

## **Analysis of Pending Changes in Governmental Pension Financial Reporting**

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**7/27/11**

The Governmental Accounting Standards Board (GASB) establishes “Generally Accepted Accounting Principles” (GAAP) for state and local governments in the US. They intend to impose **major reforms in how governments must report the expense and debt of their pension plans** next summer. Some governments will have to immediately implement these changes; others including Mendocino and Sonoma Counties will have an extra year.

GASB has realized their **current standards** have a **fatal flaw** – they **allow governments to report the pension expenses that created huge government unfunded pension debts as if they will happen in the future when the debt is paid. But they won’t happen in the future – they already happened in the past.** They created the huge unfunded pension debt. Governments will **no longer be able to delay decades into the future** reporting these true pension expenses of the past. Governments with high Unfunded Pension Debt today will report much higher pension expense immediately. If these new rules had been in place for the **County of Mendocino’s audited financial statement for 6/30/2010 pension expenses** would have been reported as about **\$50 million instead of \$9 million to \$13 million** that was actually reported.

GASB will also require governments to **report Unfunded Pension Obligations as a liability** in its **Balance Sheets**. Today they are only disclosed in “Supplementary Information” attached to the financial statements.

In calculating this liability the **“fair (market) value” of Fund investments** will be used **instead of the actuarially “smoothed” value used today**. Further, GASB proposes to apply a **much lower discount rate** to determine the value of Unfunded Pensions rather than today’s standard that uses the Pension Fund’s expected rate of return. But there’s a subtle debate about how to do that. GASB proposed a very different method last year than is currently proposed. Many analysts (including me) prefer the previous method. This will be a point of contention in public comments over the next 3 months.

Either method will cause governments to report unfunded pensions as a bona fide liability on their Balance Sheets. I believe the **currently proposed (complex) method** will result in a liability **roughly equal to today’s calculation of the market value of the Pension Deficit** – the **method proposed last year** would roughly **double to triple** that amount. Using the **currently proposed method Mendocino County** would have reported about **\$140 million in Unfunded Pension Liability on its Balance Sheet** which would have **doubled total reported Liabilities**. **Last year’s proposed method** would have produced a **\$383 million liability**.

GASB has no authority to change how and when governments fund their pensions. But they do define how pension finances are reported in government financial statements to the people. **The political impacts of these changes are likely to be profound**. It remains to be seen what the direct impact will be on credit ratings, access to loans and bonds, state requirements to operate with balanced budgets, etc.

The proposed new standards **do not include “Other Postemployment Benefits” – esp. retiree healthcare**.

I’ve tried my best to interpret the complex proposals correctly but I wouldn’t be surprised if I got something wrong. **If you see an error please let me know.**

*I take no position on what pension benefits should be.*

*I absolutely take the position that whatever they are their true expense and debt must be reported to the people, they must be properly funded, and they must not produce huge debts to burden our kids.*

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## I. INTRODUCTION

The Governmental Accounting Standards Board (known as “GASB” – pronounced “Gas-Bee”) establishes the rules by which state and local governments produce their financial statements. GASB released three documents dated June 27, 2011 that describe proposed **major changes** in how state and local governments and their pension funds must **report pension finances**. These are the third and final set of public review documents GASB has released since initiating a review of its pension reporting standards in 2006. GASB **intends to impose** these new requirements **next summer** subject to any modifications they make after this final round of public comments. Governments will be required to comply either next year or the year after depending on the size and structure of their Pension Fund.

GASB describes these proposals in three documents

- **Accounting and Financial Reporting for Pensions**
- **Financial Reporting for Pension Plans**
- **Pension Accounting and Financial Reporting – a Plain Language Description).**

To download copies go to: [www.gasb.org/](http://www.gasb.org/), then “Projects”, then “Documents for Public Comment”.

**This paper** is written for concerned citizens who want more than a general review – but rather a **more specific “operational” description**. **What exactly is going to change and what does it “mean”?** Therefore this paper is “fairly comprehensive” regarding the problems the new GASB standards are supposed to correct, what those proposed standards are, and what their impact will be. Even so it would require a book to put all this in proper context.

Many concepts in this paper are **simplifications**. However – I believe these concepts provide a **basic and correct understanding** of the finances of “Defined Pension Benefits”, how governments report the finances of their pension benefits today, why there’s a huge flaw in today’s government financial statements, and how GASB’s reforms would radically change government financial statements.

After I describe what I see as the “Fatal Flaw” in GASB’s current pension reporting requirements I’ll lay out the basic financial activities of a defined pension benefit that must be reported in financial statements and how Actuaries analyze and plan the funding of pensions. Then we’ll look at how governments report various aspects of the finances of their pension benefits today, and how they would be reported under the new GASB standards.

## II. GASB’S FATAL FLAW AND FUNDAMENTAL REFORMS

GASB has realized their **current standards** have a **fatal flaw** –

***They allow local and state governments to report pension expenses that created the huge unfunded government pension debts across the country as if they will happen in the future when the debt is paid. But they won’t happen in the future – they happened in the past.***

The undeniable existence of that debt is proof they really happened in the past.

But they were **never reported to the people**.

There are **two big changes** GASB will impose.

- Governments like Mendocino County will no longer be able to delay reporting the millions of real **annual pension expenses** that created huge unfunded pension debts decades into the future. They’re going to have to report them pretty much (but not quite) NOW!
- Today governments only put a footnote in their financial statements about how much unfunded pensions they owe. GASB will force them to list it as a **real liability on their Balance Sheets**, and in some cases a much bigger liability than governments disclose today.

### III. FINANCIAL DYNAMICS OF DEFINED BENEFIT PENSIONS

#### A. When Does Pension Expense Happen?

Most state and local governments make this deal with their employees:

*In **exchange for your services** we will pay you a salary and a number of benefits.  
In addition, if you work enough years we will also pay you a **pension after you retire for the rest of your life.***

No matter how long they live retirees who qualify will receive a pension. This is called a “guaranteed” or “defined pension benefit”. Here’s what happens (as shown in the graphic below).

- 1) The government and someone they want to hire make a deal – part of which is that if the employee works long enough he or she will get a pension for the rest of their lives.
- 2) The employee works for the number of years required to get a pension.
- 3) The employee retires and receives pension payments.

#### What’s really happening financially?



Obviously employees don’t get a pension while they are working – they get it after they retire. BUT **they are earning the legal right to receive those future pension payments as part of their compensation while they are employed.** The real pension expense always happens at the moment the government incurs an obligation to pay pensions in the future to employees in partial compensation for their labor in the present. When employees retire they have a 100% right to receive all their future pension payments and the government has a 100% legal liability to pay them.

**Pension expenses never happen when they are paid. The payment of pensions is the payment of a debt. The government receives the full value promised by the employee in the form of work while employed. The government’s true Pension Expense is the cost of the obligation it legally incurs each pay period to pay pensions in the future to current employees in exchange for the full value it has received from the employee.**<sup>1</sup>

But there’s a **huge mathematical problem** – **no one knows** how much an employee’s total pensions will be in the future. Therefore no one really knows what today’s pension expense is.

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<sup>1</sup> This is simply a statement of “Accrual Accounting” – one of the most fundamental concepts in Accounting and Financial Reporting. “Cash Accounting” generally waits until money moves to recognize income and expenses. In Cash Accounting the Pension Expense would be reported when the Pension is paid – OR when the government makes a payment to its Pension Fund. “Accrual Accounting” is far more realistic except for the smallest and simplest entities. Under Accrual Accounting the “trigger” for reporting Pension Expense isn’t when it’s paid – it’s when the obligation to make a payment is created.

## **B. How the Funding of Defined Benefit Pensions is “Supposed to Work”**

A Pension Fund<sup>2</sup> is **supposed to need only two sources of funds – yearly contributions and investment profits**. The yearly contributions are calculated so that – if all the dozens of assumptions and projections on which the calculation is based come true – there will be enough money in the Fund in the future to pay for the portion of future pension payments that are being earned that year. These yearly contributions are the sum of the government’s contribution and its employee’s contribution.

And – **Pension Funds are supposed to have enough money in the Fund when employees retire to fully fund their pension payments.**

If all this happens, **the yearly contribution made by the government would in fact be its true annual pension expense**, the Pension Fund would always be **fully funded**, and **all the pension expense related to retirees** will have been **reported** in financial statements **when they retire**.

The **Fatal Flaw** in GASB’s current financial reporting standards **isn’t about when everything works** according to plan – **it’s about what happens when they don’t**.

