Crowe Horwath.

Smart decisions. Lasting value.™

GASB 72: Fair Value Measurement and Application

October 7, 2016

Chris Davis, CPA

Agenda

- Overview of the new standard
- Required Disclosures
- Questions and Answers
- Common Issues

Overview of New Standard

GASB 72 – Fair Value Measurement and Application

- Effective date
  - Issued February 2015
  - Provisions of this Statement are effective for financial statements for periods beginning after June 15, 2015. (6/30/2016, 9/30/2016, 12/31/2016)
- Objectives
  - To enhance comparability of financial statements among governments by requiring measurement of certain assets and liabilities at fair value using a consistent and more detailed definition of fair value and accepted valuation techniques.
  - To enhance fair value application guidance and related disclosures in order to provide information to financial statement users about the impact of fair value measurements on a government's financial position.
- Why?
  - "The board believes that requiring governments to provide additional information about how they measure the fair value of their assets and liabilities will increase financial statement users' understanding of the nature of the fair value information they receive and enhance users' ability to make decisions with that information" – GASB Chairman David Vaudt

GASB 72 – Fair Value Measurement and Application

- Definitions
  - Investment
    - A security or other asset that (a) a government holds primarily for the purpose of income or profit and (b) has a present service capacity that is based solely on its ability to generate cash or to be sold to generate cash
- Fair value
  - The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date
  - An exit price that assumes the transactions takes place in a government's principal market (or most advantageous market if no principal market)
  - Should not be adjusted for transactions costs (these are expensed) – however, transportation costs are relevant in determining the most advantageous market
- Principal market
  - The market with the greatest volume and level of activity for that asset or liability
- Most advantageous market
  - If no principal market exists, the most advantageous market is the market that maximizes the amount that would be received to sell an assets or minimizes the amount that would be paid to transfer a liability, after taking into account transaction costs and transportation costs

GASB 72 – Fair Value Measurement and Application

- Determining fair value measurement
  - Unit of account
    - For investments held in a brokerage account – each individual security
    - For investments in mutual funds – each share of the respective mutual funds
    - For an investment in a partnership – a group of related assets
  - Valuation techniques
    - Market approach – use prices and other relevant information generated by market transactions involving identical or comparable assets, liabilities or groups of assets and liabilities
      - Quoted market prices
      - Matrix pricing
    - Cost approach – use amounts that would be required to replace the present service capacity of an asset (often referred to as current replacement cost)
    - Income approach – convert future amounts (such as cash flows or revenue and expenses) to a single, current (discounted) amount.
      - Present value
      - Option pricing model (ie. Black-Scholes-Merton formula)

GASB 72 – Fair Value Measurement and Application

- Basic Principles
  - Maximize use of relevant observable inputs and minimize the use of unobservable inputs
  - Select inputs that are consistent with the characteristics of the asset or liability that market participants would take into account in a transaction for the asset or liability
  - Premiums or discounts that reflect size as a characteristic of a government's holding are not permitted in the measurement of fair value
    - A blockage factor that when applied to a Level 1 input would adjust the quoted price of an asset or a liability because the market's normal daily trading volume is not sufficient to absorb the quantity held by a government

GASB 72 – Fair Value Measurement and Application

- Hierarchy of inputs
  - Level 1 – quoted prices in active markets for identical assets or liabilities that a government can access at the measurement date
    - Exchange markets, dealer markets, brokered markets and principal-to-principal markets
  - Level 2 – observable inputs, either directly or indirectly (other than quoted prices)
    - Quoted prices for similar assets or liabilities in active markets
    - Quoted prices for identical or similar assets or liabilities in markets that are not active
    - Inputs other than quoted prices that are observable for the asset or liability, such as:
      - Interest rates and yield curves observable at commonly quoted intervals
      - Implied volatilities
      - Credit spreads
    - Market-corroborated inputs

GASB 72 – Fair Value Measurement and Application

- Hierarchy of inputs (Continued)
  - Level 3 – unobservable inputs
    - Best information available under the circumstances
    - Management assumptions
    - i.e. limited partnerships with K-1's, real estate, long-dated currency swap, interest rate swap
  - Net asset value per Share (NAV)
    - Presented separately from Levels 1, 2, and 3
    - i.e. hedge funds
    - NAV should not be applied if it is probable that the government will sell the investment for an amount different from the NAV per share
  - If the fair value of an asset or a liability is measured using inputs from more than one level, the measurement is based on the lowest priority level input that is significant to the entire measurement
    - For example, if there are three inputs significant to a certain fair value measurement, two of them are Level 2 inputs, and one is a Level 3 input, the fair value measurement would be categorized in Level 3 of the fair value hierarchy

