

PRINTING LOCAL 72 INDUSTRY PENSION PLAN

Actuarial Valuation Report for Plan Year
Beginning March 1, 2020 and Ending February 28, 2021

The McKeogh Company

February 2021





The McKeogh Company

February 19, 2021

Board of Trustees,
Printing Local 72 Industry Pension Fund
c/o Associated Administrators, LLC
911 Ridgebrook Road
Sparks, MD 21152

Dear Trustees:

This report presents the results of the actuarial valuation of the Printing Local 72 Industry Pension Plan as of March 1, 2020. The primary purposes of the report are to:

- Determine the minimum funding requirements of ERISA and Section 412 of the Internal Revenue Code for the Plan Year ending February 28, 2021.
- Compare the minimum funding requirement to the contributions expected to be paid by the contributing employers.
- Develop information required to be disclosed in accordance with Financial Accounting Standards Board Accounting Standards Codification (ASC) Topic 960 Plan Accounting – Defined Benefit Pension Plans (formerly SFAS No. 35) and Schedule MB (Form 5500).
- Calculate the Unfunded Vested Benefit Liability (UVB) for withdrawal liability purposes under the Multiemployer Pension Plan Amendments Act of 1980.
- Report on the Plan's status with regard to the Pension Protection Act of 2006 ("PPA '06"), as amended.



This valuation has been prepared on an ongoing plan basis and the use of this report for purposes other than those enumerated above may be inappropriate.

To the best of our knowledge and belief, all Plan participants as of March 1, 2020 and all Plan provisions in effect on that date have been reflected in the valuation. We hereby certify that all of our calculations have been performed in conformity with generally accepted actuarial principles and practices, and that those actuarial assumptions which are not prescribed by law are reasonable and represent our best estimate of the anticipated experience under the Plan.

We will be pleased to review this report at your convenience.

Respectfully submitted,

Brian W. Hartsell, ASA

Brian R. Goddu, ASA

TABLE OF CONTENTS

	<u>Page</u>
Transmittal Letter	
 Part I – Discussion of Principal Valuation Results	
1.1 Valuation Highlights	1
1.2 Comparison of Key Valuation Results With Those of Prior Valuations	2
1.3 Plan Experience During Prior Year	3
1.4 Funded Status Under ASC 960 and PPA '06	4
1.5 Summary of Investment Performance	5
1.6 Statement of Changes From Prior Valuation	6
1.7 Projections	7
1.8 Risk Assessment and Disclosure	10
 Part II – Valuation Results	
2.1 Summary Statistics	13
2.2 Actuarial Accrued Liability and Current Liability	14
2.3 Development of Minimum Required Contribution – Summary	15
2.4 Development of Minimum Required Contribution – Amortization Record	16
2.5 Development of Minimum Required Contribution – Full Funding Limitation	17
2.6 Funding Standard Account Information	18
2.7 Estimated Maximum Deductible Contribution	19
2.8 Estimated Maximum Deductible Contribution – Full Funding Limitation	20
2.9 Development of Actuarial Gain/(Loss)	21
2.10 Presentation of ASC 960 Disclosures	22
2.11 Historical ASC 960 Information	23

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
 Part III – Withdrawal Liability Information	
3.1 Withdrawal Liability Summary	24
3.2 Basic Withdrawal Liability Pools	25
3.3 Reallocated Withdrawal Liability Pools	26
3.4 Withdrawn Employer Contributions	27
3.5 Contribution History	28
3.6 Individual Employer Withdrawal Liability Estimate Worksheet	29
 Part IV – Asset Information	
4.1 Historical Asset Information	30
4.2 Summary of Plan Assets	31
4.3 Changes in Assets from Prior Valuation	32
4.4 Development of Actuarial Value of Assets	33
4.5 Investment Rates of Return	34
 Part V – Demographic Information	
5.1 Historical Participant Information	35
5.2 Active Participant Age/Service Distribution	36
5.3 Inactive Participant Information	37
5.4 Reconciliation of Participants	38
 Part VI – Actuarial Basis	
6.1 Actuarial Methods	39
6.2 Actuarial Assumptions	40
 Part VII – Summary of Plan Provisions	
7.1 Plan Provisions	42

PART I

DISCUSSION OF PRINCIPAL VALUATION RESULTS

Section 1.1

Valuation Highlights

Projected Insolvency

The Plan was certified to be in the red & declining zone (critical & declining status) for the Plan Year beginning March 1, 2020 for purposes of the Pension Protection Act of 2006. The Plan is currently projected to become insolvent during the Plan Year beginning March 1, 2024.

Minimum Funding Requirement

The minimum funding requirement for the Plan Year ending February 29, 2020 was \$24,525,817. The contributions for the Plan Year ending February 29, 2020 were \$903,088. The Minimum Funding Requirement was not met and the Plan has a funding deficiency (i.e. a negative credit balance) for the Plan Year ending February 29, 2020. The expected contributions for the Plan Year ending February 28, 2021 will not be sufficient to meet the minimum funding requirement for that Plan Year of \$27,328,448.