## **C. What Actuaries Do – Funding Pension Benefits**

No one knows how much future pension payments are going to be and therefore don’t know with certainty what they cost when the legal right to receive them is conveyed to government employees as they are working. We don’t know how long retirees are going to live. We don’t know if they will suffer a disabling injury on the job. We don’t know how long they’re going to work. We don’t know if they’ll have a surviving spouse entitled to receive some or all of the retiree’s pensions. There are dozens of other uncertainties as well.

**Actuaries** attempt to figure all this out.<sup>3</sup> They **estimate what pension payments will be and develop a plan for how to fund them** ahead of time by producing “Actuarial Valuations” of Pension Funds. These Valuations involve **very complex** assumptions, calculations and projections. A simple way to understand them is they are “Pension Funding Plans”. For the purposes of this paper **two important payments to the Pension Fund** are produced in Actuarial Valuations:

- **Yearly Contributions**
  - **The Government’s Share – called “Normal Contribution**
  - **Employees’ Share**
- **Unfunded Pension Amortization Payment**

Governments and their employees both make annual contributions to the Pension Fund. The government’s contribution is called the “Normal Contribution”. The total of the two is what an Actuary calculates will fully fund the amount of future pension payments that employees earn each year – assuming all the other dozens of assumptions come true, most importantly the Pension Fund’s target rate of investment profits.

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<sup>2</sup> Pension Funds are always separate legal entities from the governments whose employees will receive pensions. There are several ways Pension Funds can be organized – but the point here is that although obviously the finances of the Pension Fund and the government strongly influence each other, they are separate financial as well as legal entities.

<sup>3</sup> For more information about pension funds and what Actuaries do see **How Pension Funds Work** at <http://yourpublicmoney.com/data/data.shtml> - scroll down half way in the left column.

## **D. Unfunded Pension Obligations**

If the Pension Funding Plan “works” there will never be “Unfunded Pensions”. **If a significant deficit in the Pension Fund develops something is wrong that needs to be “fixed”.** PERIOD!

### **1. The Yearly Contribution & Pension Expense is an ESTIMATE**

**The required yearly contribution** is an **ESTIMATE** (based on a host of “hoped for” and expected developments) of how much money needs to be paid into the Pension Fund each year so that the pensions being earned that year will be fully funded when the time comes to pay them.

**ESTIMATES CAN BE WRONG!** In systems as complex as government pensions the Actuary’s estimate will never be precisely correct – in fact they are often way off.

In almost every case **if an Unfunded Pension deficit develops** it means **the real Pension Expense in the past was more than was reported in the financial statements.**

Nothing is more important to understand in the context of this paper.

### **2. Unfunded Pension Debt Only Refers to Pensions Earned in the Past**

The Actuary calculates the current financial position of the Pension Fund to determine if there is enough money in the Fund today to be able to pay all the pensions in the future that were earned in the past. If not then there is an Unfunded Pension Obligation or Deficit. This fact – that the **Unfunded Pension Obligation** is only related to the right to receive future pension payments that have **already been earned by employees in the past** – is fundamental as we will see.

**Only the government must pay additional money into the Fund to eliminate Unfunded Pensions** – employees bear no risk that the dozens of complex assumptions and projections that go into calculating the total yearly contributions may be wrong. If there is a significant deficit in the Pension Fund the Actuary calculates the second payment the government must make – the “Unfunded Pension Amortization Payment”. These payments over a specified number of years (up to a maximum of 30) are supposed to completely eliminate the Unfunded Pension Deficit.

### **3. How Governments Eliminate Unfunded Pensions**

Once a significant unfunded pension deficit develops the government must eliminate it. There are two ways it can do that – one of which has two variations.

#### **a) Immediate Cash Payment from Its Own Funds**

This rarely happens – but if the government has enough cash reserves it could simply make an additional payment to the Pension Fund to immediately eliminate the deficit. But – it very rarely happens.

#### **b) Debt Payments over Time**

Most of the time a government that develops a significant unfunded pension deficit doesn’t have enough cash to eliminate the deficit or doesn’t want to spend it that way. It would choose to pay it off over time. There are two ways to do this:

- **Unfunded Pension Amortization Payments** to the Pension Fund.
- **Pension Obligation Bonds (POB)** – money borrowed from outside investors.

In both cases the payments have both a “Principal” and “Interest” component – that is, some part of the payment is paying down the unfunded pension debt and another part is paying interest on the debt.

**How should these two methods of eliminating Unfunded Pension Deficits be reported in financial statements in terms of pension expense?**

## IV. HOW GOVERNMENTS REPORT PENSION FINANCES TODAY

### A. GASB Current Standards Follow Actuarial Practice

As stated in Section II on page I the “Fatal Flaw” in GASB’s current government financial reporting standards is they allow governments to report the pension expenses that cause unfunded pension debt when the debt is paid in the future rather than when they really happened in the past. This section will explain how that happens today – the next section will explain how GASB intends to correct this flaw.

The **Fatal Flaw** was created because when **GASB** issued their current standards 20 years ago they **made their standards conform to how Actuaries calculate and plan the funding of pensions.**

Actuaries are concerned about **cash flow** – cash into the Pension Fund and cash out. Large unfunded pension deficits often appear suddenly as a result of steep declines in the stock market (and other investment markets). Actuaries have developed methods to **prevent** such steep declines from causing **sudden precipitous increases in the government’s required Unfunded Pension Amortization payments.** They do this in order to soften the destructive and chaotic impact such steep increases would have on government yearly budgets. They slowly “ramp up” the amortization payments over a few years in the hope that government revenues would increase to help make the higher payments without cutting services, or the Pension Fund will eliminate some or all the unfunded pension deficit by over-target returns on investments, or to provide the government with a few years to more calmly reduce its operating budget to make room for increased debt payments – or a combination of all three.

They also **allow governments up to 30 years to eliminate unfunded pension deficits.**

Actuaries are **primarily focused** on making sure a government’s **pensions can be paid when due.** Subject to that goal they try to make the funding as “easy” as possible on the government. They **aren’t focused** on reporting what’s happening to the **“true economic” pension expense and debt.**

### B. Reporting Pension Expense

#### 1. If There Are No Significant Unfunded Pensions

In this case the calculation of yearly pension expense to be reported in financial statements is:

$$\text{Yearly Pension Expense} = \text{Actuarially Calculated “Normal Yearly Contribution”}$$

The problem with GASB’s current standards doesn’t appear when there are no significant unfunded pensions – it comes when there are.

#### 2. If There Are Significant Unfunded Pensions

Although governments theoretically can eliminate Unfunded Pension Deficits by making immediate payments out of its reserves this apparently very rarely happens. By far the most common method of eliminating such Deficits is to make payments to eliminate it over time.

There are two main alternatives:

- **Pay Pension Deficit Amortization Payments**
- **Borrow Money by Selling Pension Obligation Bonds**

As stated above the question is:

**How should these two methods of eliminating Unfunded Pension Deficits be reported in financial statements in terms of pension expense?**

### a) The Government Pays Unfunded Pension Deficit Amortization Payments

If a government has a significant Unfunded Pension Deficit and elects to eliminate it by paying the additional Unfunded Pension Deficit Amortization Payments as calculated by the Actuary, then an **amount approximately equal to the part of the payments that is paying down the Unfunded Deficit is added to each year's Pension Expense in the future.**

This **makes it appear that the expenses tied to Unfunded Pension Deficit Amortization Payments happen as the Unfunded Pension Deficit (Debt) gets paid.** But as stated on page 2 pension expenses really happen as employees earn while they are working the right to receive pensions after they retire and on page 4 unfunded pension debt only refers to pensions earned in the past.

Actuaries allow governments to take up to 30 years to eliminate Unfunded Pension Deficits – and so the **government can report pension expenses that really happened in the past over the following 30 years** – long after many of the people who earned those pensions have passed on.

### b) The Government Borrows Money by Selling Pension Obligation Bonds

Governments can also sell Pension Obligation Bonds (POB) to borrow money to eliminate the Unfunded Pension Deficit. This is **simply “restructuring” debt** by changing the Unfunded Pension debt into Pension Bond debt. Once again current GASB standards allow governments to defer reporting the pension expenses that caused the Unfunded Deficit over several decades in the future. Only this time the **accounting mechanism is considerably more complicated.**

**Mendocino County**<sup>4</sup> borrowed a total of \$110 million by selling POBs in 1996 and 2002. In its most recent financial statements the County reported an asset on its Balance Sheet titled “**Net Pension Asset**” valued at \$62.4 million – nearly 30% of its total assets. This is a “**Pre-paid Pension**” asset that the County set up **roughly equal to the amount of POB proceeds it paid to the Pension Fund** to eliminate Unfunded Deficits in those years.

