealer temporarily exchanges cash for this collateral. This is, in effect temporarily borrowing cash at a high interest rate. Most typically a Repo is initiated by the lender of funds. Reverse Repos are used by dealers to borrow securities they have shorted.

**Risk** – A measure of the degree of uncertainty and/or of negative market value change inherent in an investment or decision.

**Safekeeping** – A service to customers rendered by banks or trust companies for a fee whereby all securities and valuables of all types and descriptions are held in the bank’s vaults for protection, or in the case of book entry securities, are held and recorded in the customer’s name and are inaccessible to anyone else.

**Scenario Analysis** – Examining the likely performance of an investment under a wide range of possible interest rate environments.

**Secondary Market** – Ongoing market for bonds previously offered or sold in the primary market.

**Securities** – Bonds, notes, mortgages or other forms of negotiable or non-negotiable instruments.

**Settlement Date** – The day on which payment is due for a securities purchase. Bonds and options normally settle one business day after the trade date. For stocks and mutual funds bought through an investment dealer, settlement is normally five business days after the trade date.

**Spread** – (1) The difference between the price at which an issue is purchased from an issuer and the price at which it is offered by the underwriters to the first holders. (2) The difference in price or yield between two securities. The securities can be in different markets, or within the same securities market between different credits, sectors or other relevant factors.

**Spread to Treasury** – The difference between the yield on a fixed-income security and the yield on a Treasury security of comparable maturity. For example, the spread between a 10-year Treasury yielding 5.50% and a 10-year corporate bond yielding 6.25% is 75 basis points.

**Step-up Agency Obligation Security** – An agency obligation security where the coupon rate increases at pre-determined intervals.

**STRIPS** – Separate Trading of Registered Interest and Principal of Securities. The Treasury Department’s program under which eligible securities are authorized to be separated into principal and interest components, and sold separately.

**Swap** – A transaction in which an investor sells one security and simultaneously buys another with the proceeds, usually for about the same price.

**Syndicate** – A group of underwriters formed for the purpose of participating jointly in the initial public offering of a new issue of securities. The terms under which a “syndicate” is formed and operates are typically set forth in an “agreement among underwriters.” One or more underwriters will act as manager of the “syndicate” and one of the managers will act as lead manager and “run the books.” A “syndicate” is also often referred to as an “account” or an “underwriting account.”

**Termination Payment** – A payment made by a counterparty that is required to terminate the swap. The payment is commonly based on the market value of the swap, which is computed using the rate on the initial swap and the rate on a replacement swap

**Third-Party Safekeeping** – A safekeeping arrangement whereby the investor has full control over the securities being held. Dealers and/or bank investment departments have no access to the securities being held.

**Time Deposit** – An interest-bearing deposit at a savings institution that has a specific maturity.

**Total Return** – Investment performance measure over a stated time period which includes coupon interest, interest on interest, and any realized and unrealized gains or losses.

**Trade Date** – The date that a trade, or sale and purchase, is consummated, with settlement to be made later (see “settlement date”).

**Treasury Bills** – Treasury Bills are short-term debt obligations of the U.S. Government which are issued at a discount to par value, have no coupon rate and mature at par value. They offer maximum safety of principal since they are backed by the full faith and credit of the United States Government. Treasury bills, commonly called “T-Bills” account for the bulk of government financing, and are the major vehicle used by the Federal Reserve System in the money market to implement national monetary policy. T-Bills are issued on a regular basis with initial maturities of 91 days, 182 days, and 364 days. They are more popularly referred to as 3-month, 6-month and 1-year Treasury bills. Because Treasury bills are considered “risk-free,” these instruments generally yield the lowest returns of the major money market instruments.

**Treasury Notes and Bonds** – While T-Bills are sold at a discount rate that establishes the yield to maturity, all other marketable treasury obligations have coupons. These include Treasury Notes, with maturities from one to ten years and Treasury Bonds with maturities of 10 to 30 years. Since Bills, Notes and Bonds are general obligations of the U.S. Government, and since the General Government has the lowest credit risk of all participants in the money market, its obligations generally offer a lower yield to the investor than do other securities with similar maturity structures.

**Underlying Securities** – Securities transferred in accordance with a Repurchase Agreement.

**U.S. Government Agency Securities** – A variety of securities issued by several U.S. agencies. Some are issued on a discount basis and some are issued with coupons. Some are backed by the full faith and credit guarantee of the U.S. Government, while others are not.

**Volatility** – A statistical measure of the variance of price or yield over time. Volatility is low if the price does not change very much over a short period of time, and high if there is a greater change.

**When-Issued Trades** – Typically there is a lag between the time a new bond is announced and sold, and the time it is actually issued. During this interval, the security trades “WI” – “when, as, and if issued.”

**Yield** – The rate at which an investment pays out interest or dividend income, expressed in percentage terms and calculated by dividing the amount paid by the price of the security and annualizing the result.

**Yield Basis** – Stated in terms of yield as opposed to price. As yield increases for a traded issue, price decreases and vice versa. Charts prepared on a yield basis appear exactly opposite of those prepared on a price basis.

**Yield Curve** – The graphical relationship between yield and maturity among bonds of different maturities and the same credit quality. This line shows the term structure of interest rates.

**Yield Spread** – The variation between yields on different types of debt securities; generally a function of supply and demand, credit quality and expected interest rate fluctuations. Treasury bonds, for example, because they are so safe, will normally yield less than corporate bonds. Yields may also differ on similar securities with different maturities. Long-term debt, for example, carries more risk of market changes and issuer defaults than short-term debt and thus usually has a higher yield.

**Yield To Call** – A yield on a security calculated by assuming that interest payments will be paid until the call date, when the security will be redeemed at the call price.

**Yield To Maturity** – The yield on a security calculated by assuming that interest payments will be made until the final maturity date, at which point the principal will be repaid by the issuer. Yield to maturity is essentially the discount rate at which the present value of future payments (investment income and return of principal) equals the price of the security.

**Zero-Coupon Bonds** – Securities that do not pay interest but are instead sold at a deep discount from face value. They rise in price as the maturity date nears and are redeemed at face value upon maturity.