

**CITY OF MANCHESTER EMPLOYEES' CONTRIBUTORY
RETIREMENT SYSTEM**
GASB STATEMENT NOS. 67 AND 68 ACCOUNTING AND
FINANCIAL REPORTING FOR PENSIONS
DECEMBER 31, 2015

June 7, 2016

Board of Trustees
City of Manchester Employees'
Contributory Retirement System
1045 Elm Street, Suite 403
Manchester, New Hampshire 03101-1824

Dear Board Members:

This report provides the accounting and financial reporting information that is intended to comply with the Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68 for the City of Manchester Employees' Contributory Retirement System (MECRS). These calculations have been made on a basis that is consistent with our understanding of these accounting standards.

GASB Statement Nos. 67 and 68 are the accounting standards that apply to the stand-alone financial reports issued by retirement systems. This information is presented in draft form for review by the City's auditor. Please let us know if there are items that the auditor changes so that we may maintain consistency with the City's financial statements.

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of assisting in the reporting and disclosure information that satisfies certain requirements of GASB Statement Nos. 67 and 68. The calculation of the City's liability for this report may not be applicable for funding purposes of the Retirement System. A calculation of the City's liability for purposes other than satisfying the requirements of GASB Statement Nos. 67 and 68 may produce significantly different results. Statement Nos. 67 and 68 cover pension benefits provided by the Retirement System. The Retirement System also provides post-retirement health benefits through a Section 401(h) sub-trust. The assets and liabilities of the sub-trust have not been included in this report. Please refer to the actuarial valuation for information concerning the liabilities and assets of the sub-trust.

This report may be provided to parties other than the City of Manchester Employees' Contributory Retirement System and the Board of Trustees only in its entirety and only with the permission of the City and the Board.

This report is based upon information, furnished to us by the City, concerning retirement and ancillary benefits, active members, deferred vested members, retirees and beneficiaries, and financial data. If your understanding of this information is different, please let us know. This information was checked for internal consistency, but was not audited. We are not responsible for the accuracy or completeness of such information.


Board of Trustees
June 7, 2016
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This report complements the actuarial valuation report that was provided to the City of Manchester Employees' Contributory Retirement System and should be considered collectively as a combined report for the plan year ending December 31, 2015. Please refer to the December 31, 2015 actuarial valuation report for additional discussion of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

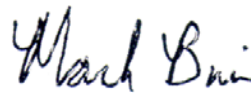
To the best of our knowledge, the information contained with this report is accurate and fairly represents the actuarial position of the City of Manchester Employees' Contributory Retirement System. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as with the Actuarial Standards of Practice issued by the Actuarial Standards Board. Mark Buis is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing individuals are independent of the plan sponsor.

This communication shall not be construed to provide tax advice, legal advice, accounting advice, or investment advice.

Respectfully submitted,



Kenneth G. Alberts



Mark Buis, FSA, EA, FCA, MAAA

KGA/MB:ah

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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
Employer's Fiscal Year Ending Date (Reporting Date)	June 30, 2016

Membership

Number of	
- Retirees and Beneficiaries	821
- Inactive, Nonretired Members	98
- Active Members	1,195
- Total	2,114
Covered Payroll #	\$ 52,953,903

Net Pension Liability

Total Pension Liability	\$ 314,355,740
Plan Fiduciary Net Position	186,492,399
Net Pension Liability	\$ 127,863,341
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	59.33%
Net Pension Liability as a Percentage of Covered Payroll	241.46%

Development of the Single Discount Rate

Single Discount Rate	7.25%
Long-Term Expected Rate of Investment Return	7.25%
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	2115

Total Pension Expense \$ 18,142,997

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	\$ 5,527,402	\$ -
Changes in assumptions	-	-
Net difference between projected and actual earnings on pension plan investments	18,997,210	-
Total	\$ 24,524,612	\$ -

Based on valuation payroll as of December 31, 2015.

* Source: "State & local bonds" rate from Federal Reserve statistical release (H.15) as of December 25, 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 pension plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 67 establishes standards of financial reporting for separately issued financial reports and specifies the required approach for measuring the pension liability. Similarly, GASB Statement No. 68 establishes standards for state and local government employers (as well as non-employer contributing entities) to 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, such as notes regarding accounting policies and investments, is not included in this report and the retirement system and/or plan sponsor will be responsible for preparing and disclosing that information to comply with these accounting standards.

Financial Statements

GASB Statement No. 68 requires State or local governments to recognize the Net Pension Liability and the pension expense on their financial statements. 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 States, "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 MECRS 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 liability and investment experience.

Pension plans that prepare their own, stand-alone financial statements are required to present two financial statements – a statement of fiduciary net position and a statement of changes in fiduciary net position in accordance with GASB Statement No. 67. The *statement of fiduciary net position* presents the assets and liabilities of the pension plan at the end of the pension plan's reporting period. The *statement of changes in fiduciary net position* presents the additions, such as contributions and investment income, and deductions, such as benefit payments and expenses, and net increase or decrease in the fiduciary net position.

DISCUSSION

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 and inflows of resources related to pensions.

GASB Statement Nos. 67 and 68 require the notes of the financial statements for the employers and pension plans to include certain additional information. The list of disclosure items should include:

- a description of benefits provided by the plan;
- the type of employees and number of members covered by the pension plan;
- a description of the plan's funding policy, which includes member and employer contribution requirements;
- the pension plan's investment policies;
- the pension Plan's Fiduciary Net Position, Net Pension Liability, and the pension plan's fiduciary net position as a percentage of the Total Pension Liability;
- 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;
- significant assumptions and methods used to calculate the Total Pension Liability;
- inputs to the discount rates; and
- certain information about mortality assumptions and the dates of experience studies.

Retirement systems that issue stand-alone financial statements are required to disclose additional information in accordance with GASB Statement No. 67. This information includes:

- the composition of the pension plan's Board and the authority under which benefit terms may be amended;
- a description of how fair value is determined;
- information regarding certain reserves and investments, which include concentrations of investments greater than or equal to 5%, receivables, and insurance contracts excluded from plan assets; and
- annual money-weighted rate of return.

DISCUSSION

Required Supplementary Information

GASB Statement No. 67 requires a 10-year fiscal history of:

- sources of changes in the Net Pension Liability;
- 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; and
- comparison of the actual employer contributions to the actuarially determined contributions based on the plan's funding policy.

Timing of the Valuation

An actuarial valuation to determine the Total Pension Liability is required to be performed at least every two years. The Net Pension Liability and pension expense should be measured as of the pension plan's fiscal year end (measurement date) on a date that is within the employer's prior fiscal year. 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 (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 7.25%; 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 7.25%.

SECTION B

FINANCIAL STATEMENTS

PENSION EXPENSE UNDER GASB STATEMENT NO. 68
PLAN YEAR ENDED DECEMBER 31, 2015

A. Expense

1. Service Cost	\$	6,468,648
2. Interest on the Total Pension Liability		21,231,157
3. Current-Period Benefit Changes		0
4. Employee Contributions (made negative for addition here)		(2,744,956)
5. Projected Earnings on Plan Investments (made negative for addition here)		(13,911,326)
6. Pension Plan Administrative Expense		693,329
7. Other Changes in Plan Fiduciary Net Position		65,963
8. Recognition of Outflow (Inflow) of Resources due to Liabilities		1,248,910
9. Recognition of Outflow (Inflow) of Resources due to Assets		5,091,272
10. Total Pension Expense	\$	18,142,997

**STATEMENT OF OUTFLOWS AND INFLOWS ARISING FROM
CURRENT REPORTING PERIOD
PLAN 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	\$ 4,528,433
2. Assumption Changes (gains) or losses	\$ -
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years }	5.8007
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	\$ 780,670
5. Outflow (Inflow) of Resources to be recognized in the current pension expense for Assumption Changes	\$ -
6. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Liabilities	<u>\$ 780,670</u>
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	\$ 3,747,763
8. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for Assumption Changes	\$ -
9. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Liabilities	<u>\$ 3,747,763</u>

