HONORS CAPSTONE PROJECT

For this project, I was gathering pension data from the Comprehensive Annual Financial Reports (CAFR) of different states pension plans. The data that I gathered was input into an excel spreadsheet with all the pension plans listed from 2009 until 2013. Some of the data that I gathered from these financial reports was the Actuarial Value of Assets (AVA) and the Actuarially Accrued Liability (AAL). The Actuarial Value of Assets are contributions made towards a pension plan that are being placed into investments to help pay for the Actuarially Accrued Liabilities. The difference between the AAL and the AVA tell us how much the pension plan is underfunded. Covered Payroll is also gathered from the CAFRs and reflects the payrolls of employees that are funded by pensions through pension plans (GASB, Financial). I then gathered the Annual Pension Cost and Actual Contributions for each of the pension plans and entered it into the spreadsheet. Lastly, I included the Expected Invest Rate and Discount Rate that were used in computing these numbers. To help understand the process of data gathering, exhibits 1 and 2 in the appendices show the reports from which I pulled the data.

In order to complete this project, I went to the Truth in Accounting office about twice every month (discussed below). This was important for me in the beginning of the project because the amount of questions I had, and it would have been difficult to get my questions answered through emails. During my trips to the office, I had independent time to work on the data gathering and get help from the office staff. Since the project required a lot of data gathering, I was required to do a lot of work outside of the office.

Truth in Accounting is a non-for-profit organization that was founded in 2002 and the organization believes in truthful accounting and provides information for citizens so

that they can understand all about government finances (TIA, 2018). One of the areas that the organization focuses on is to give the public financial reports that are easy to understand and transparent. In addition to this, the organization analyzes this accounting information and issues reports for the public to view. Lastly, Truth in Accounting wants to provide all the data that they gather to the public so that they can analyze it for themselves. This will give the public the opportunity to understand what is happening with government finances. Truth in Accounting's Mission Statement of "To educate and empower citizens with understandable, reliable, and transparent government financial information" summarizes why they are doing this as an organization. (TIA, 2018)

Based on the data gathering that I performed, I found that a lot of state pension retirement and health care benefits are majorly underfunded, and this is a serious issue for the states. Previously under GASB standards, they were not required to disclose the net pension liability on the financial statements. With GASB No. 67 and No.68 put in effect in 2012, "Governments will now be required to report that amount as a liability in their accrual-based financial statements." (New GASB, 2013) This is important because the government is now going to be required to include these liabilities onto their financial statements. When the public examines the financial statements under the new standard, it will look like the financial position of the state is worse, but it is the same. Now, the public will get an actual understanding of the financial situation of the government. No longer will these liabilities be an off-balance sheet item for the government.

There are major implications and consequences for states with unfunded liabilities because these pension plans are not getting fully funded. This means that if the government wants to get rid of the liabilities, they will need to increase their plan assets.

In order for this to happen, the government is going to need to take action and get the right amount of funding that is needed.

Citizens need to be concerned about the unfunded state pension retirement and health care benefits because they are going to feel the effects of these liabilities. According to the article written by Jeffrey Cheng and David Wessel, "State governments with large unfunded pension liabilities are paying more to borrow from capital markets than are other states." (Cheng, Jeffrey, 2018) If you live in a state that has a higher pension liability, it means that the state is going to have rates when borrowing from the markets. Citizens may have thought that these unfunded pension liabilities have no impact on the state, but that is false and as previously stated, will now be included in the financial statements. Lastly, Citizens of these states should be asking the state to reform the pension system so that they can avoid these higher rates and ultimately be saving money on these lower costs of borrowing.

The data gathered by me for Truth in Accounting will be used to determine if the pension plans in different states are being underfunded or fully funded. Net Pension Liability cannot be determining if you do have information on the Plan Assets and Liabilities. By gathering all of this data, citizen can compare the different pension plans of different states and determine which state is in the best financial position and which is struggling with the pension plans. Multiple years of the pension plans need to be gathered because citizens of each state should be able to determine if the state is improving its pension funding or are more pension plans getting underfunded. The gathering of data was needed because the average citizen might find it difficult to find this information in

the financial reports or may not have enough time to do so. By gathering all the data and creating a data base, citizens will have easy access to this information.