GASB 72 – Fair Value Measurement and Application

- Acquisition value
  - The price that would be paid to acquire an asset with equivalent service potential in an orderly market transactions at the acquisition date, or the amount at which a liability could be liquidated with the counterparty at the acquisition date

  - The following assets should be measured at acquisition value:
    - Donated capital assets
    - Donated works of art, historical treasures, and similar assets
    - Capital assets that a government receives in a service concession arrangement

Required Disclosures

GASB 72 – Required Disclosures

- Should take into consideration the following:
  - The nature, characteristics, and risks of an asset or a liability
    - Assets can be aggregated (for example, U.S. Treasury bills with STRIPS because these investments have similar exposures to interest rate risk)
    - Measurements categorized within Level 3 may need greater disaggregation
  - The level of the fair value hierarchy within which the fair value measurement is categorized
    - Fair value measurements categorized within Level 3 of the fair value hierarchy may need greater disaggregation
  - Whether this Statement or another Statement specifies a type for an asset or a liability

GASB 72 – Required Disclosures

- Should take into consideration the following (continued):
  - The objective or the mission of the government
  - The characteristics of the government
  - Relative significance of assets and liabilities
  - Whether separately issued financial statements are available
  - Line items presented in the statement of net position
    - A type of asset or liability will often require greater disaggregation than the line items presented in the statement of net position

GASB 72 – Required Disclosures

- For recurring and nonrecurring fair value measurements:
  - (1) The fair value measurement at the end of the reporting period
  - (2) Except for investments that are measured at the NAV per share (or its equivalent), the level of the fair value hierarchy within which the fair value measurements are categorized in their entirety (Level 1, Level 2, or Level 3)
  - (3) A description of the valuation techniques used in the fair value measurement
  - (4) If there has been a change in valuation technique that has a significant impact on the result, that change and the reason(s) for making it
    - Changing from an expected cash flow technique to a relief from royalty technique or the use of an additional valuation technique
- For nonrecurring fair value measurements: the reason(s) for the measurement

GASB 72 – Required Disclosures

- Investments valued at NAV
  - a. The fair value measurement of the investment type at the measurement date and a description of the significant investment strategies of the investee(s) in that type
  - b. For each type of investment that includes investments that can never be redeemed with the investees, but a government receives distributions through the liquidation of the underlying assets of the investees: the government's estimate of the period over which the underlying assets are expected to be liquidated by the investees
  - c. The amount of a government's unfunded commitments related to that investment type
  - d. A general description of the terms and conditions upon which a government may redeem investments in the type (for example, quarterly redemption with 60 days' notice)

GASB 72 – Required Disclosures

- Investments valued at NAV (Continued)
  - e. Any redemption restrictions (for example, investments subject to a redemption restriction, such as a lockup or gate)
    - The estimate of when the restriction from redemption might lapse; if an estimate cannot be made, disclose that fact and how long the restriction has been in effect
    - Any other significant restriction on the ability to sell investments in the type at the measurement date
  - f. If a government determines that it is probable that it will sell an investment for an amount different from the NAV per share; then disclose the FV of all investments that meet this criteria and any remaining actions required to complete the sale

GASB 72 – Fair Value Measurement and Application

- Basic disclosure example

The City categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

The City has the following recurring fair value measurements as of June 30, 20X1:

- U.S. Treasury securities of $45 million are valued using quoted market prices (Level 1 inputs)
- Corporate bonds of $12 million are valued using a matrix pricing model (Level 2 inputs).

The City also has a nonrecurring fair value measurement as of June 30, 20X1, for a closed performing arts hall that will no longer be used by the government and therefore is considered to be impaired. The hall has been written down from $5.6 million to $3.4 million based on an appraisal of the property (Level 3 inputs).