B. Outflows (Inflows) of Resources due to Assets

1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	\$ 18,616,968
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	\$ 3,723,394
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	\$ 14,893,574

**STATEMENT OF OUTFLOWS AND INFLOWS ARISING FROM
CURRENT AND PRIOR REPORTING PERIODS
PLAN YEAR ENDED DECEMBER 31**

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

	<u>Outflows of Resources</u>	<u>Inflows of Resources</u>	<u>Net Outflows of Resources</u>
1. Due to Liabilities	\$ 1,248,910	\$ 0	\$ 1,248,910
2. Due to Assets	5,091,272	-	5,091,272
3. Total	\$ 6,340,182	\$ 0	\$ 6,340,182

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

	<u>Outflows of Resources</u>	<u>Inflows of Resources</u>	<u>Net Outflows of Resources</u>
1. Differences between expected and actual experience	\$ 1,248,910	\$ 0	\$ 1,248,910
2. Assumption Changes	-	-	0
3. Net Difference between projected and actual earnings on pension plan investments	5,091,272	-	5,091,272
4. Total	\$ 6,340,182	\$ 0	\$ 6,340,182

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

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>	<u>Net Deferred Outflows of Resources</u>
1. Differences between expected and actual experience	\$ 5,527,402	\$ 0	\$ 5,527,402
2. Assumption Changes	-	-	0
3. Net Difference between projected and actual earnings on pension plan investments	18,997,210	-	18,997,210
4. Total	\$ 24,524,612	\$ 0	\$ 24,524,612

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

<u>Year Ending December 31</u>	<u>Net Deferred Outflows of Resources</u>
2016	\$ 6,340,182
2017	6,340,182
2018	6,340,182
2019	4,878,983
2020	625,083
Thereafter	0
Total	\$ 24,524,612

**STATEMENT OF FIDUCIARY NET POSITION
AS OF DECEMBER 31, 2015**

Assets

Cash and Deposits	\$	5,061,139
Receivables		
Accounts Receivable	\$	3,343
Accrued Interest and Other Dividends		27,694
Additional Contribution Account		783,434
Property, Plant, Equipment		33,603
Total Receivables	\$	<u>848,074</u>
Investments	\$	191,822,504
Total Assets	\$	<u>197,731,717</u>

Liabilities

Payables		
Accounts Payable and Accrued Expenses	\$	258,159
Payable for Investments Purchased		66,531
Benefits Payable		1,296,350
Total Liabilities	\$	<u>1,621,040</u>
Assets held for 401(h) Subtrust	\$	<u>9,618,278</u>
Net Position Restricted for Pensions	\$	<u><u>186,492,399</u></u>

**STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR YEAR ENDED DECEMBER 31, 2015**

Additions

Contributions

Employer (Including Buybacks, Upgrades and Enrollments)	\$ 11,613,137
Employee (Including Additional Contributions)	2,744,956
Total Contributions	\$ 14,358,093

Other	\$ -
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Investment Income

Net Appreciation in Fair Value of Investments	\$ (4,025,193)
Less Investment Expense	(757,955)
Net Investment Income	\$ (4,783,148)

Total Additions	\$ 9,574,945
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Deductions

Benefit Payments, Additional Contribution Payments, and Refunds of Employee Contributions	\$ 14,963,425
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Pension Plan Administrative Expense	693,329
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Other: Custodial Fees and Foreign Taxes	65,963
	65,963

Total Deductions	\$ 15,722,717
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Net Increase in Net Position	\$ (6,147,772)
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Net Position Restricted for Pensions

Beginning of Year	\$ 192,562,665
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Prior Year Adjustment	77,506
	77,506

End of Year	\$ 186,492,399
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**SCHEDULE OF PROPORTIONATE EMPLOYER SHARE
FOR YEAR ENDED DECEMBER 31, 2015**

<u>Deferred Outflows of Resources</u>									
<u>Covered Payroll</u>	<u>Employer</u>	<u>Prop. Share</u>	<u>Net Pension Liability</u>	<u>Differences Between Expected and Actual Experience</u>	<u>Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments</u>	<u>Changes of Assum.</u>	<u>Changes in Proportion and Differences Between Employer Cont. and Share of Cont.</u>	<u>Total Deferred Outflows of Resources</u>	
\$ 4,962,323	Airport	9.37%	\$ 11,980,795	\$ 517,918	\$ 1,780,039	\$ -	\$ 6,840	\$ 2,304,797	
345,527	Parking Control	0.65%	831,112	35,928	123,482	-	2,598	162,008	
2,377,677	Environmental Protection	4.49%	5,741,064	248,180	852,975	-	3,149	1,104,304	
10,466,179	School District	19.76%	25,265,796	1,092,215	3,753,849	-	392,587	5,238,651	
4,618,483	Water Works	8.72%	11,149,683	481,989	1,656,557	-	124,938	2,263,484	
30,183,714	General Fund City Departments	57.01%	72,894,891	3,151,172	10,830,308	-	214,282	14,195,762	
<u>\$ 52,953,903</u>	<i>Total for All Employers</i>	<u>100.00%</u>	<u>\$ 127,863,341</u>	<u>\$ 5,527,402</u>	<u>\$ 18,997,210</u>	<u>\$ -</u>	<u>\$ 744,394</u>	<u>\$ 25,269,006</u>	

**SCHEDULE OF PROPORTIONATE EMPLOYER SHARE
FOR YEAR ENDED DECEMBER 31, 2015
(CONCLUDED)**

Employer	Deferred Inflows of Resources				Pension Expense			
	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	Changes of Assum.	Changes in Proportion and Differences Between Employer Cont. and Share of Cont.	Total Deferred Inflows of Resources	Prop. Share of Plan Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
Airport	\$ -	\$ -	\$ -	\$ 352,527	\$ 352,527	\$ 1,699,999	\$ (72,008)	\$ 1,627,991
Parking Control	-	-	-	48,072	48,072	117,929	(9,472)	108,457
Environmental Protection	-	-	-	184,275	184,275	814,621	(37,729)	776,892
School District	-	-	-	159,520	159,520	3,585,056	48,548	3,633,604
Water Works	-	-	-	-	-	1,582,069	26,025	1,608,094
General Fund City Departments	-	-	-	-	-	10,343,323	44,636	10,387,959
<i>Total for All Employers</i>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 744,394</u>	<u>\$ 744,394</u>	<u>\$ 18,142,997</u>	<u>\$ -</u>	<u>\$ 18,142,997</u>

SECTION C

REQUIRED SUPPLEMENTARY INFORMATION

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

A. Total pension liability	
1. Service cost	\$ 6,468,648
2. Interest on the total pension liability	21,231,157
3. Changes of benefit terms	0
4. Difference between expected and actual experience of the total pension liability	4,528,433
5. Changes of assumptions	0
6. Benefit payments, including refunds of employee contributions	(14,963,425)
7. Net change in total pension liability	\$ 17,264,813
8. Total pension liability – beginning	297,090,927
9. Total pension liability – ending	<u><u>\$ 314,355,740</u></u>
B. Plan fiduciary net position	
1. Contributions – employer	\$ 11,613,137
2. Contributions – employee	2,744,956
3. Net investment income	(4,783,148)
4. Benefit payments, including refunds of employee contributions	(14,963,425)
5. Pension plan administrative expense	(693,329)
6. Other	(65,963)
7. Net change in plan fiduciary net position	\$ (6,147,772)
8. Plan fiduciary net position – beginning	192,640,171
9. Plan fiduciary net position – ending	<u><u>\$ 186,492,399</u></u>
C. Net pension liability	<u><u>\$ 127,863,341</u></u>
D. Plan fiduciary net position as a percentage of the total pension liability	59.33%
E. Covered-employee payroll	\$ 52,953,903
F. Net pension liability as a percentage of covered-employee payroll	241.46%

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

(Ultimately 10 Years Will Be Displayed)