Truth in Accounting will use the data that I gathered and post it to their State Data Lab that is available to everyone and can be accessed on their website. On this State Data Lab, you can obtain all of the information on all the major pension plans of a state in a way that is easy to access. With the data that I gathered for Truth in Accounting, citizens will be able to go back a further five years in addition to the four years that are posted right now. The data posted on the State Data Lab will make it easier for citizens to also compare the different pension plans of a state with each other and see which pension plans are not doing as well as the other are doing.

After I submit my spreadsheets to Truth in Accounting, they will go through a process that will double check my numbers for any errors or mistakes. If they do come across an error or a mistake, they will correct it. By doing this, Truth in Accounting will make sure that information is most accurate that it could be. The next step will be for Truth in Accounting to use this information to determine the financial status of the states. These unfunded pension plans comprise a lot of a states' total debt and that means that my data gathered is very important for Truth in Accounting when calculating the status of states.

During the process of gathering data for Truth in Accounting, I learned that there is a serious problem when it comes to pension plans. Not only are there a lot of pension plans with a liability, most of these are also majorly underfunded. When filling out the spreadsheets, I found this to be very concerning. I also learned that a lot of these liabilities were going unnoticed by the public because of the reporting standards that were

in place before. During the process of completing the project, I learned a lot about the GASB standards that are currently in place and what it used to be before the changes. GASB No. 67 and No.68 are going to have big impacts on the financial statements and I have a better understanding of these standards now.

While working on this project, I came across a lot of challenges. These challenges came from gathering the data. One of the first challenges I faced was that the information that I was looking for in the CAFR, wasn't always in the same location. This means that every time I looked at a report, I would have to spend a lot of time trying to find the information that I needed. Each report used different scales for reporting the information. This means that some states had their numbers in millions, while other states had it in thousands. So, if a state had 50 million in unfunded liabilities, I would have to enter into the spreadsheet as 50,000 to keep it in the same format as the rest of the reports. This is sometimes a challenge because it is easy to get used to recording information in thousands and the report might not have been in thousands and so I had to be more careful. One of the biggest challenges that I came across was when a report had flipped their assets and liabilities in the report. Most reports had assets in the first column and liabilities in the second. If I made a mistake initially, I would have to go back and reenter all of the data. Lastly, I spent a lot of time trying to find a report for each year that had the invest rate of returns. Only one report had the rates listed for all five previous years. If these rates were included for the past five years for every report, I wouldn't go through the challenges of finding previous years rates.

This experience will greatly benefit me in my future. In the process of entering all the data into an excel spreadsheet, I was able to familiarize myself with excel and feel

more comfortable using it. I know that I will be using excel a lot in my future and this experience will make it easier for me to use it. I had to find the reports for all the data that I gathered. I had a lot of difficulty finding all of the reports and I had to be creative in what I entered into the search engine to find the reports. I gained a lot of skill in being able to find information that you are looking for on the internet and this will be very helpful in my future. While working, I might not be able to find all of the information that I need and having this skill will aid me in the future. Lastly, I feel that after this experience, I am going to be more educated about government finances and you never know when this knowledge will become useful in your future.

Appendices

Exhibit 1:

Indiana Public Retirement System

Required Supplementary Information:
Schedule of Funding Progress

(dollars in thousands)

Actuarial Valuation Date	Actuarial Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) or (Funding Surplus) (b) - (a)	Funded Ratio (a) / (b)	Annual Covered Payroll (c)
		Public Employees' Retirement Fund			
6/30/2008	$ 12,780,116	$ 13,103,221	$ 323,105	97.5%	$ 4,600,354
6/30/2009	12,569,336	13,506,280	936,944	93.1	4,931,423
6/30/2010	12,357,199	14,506,052	2,148,853	85.2	4,896,013
6/30/2011	12,000,586	14,913,147	2,912,561	80.5	4,818,774
6/30/2012	12,088,225	15,784,240	3,696,015	76.6	4,904,052
6/30/2013	12,947,283	16,145,681	3,198,398	80.2	4,766,910

Exhibit 2:

Indiana Public Retirement Sy

Required Supplementary Information:
Schedule of Employer Contributions

(dollars in thousands)

Public Employees' Retirement Fund

Fiscal Year Ended	Annual Required Contribution	Annual Employer Contribution	Percentage Contributed
6/30/2008	$ 291,397	$ 303,877	104.3%
6/30/2009	316,059	323,151	102.2
6/30/2010	360,183	331,090	91.9
6/30/2011	483,842	342,779	70.8
6/30/2012	509,724	397,843	78.1
6/30/2013[1]	477,342	455,658	95.5

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