The accounting entries made by the County in this regard are very complicated – but the “bottom line” is that instead of reporting on its financial statements that in fact past pension expenses were considerably more than had been reported in previous years, it **essentially “capitalized” those past expenses** by indicating the payment of Bond proceeds to the Pension Fund was a payment of future pension expenses, not the payment of a Pension Deficit caused by past pension expenses.

Then – again in a complex accounting method – the County will **eliminate the value of that supposed pre-paid pension expense** asset over what will roughly be **the same number of years it will take to pay the Pension Bonds**. It is showing the amount it reduces the pre-paid pension asset in a year as part of that year's **pension expense**.

The total past real pension expense that caused the Unfunded Pension Deficits is being reported as an expense in the future roughly over the same number of years the Pension Bond debt is being paid.

(See “Examples - Pension Expense Related to Unfunded Pensions” on page 9 for further discussion of “what’s wrong” with these methods allowed today by GASB.)

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<sup>4</sup> My home County of Mendocino on California's North Coast is a geographically rugged and large County (as big as the two smallest states in the Union combined) with a small population of about 90,000. It's a relatively small County financially. Total reported liabilities are about \$170 million. Total expenses are about \$180 million.

### C. Reporting Unfunded Pension Debt

Governments **today don't report a Pension liability on their Balance Sheets.**<sup>5</sup>

Today GASB requires governments to present three years of the financial position of its Pension Obligations as calculated by Actuaries in Actuarial Valuations in a form of footnotes called "**Required Supplementary Information**". As an example this table was attached to the audited financial statements for the County of Mendocino for fiscal year 2010.

COUNTY OF MENDOCINO							
Required Supplementary Information For the Year Ended June 30, 2010							
SCHEDULE OF FUNDING PROGRESS – RETIREMENT PLAN							
The table below shows a three-year analysis of the actuarial value of assets as a percentage of the actuarial accrued liability and the unfunded actuarial accrued liability as a percentage of the annual covered payroll as of June 30 (in thousands):							
Valuation Date	Entry Age Actuarial Accrued Liability (AAL)	Actuarial Value of Assets	Unfunded/ (Overfunded) Liability (UAAL)	Funded Ratio	Annual Covered Payroll <sup>(1)</sup>	UAAL as a % of Payroll	
6/30/08	\$ 373,852	\$ 353,421	\$ 20,411	94.5%	\$ 70,880	28.8%	
6/30/09	403,196	336,263	66,933	83.4%	72,235	92.7%	
6/30/10	434,987	343,202	91,785	78.9%	69,004	133.0%	

(1) Plan members include the County of Mendocino, the Mendocino County Courts and the Russian River Cemetery District.

This information is **taken directly from Actuarial Valuations** – they are not produced by Accountants. The key terms are defined below.

**Actuarially Accrued Liability (AAL):** This is the **amount** the Actuary calculated was **needed to be in the Pension Fund** as of the "Valuation Date so that the **part of future pension payments** that were **already earned** by employees in the past before the Valuation Date **can be paid**. There are several conceptual methods to use in performing these calculations – one of which is "Entry Age" as used in Mendocino County.

See "Determining the Value of "Total Pension Liability"" on page 17 for a discussion of how pension liabilities are calculated.

<sup>5</sup> Many governments, including Mendocino County, have borrowed money by issuing "Pension Obligation Bonds" (POB) to eliminate Unfunded Pensions instead of making additional Unfunded Pension Amortization Payments. The Bonds are simply Unfunded Pension Liability restructured as Bonds. POBs are listed on government Balance Sheets as a liability. POB's almost always bear a lower interest rate than the Pension Fund's target rate of return that functions as the interest rate for Unfunded Pensions. See footnote 3 on page 2 for a source of more information.

**Actuarial Value of Assets:** In calculating the value of the Pension Fund's Assets Actuaries use a process called "**smoothing**". The Actuary "spreads" the amount the Fund was over or short of its target investment profits over a number of years. This produces a form of a "moving average" value of Pension Fund assets that is considerably less "volatile" than the actual Market Value of the Pension Fund's Assets. The purpose of Smoothing is to avoid sudden precipitous increases in a government's UAAL Amortization Payments. Mendocino County's Pension Fund spreads these "over-under" amounts over five years which is common among public Pension Funds although some use considerably longer Smoothing periods.

**Underfunded/(Overfunded) Liability - Unfunded Actuarially Accrued Liability (UAAL):** This is the smoothed **Actuarial Value of Assets less the Actuarially Accrued Liability**. If the resulting value is negative (a Deficit) It's what the Actuarial Valuation indicates is the amount of money that should be in the Pension Fund but isn't. The government is solely responsible to pay additional money on top of its Normal (Yearly) Contribution to eliminate this value.

Note – the table shown above is all that's in the Supplemental Information – there is no explanation of what the terms mean, how they are calculated, and how readers should understand them in terms of the County's financial condition. Very few "normal people" would understand this table.

## V. WHAT'S WRONG WITH THE CURRENT STANDARDS?

### A. The Fundamental Errors

A **crucial goal** of financial reporting is to **confront decision makers with negative results as soon as possible** so that corrective action can be taken to **prevent further deterioration**. The **longer it takes** for decision makers to get necessary feedback about financial problems the **worse the damage** is likely to get. "**Timeliness**" and "**actionability**" of information are extremely important concerns in financial reporting.

There are **four big things wrong** with the current GASB Standards:

- **Pension Expense**
  - Governments **defer reporting real pension expenses** that create unfunded pensions until the resulting pension debt is paid. This allows destructive financial behavior to continue for decades without being identified to decision makers and the public.
  - There are **many factors** that are involved in determining what the real pension expense is that are **not included** in the Actuary's calculations.
- **Unfunded Pension Liability**
  - Under current GASB standards **governments do not report Unfunded Pensions as a liability** on government financial statements even though they are most certainly a legal obligation.
  - Although this is somewhat controversial, many analysts (me included) **believe current standards vastly understate the true level of indebtedness** and **seriously misstates the nature of the risk** being taken, **who is taking that risk**, and how that risk should be evaluated.

## **B. Examples - Pension Expense Related to Unfunded Pensions**

### **I. If Eliminated by “UAAL (Unfunded Pension) Amortization Payments”**

#### **a) A Simple Example**

This **very simplified example of a common situation** shows why GASB's reforms in are necessary.

#### **ASSUME:**

- Current employees will be paid \$1 million worth of pensions 10 years from now.
- The yearly contribution is split 50-50 between the government and its employees.
- The Pension Fund assumes it will earn an 8% investment profit each year.

The Actuary calculates the total yearly contribution must be \$464,000 this year which will grow at 8% a year and be worth \$1 million in 10 years. Therefore the government must contribute half that amount, \$232,000, and report that amount as that year's pension expense in its financial statements.

**BUT ASSUME THIS IS WHAT HAPPENS:**

- **All of the projections and assumptions turn out to be exactly correct** including that \$1 million will be paid as pensions 10 years later – **EXCEPT** ...
- The Pension Fund **only earns 4% a year** over those 10 years.

After 10 years the \$464,000 has only grown to \$686,000 - \$314,000 short of the \$1 million that has to be paid as pensions that year. **The government must pay in that extra \$314,000.** The actual calculations and money flows are more complex. But this simple example lays out the core problem

This \$314,000 is the amount of pension payments that must be made that year that were earned by employees 10 years ago (in this simple example) but have wound up “unfunded” because the Fund earned less than its target rate of return. There is no doubt this \$314,000 is real Pension Expense the government has already incurred. The question is – **when should this expense be reported?** There are **3 choices** (the real choices are more complex but this shows the basic issue):

- **In the past** – go back and “restate” previous financial statements to show there really was \$314,000 more pension expense than was reported.
- **Today** – when it becomes apparent a significant Unfunded Pension Deficit has developed.
- **In the future** – as the Deficit is eliminated by extra payments from the government.

It can be strongly argued the expense happened **in the past** when the retirees who will receive those pension payments earned them. The 8% target rate of return was a “hope” – a “projection”. It wasn't “reality”. It turned out reality was a 4% return. That necessarily means not enough was paid in initially, and therefore the true pension expense was understated in the past.

**But the math complicates things.** If the Actuary had known the return would be only 4% the total contribution 10 years before would have been about \$675,000 instead of \$464,000 and the government would have contributed \$337,750 that year and reported that amount as that year's expense - \$105,000 more than it reported.