Fiscal Year Ending June 30,	<u>2016</u>	<u>2015</u>
Total Pension Liability		
Service Cost	\$ 6,468,648	\$ 6,589,804
Interest on the Total Pension Liability	21,231,157	20,108,289
Benefit Changes: Buybacks and COLA	-	-
Difference between Expected and Actual Experience	4,528,433	2,716,119
Assumption Changes	-	-
Benefit Payments	(14,516,835)	(12,335,397)
Refunds	(446,590)	(207,947)
Net Change in Total Pension Liability	<u>17,264,813</u>	<u>16,870,868</u>
Total Pension Liability - Beginning	<u>297,090,927</u>	<u>280,332,479</u>
Prior Year Adjustment	<u>-</u>	<u>(112,420)</u>
Total Pension Liability - Ending (a)	<u>\$ 314,355,740</u>	<u>\$ 297,090,927</u>
Plan Fiduciary Net Position		
Employer and Other Contributions	\$ 11,613,137	\$ 10,959,998
Employee and Add'l Contributions	2,744,956	2,254,021
Pension Plan Net Investment Income	(4,783,148)	6,754,397
Benefit Payments	(14,516,835)	(12,335,397)
Refunds	(446,590)	(207,947)
Pension Plan Administrative Expense	(693,329)	(679,116)
Other	(65,963)	(50,008)
Net Change in Plan Fiduciary Net Position	<u>(6,147,772)</u>	<u>6,695,948</u>
Plan Fiduciary Net Position - Beginning	<u>192,562,665</u>	<u>185,979,137</u>
Adjustment	<u>77,506</u>	<u>(112,420)</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 186,492,399</u>	<u>\$ 192,562,665</u>
Net Pension Liability - Ending (a) - (b)	<u>127,863,341</u>	<u>104,528,262</u>
Plan Fiduciary Net Position as a Percentage		
of Total Pension Liability	59.33 %	64.82 %
Covered-Employee Payroll	\$ 52,953,903	\$ 54,267,183
Net Pension Liability as a Percentage		
of Covered-Employee Payroll	241.46 %	192.62 %
Notes to Schedule:	N/A	N/A

**SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF THE NET PENSION LIABILITY**

(Ultimately 10 Years Will Be Displayed)

December 31,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll *	Net Pension Liability as a % of Covered Payroll
2014	\$ 297,090,927	\$ 192,562,665	\$ 104,528,262	64.82%	\$ 54,267,183	192.62%
2015	\$ 314,355,740	\$ 186,492,399	\$ 127,863,341	59.33%	\$ 52,953,903	241.46%

* Based on valuation payroll as of plan year ending December 31.

SCHEDULE OF CONTRIBUTIONS

(Ultimately 10 Years Will Be Displayed)

Plan Year Ending December 31,	Actuarially Determined Contribution (ADC) #	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll *	Actual Contribution as a % of Covered Payroll
2014	\$ 10,959,998	\$ 10,959,998	\$ -	\$ 54,267,183	20.20%
2015	\$ 11,613,137	\$ 11,613,137	\$ -	\$ 52,953,903	21.93%

** Based on valuation payroll as of plan year ending December 31.*

Employer contributes based on percent of payroll. Employer pays the ADC percentage.

NOTES TO SCHEDULE OF CONTRIBUTIONS

Valuation Date: December 31, 2015
Notes Actuarially determined contribution rates are calculated as of December 31, which is 6 months prior to the beginning of the fiscal year which contributions are reported.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method	Entry-Age Normal
Amortization Method	Level Percent-of-Payroll, Closed
Remaining Amortization Period	24 years
Asset Valuation Method	5-year smoothed market; 20% corridor
Wage Inflation	3.00%
Salary Increases	3.00% to 7.93% including inflation
Investment Rate of Return	7.25% (net of investment expenses)
Long-Term Municipal Bond Rate	3.57%
Retirement Age	Age and Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	RP-2000 Mortality Table projected to 2020 for males and females.
Expense Load	0.5% of payroll.
COLA Assumption	1.25% compounded annually.

Other Information:

Notes There were no changes to actuarial assumptions or benefit provisions reflected in the TPL as of December 31, 2015.

SCHEDULE OF INVESTMENT RETURNS**Ultimately 10 Years Will Be Displayed**

FY Ending June 30,	Annual Return¹
2007	
2008	
2009	
2010	
2011	
2012	
2013	
2014	
2015	
2016	

¹ Annual money-weighted rate of return, net of investment expenses.

The figures in the above table are to be provided by your investment consultant. The chart is provided in this report for illustration purposes only.

SECTION D

NOTES TO FINANCIAL STATEMENTS

Long-Term Expected Return on Plan Assets

The assumed rate of investment return was adopted by the plan’s trustees after considering input from the plan’s investment consultant(s) and actuary. Additional information about the assumed rate of investment return is included in our actuarial valuation report as of December 31, 2015.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These real rates of return are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. For each major asset class that is included in the pension plan’s target asset allocation as of December 31, 2015, these best estimates are summarized in the following table:

Asset Allocation

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>	<u>Allocation-Weighted Long-Term Expected Real Rate of Return</u>
Domestic Fixed Income			
International Fixed Income			
Domestic Equity			
International Equity			
Private Equity			
Real Estate			
Commodities			
Cash			
Total			
Expected Inflation			
Total Return			

The information in the above table is to be provided by your investment consultant.

Single Discount Rate

A Single Discount Rate of 7.25% was used to measure the Total Pension Liability. This Single Discount Rate was based on the expected rate of return on pension plan investments of 7.25%. The projection of cash flows used to determine this Single Discount Rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

Regarding the sensitivity of the Net Pension Liability to changes in the Single Discount Rate, the following presents the plan's Net Pension Liability, calculated using a Single Discount Rate of 7.25%, as well as what the plan's Net Pension Liability would be if it were calculated using a Single Discount Rate that is one percent lower or one percent higher:

Sensitivity of Net Pension Liability to the Single Discount Rate Assumption

	Current Single Discount		
	1% Decrease 6.25%	Rate Assumption 7.25%	1% Increase 8.25%
Total Pension Liability (TPL)	\$351,621,067	\$314,355,740	\$282,700,129
Net Position Restricted for Pensions	\$186,492,399	\$186,492,399	\$186,492,399
Net Pension Liability (NPL)	\$165,128,668	\$127,863,341	\$ 96,207,730

Summary of Population Statistics

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	821
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	98
Active Plan Members	<u>1,195</u>
Total Plan Members	2,114

SECTION E

SUMMARY OF BENEFITS

**SUMMARY OF BENEFIT PROVISIONS
AS OF DECEMBER 31, 2015**

Eligibility	Amount
NORMAL RETIREMENT	
Members are eligible to retire at age 60.	Straight life pension equals 2.0% of 3-year Final Average Earnings (FAE) times service on and after January 1, 1999 <i>plus</i> 1.5% of FAE times service before January 1, 1999.
Members with at least 20 years of service at retirement are eligible for a minimum benefit if employed on or before January 1, 1974.	Minimum benefit for eligible members is 50% of FAE.
EARLY RETIREMENT	
Members are eligible to retire early if the sum of age and service is at least 80, or at age 55 with at least 20 years of service.	Computed as a normal retirement pension. If the early retirement occurs prior to the member attaining age 60, the benefit is reduced by 1/6 of 1% for each month that the early retirement precedes age 60.
DEFERRED RETIREMENT	
Members are eligible to retire with a deferred benefit after attaining at least 5 years of service, provided they do not take a refund of member contributions.	Pension is computed as a normal retirement pension, based on service and FAE on date of termination. Commencement of benefits begins at age 60.
NON-DUTY DISABILITY	
Members are eligible upon attainment of 15 years of service.	Pension is computed as a normal retirement pension based on service and FAE as of date of disability.
DUTY DISABILITY	
No age or service requirement.	Pension is computed as a normal retirement pension based on service and FAE as of date of disability. Minimum duty disability benefit is 50% of FAE.

