Gabriel Roeder Smith & Company
Consultants & Actuaries

VILLAGE OF ALSIP REGULAR

GASB STATEMENT NO. 68 EMPLOYER REPORTING
ACCOUNTING SCHEDULES
DECEMBER 31, 2015

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GRS
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April 15, 2016

Village of Alsip
Illinois Municipal Retirement System

Ladies and Gentlemen:

The accounting schedules submitted in this report are required under the Governmental Accounting Standards Board (GASB) Statement No. 68 "Accounting and Financial Reporting for Pensions."

Our calculations for this report were prepared for the purpose of complying with the requirements of GASB Statement No. 68. These calculations have been made on a basis that is consistent with our understanding of these accounting standards. These results are subject to review by the system's auditor and may be revised.

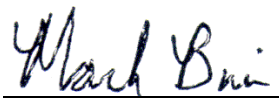
Our calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statement No. 68. The Net Pension Liability is not an appropriate measure for measuring the sufficiency of plan assets to cover the estimated cost of settling the employer's benefit obligation. The Net Pension Liability is not an appropriate measure for assessing the need for or amount of future employer contributions. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statement Nos. 67 and 68 may produce significantly different results. This report may be provided to parties other than the Village of Alsip only in its entirety and only with the permission of Village of Alsip.

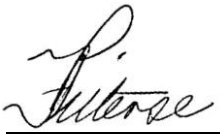
This report is based upon information, furnished to us by IMRF, concerning retirement and ancillary benefits, active members, deferred vested members, retirees and beneficiaries, and financial data. If your understanding of this information is different than ours, please let us know and do not use or distribute this report until those differences have been resolved to your satisfaction. This information was checked for internal consistency, but it was not otherwise audited.

Please see the actuarial valuation report for the Illinois Municipal Retirement Fund as of December 31, 2015 for additional discussions of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

To the best of our knowledge, the information contained in this report is accurate, and fairly represents the GASB 68 information relates to Village of Alsip. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as with the Actuarial Standards of Practice issued by the Actuarial Standards Board. Mark Buis and Francois Pieterse are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the Academy of Actuaries to render the actuarial opinions herein. The signing actuaries are independent of the plan sponsor.

Respectfully submitted,

By 
Mark Buis
FSA, EA, MAAA

By 
Francois Pieterse
ASA, MAAA

SECTION A

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY
AS OF DECEMBER 31, 2015

Actuarial Valuation Date	December 31, 2015
Measurement Date of the Net Pension Liability	December 31, 2015
Fiscal Year End	April 30, 2016

Membership

Number of	
- Retirees and Beneficiaries	60
- Inactive, Non-Retired Members	36
- Active Members	68
- Total	164
Covered Valuation Payroll	$ 3,256,920

Net Pension Liability

Total Pension Liability/(Asset)	$ 17,891,016
Plan Fiduciary Net Position	15,442,562
Net Pension Liability/(Asset)	$ 2,448,454
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	86.31%
Net Pension Liability as a Percentage of Covered Valuation Payroll	75.18%

Development of the Single Discount Rate as of December 31, 2015

Long-Term Expected Rate of Investment Return	7.50%
Long-Term Municipal Bond Rate*	3.57%
Last year ending December 31 in the 2016 to 2115 projection period for which projected benefit payments are fully funded	2089
Resulting Single Discount Rate based on the above development	7.48%

Single Discount Rate calculated using December 31, 2014 Measurement Date	7.49%
Total Pension Expense/(Income)	$ 925,892

Deferred Outflows and Deferred Inflows of Resources by Source to be recognized in Future Pension Expenses

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 0	$ 882,128
Changes in assumptions	16,486	0
Net difference between projected and actual earnings on pension plan investments	878,002	0
Total	$ 894,488	$ 882,128

*Source: *"State & local bonds" rate from Federal Reserve statistical release (H.15) as of December 31, 2015. The statistical release describes this rate as "Bond Buyer Index, general obligation, 20 years to maturity, mixed quality." In describing this index, the Bond Buyer notes that the bonds' average credit quality is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'s AA.*

DISCUSSION

Accounting Standard

For state and local government employers (as well as certain non-employers) that contribute to a Defined Benefit (DB) pension plan administered through a trust or equivalent arrangement, Governmental Accounting Standards Board (GASB) Statement No. 68 establishes standards for pension accounting and financial reporting. Under GASB Statement No. 68, the employer must account for and disclose the net pension liability, pension expense, and other information associated with providing retirement benefits to their employees (and former employees) on their basic financial statements.

The following discussion provides a summary of the information that is required to be disclosed under these accounting standards. A number of these disclosure items are provided in this report. However, certain information is not included in this report if it is not actuarial in nature, such as the notes to the financial statements regarding accounting policies and investments. As a result, the retirement system and/or plan sponsor is responsible for preparing and disclosing the non-actuarial information needed to comply with these accounting standards.

Financial Statements

GASB Statement No. 68 requires state and local government employers that contribute to DB pension plans to recognize the net pension liability and the pension expense on their financial statements, along with the related deferred outflows of resources and deferred inflows of resources. The net pension liability is the difference between the total pension liability and the plan's fiduciary net position. In traditional actuarial terms, this is analogous to the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

Paragraph 57 of GASB Statement No. 68 says, "Contributions to the pension plan from the employer subsequent to the measurement date of the collective net pension liability and before the end of the employer's reporting period should be reported as a deferred outflow of resources related to pensions." The information contained in this report does not incorporate any contributions made to IMRF subsequent to the measurement date of December 31, 2015.

The pension expense recognized each fiscal year is equal to the change in the net pension liability from the beginning of the year to the end of the year, adjusted for deferred recognition of the certain changes in the liability and investment experience.

Notes to Financial Statements

GASB Statement No. 68 requires the notes of the employer's financial statements to disclose the total pension expense, the pension plan's liabilities and assets, and deferred outflows of resources and inflows of resources related to pensions.