Contribution Level

The level of projected contributions for the current Plan Year is not sufficient to provide for the Plan's normal cost and to eliminate the unfunded liability over any period of time.

Contribution Base Units

Contributions for the Plan Year beginning March 1, 2020 pursuant to collective bargaining agreements are \$111.50 per member per week. This results in projected regular contributions of \$128,225 for the Plan Year (23 actives x 50 weeks x \$111.50/week). It is anticipated that there will be an additional \$919,000 in withdrawal liability payments for that Plan Year.

Investments

The return on the market value of assets for the year ended February 29, 2020 was 12.06% and the return on the actuarial value of assets for the year ended February 29, 2020 was 3.55%, compared to the 7.00% assumption.

Withdrawal Liability

The unfunded vested benefit liability as of February 29, 2020 for withdrawal liability is \$36,066,296, up from the prior year's level of \$35,991,675. Substantially all employers withdrew from the Plan on or after March 1, 2018 triggering a Mass Withdrawal from the Plan. There continues to be one remaining contributing employer, Doyle Printing Company.

COVID 19

The coronavirus pandemic began in 2019 and continued to affect the world through thousands of fatalities, extreme market volatility, the closing of non-essential businesses and the issuance of stay-at-home orders for citizens. The effects of COVID-19 on the Plan's funded status are not yet quantifiable, however this report reflects a conservative assumption for both 2020 hours and 2020 investment return due to the year's volatility.

Section 1.2

Comparison of Key Valuation Results With Those of Prior Valuations

	Plan Year Beginning March 1,				
	2020	2019	2018	2017	2016
Contributions					
Minimum Funding Requirement	\$ 27,328,448	\$ 24,525,817	\$ 20,749,697	\$ 16,671,969	\$ 12,545,755
Actual Employer Contributions	1,047,225 *	903,088	977,644	871,913	931,287
Maximum Deductible Contribution (Estimated)	82,243,117	80,844,446	82,202,655	77,117,247	74,078,320
Liabilities and Normal Cost					
Actuarial Accrued Liability	\$ 43,485,116	\$ 44,409,145	\$ 44,795,622	\$ 44,860,209	\$ 44,614,780
Normal Cost	342,248	332,124	346,893	426,053	367,448
Present Value of Accumulated Benefits (ASC 960)	43,485,116	44,409,145	44,795,622	44,860,209	44,614,780
Present Value of Vested Benefits (ASC 960)	43,422,419	44,354,056	44,760,392	44,797,256	44,525,983
RPA '94 Current Liability	65,992,083	66,512,799	68,994,080	66,298,502	65,039,396
Assets					
Market Value	\$ 11,563,896	\$ 12,755,961	\$ 14,923,440	\$ 16,081,031	\$ 16,341,114
Actuarial Value	11,110,061	13,260,508	15,280,470	16,757,474	18,008,669
Participant Counts					
Active	23	24	59	90	93
Persons with Deferred Benefits	330	339	328	329	338
Other Persons in Pay Status	480	488	471	455	450
Total	833	851	858	874	881
PPA '06 Certification Results					
Plan Status (Zone)	Red & Decl.**	Red & Decl.	Red & Decl.	Red & Decl.	Red & Decl.
Funded Percentage (Actuarial Value Basis)***	25.4%	29.7%	33.9%	37.5%	45.9%

* Estimated.

** Certified to be Red and Delcining in part because the fund is projected to become insolvent (i.e. run out of money) during the Plan Year Beginning March 1, 2024.

*** Estimated as of the date of certification. Actual funded percentage varied from the estimates shown to the extent that actual experience varied from that projected.

Section 1.3

Plan Experience During Prior Year

The plan had mixed investment experience during the year ended February 29, 2020 as it earned 12.06% on a market value basis and 3.55% on an actuarial value basis as compared to the valuation interest rate assumption of 7.00%.

That “missed” return of 3.45% on an actuarial basis represents a loss in dollars of \$415,773 which is combined with a net gain from liabilities of \$789,721. A 5-year history of actuarial gains/(losses) is shown below.