But the Pension Fund Deficit is \$314,000 – not \$105,000. That's because **over the intervening 10 years nothing was done** to either focus on increasing the rate of return or to admit that the returns were lower than expected and therefore more money needed to be put into the Fund sooner than later – because the longer the government waits the worse it gets. Therefore **year by year the deficit grew** – and therefore **year by year the true pension expense grew**.

It can therefore be strongly argued that the **pension expense happened not only in the initial year** when not enough was contributed and reported as expense – **but also over the intervening years** up until the year pensions need to be paid as the Pension Fund earned only half its target return.

If so – it can be further argued that once we realize what’s happened the accumulated unreported expense should be reported as soon as we realize what happened – which in this case would be the **current year**.

But **how can it be argued that the pension expense will happen in the future** as today’s Pension Deficit is slowly eliminated. That’s – by far – the **weakest argument** – and yet it’s the **argument on which GASB’s current standards rely**.

By placing its current standards on this deeply flawed foundation **GASB allowed** thousands of local and state government **officials to avoid being confronted by bad news** –the truth is their **pension benefits were costing far more than they were told**. And therefore **the financial situation just got worse and worse without forcing those officials to deal with it** – and **without telling the people** about the serious financial deterioration of their governments as a result so they could hold those officials accountable for their failure to properly manage their governments’ finances.

### **b) Real-World Example – Mendocino County**

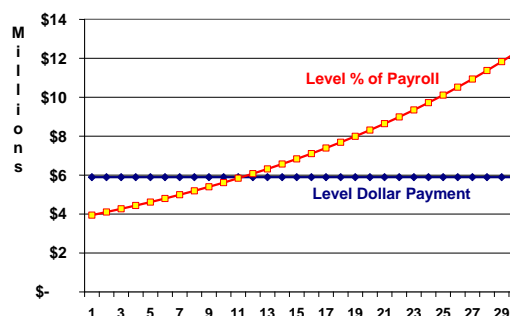
But current GASB standards can allow it to get much “worse”.

The **County of Mendocino’s** Actuarial Valuation for 6/30/09 indicated the County had a \$67 million Unfunded Pension Deficit. It was obligated to begin making **amortization payments** in the fiscal year ending June 2011. Officials chose to amortize this Deficit over 30 years. The effective interest rate is the Pension Fund’s target rate of return. (The government is expected to make up for “lost investment profits” caused by Pension Fund Deficits because that’s money the Fund is supposed to have to invest that it doesn’t have.)

Officials had a choice of two methods to calculate what the amortization payments would be.

- **Level Payment:** Just as with a “classic” 30 year home mortgage the government would pay the same amount each year. At the end of 30 years the UAAL would be eliminated.
- **Level Percent of Payroll:** First an assumed rate of payroll growth over 30 years is established. That rate is used to project what total payroll will be in each of those 30 years. Finally the Actuary calculates a fixed percentage payment of each of those 30 yearly payrolls such that at the end of 30 years the UAAL would be eliminated.

This graph shows what the County’s yearly amortization payments for the UAAL shown for 6/30/09 would be over 30 years under the two methods. The **Level Percent of Payroll** method **initially produces significantly lower payments** than the Level Dollar Payment method. But based on the assumption of 4% yearly growth in total payroll payments in the later years are significantly higher.



Mendocino County Officials chose the Level Percent of Payroll method to eliminate the UAAL. I believe the main reason was the first year’s payment was \$2 million less than the Level Payment method and stay below the Level Payment method for 12 years. It was easier on today’s officials.

**Payments are so low** using the Level Percent of Payroll method that they **don't even pay the accumulating 8% yearly effective interest** rate (which is the Pension Fund's target rate of return) for the first **12 years**.

This means that (assuming all other projections in the Actuarial Valuation "come true") the Unfunded Pension **debt will actually increase over the first 12 years**.

This is known as **Negative Amortization**.

Mendocino County Retirement Officials claim they didn't realize this was happening – they claim they thought the payments were "taking care of the problem".

Current GASB standards allow the County to report the amount paid to reduce the Pension Deficit each year as part of that year's pension expense – and amounts paid as interest as an interest expense. Since the County hasn't yet produced audited annual financial statements for 2011 – which was the first year the County made Pension Deficit Amortization Payments – I don't know how the County will report the reality that its payment in 2011 was \$1.7 million less than the interest cost.

But two things are certain – once again the County is **reporting past pension expenses** that created the Unfunded Pension Deficit **as if they are expenses in the future** as the debt is paid, and it **will not report that it incurred \$1.7 million more interest expense during the year than it paid**.

## 2. If Eliminated by Proceeds from Pension Obligation Bonds

As described in "The Government Borrows Money by Selling Pension Obligation Bonds" on page 6 **Mendocino County** sold a total of \$110 million of POBs in 1996 and 2002 to eliminate Unfunded Pension Deficits in those years. The **balance owed** on those Bonds as of 6/30/2011 was **\$86 million**. The County also reported on that date an asset titled "**Net Pension Asset**" worth about **\$62 million**.

We know the County borrowed money to eliminate Unfunded Pensions that had been earned by its employees in the past and that really were true pension expenses in the past. But those expenses had not yet been reported on the County's financial statements.

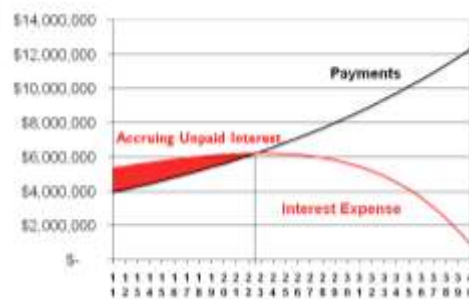
Apparently when the County borrowed the Pension Bonds it set up a form of a "**Pre-paid Pension**" asset titled "Net Pension Asset" **roughly equal to the amount of money it had borrowed**. And as the years go by that prepaid asset is being **depleted roughly parallel to the payments of the Pension Bond debt**. The amount depleted each year is in that year's reported **pension expense**.

The point is this – once again the total past real pension expense that caused the Unfunded Pension Deficits is being reported as an expense roughly over the same number of years the debt is being paid off. The payments aren't Unfunded Pension Deficit Amortization Payments defined by the Actuary – they are payments of on the Pension Bonds.

A **major difference** from how Pension Deficit Amortization Payments are reported is that in this case **the County actually created a pre-paid asset** roughly equal to the total unreported pension expenses of the past. This strikes me as a **huge violation of a fundamental financial principle**.

**What is an asset?** Simple question. This is the definition of assets provided in one of the most important accounting textbooks in use today.

*ASSETS are the economic resources of the entity, and include such items as cash, accounts receivable (amounts owed to a firm by its customers), inventories, land, buildings, equipment, and even intangible assets like patents and other legal rights*



and claims. **Assets are presumed to entail probable future economic benefits to the owner.**<sup>6</sup> (emphasis added)

That's fundamental to the definition of an Asset – it **entails or provides a probable future economic benefit to the “owner”** – in this case the County of Mendocino.

If the County had really “prepaid” about \$100 million of future pension expenses it would be an asset. It would have provided a future economic benefit because the County wouldn't have to pay pension contributions in the future in partial payment of the thing of value it would be receiving – the labor of its future employees.

But that's not what this “asset” represents. **This “asset” is a “ghost” of past pension expenses.** It's a **charade** – it pretends to be economically useful in the future as a “prepaid pension expense”, but its **real function** is to **allow the County to report past expenses in the future.**

**The “economic benefit” the County received is gone** – it was the labor of its employees who earned pension payments in the past as part of their compensation in those past years. There is no more economic value to be derived for the County.

**This is a “fake” asset** that is allowed to exist by today's deeply flawed GASB standards.

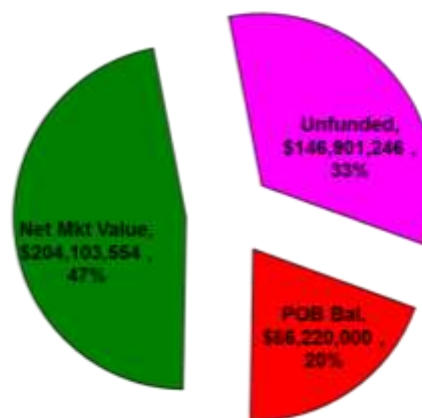
### **C. The Impact on Mendocino County – a Huge Destructive Debt**

This shows the financial status of Mendocino County's Pension Fund as of June 30, 2010. As stated above, if everything had worked the way the Pension Funding Plan inherent in the Fund's Actuarial Valuations had predicted the Fund would have been fully funded and no Unfunded Pension Debt would have been imposed on the County.