In addition, GASB Statement No. 68 requires the notes of the financial statements for the employers to include certain additional information, including (page numbers refer to page numbers from this report unless specified otherwise):

- a description of the types of benefits provided by the plan, as well as automatic or ad hoc COLAs (please see pages B-1 - B-5 of the December 31, 2015 Annual Actuarial Valuation report dated April 1, 2016);
- the number and classes of employees covered by the benefit terms (page 1);
- for the current year, sources of changes in the net pension liability (page 10);
- significant assumptions and methods used to calculate the total pension liability (page 15);
- inputs to the single discount rate (page 16);
- certain information about mortality assumptions and the dates of experience studies (page 13 and page 15);
- the date of the valuation used to determine the total pension liability (page 1);
- information about changes of assumptions or other inputs and benefit terms (pages 13 and 15);
- the basis for determining contributions to the plan, including a description of the plan's funding policy, as well as member and employer contribution requirements (please see page A-3, B-5 and Section D of the December 31, 2015 Annual Actuarial Valuation report dated April 1, 2016, as well as page 13);
- the total pension liability, fiduciary net position, net pension liability, and the pension plan's fiduciary net position as a percentage of the total pension liability (page 10);
- the net pension liability using a discount rate that is 1% higher and 1% lower than used to calculate the total pension liability and net pension liability for financial reporting purposes (page 10); and
- a description of the system that administers the pension plan (to be provided by IMRF).

Required Supplementary Information

The financial statements of employers also include required supplementary information showing the 10-year fiscal history of:

- sources of changes in the net pension liability (page 11);
- information about the components of the net pension liability and related ratios, including the pension plan's fiduciary net position as a percentage of the total pension liability, and the net pension liability as a percent of covered-employee payroll (page 11); and
- comparison of actual employer contributions to the actuarially determined contributions based on the plan's funding policy (page 12).

These tables may be built prospectively as the information becomes available.

Timing of the Valuation

An actuarial valuation to determine the total pension liability is required to be performed at least every two years. For the employer's financial reporting purposes, the net pension liability and pension expense should be measured as of the employer's "measurement date" which may not be earlier than the employer's prior fiscal year-end date. If the actuarial valuation used to determine the total pension liability is not calculated as of the measurement date, the total pension liability is required to be rolled forward from the actuarial valuation date to the measurement date.

The total pension liability shown in this report is based on an actuarial valuation performed as of December 31, 2015 and a measurement date of December 31, 2015.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a single discount rate that reflects: (1) a long-term expected rate of return on pension plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the plan's projected fiduciary net position is not sufficient to pay benefits).

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.50%; the municipal bond rate is 3.57% (based on the weekly rate closest to but not later than the measurement date of the "state & local bonds" rate from Federal Reserve statistical release (H.15)); and the resulting single discount rate is 7.48%.

OTHER OBSERVATIONS

General Implications of Contribution Allocation Procedure or Funding Policy on Future Expected Plan Contributions and Funded Status

Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 7.50% on the actuarial value of assets), it is expected that:

(1) The employer normal cost as a percentage of pay will decrease to the level of Tier 2 normal cost as time passes as the majority of the active population will consist of Tier 2 members.
(2) The unfunded liability will increase in dollar amount for several years before it begins to decrease.
(3) The funded status of the plan will increase gradually towards a 100% funded ratio.

This funding policy results in a crossover date in 2089 and a discount rate of 7.48%. The projections in this report are strictly for the purposes of determining the GASB discount rate and are different from a funding projection for the ongoing plan.

Limitations of Assets as a Percent of Total Pension Liability Measurements

This report includes a measure of the plan fiduciary net position as a percent of total pension liability. Unless otherwise indicated, with regard to any such measurements presented in this report:

(1) The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.
(2) The measurement is inappropriate for assessing the need for or amount of future employer contributions.

Limitations of Funded Status Measurements

Unless otherwise indicated, a funded ratio measurement presented in this report is based upon the actuarial accrued liability and the market value of assets. Unless otherwise indicated, with regard to any funded status measurements presented in this report:

(1) The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations, in other words of transferring the obligations to a unrelated third party in an arm's length market value type transaction.
(2) The measurement is dependent upon the actuarial cost method which, in combination with the plan's amortization policy, affects the timing and amounts of future contributions. The amount of future contributions will most certainly differ from those assumed in this report due to future actual experience differing from assumed experience based upon actuarial assumptions. A funded ratio measurement in this report of 100% is not synonymous with no required future contributions. If the funded ratio were 100%, the plan would still require future normal cost contributions (i.e., contributions to cover the cost of the active membership accruing an additional year of service credit).

Limitation of Project Scope

Actuarial standards do not require the actuary to evaluate the ability of the plan sponsor or other contributing entity to make required contributions to the plan when due. Such an evaluation was not within the scope of this project and is not within the actuary's domain of expertise. Consequently, the actuary performed no such evaluation.

SECTION B

FINANCIAL STATEMENTS

PENSION EXPENSE/(INCOME) UNDER GASB STATEMENT NO. 68
CALENDAR YEAR ENDED DECEMBER 31, 2015

A. Expense/(Income)		
1. Service Cost	$	338,319
2. Interest on the Total Pension Liability		1,342,439
3. Current-Period Benefit Changes		0
4. Employee Contributions (made negative for addition here)		(146,561)
5. Projected Earnings on Plan Investments (made negative for addition here)		(1,177,515)
6. Other Changes in Plan Fiduciary Net Position		604,709
7. Recognition of Outflow (Inflow) of Resources due to Liabilities		(254,999)
8. Recognition of Outflow (Inflow) of Resources due to Assets		219,500
9. Total Pension Expense/(Income)	**$**	**925,892**

STATEMENT OF OUTFLOWS AND INFLOWS ARISING FROM CURRENT REPORTING PERIOD

CALENDAR YEAR ENDED DECEMBER 31, 2015

A. Outflows (Inflows) of Resources due to Liabilities		
1. Difference between expected and actual experience of the Total Pension Liability (gains) or losses	$	(1,141,983)
2. Assumption Changes (gains) or losses	$	21,342
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}		4.3947
4. Outflow (Inflow) of Resources to be recognized in the current pension expense for the Difference between expected and actual experience of the Total Pension Liability	$	(259,855)
5. Outflow (Inflow) of Resources to be recognized in the current pension expense for Assumption Changes	$	4,856
6. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Liabilities	$	(254,999)
7. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for the Difference between expected and actual experience of the Total Pension Liability	$	(882,128)
8. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for Assumption Changes	$	16,486
9. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Liabilities	$	(865,642)
B. Outflows (Inflows) of Resources due to Assets		
1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	$	1,097,502
2. Recognition period for Assets {in years}		5.0000
3. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Assets	$	219,500
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	$	878,002

* *Please note that employer contributions made after the measurement date have not been reported as deferred outflows of resources. These employer contributions must be separately accounted for by the employer.*