**SUMMARY OF BENEFIT PROVISIONS
AS OF DECEMBER 31, 2015**

Eligibility	Amount
ORDINARY DEATH-IN-SERVICE	
(1) Any age with less than 5 years of service.	Beneficiary receives member's contributions and accumulated interest, and an additional lump sum equal to one year's salary.
(2) Any age with 5 or more years of service.	Beneficiary receives the option of (1) the greater of (a) 50% of the accrued service retirement benefit (without any early retirement reduction); or (b) pension computed as normal or early retirement benefit (depending on eligibility), actuarially reduced as if the member had elected the 100% Joint & Survivor benefit; or (2) lump sum equal to 100% of base salary plus the member's accumulated contributions (including interest).

DUTY DEATH-IN-SERVICE

Death as a result of a work-related accident; not caused by willful neglect of the member.	The option of (1) the greater of (a) 50% of FAE, or (b) pension computed as an early retirement benefit actuarially reduced as if the member had elected the 100% Joint & Survivor benefit; or (2) a lump sum as described below; options payable to the spouse or child(ren) under age 18. If no spouse or child(ren) are alive at the time of the member's death, a lump sum is payable to the member's estate in the amount of 100% of base salary plus the member's accumulated contributions (including interest) plus accrued fringe benefits not paid at the time of death.
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MEMBER CONTRIBUTIONS

3.75% of pay for service on and after January 1, 1999. 2.5% of pay for service prior to January 1, 1999. Contributions are credited with 5.0% interest per annum. Members may elect to contribute additional contributions which are accounted for separately. At retirement the additional contribution balance is annuitized to provide an additional benefit, within certain limits.

SUMMARY OF BENEFIT PROVISIONS AS OF DECEMBER 31, 2015

OPTIONAL FORMS OF PAYMENT

In lieu of the straight life benefit, a member may elect an actuarially reduced benefit in one of the following forms:

100% Joint & Survivor with pop-up
66 2/3 % Joint & Survivor with pop-up
50% Joint & Survivor with pop-up
10-year Certain & Life Option

The actuarial factors for optional forms of payment are based on the 1983 Group Annuity Mortality Table and 7.5% interest.

SERVICE UPGRADE

Members may elect to purchase an increase in their benefit multiplier for service rendered before 1999 under Chapter 159 (or Senate Bill 402). The cost to the member is ½ of the actuarially determined increase in System costs and results in a benefit based on 2% of FAE for the time purchased.

SECTION F

ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

ACTUARIAL COST METHOD

Normal cost and the allocation of benefit values between service rendered before and after the valuation date was determined using the *individual entry-age actuarial cost method*. GASB Statement Nos. 67 and 68 require the use of this method having the following characteristics:

- the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement;
- each annual normal cost is a constant percentage of the member's year-by-year projected covered pay;
- the use of Market Value of Assets for the Net Position Restricted for Pensions.

ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

The contribution requirements and benefit values of the System are calculated by applying actuarial assumptions to the benefit provisions and member information furnished, using the actuarial cost method described on the previous page.

The principal areas of financial risk which require assumptions about future experience are:

- long-term rates of investment return to be generated by the assets of the System,
- patterns of pay increases to members,
- rates of mortality among members, retirees and beneficiaries,
- rates of withdrawal of active members,
- rates of disability among members, and
- the age patterns of actual retirement.

In a valuation, the monetary effect of each assumption is calculated for as long as a present covered person survives - - - a period of time which can be as long as a century.

Actual experience of the System will not coincide exactly with assumed experience, regardless of the accuracy of the assumptions, or the skill of the actuary and the precision of the many calculations made. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations). The Board has established a policy of performing an Experience Study every 3-5 years to evaluate/modify valuation assumptions. Assumptions used in this report are based on the January 1, 2007 – December 31, 2011 experience study of the MECRS and were adopted by the Board. These assumptions were first used in the December 31, 2012 actuarial valuation. We believe the assumptions are reasonable individually and in the aggregate.

ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

The rate of investment return was 7.25% per year, compounded annually (net of investment expenses). This assumption is used to make money payable at one point in time equal in value to a different amount of money payable at another point in time. The assumed real rate of return (the net return in excess of the wage inflation rate) is 4.25%. Experience over the last 5 years has been as follows:

	Year Ended December 31					5-Year Average
	2015	2014	2013	2012	2011	
1) Nominal rate of return#	4.8 %	7.4 %	9.3 %	3.8 %	3.5 %	5.7 %
2) Increase in CPI	0.7 %	0.8 %	1.5 %	1.7 %	1.5 %	1.2 %
3) Average Salary Increase (ASI)	(2.0)%	1.3 %	3.3 %	3.9 %	4.1 %	2.1 %
4) Real Return						
- Total: CPI (1) - (2)						4.5 %
- Total: ASI (1) - (3)						3.7 %
- Assumption	4.25 %	4.25 %	4.25 %	4.25 %	4.0 %	4.2 %

The nominal rate of return was computed using the approximate formula: $i = I$ divided by $\frac{1}{2}(A+B-I)$, where I is realized investment income net of expenses, A is the beginning of year asset funding value and B is the end of year funding asset value.

The rate of assumed price inflation was 2.75% per year. This results in a real rate of return over price inflation of 4.5%.

The rates of salary increase used for individual members are in accordance with the following table. This assumption is used to project a member’s current salary to the salaries upon which benefit amounts will be based.

Service	Salary Increase Assumptions For an Individual Member		
	Merit & Seniority	Base (Economic)	Increase Next Year
1	3.96%	3.00%	6.96%
2	4.93%	3.00%	7.93%
3	4.72%	3.00%	7.72%
4	4.20%	3.00%	7.20%
5	3.88%	3.00%	6.88%
6	3.43%	3.00%	6.43%
7	3.05%	3.00%	6.05%
8	2.76%	3.00%	5.76%
9	2.56%	3.00%	5.56%
10	2.35%	3.00%	5.35%
15	1.58%	3.00%	4.58%
20	1.27%	3.00%	4.27%
25	1.25%	3.00%	4.25%
30	1.25%	3.00%	4.25%
35	1.25%	3.00%	4.25%
40	1.25%	3.00%	4.25%
Ref:	280		

If the number of active members remains constant, then the total active member payroll will increase 3.0% annually, the base portion of the individual salary increase assumptions. This increasing payroll was recognized in amortizing unfunded actuarial accrued liabilities.

ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

The mortality table was the RP 2000 Mortality Table projected to 2020.

Sample Attained Ages	Single Life Retirement Values					
	Present Value of \$1 Monthly for Life		Percent Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women	Men	Women
50	\$148.84	\$150.73	0.1487%	0.1189%	32.77	34.63
55	140.89	143.37	0.2469%	0.2314%	28.04	29.88
60	130.74	134.14	0.4887%	0.4573%	23.47	25.31
65	118.50	123.10	0.9607%	0.8780%	19.17	21.02
70	104.41	110.47	1.6413%	1.5145%	15.22	17.06
75	88.00	96.22	2.8538%	2.3935%	11.58	13.47
80	70.35	80.35	5.2647%	3.9866%	8.42	10.23
Ref:	454 x 1.00 sb 0	455 x 1.00 sb 0				

This assumption is used to measure the probabilities of members dying after retirement. Ninety percent of these rates are used to measure the probability of dying before retirement. The projection to 2020 is the margin for mortality improvement.

Post-retirement disabled mortality rates are based on the health mortality rates, set forward 10 years.

The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

Active Members Retiring Next Year Under Normal Retirement			Active Members Retiring Next Year Under Early Retirement			
Ages	% Retiring		Ages	% Retiring		Rule of 80
	Men	Women		Age and Service		
	Men	Women	Men	Women		
60	10%	13%	50			5%
61	10%	15%	51			5%
62	20%	28%	52			5%
63	20%	15%	53			5%
64	15%	10%	54			5%
65	25%	25%	55	5%	7%	5%
66	20%	25%	56	5%	7%	5%
67	15%	25%	57	5%	7%	5%
68	15%	10%	58	5%	7%	5%
69	15%	20%	59	5%	7%	5%
70	15%	20%				
71	50%	20%				
72	50%	20%				
73	50%	20%				
74	50%	20%				
75	100%	20%				
76	100%	20%				
77	100%	20%				
78	100%	20%				
79	100%	20%				
80	100%	100%				
Ref.	2355	2356		2357	2358	2359

ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

A member was assumed to be eligible for normal retirement after attaining age 60 regardless of service. A member was assumed to be eligible for early retirement after attaining age 55 with at least 20 years of service or if the sum of age and service is at least 80.