The Valuation for June 30, 2010 showed that the Pension Fund was **supposed to have \$435 million** on that date. But the **market value** of its assets was **1/3 less**<sup>7</sup>. Further the County still **owed \$86 million on Pension Obligation Bonds** that were borrowed in 1996 and 2002 to eliminate earlier Pension deficits. If the Pension Funding Plan inherent in previous Valuations had “worked” the County would have no unfunded pension debt.

The County and its Pension Fund **achieved less than half the County's Pension Funding Goal over the past 2 decades.** The County still owed \$237 million - it wasn't supposed to owe a dime.

Pension Market Value Funding Position  
Amount that Should be in Fund = \$435 million  
6/30/2010



<sup>6</sup> *Principles of Accounting*, from a “Preview of the new global edition” – Chapter 1 – Welcome to the World of Accounting, available at <http://www.principlesofaccounting.com/chapter%201.htm>, accessed on 7/26/2011.

<sup>7</sup> If Unfunded Pensions were calculated according to the methods described in last year's GASB's public comment drafts (see page 16) the value of Unfunded Pensions would have been around \$300 million.

And here's the kicker – **GASB's standards allowed the County of Mendocino to incur at least \$200 million of true pension expenses over the past 20 years it has never reported to the public in its financial statements.**

The County – in true economic terms – has operated with about an **average \$10 million operational deficit annually** over the past 2 decades. And most of the officials and nearly all the people of Mendocino County don't know it because the **County's financial statements have never reported that true economic fact.**

If all Actuarial assumptions and projections work out exactly as planned from here on out nearly a **half-billion dollars** will be extracted from this weak local economy of not quite 90,000 people to pay this debt over the **next 3 decades**. Kids not even born yet will be paying this debt created in our time. That half billion dollars **won't produce one minute of County services or one dime of public infrastructure** for the people who will pay it.

This **wouldn't have happened** if the County's financial statements had been reporting the true economic pension expense that was really occurring each year.

## VI. GASB'S REFORMED STANDARDS

### A. The Big Picture

As stated at the beginning of this paper, there are **two big changes GASB will impose.**

- Governments like Mendocino and Sonoma Counties will **no longer be able to delay reporting the millions of real annual pension expenses that created huge unfunded pension debts decades into the future.** They will have to report them pretty much NOW!
- Today governments only put a footnote in their financial statements about how much unfunded pensions they owe. GASB will force them to **list Unfunded Pensions as a real liability,** and **in many cases a much bigger liability** than governments disclose today.

As things stand today some larger governments will have to comply with these new standards in the fiscal year that starts after June 15, 2011. Most will be able to wait an extra year. If the new standards would have caused significantly different values of Pension Expense and Debt to have been reported in the years before the year in which governments will be required to implement them the government will generally be expected to **“restate” their previous annual financial statements to show what they would have been had the new standards been in effect.** This is a **major** impact.

### B. Pension Expenses

GASB's reformed standards would impose a **much more complex calculation** of Pension Expenses than that used today. However, it would also be **far more economically accurate.**

Governments that have **significant Unfunded Pension Debt when these standards are implemented** will experience **very substantial immediate increases** in their **reported yearly Pension Expenses.** For example I calculate the **County of Mendocino's Pension Expenses** which were **reported as \$9 million to \$13 million** in its 2010 financial statements (depending on which schedule you looked at) **would have been around \$50 million.** This is a huge hit since total operating expenses were reported to be about \$181 million.

Today governments report as their yearly Pension Expense the amount the Actuary calculates as the government's Normal (Yearly) Contribution plus an amount roughly equal to any payments over time to eliminate Unfunded Pension Deficits or other debt caused by such Deficits.<sup>8</sup>

GASB refers to the Normal Contribution as the Current Period (Year) Service Cost. It will be a part of the calculation of Pension Expense under GASB's new rules. But the **Pension Deficit Amortization Payments** will **no longer be a part of the calculation of a year's Pension Expense**.

The **inclusion of these Amortization Payments** is **where GASB's Fatal Flaw occurs** – it converts reporting Pension Expenses related to Unfunded Pension Deficits from when they actually occurred in the past to when they are paid which can be decades in the future.

My rough calculation is that **Pension Expenses related to Unfunded Pension will be reported – on average – within about four years** of the time the Unfunded Pensions “show up” **instead of 20 years or so** that happens under current GASB standards.

These are the major items to be included in the calculation of yearly Pension Expense. The only item specifically included in Pension Expenses under current standards is the “Current Period Service Cost”.

	Increase Pension Expense	Decrease Pension Expense	Note
Current Period Service Cost	X		Actuarially Determine “Normal (Yearly) Employer Contribution
“Interest” on Average Total Pension Liability	X		Interest (target return) on amount that SHOULD BE in Pension Fund.
Pensions & Refunds of Employee Contributions		X	
Benefit Changes that Increase Debt.	X		
Differences of All Other Actuarial Assumptions and Actual Results (Except Earnings)	Could either increase or decrease expense		Amount tied to retirees will affect expense in the current year – for current employees spread out over average remaining years of expected employment (about 12)
Difference Expected and Actual ROI			Must be included in <b><u>expense</u></b> over 5 years.
Expected ROI		X	Based on Target Rate of Return and actual amount invested.
Government & Employee Contributions		X	
Pension Fund Administrative Costs	X		

**Significant Stock Market Losses in 2008 & 2009:** Today some Pension Funds are “smoothing” the very significant Pension Fund losses in the stock market in 2008 and 2009 over 15 years (5 years is “normal”). Then, as those losses are slowly recognized as reducing the value of Pension assets, Actuaries allow governments to take as long as 30 years to pay off the resulting Unfunded Pension Deficits – AND to report the underlying Pension Expense that really happened in the past. Therefore governments are allowed to spread reporting the impact of those investment losses over 35 to 45 years!

These new standards would force governments to include the effect of those losses within five years from when they happened. Since practically all governments will be expected to use the new standards in their fiscal year 2014 financial statements the total negative impact of **stock losses in 2008 & 2009** will be **included in reported Pension Expense and Debt by 2014**.

<sup>8</sup> See “Reporting Pension Expense” on page 6. The actual expense calculations are more complex, but this captures their essence.

**Must Faster Reporting of Pension Expenses: Today** governments are allowed to spread reporting the pension expenses of the past that caused Unfunded Pension Deficits over **30 years** or so in the future. The **new standards** will require **significantly faster** reporting. Most of the items listed above will impact Pension Expense the year they occur. As stated above the impact of investment losses (and gains) must be included in Pension Expenses within 5 years.

Only one item allows a longer period to report the impact on expenses – “Differences in All Other Pension Funding Assumptions and Actual Results Other than Earnings”. These are the financial impact of differences between what actually happens and the assumptions used by the Actuary to project future Pension Payments and the current Total Pension Liability. This includes items such as how long people live, how much their pension payments will be, whether or not they retire with a disability, whether or not they have a surviving beneficiary, etc.

The number of years over which the impact of differences in these Actuarial assumptions and actual results must be included in reported Pension Expenses will be the average number of years the current staff is expected to continue to work for the government. This **will force governments to report all the Pension Expense related to employees before they retire** instead of today’s practice that allows those expenses to be reported even after those former employees have actually passed away.

## C. Pension Liabilities

### I. GASB’s Big Changes

There are **two big changes** proposed by GASB -

- The “Unfunded Pension Deficit” will **be listed as a liability** on the government’s Balance Sheet instead of as a “footnote” (“Supplemental Information”) attached to the financial statements.
- The **Unfunded portion** will be valued by using a **lower discount rate** than the Pension Fund’s target rate of return (a high-quality Municipal Bond index rate)

### 2. The Basic Calculation of “Reportable Pension Liability”

If the **Total Pension Liability** is **greater** than the **Pension Fund’s “Plan Net Position”** then there is a **“Net Pension Liability”** that will be reported on the government’s Balance Sheet. However – this simple description doesn’t describe necessary and to varying degrees complex methods by which Total Pension Liability and Plan Net Position must be calculated. It also does not do the complexity of GASB’s proposed specific calculation methods justice (see below).

GASB’s states that it has not yet determined how to report instances in which the value of the Plan Net Position is greater than Total Pension Liability – but it’s “working on it”.