STATEMENT OF OUTFLOWS AND INFLOWS ARISING FROM CURRENT AND PRIOR REPORTING PERIODS
CALENDAR YEAR ENDED DECEMBER 31, 2015

A. Outflows and Inflows of Resources due to Liabilities and Assets to be recognized in Current Pension Expense

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Due to Liabilities	$ 4,856	$ 259,855	$ (254,999)
2. Due to Assets	219,500	0	219,500
3. Total	$ 224,356	$ 259,855	$ (35,499)

B. Outflows and Inflows of Resources by Source to be recognized in Current Pension Expense

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Differences between expected and actual experience	$ 0	$ 259,855	$ (259,855)
2. Assumption changes	4,856	0	4,856
3. Net difference between projected and actual earnings on pension plan investments	219,500	0	219,500
4. Total	$ 224,356	$ 259,855	$ (35,499)

C. Deferred Outflows and Deferred Inflows of Resources by Source to be recognized in Future Pension Expenses

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows of Resources
1. Differences between expected and actual experience	$ 0	$ 882,128	$ (882,128)
2. Assumption changes	16,486	0	16,486
3. Net difference between projected and actual earnings on pension plan investments	878,002	0	878,002
4. Total	$ 894,488	$ 882,128	$ 12,360

D. Deferred Outflows and Deferred Inflows of Resources by Year to be recognized in Future Pension Expenses

Year Ending December 31	Net Deferred Outflows of Resources
2016	$ (35,499)
2017	(35,499)
2018	(35,499)
2019	118,857
2020	0
Thereafter	0
Total	$ 12,360

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
CURRENT PERIOD
CALENDAR YEAR ENDED DECEMBER 31, 2015

A. Total pension liability		
1. Service Cost	$	338,319
2. Interest on the Total Pension Liability		1,342,439
3. Changes of benefit terms		0
4. Difference between expected and actual experience of the Total Pension Liability		(1,141,983)
5. Changes of assumptions		21,342
6. Benefit payments, including refunds of employee contributions		(846,048)
7. Net change in total pension liability	$	(285,931)
8. Total pension liability – beginning		18,176,947
9. Total pension liability – ending	**$**	**17,891,016**
B. Plan fiduciary net position		
1. Contributions – employer	$	628,890
2. Contributions – employee		146,561
3. Net investment income		80,013
4. Benefit payments, including refunds of employee contributions		(846,048)
5. Other (Net Transfer)		(604,709)
6. Net change in plan fiduciary net position	$	(595,293)
7. Plan fiduciary net position – beginning		16,037,855
8. Plan fiduciary net position – ending	**$**	**15,442,562**
C. Net pension liability/(asset)	**$**	**2,448,454**
D. Plan fiduciary net position as a percentage of the total pension liability		**86.31%**
E. Covered Valuation payroll	**$**	**3,256,920**
F. Net pension liability as a percentage of covered valuation payroll		**75.18%**

SENSITIVITY OF NET PENSION LIABILITY/(ASSET) TO THE SINGLE DISCOUNT RATE ASSUMPTION

	1% Decrease 6.48%	Current Single Discount Rate Assumption 7.48%	1% Increase 8.48%
Total Pension Liability	$ 20,209,040	$ 17,891,016	$ 15,992,969
Plan Fiduciary Net Position	15,442,562	15,442,562	15,442,562
Net Pension Liability/(Asset)	$ 4,766,478	$ 2,448,454	$ 550,407

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION
MULTIYEAR SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Calendar Years

(schedule to be built prospectively from 2014)

Calendar year ending December 31,	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total Pension Liability										
Service Cost	$ 338,319									
Interest on the Total Pension Liability	1,342,439									
Benefit Changes	0									
Difference between Expected and Actual Experience	(1,141,983)									
Assumption Changes	21,342									
Benefit Payments and Refunds	(846,048)									
Net Change in Total Pension Liability	(285,931)									
Total Pension Liability - Beginning	18,176,947									
Total Pension Liability - Ending (a)	$ 17,891,016									
Plan Fiduciary Net Position										
Employer Contributions	$ 628,890									
Employee Contributions	146,561									
Pension Plan Net Investment Income	80,013									
Benefit Payments and Refunds	(846,048)									
Other	(604,709)									
Net Change in Plan Fiduciary Net Position	(595,293)									
Plan Fiduciary Net Position - Beginning	16,037,855									
Plan Fiduciary Net Position - Ending (b)	$ 15,442,562									
Net Pension Liability/(Asset) - Ending (a) - (b)	2,448,454									
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	86.31%									
Covered Valuation Payroll	$ 3,256,920									
Net Pension Liability as a Percentage of Covered Valuation Payroll	75.18%									

MULTIYEAR SCHEDULE OF CONTRIBUTIONS

Last 10 Calendar Years

Calendar Year Ending December 31,	Actuarially Determined Contribution		Actual Contribution	Contribution Deficiency (Excess)	Covered Valuation Payroll	Actual Contribution as a % of Covered Valuation Payroll
2015	$ 545,860	*	$ 628,890	$ (83,030)	$ 3,256,920	19.31%

* *Estimated based on contribution rate of 16.76% and covered valuation payroll of $3,256,920. This number should be verified by the auditor.*

NOTES TO SCHEDULE OF CONTRIBUTIONS

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS USED IN THE CALCULATION OF THE 2015 CONTRIBUTION RATE*

Valuation Date:

Notes	Actuarially determined contribution rates are calculated as of December 31 each year, which is 12 months prior to the beginning of the fiscal year in which contributions are reported.

Methods and Assumptions Used to Determine 2015 Contribution Rates:

Actuarial Cost Method	Aggregate Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Remaining Amortization Period	Non-Taxing bodies: 10-year rolling period. Taxing bodies (Regular, SLEP and ECO groups): 28-year closed period until remaining period reaches 15 years (then 15-year rolling period). Early Retirement Incentive Plan liabilities: a period up to 10 years selected by the Employer upon adoption of ERI. SLEP supplemental liabilities attributable to Public Act 94-712 were financed over 23 years for most employers (two employers were financed over 32 years).
Asset Valuation Method	5-Year smoothed market; 20% corridor
Wage growth	4.00%
Price Inflation	3.0% -- approximate; No explicit price inflation assumption is used in this valuation.
Salary Increases	4.40% to 16.00% including inflation
Investment Rate of Return	7.50%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2011 valuation pursuant to an experience study of the period 2008 - 2010.
Mortality	RP-2000 Combined Healthy Mortality Table, adjusted for mortality improvements to 2020 using projection scale AA. For men 120% of the table rates were used. For women 92% of the table rates were used. For disabled lives, the mortality rates are the rates applicable to non-disabled lives set forward 10 years.