Rates of separation from active membership are shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

Sample Ages	Service	% of Active Members Separating Within Next Year	
		Men	Women
	0-1	20.00%	30.00%
	1-2	17.00%	20.00%
	2-3	11.50%	15.00%
	3-4	9.00%	12.50%
	4-5	8.00%	11.00%
	5-6	n/a	8.00%
30	5 & Up (Men)		
	6 & Up (Women)	5.14%	5.30%
35		3.80%	4.45%
40		3.00%	3.85%
45		2.57%	3.40%
50		2.40%	2.95%
Ref.		830 77x0.45	831 37x1

Rates of disability were divided equally between duty and non-duty disability and are as follows:

Sample Ages	% of Active Members Becoming Disabled Within Next Year	
	Male	Female
20	0.002%	0.002%
25	0.002%	0.002%
30	0.002%	0.002%
35	0.011%	0.011%
40	0.043%	0.043%
45	0.088%	0.088%
50	0.144%	0.144%
55	0.214%	0.214%
60	0.318%	0.318%
Ref.	37 x 0.30	37 x 0.30

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption:	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses.
Pay Increase Timing:	Beginning of the year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
Decrement Timing:	Decrements of all types are assumed to occur mid-year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and exact fractional service on the date the decrement is assumed to occur.
Decrement Relativity:	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation:	Disability and withdrawal decrements do not operate after member reaches retirement eligibility.
Expense Load:	0.50% of payroll.
Normal Form of Benefit:	The assumed normal form of benefit is the straight life form.
Benefit Service:	Exact fractional service as of the valuation date is used to determine the amount of benefit payable.
Incidence of Contributions:	For Manchester School District and enterprise funds of the City (Airport, Water Works, and the MECRS), contributions are assumed to be received continuously throughout the year based upon the actual payroll payable at the time contributions are made. For the remaining City group, contributions are assumed to be received on a semiannual basis in December and July.
COLA Assumption:	1.25% compounded annually.
Adjustments:	Normal and Early retirement costs were increased by 9% to reflect lump sums that are payable at retirement but not available in the active data. Retiree liabilities were increased 1% to account for pop-up retiree benefits.
Post-Retirement Subsidy:	55% of current actives and 25% of current terminated vested members were assumed to elect to receive the post-retirement health subsidy upon retirement.

SECTION G

CALCULATION OF THE SINGLE DISCOUNT RATE

CALCULATION OF THE SINGLE DISCOUNT RATE

GASB Statement No. 67 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 7.25%; the municipal bond rate is 3.57%; and the resulting Single Discount Rate is 7.25%.

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). Administrative expenses were assumed to be 1.31% of payroll.

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 ENDING DECEMBER 31, 2115

Year	Payroll for Current Employees	Contributions from Current Employees	Service Cost Contributions	Administrative Expense Contributions	UAL Contributions	Total Contributions
0	\$ 52,953,903					
1	55,742,398	\$ 2,164,789	\$ 4,726,846	\$ 729,839	\$ 7,720,876	\$ 15,342,351
2	53,042,362	2,059,931	4,466,249	694,487	8,121,553	15,342,220
3	51,066,657	1,983,204	4,275,702	668,619	8,764,043	15,691,568
4	49,355,560	1,916,752	4,109,999	646,216	9,355,489	16,028,457
5	47,676,526	1,851,546	3,946,589	624,232	9,636,154	16,058,521
6	45,997,955	1,786,358	3,787,223	602,254	9,925,239	16,101,073
7	44,253,302	1,718,603	3,618,477	579,411	10,222,996	16,139,487
8	42,452,069	1,648,651	3,447,614	555,828	10,529,686	16,181,778
9	40,438,347	1,570,447	3,260,193	529,462	10,845,576	16,205,678
10	38,401,821	1,491,357	3,069,183	502,798	11,170,943	16,234,282
11	36,317,285	1,410,403	2,878,269	475,505	11,506,072	16,270,249
12	34,198,317	1,328,112	2,682,849	447,761	11,851,254	16,309,975
13	32,151,950	1,248,640	2,497,613	420,968	12,206,792	16,374,013
14	30,149,118	1,170,859	2,316,503	394,744	12,572,995	16,455,101
15	28,208,900	1,095,509	2,142,797	369,341	12,950,185	16,557,832
16	26,338,719	1,022,880	1,977,082	344,855	13,338,691	16,683,508
17	24,550,018	953,414	1,821,093	321,435	13,738,851	16,834,794
18	22,855,674	887,614	1,676,765	299,251	14,151,017	17,014,647
19	21,255,339	825,464	1,539,272	278,298	14,575,548	17,218,581
20	19,734,297	766,393	1,409,575	258,382	15,012,814	17,447,164
21	18,272,869	709,638	1,286,873	239,248	15,463,198	17,698,958
22	16,934,165	657,648	1,176,789	221,720	15,927,094	17,983,252
23	15,680,565	608,964	1,073,458	205,307	16,404,907	18,292,636
24	14,484,600	562,518	978,398	189,648	16,897,055	18,627,619
25	13,350,751	518,484	889,116	174,802	-	1,582,402
26	12,248,684	475,685	804,511	160,373	-	1,440,569
27	11,247,236	436,793	728,746	147,261	-	1,312,800
28	10,243,781	397,823	654,407	134,123	-	1,186,354
29	9,279,191	360,363	585,205	121,493	-	1,067,060
30	8,403,959	326,373	522,954	110,034	-	959,361
31	7,576,155	294,224	465,156	99,195	-	858,576
32	6,795,647	263,913	411,958	88,976	-	764,847
33	6,030,738	234,207	361,679	78,961	-	674,847
34	5,300,676	205,855	313,812	69,402	-	589,069
35	4,619,389	179,397	270,351	60,482	-	510,230
36	3,989,336	154,928	230,613	52,233	-	437,774
37	3,381,385	131,318	193,473	44,273	-	369,064
38	2,844,709	110,476	160,882	37,246	-	308,604
39	2,344,380	91,045	131,357	30,695	-	253,098
40	1,908,063	74,101	105,915	24,982	-	204,998
41	1,544,178	59,969	84,686	20,218	-	164,873
42	1,228,209	47,698	67,006	16,081	-	130,785
43	958,007	37,205	51,767	12,543	-	101,515
44	735,439	28,561	39,474	9,629	-	77,664
45	560,988	21,786	29,777	7,345	-	58,908
46	426,698	16,571	22,453	5,587	-	44,611
47	316,110	12,276	16,416	4,139	-	32,832
48	226,617	8,801	11,619	2,967	-	23,387
49	162,239	6,301	8,122	2,124	-	16,547
50	113,564	4,410	5,573	1,487	-	11,470

**SINGLE DISCOUNT RATE DEVELOPMENT
PROJECTION OF CONTRIBUTIONS ENDING DECEMBER 31, 2115
(CONCLUDED)**

Year	Payroll for Current Employees	Contributions from Current Employees	Service Cost Contributions	Administrative Expense Contributions	UAL Contributions	Total Contributions
51	\$ 69,972	\$ 2,717	\$ 3,425	\$ 916	\$ -	\$ 7,059
52	43,563	1,692	2,136	570	-	4,397
53	27,741	1,077	1,366	363	-	2,806
54	17,051	662	818	223	-	1,703
55	8,934	347	421	117	-	885
56	5,600	217	250	73	-	541
57	2,696	105	122	35	-	262
58	623	24	27	8	-	59
59	-	-	-	-	-	-
60	-	-	-	-	-	-
61	-	-	-	-	-	-
62	-	-	-	-	-	-
63	-	-	-	-	-	-
64	-	-	-	-	-	-
65	-	-	-	-	-	-
66	-	-	-	-	-	-
67	-	-	-	-	-	-
68	-	-	-	-	-	-
69	-	-	-	-	-	-
70	-	-	-	-	-	-
71	-	-	-	-	-	-
72	-	-	-	-	-	-
73	-	-	-	-	-	-
74	-	-	-	-	-	-
75	-	-	-	-	-	-
76	-	-	-	-	-	-
77	-	-	-	-	-	-
78	-	-	-	-	-	-
79	-	-	-	-	-	-
80	-	-	-	-	-	-
81	-	-	-	-	-	-
82	-	-	-	-	-	-
83	-	-	-	-	-	-
84	-	-	-	-	-	-
85	-	-	-	-	-	-
86	-	-	-	-	-	-
87	-	-	-	-	-	-
88	-	-	-	-	-	-
89	-	-	-	-	-	-
90	-	-	-	-	-	-
91	-	-	-	-	-	-
92	-	-	-	-	-	-
93	-	-	-	-	-	-
94	-	-	-	-	-	-
95	-	-	-	-	-	-
96	-	-	-	-	-	-
97	-	-	-	-	-	-
98	-	-	-	-	-	-
99	-	-	-	-	-	-
100	-	-	-	-	-	-