### 3. “Primary” and “Secondary” Responsibility to Fund Pension Payments

GASB holds that the employer **government** has the **original obligation** to fund future pension payments for its employees as a part of the compensation employees receive in exchange for their work. Further, the government continues to be obligated to specific employees and retirees until all their future pension payments are made.

However GASB makes a further distinction between the “primary” and “secondary” responsibility to employees regarding their pensions based on the extent to which resources have been accumulated in the Pension Fund to fund future pension payments.

... the **employer** remain(s) **“primarily responsible”** for the portion of its **benefit obligation** to employees **in excess of the plan net assets** available for pensions.  
 ... to the **extent that plan net assets have been accumulated**, the employer

becomes **secondarily responsible**, and the **pension plan is primarily responsible**, for the obligation.<sup>9</sup>

Conceptually, the part of the pension obligation the government remains “**primarily**” responsible for is the “**Net Pension Liability**” to be reported on the Balance Sheet. The government remains a “guarantor” for the pension obligation that GASB considers can be paid by the Pension Fund’s existing assets, but that responsibility is “secondary” to the Fund’s “primary” responsibility.

#### **4. Determining the Value of “Net Plan Position” is Easy**

The basic calculation is to subtract the Pension Fund’s Liabilities shown on its financial statements from the value of its Assets – the result is the “Plan (Pension Fund) Net Position” – or in private sector terms “Net Worth”. Sounds simple – but there are a few easily understood “wrinkles”.

##### **a) Pension Fund Asset Value**

There are **two methods** of calculating the value of a Pension Fund’s assets. They are both rather **easy**. **They focus on the value of the Pension Fund’s investments** which are – by far – the largest asset. Mendocino’s Pension Fund reported on its most recent Balance Sheet total investments worth about \$285 million compared to total assets of \$300 million. Most of the rest was cash.

##### **(1) Fair-Market Value of Investments**

This is simple – it’s the amount you could sell the investments for on the day for which the Balance Sheet is prepared. **This is the value GASB intends to use** in its new financial reporting standards.

##### **(2) “Actuarial Value of Assets” (AVA) – “Smoothed”**

Actuaries have adopted a method of modifying the fair-market value of Pension Fund assets called “smoothing”. The purpose of smoothing is to slow down rapid changes in the Market Value of assets so that **changes in additional government payments to eliminate unfunded pensions won’t be too drastic**. This is to allow for more **stability in government budgets**.

In simple terms smoothing spreads the recognition of the amount a Pension Fund’s investments were over or short of target each year over a set number of years – the most common being 5 years. The effect is the value of the AVA “lags” behind that of the fair market value. When the market goes up the AVA goes up but more slowly. When it goes down, the AVA also tends to go down, but more slowly.

This is the value of Pension Fund assets Actuaries use to **determine the funding requirements of a Pension Fund**. It’s a fairly easy calculation – but GASB does not intend to use this value in determining the Net Pension Liability.

##### **b) Pension Fund Liabilities**

This is about liabilities of the Pension Fund – not the pension liabilities of the sponsoring government, which is the focus of this paper. They are two very different values.

Pension Funds **don’t include pension liabilities** as liabilities on the Fund’s Balance Sheet except perhaps for current pension payments that are due but not yet paid.<sup>10</sup> As a result **liabilities are usually very small compared to assets**.

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<sup>9</sup> **Proposed Statement of the Governmental Accounting Standards Board – Exposure Draft – Accounting and Financial Reporting for Pensions**, June 27, 2011, page 60

<sup>10</sup> The report that considers pension liabilities for the Pension Fund is the Actuarial Valuation. Although there are several intimate connections between values in the Actuarial Valuation and the financial

For example, Mendocino County's Pension Fund's liabilities as of its most recent financial statements (6/30/2011) were \$1.8 million compared to its assets of over \$300 million and Total Pension Liability as shown in its most recent Actuarial Valuation of \$435 million. Most of it is "investment purchases" that have not yet been paid for. There are minor amounts of "accounts payable", etc.

### **5. Determining the Value of "Total Pension Liability" is Complicated**

Total Pension Liability is determined in a two-stage process.

- **Projections** are made for the amount in **each future year of pension payments** that have **already been earned** by employees (and retirees) in the past.
- Those future payments are then "**discounted**" to the current year to produce a value for Total Pension Liability.

#### **a) Projecting Future Pension Payments That Have Already Been Earned**

Actuaries project for **each year in the future** how much will be paid out in pension payments that have **already been earned** by employees in the past. This is the most complicated set of calculations referred to in this paper – by far. It's the subject of huge text books

Actuaries must use **dozens of assumptions** to make these projections - life expectancy, amount of pensions paid to individuals, disability rates, whether or not a retiree will have a surviving beneficiary, etc. Once these assumptions are made – many based on **dozens of calculations** - the calculations of projected future pension payments that have already been earned are also **very complex**.

**GASB's proposed method** starts with **pretty much the same** first stage as under current standards. There are **some differences** in GASB's proposed process at this stage that would affect some governments more than others – but my overall expectation is they will **not result in significant differences** in Net Pension Liability. At least I don't believe they would for the local governments I'm familiar with (a limited number). Although it's possible that the actual complex calculations made two years from now may produce a surprise – at this point I doubt it.

#### **b) Discounting Projected Payments to Calculate Total Pension Liability**

This stage is **relatively simple**, although GASB's proposals will make it considerably more complicated than it is today. Even so this process would still be much simpler than projecting payments.

You have to understand "financial discounting" and "net present value" to understand how this stage in the process works.

If you want \$1 million 10 years from now and you can make an investment that earns 8% annual interest, you need to invest about \$464,000 today. The \$1 million is said to have been "discounted" for 10 years at 8% per year. The 8% is the "discount rate", \$464,000 is the "net present value", while the \$1 million is the "future value".

The basic process is that the Actuary **discounts each of the projected yearly payments that have already been earned** by a **specified percentage rate** for the **appropriate number of years** to produce a net present value for each of those years. The **total** of the net present values for all those years is the **Total Pension Liability**.

statements of both the Pension Fund and the Employer Government, Actuarial Valuations are not financial statements – and vice versa.

Think of the Total Pension Liability this way –

*The **Total Pension Liability** is the **amount of money that should be in the Pension Fund** today so that all future pension payments that have been earned in the past can be paid assuming those assets would “grow” at the “discount rate” and all the other complex assumptions made by the Actuary “come true”.*

One could argue about some details of this concept – but for general purposes it’s a good way for concerned citizens to think about what Total Pension Liability means.

### ***(1) Today’s Method to Discount Future Payments***

As discussed in “Reporting Unfunded Pension Debt” on page 7 current GASB standards **do not require** governments to report **any part of the Total Pension Liability** as an “official” liability on its Balance Sheet. However, the value of the “Actuarially Accrued Liability” (AAL) is shown in a form of a footnote called **Supplemental Information** attached to the financial statements. The AAL is one way to calculate Total Pension Liability.

The Actuary uses the Pension Fund’s “**Target Rate of Return**” or “Interest Rate Assumption” as the **discount rate**. Mendocino’s Pension Fund’s rate is 8%. Therefore all projected future payments of pensions that have already been earned are discounted by 8%.

Then the Actuary **subtracts** the resulting value **from the Actuarial Value of Assets** determined using the smoothing process as described above to produce the “**Unfunded (or Overfunded) Actuarially Accrued Liability**” – which is conceptually the equivalent of the “Net Pension Liability” – except GASB proposes a substantially different calculation method.

### ***(2) GASB’s Proposed Discounting Method - Overview***

GASB will impose **three main differences** from the discounting process used today.

- **Pension Fund Cash Flow Projections:** Projecting elements of the Pension Fund’s future cash flow in order to determine if in the future such resources would no longer be expected to be available. This is the change that would produce much more complexity compared to current calculations.
- **Use of Two Different Discount Rates to Determine Total Pension Liability:**
  - The payments in the first set of years that are projected to be paid based on these cash flow projections would be discounted by the Pension Fund’s **Target Rate of Return**. If the cash flow projection indicates there will be enough cash in the Pension Fund in the future to pay all pension payments that have already been earned, then the lower discount rate described below won’t be used.
  - Pension payments in **years beyond which resources to pay pensions are projected to be available** in the Pension Fund (in a year for which the balance of Ending Net Position turns negative) would be discounted at a lower rate – an “**index rate for a 30-year, tax-exempt municipal bond**” rated as “**high-quality**”.
- **Single Blended Rate<sup>11</sup>:** The Actuary would calculate a single “blended discount rate” that if applied to all projected future pension payments that have already been earned would produce the same value for the Total Pension Liability. This blended rate is defined in GASB’s proposal as the “discount rate for purposes of this Statement”.