Other Information:

Notes	There were no benefit changes during the year.

* *Based on Valuation Assumptions used in the December 31, 2013 actuarial valuation*

DEVELOPMENT OF MARKET VALUE OF ASSETS

Market Value of Assets as of December 31, 2015

1. Employee Contribution Reserve (MDF Assets from IMRF)	$	2,765,987
2. Employer Contribution Reserve (EAF assets from IMRF)		3,985,068
3. Annuitant Reserve		8,688,981
4. Miscellaneous Adjustment*		2,526
5. Net Market Value	$	15,442,562

* *Includes an adjustment factor of* .000163582 on *Items 1 through 4 to ensure that Market Value of Assets for all employers balances to the total Market Value of IMRF. Miscellaneous adjustments are due to various items such as suspended annuity reserve, disability benefit reserve, death benefit reserve, supplemental benefit reserve, employers with no assets, etc.*

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS USED IN THE CALCULATION OF THE TOTAL PENSION LIABILITY

Methods and Assumptions Used to Determine Total Pension Liability:	
Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Market Value of Assets
Price Inflation	2.75%
Salary Increases	3.75% to 14.50%
Investment Rate of Return	7.48%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2014 valuation pursuant to an experience study of the period 2011-2013.
Mortality	For non-disabled retirees, an IMRF specific mortality table was used with fully generational projection scale MP-2014 (base year 2014). The IMRF specific rates were developed from the RP-2014 Blue Collar Health Annuitant Mortality Table with adjustments to match current IMRF experience. For disabled retirees, an IMRF specific mortality table was used with fully generational projection scale MP-2014 (base year 2014). The IMRF specific rates were developed from the RP-2014 Disabled Retirees Mortality Table applying the same adjustment that were applied for non-disabled lives. For active members, an IMRF specific mortality table was used with fully generational projection scale MP-2014 (base year 2014). The IMRF specific rates were developed from the RP-2014 Employee Mortality Table with adjustments to match current IMRF experience.
Other Information:	
Notes	There were no benefit changes during the year.

A detailed description of the actuarial assumptions and methods can be found in the December 31, 2015 Illinois Municipal Retirement Fund annual actuarial valuation report.

SECTION C

CALCULATION OF THE SINGLE DISCOUNT RATE

CALCULATION OF THE SINGLE DISCOUNT RATE

GASB Statement No. 68 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a "risk-free" rate is required, as described in the following paragraph.

The *Single Discount Rate* (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.50%; the municipal bond rate is 3.57%; and the resulting single discount rate is 7.48%.

The tables in this section provide background for the development of the single discount rate.

The **Projection of Contributions** table shows the development of expected contributions in future years. Normal Cost contributions for future hires are not included (nor are their liabilities).

Expected Contributions are developed based on the following:

- Member Contributions for current members
- Normal Cost contributions for current members
- Unfunded Liability contributions for current and future members.

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years.

The **Present Values of Projected Benefit Payments** table shows the development of the Single Discount Rate (SDR). It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

SINGLE DISCOUNT RATE DEVELOPMENT
PROJECTION OF CONTRIBUTIONS

Year	Payroll for Current Employees	Contributions from Current Employees	Normal Cost Contributions	UAL Contributions	Total Contributions
0	$ 3,256,920				
1	3,211,449	$ 144,515	$ 226,814	$ 322,377	$ 693,706
2	3,029,040	136,307	207,294	111,355	454,955
3	2,884,943	129,822	195,996	120,410	446,228
4	2,763,110	124,340	187,994	128,109	440,443
5	2,665,120	119,930	181,593	136,439	437,962
6	2,584,435	116,300	175,838	145,468	437,605
7	2,507,836	112,853	170,626	150,560	434,038
8	2,422,342	109,005	164,568	155,829	429,402
9	2,343,535	105,459	158,747	161,283	425,489
10	2,276,106	102,425	153,726	166,928	423,079
11	2,209,610	99,432	148,795	172,770	420,998
12	2,150,185	96,758	144,579	178,817	420,155
13	2,077,184	93,473	139,464	185,076	418,013
14	1,994,834	89,768	133,736	181,891	405,394
15	1,924,044	86,582	128,607	178,760	393,949
16	1,858,179	83,618	123,834	175,684	383,136
17	1,795,134	80,781	119,633	172,660	373,074
18	1,735,292	78,088	115,472	169,688	363,249
19	1,679,690	75,586	111,437	166,768	353,792
20	1,624,011	73,081	107,582	163,898	344,560
21	1,567,029	70,516	103,495	161,077	335,088
22	1,503,167	67,642	98,978	158,305	324,925
23	1,429,832	64,342	93,722	155,580	313,644
24	1,349,146	60,712	87,895	152,903	301,510
25	1,266,940	57,012	82,035	150,271	289,318
26	1,171,232	52,705	75,371	147,685	275,762
27	1,061,413	47,764	67,776	145,143	260,682
28	944,651	42,509	59,756	142,645	244,910
29	822,061	36,993	51,428	140,190	228,611
30	712,441	32,060	44,002	137,777	213,839
31	621,712	27,977	37,965	135,406	201,348
32	548,332	24,675	33,047	133,076	190,798
33	468,635	21,089	27,871	130,785	179,745
34	382,539	17,214	22,560	128,534	168,309
35	317,276	14,277	18,616	126,322	159,216
36	253,612	11,413	14,780	124,148	150,340
37	175,875	7,914	10,267	122,011	140,193
38	121,827	5,482	7,355	119,911	132,748
39	98,596	4,437	6,158	117,848	128,443
40	80,731	3,633	5,034	115,819	124,487
41	56,643	2,549	3,538	113,826	119,913
42	36,216	1,630	2,359	111,867	115,856
43	26,238	1,181	1,830	109,942	112,952
44	20,310	914	1,455	108,050	110,418
45	15,902	716	1,152	106,190	108,057
46	11,724	528	855	104,362	105,745
47	8,544	385	615	102,566	103,566
48	6,177	278	449	100,801	101,527
49	3,557	160	257	99,066	99,483
50	2,244	101	163	97,361	97,625

SINGLE DISCOUNT RATE DEVELOPMENT
PROJECTION OF CONTRIBUTIONS (CONCLUDED)