Defined Benefit Pension Plan example

	12/31/X1	Fair Value Measurements Using: Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level				
Debt securities				
U.S. Treasury securities	$ 85	$ 85		
Commercial mortgage-backed securities	50		$ 45	$ 5
Collateralized debt obligations	30		5	25
Residential mortgage-backed securities	149		24	125
Corporate bonds	93	9	84	
Total debt securities	407	94	158	155
Equity securities				
Financial services industry	150	150		
Healthcare industry	110	110		
Other	15	15		
Total equity securities	275	275		
Venture capital investments				
Direct venture capital—healthcare	53			53
Direct venture capital—energy	32			32
Total venture capital investments	85			85
Private equity funds—international	43			43
Total investments by fair value level	810	$ 369	$ 158	$ 283

Defined Benefit Pension Plan example (continued)

	12/31/X1	Fair Value Measurements Using: Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments measured at the net asset value (NAV)				
Equity long/short hedge funds	55			
Event-driven hedge funds	45			
Global opportunities hedge funds	35			
Multi-strategy hedge funds	40			
Real estate funds	47			
Total investments measured at the NAV	222			
Total investments measured at fair value	$ 1,032			
Investment derivative instruments				
Interest rate swaps	$ 57		$ 57	
Foreign exchange contracts (liabilities)	(43)		(43)	
Total investment derivative instruments	$ 14		$ 14	

Defined Benefit Pension Plan example (continued)

Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Commercial and residential mortgage-backed securities classified in Level 3 are valued using discounted cash flow techniques. Collateralized debt obligations classified in Level 3 are valued using consensus pricing.

Venture capital investments classified in Level 3 are valued using either a discounted cash flow or market comparable companies technique.

Private equity funds—international are valued as described in the following schedule, Note 6.

The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) is presented on the following table.

Derivative instruments classified in Level 2 of the fair value hierarchy are valued using a market approach that considers benchmark interest rates and foreign exchange rates.

Defined Benefit Pension Plan example (continued)

Investments Measured at the NAV
($ in millions)

	Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Equity long/short hedge funds [1]	$ 55		Quarterly	30–60 days
Event-driven hedge funds [2]	45		Quarterly, annually	30–60 days
Global opportunities hedge funds [3]	35		Quarterly	30–45 days
Multi-strategy hedge funds [4]	40		Quarterly	30–60 days
Real estate funds [5]	47	$ 20		
Total investments measured at the NAV	$ 222			
Private equity funds—international [6]	$ 43	$ 15		

Defined Benefit Pension Plan example (continued)

1. *Equity long/short hedge funds*. This type includes investments in 12 hedge funds that invest both long and short primarily in U.S. common stocks. Management of each hedge fund has the ability to shift investments from value to growth strategies, from small to large capitalization stocks, and from a net long position to a net short position. The fair values of the investments in this type have been determined using the NAV per share of the investments. Investments representing approximately 22 percent of the value of the investments in this type cannot be redeemed because the investments include restrictions that do not allow for redemption in the first 12 to 18 months after acquisition. The remaining restriction period for these investments ranged from three to seven months at December 31, 20X1.

2. *Event-driven hedge funds*. This type includes 3 investments in hedge funds that invest in approximately 60 percent equities and 40 percent bonds to profit from economic, political, corporate, and government-driven events. A majority of the investments are targeted at economic policy decisions. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the investments.

3. *Global opportunities hedge*. This type includes investments in 5 hedge funds that hold approximately 80 percent of the funds' investments in non-U.S. common stocks in the healthcare, energy, information technology, utilities, and telecommunications sectors and approximately 20 percent of the funds' investments in diversified currencies. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the investments. For one investment, valued at $8.75 million, a gate has been imposed by the hedge fund manager, and no redemptions are currently permitted. This redemption restriction has been in place for six months, and the time at which the redemption restriction might lapse cannot be determined.

Defined Benefit Pension Plan example (continued)

4. *Multi-strategy hedge funds*. This type invests in 15 hedge funds that pursue multiple strategies to diversify risks and reduce volatility. The hedge funds' composite portfolio for this type includes investments in approximately 50 percent U.S. common stocks, 30 percent global real estate projects, and 20 percent arbitrage investments. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the investments. Investments representing approximately 15 percent of the value of the investments in this type cannot be redeemed because the investments include restrictions that do not allow for redemption in the first year after acquisition. The remaining restriction period for these investments ranged from four to six months at December 31, 20X1.

5. *Real estate funds*. This type includes nine real estate funds that invest primarily in U.S. commercial real estate. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. These investments can never be redeemed with the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 7 to 10 years. Twenty percent of the total investment in this type is expected to be sold. However, the individual investments that will be sold have not yet been determined. Because it is not probable that any individual investment will be sold, the fair value of each individual investment has been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. Once it has been determined which investments will be sold and whether those investments will be sold individually or in a group, the investments will be sold in an auction process. The investee fund's management is required to approve of the buyer before the sale of the investments can be completed.