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<sup>11</sup> Frankly – I’m not sure why GASB would require the third step – by definition it would produce the same value for Total Pension Liability. The blended rate would be reported in footnotes; perhaps GASB requires it for disclosure purposes.

### (3) GASB's Proposed Pension Fund Cash Flow Projections – A Closer Look

As the description below unfolds keep in mind there is a **distinction** between –

- The calculation in the cash flow projection of how far into the future pension payments that have already been earned are expected to be paid out of cash projected to be in the Pension Fund for the purpose of determining the Total Pension Liability.
- The subsequent calculation of reportable Net Pension Liability by subtracting the Total Pension Liability (discussed in this immediate section) from the Pension Plan (Fund) Net Position.

If the **Cash Flow projections** indicate there will be **adequate resources** in the Pension Fund to **pay all future pension payments** that have already been earned – then **wouldn't that seem to indicate there are no "unfunded pensions"?** But that's **not what it "means"**. These are subtle distinctions but important to understand to avoid confusion.

GASB provides an illustration of how to calculate the blended discount rate described above<sup>12</sup>. It starts with the year-by-year cash flow projection. This projection is to be carried through the last year in which pension payments that have already been earned are projected to be made. In the **GASB illustration** they **projected 96 years** into the future!

The items below are those required to be used as **inputs** for each year in the projection of **cash flow**. Obviously Net Position would be calculated after the first year's Beginning Net Position.

Beginning Net Position			XXX
CASH IN			
Contributions			
From Current Employees		XXX	
From Employer Government			
For Current Employees	XXX		
For Future Employees (1)	XXX		
Employer Contributions	XXX	XXX	
Total Contributions		XXX	XXX
Investment Earnings		XXX	
Total Cash In		XXX	XXX
CASH OUT			
Pensions/Benefits Paid (2)		XXX	
Fund Admin Expenses		XXX	
Total Cash Out		XXX	- XXX
Ending Net Position			XXX

(1) Above Yearly Service Costs (Normal Contribution)  
(2) Only for Pensions/Benefits Already Earned

These values have to be projected for every year in the future a pension would be paid to any current employee or retiree. GASB states in its review documents that Actuaries have assured them that these calculations can be "computerized" so they would be much less laborious than they appear.

As stated in the overview above, if at any point in the calculation of Cash Flow for future years the projected Plan Net Position turns negative – at that point the lower municipal bond rate would begin to be used.

<sup>12</sup> Ibid, page 111

## **6. The Final Step – Calculation of Reportable Net Pension Liability**

The next step is to subtract the value calculated as described in “Determining the Value of “Total Pension Liability” is Complicated” on page 17 from that described in “Determining the Value of “Net Plan Position” is Easy” on page 16.

**If the result is negative** – then **Net Pension Liability** would exist that must be reported on the government’s **Balance Sheet**.<sup>13</sup>

## **7. A Debate – Is the Method Proposed by GASB Last Year “Better”?**

There is a **very “hot” dispute** today among people concerned with government pensions and the debt associated with them about whether or not to use a **lower discount rate** to determine the net present value of the unfunded portion of projected future pension payments. I strongly support the general notion of using a lower rate – which would make the net present value of reportable Net Pension Liability much bigger than if the Pension Fund’s target rate is used. However, I’m not going to describe that complex issue – plenty of articles can be found by doing a search of the internet.

GASB has adopted the general view that the use of a lower rate related to unfunded pensions is greatly preferable to simply using the Pension Fund’s target rate of return. But the “devil is in the details”.

GASB has released three sets of public review documents since it began its review of the pension financial reporting standards in 2006. Last year in July 2010 GASB published a set of documents titled “Preliminary Views” which was a more theoretical discussion of its analysis and high level conclusions than the documents released in early July 2011 which are “Proposed Standards”. Although the Proposed Standards may change in content, their structure is in the same form in which the Final Standards will be published as a “GASB Statement”. GASB intends to impose the new standards in summer 2012.

The conceptual **method** to determine the reportable Net Pension Liability that was described in the **Preliminary Views published last year** is substantially **different** in one key respect from the **method** described in the **current Proposed Standards**. I’m inclined to support the method proposed last year over that in this year’s Proposed Standards.

- **Last Year’s Method:** Last year’s method made **only one change** in the process by which Actuaries calculate the Total Pension Liability in the form of “Actuarially Accrued Liability” used in Actuarial Valuations. The Actuary would add up the sum of the net present values for each future year’s payments going forward using the Pension Fund’s target rate of return until **the point at which the total net present value of projected pension payments equals the total value of the Pension Fund’s assets** today. At that point the Actuary would **switch to using the lower municipal bond index rate to discount the projected payments in years beyond that point**. The sum of those payments discounted by the Muni Bond rate would be reported as the government’s **Net Pension Liability** on its Balance Sheet.
- **This Year’s Method:** The method GASB proposed this year has **one very major addition** – basing the point at which the discount rate would switch from the target rate of return to the lower muni bond index rate based on the projection of the Pension Fund’s cash flow as described above in “GASB’s Proposed Pension Fund **Cash Flow Projections – A Closer Look**” on page 19.

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<sup>13</sup> As stated before – GASB has not yet determined how to report a positive balance.

GASB states that in the required Pension Fund cash flow projection “projected plan net position **should incorporate**, based on current contribution policies and practices, **all employer contributions ... intended to fund benefits of current and former employees**”.

I confirmed with the GASB manager in charge of these proposed standards that these **projected government contributions** would **include Unfunded Pension Deficit Amortization Payments** calculated by the Actuary in the Actuarial Valuation. By definition those projected payments are **calculated to eliminate today’s Unfunded Pension liability**. These projected amortization Payments GASB intends to include are **payments on the debt it would seem they are attempting to calculate** –Unfunded Pensions.

The point of those payments is to eliminate today’s unfunded pensions. If those payments are included as projected cash receipts in the future it seems to me they would have the effect of **never triggering the switch to the lower muni bond rate**.

It seems to me the only occasion where this process would indicate any future payments could not be paid out of the cash projected to be in the Pension Fund would be in cases where the government has a history of not paying the full amount the Actuary calculates it should pay and the Actuary and Accountant incorporate those deficiencies into future contributions.

This is a very complex issue – and frankly I have to do more thinking about it. This will be a major point of contention about GASB’s proposed standards across the country.

#### **8. The Impact of GASB’s Proposed Standards on Reported Liabilities**

The process defined in GASB’s Proposed Standards is **complex**. And GASB’s **Proposed Standards don’t provide specifics** about **how to perform many of the calculations**. GASB will issue an Implementation Guide” with the final standards released next summer. Without such a Guide it’s **difficult to model** what the impact would be on government Balance Sheets.

In general my preliminary calculations indicate that under the standards defined in the current **Proposed Standards** governments would report a **Net Pension Liability** on their Balance Sheets **roughly equal** to the **Unfunded Actuarially Accrued Liability** that is reported in their Pension Fund **Actuarial Valuations**.

In contrast I think the **method they proposed last year would roughly double to triple** the amount the Actuary calculates today as the **Unfunded Actuarially Accrued Liability**.

As I say – without specific guidelines about how to perform some of the calculations these estimates are somewhat speculative – but I’m pretty sure they are in the ball park.

As an example I calculate that using the **current Proposed Standards** the **County of Mendocino** would have reported a **Net Pension Liability** on its **June 30, 2011** Balance Sheet of about **\$140 million**. The County actually reported a total of about \$120 million in long term liabilities and total liabilities of \$170 million. So this would have more than **doubled** the County’s reported **long-term liabilities** and **close to doubled** its **total liabilities**.

If **last year’s proposals** about how to calculate the value of unfunded pensions were adopted (which are easier to interpret), the County would have reported about **\$380 million** of **Net Pension Liability** on its **6/30/2011** financial statements. Reported total liabilities would have **tripled**.