Year	Payroll for Current Employees	Contributions from Current Employees	Normal Cost Contributions	UAL Contributions	Total Contributions
51	$ 1,042	$ 47	$ 76	$ 95,685	$ 95,808
52	0	0	0	94,039	94,039
53	0	0	0	92,420	92,420
54	0	0	0	90,829	90,829
55	0	0	0	89,266	89,266
56	0	0	0	87,730	87,730
57	0	0	0	86,220	86,220
58	0	0	0	84,736	84,736
59	0	0	0	83,278	83,278
60	0	0	0	81,844	81,844
61	0	0	0	80,436	80,436
62	0	0	0	79,051	79,051
63	0	0	0	77,691	77,691
64	0	0	0	76,354	76,354
65	0	0	0	75,040	75,040
66	0	0	0	73,748	73,748
67	0	0	0	72,479	72,479
68	0	0	0	71,231	71,231
69	0	0	0	70,006	70,006
70	0	0	0	68,801	68,801
71	0	0	0	67,617	67,617
72	0	0	0	66,453	66,453
73	0	0	0	65,309	65,309
74	0	0	0	64,185	64,185
75	0	0	0	63,080	63,080
76	0	0	0	61,995	61,995
77	0	0	0	60,928	60,928
78	0	0	0	59,879	59,879
79	0	0	0	58,849	58,849
80	0	0	0	57,836	57,836
81	0	0	0	56,840	56,840
82	0	0	0	55,862	55,862
83	0	0	0	54,901	54,901
84	0	0	0	53,956	53,956
85	0	0	0	53,027	53,027
86	0	0	0	52,115	52,115
87	0	0	0	51,218	51,218
88	0	0	0	50,336	50,336
89	0	0	0	49,470	49,470
90	0	0	0	48,618	48,618
91	0	0	0	47,782	47,782
92	0	0	0	46,959	46,959
93	0	0	0	46,151	46,151
94	0	0	0	45,357	45,357
95	0	0	0	44,576	44,576
96	0	0	0	43,809	43,809
97	0	0	0	43,055	43,055
98	0	0	0	42,314	42,314
99	0	0	0	41,586	41,586
100	0	0	0	40,870	40,870

SINGLE DISCOUNT RATE DEVELOPMENT
PROJECTION OF PLAN FIDUCIARY NET POSITION

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Investment Earnings at 7.50%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)=(a)+(b)-(c)+(d)
1	$ 15,442,562	$ 693,706	$ 821,976	$ 1,153,469	$ 16,467,761
2	16,467,761	454,955	872,852	1,219,694	17,269,559
3	17,269,559	446,228	970,967	1,275,895	18,020,714
4	18,020,714	440,443	1,036,158	1,329,618	18,754,617
5	18,754,617	437,962	1,082,755	1,382,854	19,492,678
6	19,492,678	437,605	1,128,199	1,436,522	20,238,606
7	20,238,606	434,038	1,187,056	1,490,168	20,975,757
8	20,975,757	429,402	1,253,135	1,542,850	21,694,874
9	21,694,874	425,489	1,318,248	1,594,242	22,396,358
10	22,396,358	423,079	1,369,423	1,644,880	23,094,894
11	23,094,894	420,998	1,450,338	1,694,215	23,759,768
12	23,759,768	420,155	1,530,263	1,741,106	24,390,766
13	24,390,766	418,013	1,607,832	1,785,496	24,986,444
14	24,986,444	405,394	1,669,950	1,827,420	25,549,308
15	25,549,308	393,949	1,715,887	1,867,522	26,094,892
16	26,094,892	383,136	1,762,086	1,906,341	26,622,283
17	26,622,283	373,074	1,814,177	1,943,607	27,124,787
18	27,124,787	363,249	1,858,404	1,979,304	27,608,935
19	27,608,935	353,792	1,897,139	2,013,841	28,079,428
20	28,079,428	344,560	1,940,481	2,047,192	28,530,699
21	28,530,699	335,088	1,993,885	2,078,722	28,950,624
22	28,950,624	324,925	2,044,724	2,107,970	29,338,796
23	29,338,796	313,644	2,100,038	2,134,631	29,687,033
24	29,687,033	301,510	2,177,361	2,157,455	29,968,636
25	29,968,636	289,318	2,236,950	2,175,932	30,196,936
26	30,196,936	275,762	2,322,613	2,189,401	30,339,486
27	30,339,486	260,682	2,413,131	2,196,204	30,383,242
28	30,383,242	244,910	2,482,038	2,196,367	30,342,482
29	30,342,482	228,611	2,558,873	2,189,881	30,202,100
30	30,202,100	213,839	2,609,819	2,176,933	29,983,053
31	29,983,053	201,348	2,649,002	2,158,601	29,694,000
32	29,694,000	190,798	2,677,132	2,135,498	29,343,164
33	29,343,164	179,745	2,711,194	2,107,524	28,919,239
34	28,919,239	168,309	2,740,687	2,074,223	28,421,083
35	28,421,083	159,216	2,745,360	2,036,354	27,871,294
36	27,871,294	150,340	2,766,324	1,994,021	27,249,331
37	27,249,331	140,193	2,799,061	1,945,795	26,536,258
38	26,536,258	132,748	2,795,019	1,892,189	25,766,175
39	25,766,175	128,443	2,760,561	1,835,543	24,969,600
40	24,969,600	124,487	2,723,674	1,777,013	24,147,425
41	24,147,425	119,913	2,694,509	1,716,255	23,289,085
42	23,289,085	115,856	2,655,756	1,653,157	22,402,342
43	22,402,342	112,952	2,603,308	1,588,476	21,500,461
44	21,500,461	110,418	2,546,225	1,522,843	20,587,497
45	20,587,497	108,057	2,486,118	1,456,497	19,665,934
46	19,665,934	105,745	2,425,069	1,389,543	18,736,152
47	18,736,152	103,566	2,360,128	1,322,120	17,801,711
48	17,801,711	101,527	2,293,697	1,254,408	16,863,949
49	16,863,949	99,483	2,225,336	1,186,518	15,924,614
50	15,924,614	97,625	2,153,246	1,118,654	14,987,647

SINGLE DISCOUNT RATE DEVELOPMENT
PROJECTION OF PLAN FIDUCIARY NET POSITION (CONCLUDED)