SINGLE DISCOUNT RATE DEVELOPMENT
PROJECTION OF PLAN FIDUCIARY NET POSITION ENDING DECEMBER 31, 2115

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 7.25%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
1	\$ 186,492,399	\$ 15,342,351	\$ 16,896,986	\$ 729,839	\$ 13,439,336	\$ 197,647,261
2	197,647,261	15,342,220	17,852,932	694,487	14,215,271	208,657,333
3	208,657,333	15,691,568	18,785,448	668,619	14,993,652	219,888,487
4	219,888,487	16,028,457	19,742,184	646,216	15,786,633	231,315,176
5	231,315,176	16,058,521	20,779,937	624,232	16,579,961	242,549,489
6	242,549,489	16,101,073	21,923,941	602,254	17,356,002	253,480,369
7	253,480,369	16,139,487	23,135,702	579,411	18,107,515	264,012,259
8	264,012,259	16,181,778	24,487,498	555,828	18,825,278	273,975,989
9	273,975,989	16,205,678	25,811,484	529,462	19,502,284	283,343,005
10	283,343,005	16,234,282	27,108,970	502,798	20,137,150	292,102,670
11	292,102,670	16,270,249	28,421,430	475,505	20,727,735	300,203,717
12	300,203,717	16,309,975	29,707,470	447,761	21,271,660	307,630,123
13	307,630,123	16,374,013	30,912,065	420,968	21,770,407	314,441,510
14	314,441,510	16,455,101	32,087,161	394,744	22,226,203	320,640,909
15	320,640,909	16,557,832	33,165,001	369,341	22,641,835	326,306,234
16	326,306,234	16,683,508	34,161,939	344,855	23,022,412	331,505,360
17	331,505,360	16,834,794	35,036,212	321,435	23,374,433	336,356,939
18	336,356,939	17,014,647	35,750,595	299,251	23,707,925	341,029,666
19	341,029,666	17,218,581	36,354,546	278,298	24,033,197	345,648,600
20	345,648,600	17,447,164	36,831,322	258,382	24,359,940	350,365,999
21	350,365,999	17,698,958	37,178,924	239,248	24,699,220	355,346,005
22	355,346,005	17,983,252	37,383,618	221,720	25,063,730	360,787,649
23	360,787,649	18,292,636	37,485,788	205,307	25,466,214	366,855,404
24	366,855,404	18,627,619	37,422,929	189,648	25,920,853	373,791,298
25	373,791,298	1,582,402	37,243,612	174,802	25,823,542	363,778,829
26	363,778,829	1,440,569	36,986,792	160,373	25,102,248	353,174,481
27	353,174,481	1,312,800	36,628,615	147,261	24,342,106	342,053,510
28	342,053,510	1,186,354	36,177,506	134,123	23,547,866	330,476,101
29	330,476,101	1,067,060	35,594,518	121,493	22,725,469	318,552,619
30	318,552,619	959,361	34,938,245	110,034	21,880,962	306,344,663
31	306,344,663	858,576	34,230,196	99,195	21,017,900	293,891,748
32	293,891,748	764,847	33,462,588	88,976	20,139,428	281,244,460
33	281,244,460	674,847	32,634,216	78,961	19,249,154	268,455,283
34	268,455,283	589,069	31,753,837	69,402	18,350,579	255,571,692
35	255,571,692	510,230	30,811,352	60,482	17,447,596	242,657,684
36	242,657,684	437,774	29,833,761	52,233	16,543,861	229,753,326
37	229,753,326	369,064	28,817,556	44,273	15,642,325	216,902,886
38	216,902,886	308,604	27,742,548	37,246	14,747,052	204,178,747
39	204,178,747	253,098	26,639,163	30,695	13,862,106	191,624,094
40	191,624,094	204,998	25,487,079	24,982	12,991,417	179,308,447
41	179,308,447	164,873	24,297,055	20,218	12,139,656	167,295,703
42	167,295,703	130,785	23,103,356	16,081	11,310,180	155,617,232
43	155,617,232	101,515	21,910,257	12,543	10,505,068	144,301,015
44	144,301,015	77,664	20,717,485	9,629	9,726,378	133,377,943
45	133,377,943	58,908	19,530,442	7,345	8,976,146	122,875,209
46	122,875,209	44,611	18,360,740	5,587	8,255,911	112,809,404
47	112,809,404	32,832	17,216,049	4,139	7,566,541	103,188,589
48	103,188,589	23,387	16,094,500	2,967	6,908,682	94,023,191
49	94,023,191	16,547	14,997,811	2,124	6,283,037	85,322,840
50	85,322,840	11,470	13,934,552	1,487	5,689,972	77,088,243

SINGLE DISCOUNT RATE DEVELOPMENT
PROJECTION OF PLAN FIDUCIARY NET POSITION ENDING DECEMBER 31, 2115
(CONCLUDED)

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 7.25%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
51	\$ 77,088,243	\$ 7,059	\$ 12,902,512	\$ 916	\$ 5,129,584	\$ 69,321,457
52	69,321,457	4,397	11,897,655	570	4,602,198	62,029,827
53	62,029,827	2,806	10,925,234	363	4,108,139	55,215,176
54	55,215,176	1,703	9,989,195	223	3,647,380	48,874,842
55	48,874,842	885	9,089,824	117	3,219,712	43,005,498
56	43,005,498	541	8,228,619	73	2,824,847	37,602,194
57	37,602,194	262	7,408,853	35	2,462,295	32,655,863
58	32,655,863	59	6,631,093	8	2,131,380	28,156,201
59	28,156,201	-	5,896,344	-	1,831,322	24,091,179
60	24,091,179	-	5,206,210	-	1,561,187	20,446,156
61	20,446,156	-	4,562,051	-	1,319,865	17,203,971
62	17,203,971	-	3,965,107	-	1,106,068	14,344,931
63	14,344,931	-	3,415,992	-	918,344	11,847,284
64	11,847,284	-	2,914,968	-	755,109	9,687,425
65	9,687,425	-	2,462,484	-	614,635	7,839,576
66	7,839,576	-	2,058,297	-	495,061	6,276,340
67	6,276,340	-	1,701,156	-	394,447	4,969,631
68	4,969,631	-	1,389,487	-	310,811	3,890,955
69	3,890,955	-	1,121,241	-	242,160	3,011,874
70	3,011,874	-	893,628	-	186,534	2,304,779
71	2,304,779	-	703,269	-	142,049	1,743,559
72	1,743,559	-	546,442	-	106,946	1,304,063
73	1,304,063	-	419,302	-	79,611	964,371
74	964,371	-	317,793	-	58,599	705,177
75	705,177	-	237,880	-	42,653	509,950
76	509,950	-	175,936	-	30,705	364,719
77	364,719	-	128,628	-	21,861	257,952
78	257,952	-	92,952	-	15,391	180,391
79	180,391	-	66,389	-	10,714	124,716
80	124,716	-	46,861	-	7,373	85,228
81	85,228	-	32,679	-	5,015	57,565
82	57,565	-	22,512	-	3,372	38,424
83	38,424	-	15,319	-	2,240	25,345
84	25,345	-	10,299	-	1,471	16,517
85	16,517	-	6,840	-	954	10,631
86	10,631	-	4,484	-	611	6,758
87	6,758	-	2,902	-	387	4,242
88	4,242	-	1,857	-	241	2,627
89	2,627	-	1,173	-	149	1,602
90	1,602	-	731	-	90	962
91	962	-	449	-	54	566
92	566	-	273	-	31	325
93	325	-	163	-	18	180
94	180	-	94	-	10	96
95	96	-	53	-	5	48
96	48	-	29	-	2	22
97	22	-	14	-	1	10
98	10	-	6	-	0	4
99	4	-	3	-	0	2
100	2	-	2	-	0	0