**VII. ATTACHMENT - CURRENT AND PROPOSED GOVERNMENTAL ACCOUNTING STANDARDS**

**A. Standards Regarding Pension Debt**

Issue	Current Standard	Proposed Standard	Effect
Where Unfunded Pension Debt is Reported	Footnotes to Audited Statements - "Supplemental Information"	Directly in the Balance Sheet as a Liability	Directly reported as debt to the people, creditors, rating agencies, etc.
How the Value of the Total Pension Obligation is Calculated	Expected Future Pension Payments that are already earned are discounted by the Pension Fund's target rate of return (8% in Mendocino County).	The amount of future payments already earned that can be paid with projected "Net Fund Position" based on cash flow projection would be discounted using the target rate of return.	Not considered a reportable debt of government (government is guarantor - Pension Fund is primary debtor)
		The amount that "can't be paid" according to above calculation would be discounted using a "high quality" 30-year tax exempt" municipal bond index rate (about 4.25% today).	Current proposal would produce amount roughly equal to Unfunded Actuarially Accrued Liability as Net Pension Liability. Last year's proposal would double to triple that value.
How Pension Fund Assets are Valued	Investments valued at "Fair Value" – which is "Market Value" if an active market exists (as in the stock market) or reasonable estimate. However, differences between projected and actual investment returns are "smoothed" so that 20% of each year's difference is added in over 5 years. This "slows down" fluctuation in market values.	Same – except no smoothing. Solely based on market value.	Value of Net Pension Liability will be more volatile from year to year.

## **B. Standards Regarding Pension Expense**

The proposed changes will have **complex effects** on the **value of Pension Expense** reported. As GASB states - "The implications of these proposals would be that **most governments would recognize pension expenses sooner than they do at present.**" My analysis indicates that governments with **significant unfunded pensions today will immediately report significantly higher pension expenses.**

As stated on page 8 a major problem with today's standards are that Actuaries do not immediately include the impact of many factors that directly control the value of "real economic pension expenses" in calculations used by governments to define their yearly pension expenses. If the proposed standards are adopted a complex series of calculations to determine the causes of changes in both the "Total Pension Liability" and the "Pension Plan Net Position" will produce each year's reported pension expense.

The table on the next page summarizes these changes in calculations.

These are notes indicated in the table:

- 1 These items must be included in pension expenses in an amount equal to the projected average number of years the current employees will continue to work for the government – estimated to be 12 to 14 years in general. This is a huge change that will greatly increase the value of reported annual pension expenses for many if not most governments.
- 2 Major change – must fully report effect on Pension Expense of differences between projected and actual returns on investment within 5 years. Governments are able to spread reporting pension expenses from this source under current standards for up to 40 years. This will have a huge impact if the new standards are implemented because it would force the immediate recognition of the very substantial losses incurred in the stock market in 2008 and 2009.

Items To Be Included in Pension Expenses (more complex than this simple table)				
Item	Today	Proposed New Standards - When Reported as Expense		
		Current Year	Over 5 Years	Remaining Yrs. Staff Service

Changes in -	Total Pension Debt	Current Period Service Cost (Actuary's Calculation Current Year Contribution)		This is the current year expense	X		
		Actuary's Calculated Unfunded Pension Amortization Payment		Added to above	No longer involved in calculation		
		"Interest" on Average Total Pension Liability During Year		Not explicitly included in calculation of Pension expenses – only as it affects UAAL which can be amortized up to 30 years	X		
		Benefit Payments and Refunds of Member Contributions			X		
		Benefit Changes that Change Ttl. Liab.			X		
		Differences of All Other Pension Funding Plan Assumptions and Actual Results (Except Earnings - see below)	People No Longer Employed		X		
			Current Employees				X (1)
	All Other Changes in Total Liability		X				
	Net Pension Position (Assets)	Difference Between Expected and Actual ROI		Reported as expense over up to 45 years.		X (2)	
		Expected ROI		Not explicitly included in calculation of Pension expenses – only as it affects UAAL which can be amortized up to 30 years	X		
		Government & Employee Contributions			X		
		Benefit Payments and Refunds of Member Contributions			X		
		Pension Fund Administrative Costs			X		
		All Other Changes			X		

### C. Standards Regarding Notes to Financial Statements and Required Supplemental Information About Pensions

GASB's proposed standards would **greatly expand** the **required explanations and additional information** about the finances of pensions that must be attached to the financial statements. As one example – this 10 year historical schedule would be required (along with several other 10 years schedules).

#### Schedules of Required Supplementary Information

#### SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY

Last 10 Fiscal Years  
(Dollar amounts in thousands)

	20X9	20X8	20X7	20X6	20X5	20X4	20X3	20X2	20X1	20X0
<b>Total pension liability</b>										
Service cost	\$ 101,095	\$ 100,317	\$ 103,471	\$ 98,685	\$ 81,057	\$ 71,765	\$ 65,615	\$ 48,060	\$ 34,803	\$ 36,512
Interest	231,141	218,193	200,491	185,434	171,179	149,133	140,555	129,623	109,901	101,733
Benefit changes	-	-	-	-	-	-	-	24,376	124,144	-
Difference between expected and actual experience	(69,838)	(41,374)	(9,387)	17,438	29,183	(4,152)	3,054	23,900	22,224	33,390
Changes of assumptions	-	-	63,375	-	-	158,409	(14,531)	(8,099)	34,257	-
Benefit payments	(124,083)	(118,311)	(109,281)	(99,654)	(91,558)	(85,690)	(78,874)	(71,853)	(67,202)	(62,188)
Refunds of contributions	(2,780)	(2,764)	(2,927)	(2,684)	(2,251)	(1,882)	(1,588)	(1,496)	(1,368)	(1,690)
<b>Net change in total pension liability</b>	<b>138,335</b>	<b>157,061</b>	<b>245,742</b>	<b>199,219</b>	<b>188,210</b>	<b>287,583</b>	<b>114,231</b>	<b>144,721</b>	<b>256,759</b>	<b>107,747</b>
<b>Total pension liability—beginning</b>	<b>3,045,863</b>	<b>2,888,832</b>	<b>2,643,090</b>	<b>2,443,871</b>	<b>2,255,661</b>	<b>1,968,078</b>	<b>1,853,847</b>	<b>1,709,126</b>	<b>1,452,367</b>	<b>1,344,620</b>
<b>Total pension liability—ending (a)</b>	<b>3,182,228</b>	<b>3,045,893</b>	<b>2,888,832</b>	<b>2,643,090</b>	<b>2,443,871</b>	<b>2,255,661</b>	<b>1,968,078</b>	<b>1,853,847</b>	<b>1,709,126</b>	<b>1,452,367</b>
<b>Plan net position</b>										
Contributions—employer	109,544	107,028	105,756	103,089	89,054	78,485	68,993	48,775	34,881	36,333
Contributions—member	51,119	50,344	54,949	51,926	41,411	39,994	30,587	25,005	19,819	15,997
Net investment income	199,273	83,235	(30,957)	131,629	236,498	154,280	165,030	120,743	(17,987)	(74,580)
Benefit payments	(124,083)	(118,311)	(109,281)	(99,654)	(91,558)	(85,690)	(78,874)	(71,853)	(67,202)	(62,188)
Administrative expense	(3,427)	(3,333)	(3,049)	(2,684)	(2,349)	(2,156)	(2,083)	(1,800)	(1,709)	(1,501)
Refunds of contributions	(2,780)	(2,764)	(2,927)	(2,684)	(2,251)	(1,882)	(1,588)	(1,496)	(1,368)	(1,690)
Other	8	(34)	37	9	(88)	40	(192)	(257)	5	-
<b>Net change in plan net position</b>	<b>229,654</b>	<b>116,186</b>	<b>14,530</b>	<b>181,631</b>	<b>270,705</b>	<b>178,071</b>	<b>181,853</b>	<b>119,227</b>	<b>(33,561)</b>	<b>(87,829)</b>
<b>Plan net position—beginning</b>	<b>2,283,333</b>	<b>2,167,188</b>	<b>2,152,638</b>	<b>1,971,007</b>	<b>1,700,302</b>	<b>1,522,231</b>	<b>1,340,378</b>	<b>1,221,151</b>	<b>1,254,712</b>	<b>1,342,341</b>
<b>Plan net position—ending (b)</b>	<b>2,512,987</b>	<b>2,283,333</b>	<b>2,167,188</b>	<b>2,152,638</b>	<b>1,971,007</b>	<b>1,700,302</b>	<b>1,522,231</b>	<b>1,340,378</b>	<b>1,221,151</b>	<b>1,254,712</b>
<b>Net pension liability—ending (a) – (b)</b>	<b>\$ 669,241</b>	<b>\$ 762,560</b>	<b>\$ 721,654</b>	<b>\$ 490,452</b>	<b>\$ 472,864</b>	<b>\$ 555,359</b>	<b>\$ 445,847</b>	<b>\$ 513,469</b>	<b>\$ 487,975</b>	<b>\$ 197,655</b>