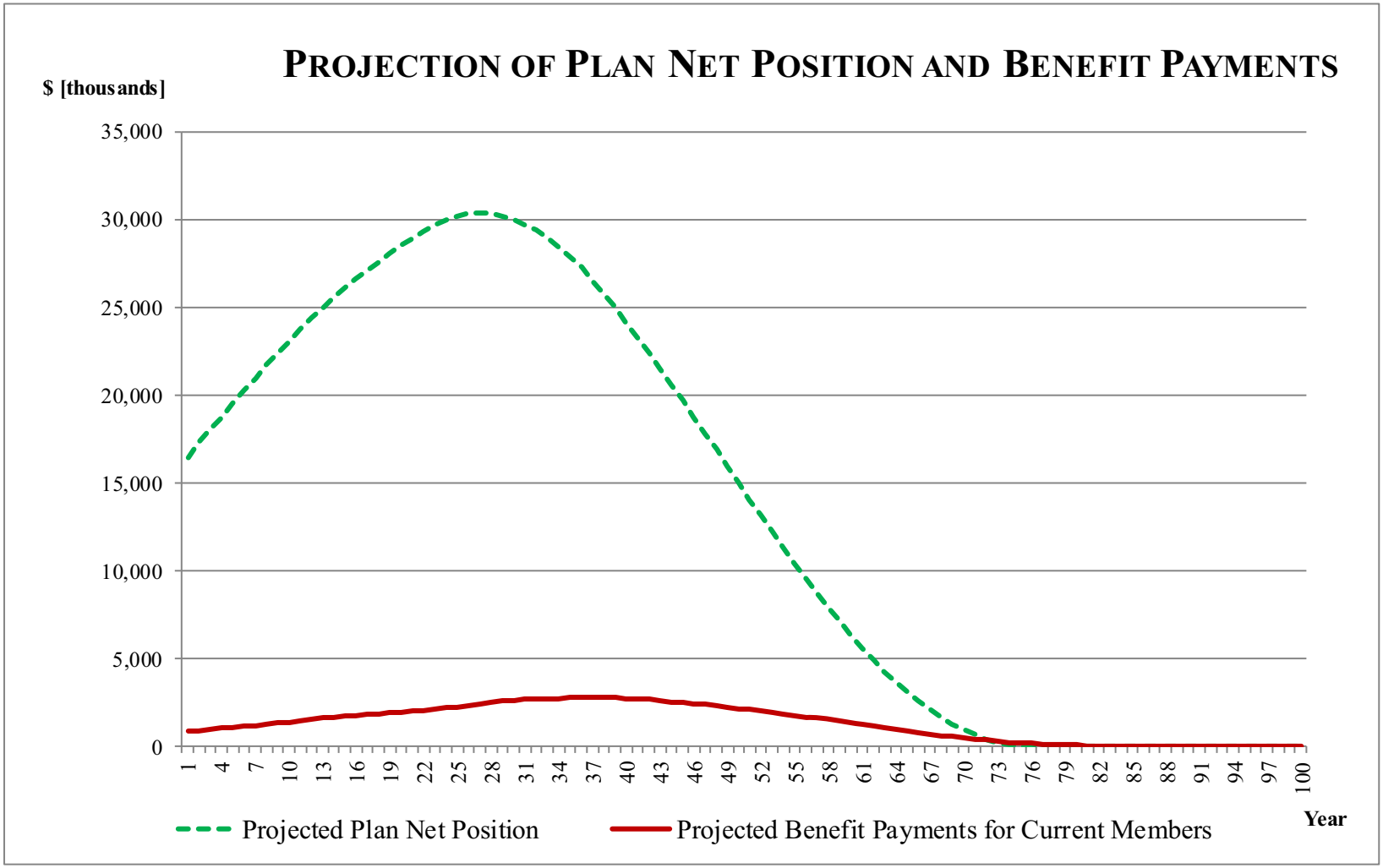
Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Investment Earnings at 7.50%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)=(a)+(b)-(c)+(d)
51	$ 14,987,647	$ 95,808	$ 2,080,434	$ 1,050,995	$ 14,054,017
52	14,054,017	94,039	2,004,621	983,700	13,127,134
53	13,127,134	92,420	1,926,295	917,008	12,210,267
54	12,210,267	90,829	1,846,235	851,132	11,305,994
55	11,305,994	89,266	1,764,410	786,267	10,417,117
56	10,417,117	87,730	1,680,871	722,621	9,546,597
57	9,546,597	86,220	1,595,713	660,412	8,697,516
58	8,697,516	84,736	1,508,992	599,870	7,873,130
59	7,873,130	83,278	1,420,807	541,234	7,076,835
60	7,076,835	81,844	1,331,405	484,751	6,312,026
61	6,312,026	80,436	1,241,126	430,663	5,581,998
62	5,581,998	79,051	1,150,348	379,202	4,889,904
63	4,889,904	77,691	1,059,533	330,589	4,238,651
64	4,238,651	76,354	969,285	285,019	3,630,740
65	3,630,740	75,040	880,276	242,655	3,068,158
66	3,068,158	73,748	793,250	203,618	2,552,275
67	2,552,275	72,479	708,887	167,987	2,083,853
68	2,083,853	71,231	627,786	135,795	1,663,094
69	1,663,094	70,006	550,665	107,033	1,289,468
70	1,289,468	68,801	478,187	81,636	961,718
71	961,718	67,617	410,858	59,490	677,966
72	677,966	66,453	349,081	40,441	435,778
73	435,778	65,309	293,133	24,294	232,249
74	232,249	64,185	243,158	10,829	64,105
75	64,105	63,080	199,179	0	0
76	0	61,995	161,049	0	0
77	0	60,928	128,474	0	0
78	0	59,879	101,076	0	0
79	0	58,849	78,413	0	0
80	0	57,836	59,964	0	0
81	0	56,840	45,170	0	0
82	0	55,862	33,499	0	0
83	0	54,901	24,460	0	0
84	0	53,956	17,576	0	0
85	0	53,027	12,413	0	0
86	0	52,115	8,611	0	0
87	0	51,218	5,864	0	0
88	0	50,336	3,914	0	0
89	0	49,470	2,554	0	0
90	0	48,618	1,630	0	0
91	0	47,782	1,016	0	0
92	0	46,959	616	0	0
93	0	46,151	365	0	0
94	0	45,357	208	0	0
95	0	44,576	112	0	0
96	0	43,809	59	0	0
97	0	43,055	30	0	0
98	0	42,314	15	0	0
99	0	41,586	7	0	0
100	0	40,870	3	0	0