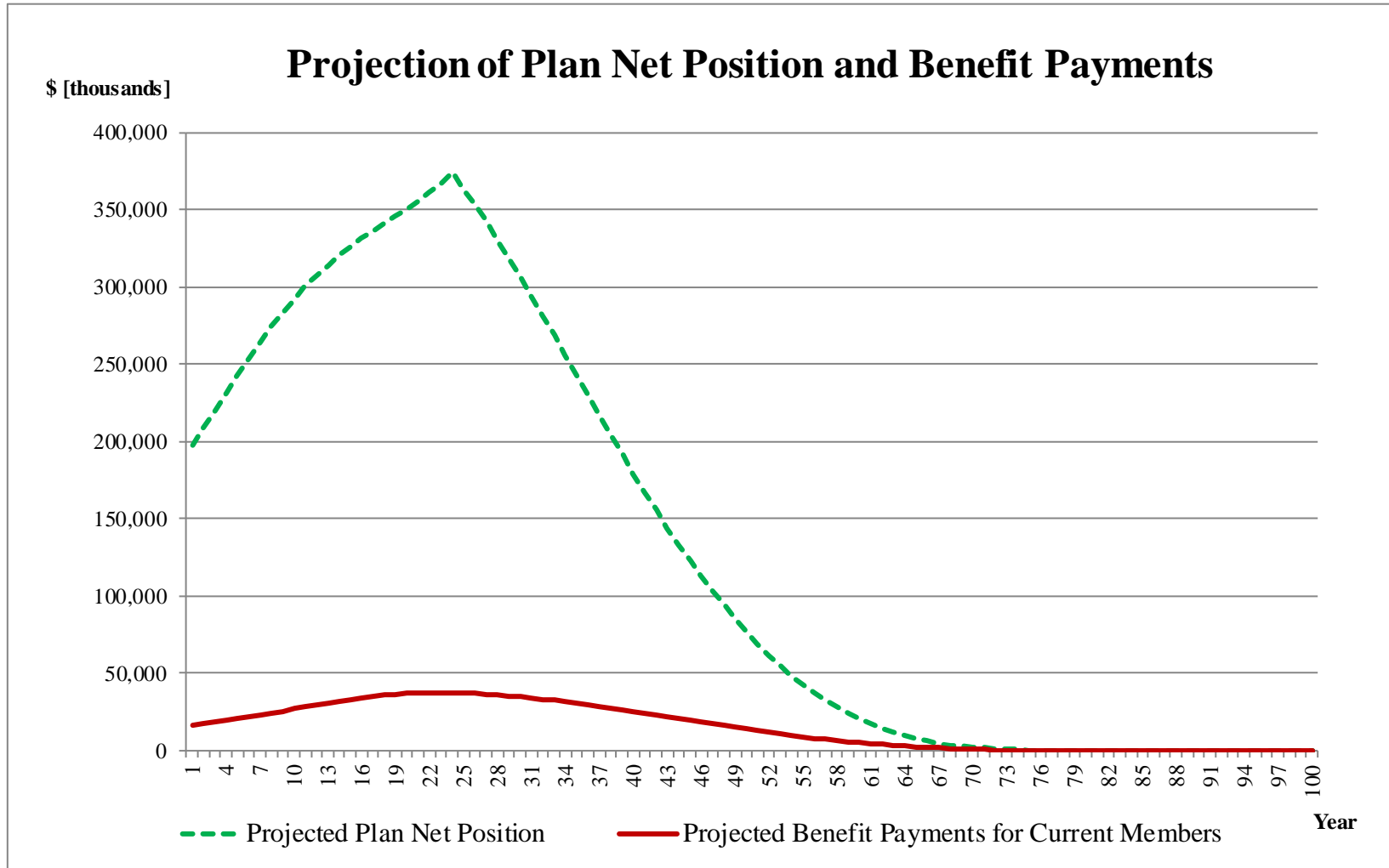
SINGLE DISCOUNT RATE DEVELOPMENT

PRESENT VALUES OF PROJECTED BENEFITS ENDING DECEMBER 31, 2115

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	\$ 186,492,399	\$ 16,896,986	\$ 16,896,986	\$ -	\$ 16,315,883	\$ -	\$ 16,315,883
2	197,647,261	17,852,932	17,852,932	-	16,073,616	-	16,073,616
3	208,657,333	18,785,448	18,785,448	-	15,769,877	-	15,769,877
4	219,888,487	19,742,184	19,742,184	-	15,452,710	-	15,452,710
5	231,315,176	20,779,937	20,779,937	-	15,165,487	-	15,165,487
6	242,549,489	21,923,941	21,923,941	-	14,918,785	-	14,918,785
7	253,480,369	23,135,702	23,135,702	-	14,679,127	-	14,679,127
8	264,012,259	24,487,498	24,487,498	-	14,486,540	-	14,486,540
9	273,975,989	25,811,484	25,811,484	-	14,237,571	-	14,237,571
10	283,343,005	27,108,970	27,108,970	-	13,942,436	-	13,942,436
11	292,102,670	28,421,430	28,421,430	-	13,629,323	-	13,629,323
12	300,203,717	29,707,470	29,707,470	-	13,283,016	-	13,283,016
13	307,630,123	30,912,065	30,912,065	-	12,887,295	-	12,887,295
14	314,441,510	32,087,161	32,087,161	-	12,472,908	-	12,472,908
15	320,640,909	33,165,001	33,165,001	-	12,020,406	-	12,020,406
16	326,306,234	34,161,939	34,161,939	-	11,544,745	-	11,544,745
17	331,505,360	35,036,212	35,036,212	-	11,039,812	-	11,039,812
18	336,356,939	35,750,595	35,750,595	-	10,503,415	-	10,503,415
19	341,029,666	36,354,546	36,354,546	-	9,958,838	-	9,958,838
20	345,648,600	36,831,322	36,831,322	-	9,407,407	-	9,407,407
21	350,365,999	37,178,924	37,178,924	-	8,854,258	-	8,854,258
22	355,346,005	37,383,618	37,383,618	-	8,301,171	-	8,301,171
23	360,787,649	37,485,788	37,485,788	-	7,761,173	-	7,761,173
24	366,855,404	37,422,929	37,422,929	-	7,224,390	-	7,224,390
25	373,791,298	37,243,612	37,243,612	-	6,703,752	-	6,703,752
26	363,778,829	36,986,792	36,986,792	-	6,207,482	-	6,207,482
27	353,174,481	36,628,615	36,628,615	-	5,731,813	-	5,731,813
28	342,053,510	36,177,506	36,177,506	-	5,278,528	-	5,278,528
29	330,476,101	35,594,518	35,594,518	-	4,842,393	-	4,842,393
30	318,552,619	34,938,245	34,938,245	-	4,431,806	-	4,431,806
31	306,344,663	34,230,196	34,230,196	-	4,048,477	-	4,048,477
32	293,891,748	33,462,588	33,462,588	-	3,690,154	-	3,690,154
33	281,244,460	32,634,216	32,634,216	-	3,355,528	-	3,355,528
34	268,455,283	31,753,837	31,753,837	-	3,044,294	-	3,044,294
35	255,571,692	30,811,352	30,811,352	-	2,754,253	-	2,754,253
36	242,657,684	29,833,761	29,833,761	-	2,486,588	-	2,486,588
37	229,753,326	28,817,556	28,817,556	-	2,239,524	-	2,239,524
38	216,902,886	27,742,548	27,742,548	-	2,010,238	-	2,010,238
39	204,178,747	26,639,163	26,639,163	-	1,799,801	-	1,799,801
40	191,624,094	25,487,079	25,487,079	-	1,605,561	-	1,605,561
41	179,308,447	24,297,055	24,297,055	-	1,427,128	-	1,427,128
42	167,295,703	23,103,356	23,103,356	-	1,265,281	-	1,265,281
43	155,617,232	21,910,257	21,910,257	-	1,118,825	-	1,118,825
44	144,301,015	20,717,485	20,717,485	-	986,403	-	986,403
45	133,377,943	19,530,442	19,530,442	-	867,026	-	867,026
46	122,875,209	18,360,740	18,360,740	-	759,999	-	759,999
47	112,809,404	17,216,049	17,216,049	-	664,445	-	664,445
48	103,188,589	16,094,500	16,094,500	-	579,170	-	579,170
49	94,023,191	14,997,811	14,997,811	-	503,221	-	503,221
50	85,322,840	13,934,552	13,934,552	-	435,940	-	435,940