Changes in net OPEB liability - EXAMPLE

6. *Private equity funds—international.* This type includes two private equity funds that invest primarily in foreign technology companies. These investments can never be redeemed with the funds. Instead, the nature of the investments in this type is that distributions are received through the liquidation of the underlying assets of the fund. If these investments were held, it is expected that the underlying assets of the fund would be liquidated over five to eight years. However, as of December 31, 20X1, it is probable that all of the investments in this type will be sold at an amount different from the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. Therefore, the fair values of the investments in this type have been determined using recent observable transaction information for similar investments and nonbinding bids received from potential buyers of the investments. As of December 31, 20X1, a buyer (or buyers) for these investments has not yet been identified. Once a buyer has been identified, the investee fund's management is required to approve of the buyer before the sale of the investments can be completed.

Questions & Answers

GASB 72 – Fair Value Measurement and Application

Question 1

- Q—Are cash equivalents subject to the fair value disclosure requirements of Statement 72?

Question 1

- Q—Are cash equivalents subject to the fair value disclosure requirements of Statement 72?
- A—Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. ***Generally***, cash equivalents are measured at other than fair value (including amortized cost) and, consequently, are ***not*** subject to the fair value disclosure requirements of Statement 72.

Question 2

- Q—A government holds an investment in a limited partnership. The limited partnership has investments in various countries. Do foreign currency risk disclosures “look through” the partnership to identify the foreign currency risks?

Question 2

- Q—A government holds an investment in a limited partnership. The limited partnership has investments in various countries. Do foreign currency risk disclosures “look through” the partnership to identify the foreign currency risks?

- A—No. Consistent with the requirements established for external investment pools, no disclosure is required for the individual deposits or investments of the limited partnership. (See Question 1.3.8 in Implementation Guide 2015-1.) Consequently, a government holding an investment in a limited partnership would not be required to report the risks associated with the *individual* investments of the limited partnership. Disclosure of the fair value and type of investment is sufficient to acknowledge the government’s exposure to foreign currency risk.

Question 3

- Q—Prior to the implementation of Statement 72, a government classified as capital assets certain assets that meet the definition of an investment in paragraph 64 of Statement 72. Likewise, the government classified as investments certain assets that do not meet the definition of an investment in Statement 72. Should the government reclassify those assets upon implementation of Statement 72?

Question 3

- Q—Prior to the implementation of Statement 72, a government classified as capital assets certain assets that meet the definition of an investment in paragraph 64 of Statement 72. Likewise, the government classified as investments certain assets that do not meet the definition of an investment in Statement 72. Should the government reclassify those assets upon implementation of Statement 72?
- A—Yes. As part of the initial implementation of Statement 72, the government should evaluate its capital assets, investments, and other assets to determine if any of those assets should be reclassified based on the definition of an investment in Statement 72. For this purpose, the classification should be based on the facts and circumstances at initial implementation of the requirements of Statement 72, rather than on those in existence at the time the asset was initially acquired. After those classifications have been established as part of the implementation of Statement 72, they should not be changed for financial reporting purposes.

Question 4

- Q—A defined benefit pension plan has certain debt securities that management intends to hold to maturity. May these investments be reported at cost? Would the answer be different if the plan is legally restricted from selling the securities below cost?

Question 4

- Q—A defined benefit pension plan has certain debt securities that management intends to hold to maturity. May these investments be reported at cost? Would the answer be different if the plan is legally restricted from selling the securities below cost?

- A—No. Statements 31 and 67, as amended, and Statement 72, do not provide for valuing such investments at cost based on management's intent to hold the securities to maturity or in circumstances in which the likelihood of selling the security is significantly limited by legal provisions.

Common Issues

GASB 72 – Fair Value Measurement and Application

- Common Issues or Questions in Implementation:
  - Disagreement on level classification
  - Difficulty obtaining information for required disclosures, especially those at NAV
  - Determination of applicability for assets and liabilities
  - Lack of understanding by Boards or Committees on what the levels mean (ie. Not risk
  - based)
  - Likely out-of-scope work; additional billings

Thank you

Chris Davis
Direct +1 813 209 2441
chris.davis@crowehorwath.com