SINGLE DISCOUNT RATE DEVELOPMENT
PRESENT VALUES OF PROJECTED BENEFITS

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)-.5)	(g)=(e)*vf^((a)-.5)	(h)=((c)/(1+sdr)^(a-.5)
1	$ 15,442,562	$ 821,976	$ 821,976	$ 0	$ 792,784	$ 0	$ 792,840
2	16,467,761	872,852	872,852	0	783,119	0	783,285
3	17,269,559	970,967	970,967	0	810,370	0	810,656
4	18,020,714	1,036,158	1,036,158	0	804,445	0	804,843
5	18,754,617	1,082,755	1,082,755	0	781,974	0	782,471
6	19,492,678	1,128,199	1,128,199	0	757,947	0	758,537
7	20,238,606	1,187,056	1,187,056	0	741,850	0	742,532
8	20,975,757	1,253,135	1,253,135	0	728,508	0	729,280
9	21,694,874	1,318,248	1,318,248	0	712,895	0	713,751
10	22,396,358	1,369,423	1,369,423	0	688,902	0	689,827
11	23,094,894	1,450,338	1,450,338	0	678,704	0	679,712
12	23,759,768	1,530,263	1,530,263	0	666,145	0	667,228
13	24,390,766	1,607,832	1,607,832	0	651,081	0	652,232
14	24,986,444	1,669,950	1,669,950	0	629,056	0	630,257
15	25,549,308	1,715,887	1,715,887	0	601,265	0	602,498
16	26,094,892	1,762,086	1,762,086	0	574,375	0	575,635
17	26,622,283	1,814,177	1,814,177	0	550,098	0	551,382
18	27,124,787	1,858,404	1,858,404	0	524,194	0	525,492
19	27,608,935	1,897,139	1,897,139	0	497,786	0	499,089
20	28,079,428	1,940,481	1,940,481	0	473,636	0	474,942
21	28,530,699	1,993,885	1,993,885	0	452,717	0	454,030
22	28,950,624	2,044,724	2,044,724	0	431,870	0	433,184
23	29,338,796	2,100,038	2,100,038	0	412,607	0	413,921
24	29,687,033	2,177,361	2,177,361	0	397,953	0	399,276
25	29,968,636	2,236,950	2,236,950	0	380,320	0	381,639
26	30,196,936	2,322,613	2,322,613	0	367,334	0	368,660
27	30,339,486	2,413,131	2,413,131	0	355,023	0	356,355
28	30,383,242	2,482,038	2,482,038	0	339,684	0	341,007
29	30,342,482	2,558,873	2,558,873	0	325,767	0	327,082
30	30,202,100	2,609,819	2,609,819	0	309,073	0	310,364
31	29,983,053	2,649,002	2,649,002	0	291,826	0	293,086
32	29,694,000	2,677,132	2,677,132	0	274,349	0	275,573
33	29,343,164	2,711,194	2,711,194	0	258,455	0	259,645
34	28,919,239	2,740,687	2,740,687	0	243,039	0	244,192
35	28,421,083	2,745,360	2,745,360	0	226,468	0	227,575
36	27,871,294	2,766,324	2,766,324	0	212,277	0	213,344
37	27,249,331	2,799,061	2,799,061	0	199,804	0	200,837
38	26,536,258	2,795,019	2,795,019	0	185,595	0	186,581
39	25,766,175	2,760,561	2,760,561	0	170,518	0	171,449
40	24,969,600	2,723,674	2,723,674	0	156,502	0	157,378
41	24,147,425	2,694,509	2,694,509	0	144,025	0	144,851
42	23,289,085	2,655,756	2,655,756	0	132,050	0	132,826
43	22,402,342	2,603,308	2,603,308	0	120,411	0	121,136
44	21,500,461	2,546,225	2,546,225	0	109,554	0	110,230
45	20,587,497	2,486,118	2,486,118	0	99,505	0	100,133
46	19,665,934	2,425,069	2,425,069	0	90,290	0	90,872
47	18,736,152	2,360,128	2,360,128	0	81,741	0	82,280
48	17,801,711	2,293,697	2,293,697	0	73,898	0	74,396
49	16,863,949	2,225,336	2,225,336	0	66,694	0	67,152
50	15,924,614	2,153,246	2,153,246	0	60,031	0	60,452

SINGLE DISCOUNT RATE DEVELOPMENT
PRESENT VALUES OF PROJECTED BENEFITS (CONCLUDED)

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)-.5)	(g)=(e)*vf ^((a)-.5)	(h)=((c)/(1+sdr)^(a-.5)
51	$ 14,987,647	$ 2,080,434	$ 2,080,434	$ 0	$ 53,954	$ 0	$ 54,341
52	14,054,017	2,004,621	2,004,621	0	48,361	0	48,714
53	13,127,134	1,926,295	1,926,295	0	43,229	0	43,551
54	12,210,267	1,846,235	1,846,235	0	38,542	0	38,834
55	11,305,994	1,764,410	1,764,410	0	34,264	0	34,529
56	10,417,117	1,680,871	1,680,871	0	30,364	0	30,603
57	9,546,597	1,595,713	1,595,713	0	26,815	0	27,030
58	8,697,516	1,508,992	1,508,992	0	23,588	0	23,781
59	7,873,130	1,420,807	1,420,807	0	20,660	0	20,832
60	7,076,835	1,331,405	1,331,405	0	18,010	0	18,162
61	6,312,026	1,241,126	1,241,126	0	15,617	0	15,751
62	5,581,998	1,150,348	1,150,348	0	13,465	0	13,583
63	4,889,904	1,059,533	1,059,533	0	11,537	0	11,639
64	4,238,651	969,285	969,285	0	9,818	0	9,906
65	3,630,740	880,276	880,276	0	8,294	0	8,370
66	3,068,158	793,250	793,250	0	6,953	0	7,017
67	2,552,275	708,887	708,887	0	5,780	0	5,834
68	2,083,853	627,786	627,786	0	4,761	0	4,807
69	1,663,094	550,665	550,665	0	3,885	0	3,923
70	1,289,468	478,187	478,187	0	3,138	0	3,169
71	961,718	410,858	410,858	0	2,508	0	2,534
72	677,966	349,081	349,081	0	1,983	0	2,003
73	435,778	293,133	293,133	0	1,549	0	1,565
74	232,249	243,158	243,158	0	1,195	0	1,207
75	64,105	199,179	66,466	132,713	304	9,727	920
76	0	161,049	0	161,049	0	11,397	692
77	0	128,474	0	128,474	0	8,778	514
78	0	101,076	0	101,076	0	6,668	376
79	0	78,413	0	78,413	0	4,995	271
80	0	59,964	0	59,964	0	3,688	193
81	0	45,170	0	45,170	0	2,682	135
82	0	33,499	0	33,499	0	1,921	93
83	0	24,460	0	24,460	0	1,354	63
84	0	17,576	0	17,576	0	939	42
85	0	12,413	0	12,413	0	641	28
86	0	8,611	0	8,611	0	429	18
87	0	5,864	0	5,864	0	282	11
88	0	3,914	0	3,914	0	182	7
89	0	2,554	0	2,554	0	115	4
90	0	1,630	0	1,630	0	71	3
91	0	1,016	0	1,016	0	42	1
92	0	616	0	616	0	25	1
93	0	365	0	365	0	14	0
94	0	208	0	208	0	8	0
95	0	112	0	112	0	4	0
96	0	59	0	59	0	2	0
97	0	30	0	30	0	1	0
98	0	15	0	15	0	0	0
99	0	7	0	7	0	0	0
100	0	3	0	3	0	0	0
				Totals	$ 20,847,090	$ 53,967	$ 20,901,056