SINGLE DISCOUNT RATE DEVELOPMENT
PRESENT VALUES OF PROJECTED BENEFITS ENDING DECEMBER 31, 2115
(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 ((a)-.5)	(g)=(e)*vf ^a ((a)-.5)	(h)=-((c)/(1+sdr) ^a ((a)-.5)
51	\$ 77,088,243	\$ 12,902,512	\$ 12,902,512	\$ -	\$ 376,366	\$ -	\$ 376,366
52	69,321,457	11,897,655	11,897,655	-	323,594	-	323,594
53	62,029,827	10,925,234	10,925,234	-	277,059	-	277,059
54	55,215,176	9,989,195	9,989,195	-	236,197	-	236,197
55	48,874,842	9,089,824	9,089,824	-	200,402	-	200,402
56	43,005,498	8,228,619	8,228,619	-	169,152	-	169,152
57	37,602,194	7,408,853	7,408,853	-	142,005	-	142,005
58	32,655,863	6,631,093	6,631,093	-	118,506	-	118,506
59	28,156,201	5,896,344	5,896,344	-	98,252	-	98,252
60	24,091,179	5,206,210	5,206,210	-	80,888	-	80,888
61	20,446,156	4,562,051	4,562,051	-	66,088	-	66,088
62	17,203,971	3,965,107	3,965,107	-	53,558	-	53,558
63	14,344,931	3,415,992	3,415,992	-	43,021	-	43,021
64	11,847,284	2,914,968	2,914,968	-	34,230	-	34,230
65	9,687,425	2,462,484	2,462,484	-	26,962	-	26,962
66	7,839,576	2,058,297	2,058,297	-	21,013	-	21,013
67	6,276,340	1,701,156	1,701,156	-	16,193	-	16,193
68	4,969,631	1,389,487	1,389,487	-	12,332	-	12,332
69	3,890,955	1,121,241	1,121,241	-	9,279	-	9,279
70	3,011,874	893,628	893,628	-	6,895	-	6,895
71	2,304,779	703,269	703,269	-	5,060	-	5,060
72	1,743,559	546,442	546,442	-	3,666	-	3,666
73	1,304,063	419,302	419,302	-	2,623	-	2,623
74	964,371	317,793	317,793	-	1,853	-	1,853
75	705,177	237,880	237,880	-	1,293	-	1,293
76	509,950	175,936	175,936	-	892	-	892
77	364,719	128,628	128,628	-	608	-	608
78	257,952	92,952	92,952	-	410	-	410
79	180,391	66,389	66,389	-	273	-	273
80	124,716	46,861	46,861	-	180	-	180
81	85,228	32,679	32,679	-	117	-	117
82	57,565	22,512	22,512	-	75	-	75
83	38,424	15,319	15,319	-	48	-	48
84	25,345	10,299	10,299	-	30	-	30
85	16,517	6,840	6,840	-	18	-	18
86	10,631	4,484	4,484	-	11	-	11
87	6,758	2,902	2,902	-	7	-	7
88	4,242	1,857	1,857	-	4	-	4
89	2,627	1,173	1,173	-	2	-	2
90	1,602	731	731	-	1	-	1
91	962	449	449	-	1	-	1
92	566	273	273	-	0	-	0
93	325	163	163	-	0	-	0
94	180	94	94	-	0	-	0
95	96	53	53	-	0	-	0
96	48	29	29	-	0	-	0
97	22	14	14	-	0	-	0
98	10	6	6	-	0	-	0
99	4	3	3	-	0	-	0
100	2	2	2	-	0	-	0
Totals	\$ 371,096,984	\$ 371,096,984	\$ 371,096,984	\$ -	\$ 371,096,984	\$ -	\$ 371,096,984



SECTION H

GLOSSARY OF TERMS

GLOSSARY OF TERMS

<i>Actuarial Accrued Liability (AAL)</i>	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.”
<i>Actuarial Assumptions</i>	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.
<i>Accrued Service</i>	Service credited under the system which was rendered before the date of the actuarial valuation.
<i>Actuarial Equivalent</i>	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.
<i>Actuarial Cost Method</i>	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.
<i>Actuarial Gain (Loss)</i>	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.
<i>Actuarial Present Value (APV)</i>	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.
<i>Actuarial Valuation</i>	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.
<i>Actuarial Valuation Date</i>	The date as of which an actuarial valuation is performed.
<i>Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)</i>	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

<i>Amortization Payment</i>	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
<i>Amortization Method</i>	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).
<i>Cost-of-Living Adjustments</i>	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
<i>Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan)</i>	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.
<i>Covered-Employee Payroll</i>	The payroll of covered employees, which is typically only the pensionable pay and does not include pay above any pay cap.
<i>Deferred Retirement Option Program (DROP)</i>	A program that permits a plan member to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The plan member continues to provide service to the employer and is paid for the service by the employer after the DROP entry date; however, the pensions that would have been paid to the plan member are credited to an individual member account within the defined benefit pension plan until the end of the DROP period. Other variations for DROP exist and will be more fully detailed in the plan provision section of the valuation report.
<i>Deferred Inflows and Outflows</i>	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.
<i>Discount Rate</i>	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: <ol style="list-style-type: none"> 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.

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<i>Entry Age Actuarial Cost Method (EAN)</i>	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.
<i>GASB</i>	The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.
<i>Fiduciary Net Position</i>	The fiduciary net position is the market value of the assets of the trust dedicated to the defined benefit provisions.
<i>Long-Term Expected Rate of Return</i>	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.
<i>Money-Weighted Rate of Return</i>	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. 67, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.
<i>Multiple-Employer Defined Benefit Pension Plan</i>	A multiple-employer plan is a defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
<i>Municipal Bond Rate</i>	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.
<i>Net Pension Liability (NPL)</i>	The NPL is the liability of employers and non-employer contribution entities to plan members for benefits provided through a defined benefit pension plan.
<i>Non-Employer Contribution Entities</i>	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 statements, plan members are not considered non-employer contribution entities.
<i>Normal Cost</i>	The actuarial present value of the pension trust benefits allocated to the current year by the actuarial cost method. The Normal Cost may also be referred to as "Service Cost."

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<i>Other Postemployment Benefits (OPEB)</i>	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.
<i>Real Rate of Return</i>	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
<i>Service Cost</i>	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year. The Service Cost may also be referred to as the “Normal Cost.”
<i>Total Pension Expense</i>	The total pension expense is the sum of the following items that are recognized at the end of the employer’s fiscal year: <ol style="list-style-type: none"> 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 9. Recognition of Outflow (Inflow) of Resources due to Assets
<i>Total Pension Liability (TPL)</i>	The TPL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.
<i>Unfunded Actuarial Accrued Liability (UAAL)</i>	The UAAL is the difference between actuarial accrued liability and valuation assets.
<i>Valuation Assets</i>	The valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of GASB Statement Nos. 67 and 68, the valuation assets are equal to the market value of assets.