PROJECTION OF PLAN NET POSITION AND BENEFIT PAYMENTS
$ [thousands]
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
1 4 7 10 13 16 19 22 25 28 31 34 37 40 43 46 49 52 55 58 61 64 67 70 73 76 79 82 85 88 91 94 97 100
Year
Projected Plan Net Position
Projected Benefit Payments for Current Members

SECTION D

GLOSSARY OF TERMS

GLOSSARY OF TERMS

Actuarial Accrued Liability (AAL)	The AAL is the difference between the actuarial present value of all benefits and the actuarial value of future normal costs. The definition comes from the fundamental equation of funding which states that the present value of all benefits is the sum of the Actuarial Accrued Liability and the present value of future normal costs. The AAL may also be referred to as "accrued liability" or "actuarial liability."
Actuarial Assumptions	These assumptions are estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and compensation increases. Actuarial assumptions are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (compensation increases, payroll growth, inflation and investment return) consist of an underlying real rate of return plus an assumption for a long-term average rate of inflation.
Accrued Service	Service credited under the system which was rendered before the date of the actuarial valuation.
Actuarial Equivalent	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.
Actuarial Cost Method	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the pension trust benefits between future normal cost and actuarial accrued liability. The actuarial cost method may also be referred to as the actuarial funding method.
Actuarial Gain (Loss)	The difference in liabilities between actual experience and expected experience during the period between two actuarial valuations is the gain (loss) on the accrued liabilities.
Actuarial Present Value (APV)	The amount of funds currently required to provide a payment or series of payments in the future. The present value is determined by discounting future payments at predetermined rates of interest and probabilities of payment.
Actuarial Valuation	The actuarial valuation report determines, as of the actuarial valuation date, the service cost, total pension liability, and related actuarial present value of projected benefit payments for pensions.
Actuarial Valuation Date	The date as of which an actuarial valuation is performed.
Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)	A calculated contribution into a defined benefit pension plan for the reporting period, most often determined based on the funding policy of the plan. Typically the Actuarially Determined Contribution has a normal cost payment and an amortization payment.

GLOSSARY OF TERMS (CONTINUED)

Amortization Payment The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.

Amortization Method The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be "open" (meaning, reset each year) or "closed" (the number of years remaining will decline each year.

Cost-of-Living Adjustments Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.

Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan) A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.

Covered Valuation Payroll The earnings of covered employees for the year ended on the valuation date, which is typically only the pensionable pay and does not include pay above any pay cap. It is not necessarily the same as payroll actually paid because it excludes all pay for people who exited during the year.

Deferred Inflows and Outflows The deferred inflows and outflows of pension resources are amounts used under GASB Statement No. 68 in developing the annual pension expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in pension expense should be included in the deferred inflows or outflows of resources.

Discount Rate For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically:

1. The benefit payments to be made while the pension plans' fiduciary net position is projected to be greater than the benefit payments that are projected to be made in the period; and
2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.

Entry Age Actuarial Cost Method (EAN) The EAN is a funding method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit ages(s). The portion of the actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial accrued liability. The sum of the accrued liability plus the present value of all future normal costs is the present value of all benefits.

GLOSSARY OF TERMS (CONTINUED)

GASB	The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.
Fiduciary Net Position	The fiduciary net position is the value of the assets of the trust.
Long-Term Expected Rate of Return	The long-term rate of return is the expected return to be earned over the entire trust portfolio based on the asset allocation of the portfolio.
Money-Weighted Rate of Return	The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For purposes of GASB Statement No. 68, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.
Multiple-Employer Defined Benefit Pension Plan	A multiple-employer plan is a defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
Municipal Bond Rate	The Municipal Bond Rate is the discount rate to be used for those benefit payments that occur after the assets of the trust have been depleted.
Net Pension Liability (NPL)	The NPL is the liability of employers and non-employer contribution entities to plan members for benefits provided through a defined benefit pension plan.
Non-Employer Contribution Entities	Non-employer contribution entities are entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities. For purposes of the GASB Accounting statement plan members are not considered non-employer contribution entities.
Normal Cost	The actuarial present value of the pension trust benefits allocated to the current year by the actuarial cost method.
Other Postemployment Benefits (OPEB)	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits regardless of the manner in which they are provided. Other post-employment benefits do not include termination benefits.
Real Rate of Return	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
Service Cost	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.

GLOSSARY OF TERMS (CONCLUDED)

Total Pension Expense

The total pension expense is the sum of the following items that are recognized at the end of the employer's fiscal year:

1. Service Cost;
2. Interest on the Total Pension Liability;
3. Current-Period Benefit Changes;
4. Employee Contributions (made negative for addition here);
5. Projected Earnings on Plan Investments (made negative for addition here);
6. Pension Plan Administrative Expense;
7. Other Changes in Plan Fiduciary Net Position;
8. Recognition of Outflow (Inflow) of Resources due to Liabilities; and
9. Recognition of Outflow (Inflow) of Resources due to Assets.

Total Pension Liability (TPL)

The TPL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.

Unfunded Actuarial Accrued Liability (UAAL)

The UAAL is the difference between actuarial accrued liability and valuation assets.

Valuation Assets

The valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of the GASB Statement No. 68, the valuation asset is equal to the market value of assets.