		Plan Year Ending February 28/29,									
		2020	2019	2018	2017	2016					
Investment Gain/(Loss) on an Actuarial Value Basis											
In dollars	\$	(415,773)	\$	(481,913)	\$	(23,490)	\$	(23,609)	\$	(133,453)	
As a percentage of average value of assets		-3.5%		-3.4%		-0.2%		-0.1%		-0.8%	
Net Gains/(Losses) from Other Sources											
In dollars	\$	789,721	\$	274,190	\$	132,056	\$	(180,931)	\$	271,523	
As a percentage of actuarial liability		1.8%		0.6%		0.3%		-0.4%		0.6%	
Total Experience Gain/(Loss)		\$	373,948	\$	(207,723)	\$	108,566	\$	(204,540)	\$	138,070

Section 1.4

Funded Status Under ASC 960 and PPA '06

During the Plan Year ended February 29, 2020, the plan's funded status for purposes of FASB Accounting Standards Codification (ASC) Topic 960 Plan Accounting - Defined Benefit Pension Plans (defined as the ratio of the market value of plan assets to the present value of accumulated plan benefits) decreased from 28.7% to 26.6%. In that same year, the plan's funded status for purposes of the Pension Protection Act of 2006 (defined as the ratio of the actuarial value of plan assets to the present value of accumulated plan benefits) decreased from 29.9% to 25.5%. A 15-year history of these measures is shown below.

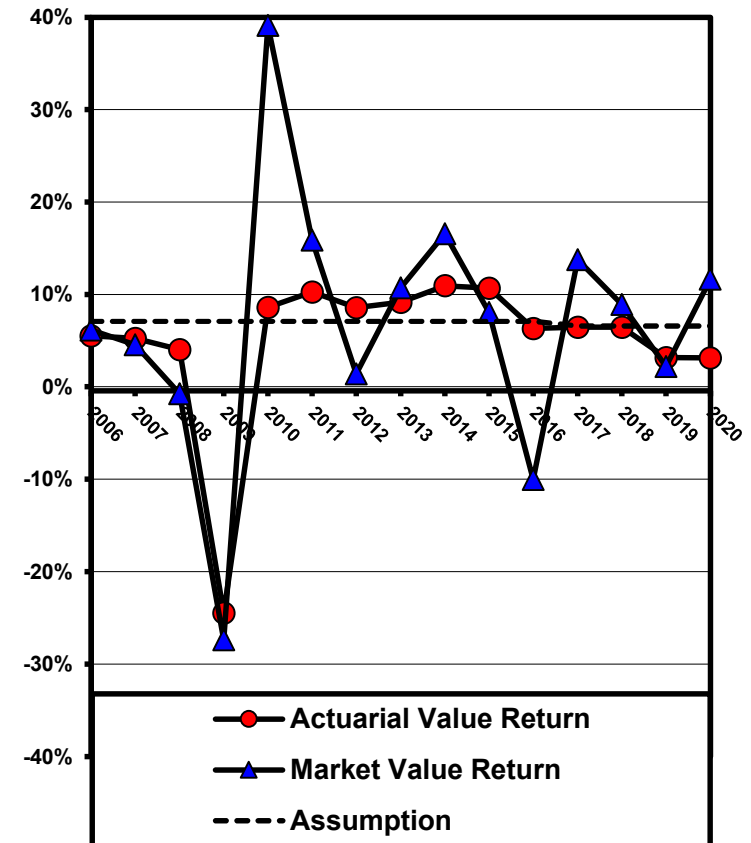
	<u>Assets</u>		<u>Present Value of Accumulated Plan Benefits</u>	<u>Funded Percentage (PPA '06)</u>	
	<u>Market Value</u>	<u>Actuarial Value</u>		<u>Market Value</u>	<u>Actuarial Value</u>
<u>March 1</u>					
2020	\$ 11,563,896	\$ 11,110,061	\$ 43,485,116	26.6%	25.5%
2019	12,755,961	13,260,508	44,409,145	28.7%	29.9%
2018	14,923,440	15,280,470	44,795,622	33.3%	34.1%
2017	16,081,031	16,757,474	44,860,209	35.8%	37.4%
2016	16,341,114	18,008,669	44,614,780	36.6%	40.4%
2015	20,500,389	18,032,462	37,018,897	55.4%	48.7%
2014	21,087,477	18,393,195	36,470,553	57.8%	50.4%
2013	20,024,515	18,559,263	36,140,274	55.4%	51.4%
2012	19,980,920	18,911,034	35,648,518	56.0%	53.0%
2011	21,706,699	19,364,590	35,274,109	61.5%	54.9%
2010	20,602,063	19,475,276	35,064,221	58.8%	55.5%
2009	16,538,574	19,846,288	35,239,999	46.9%	56.3%
2008	24,970,884	28,413,645	39,372,333	63.4%	72.2%
2007	26,983,049	29,083,185	39,205,217	68.8%	74.2%
2006	27,618,337	29,432,961	38,478,367	71.8%	76.5%

Section 1.5

Summary of Investment Performance

A summary of the investment returns during the 15 years preceding the valuation date are shown below.

Plan Year Ending February 28/29,	Valuation Assumption	Single-Year Return		Average Return * Over 5-Year Period	
		Actuarial Value	Market Value	Actuarial Value	Market Value
2020	7.00%	3.55%	12.06%	5.50%	5.34%
2019	7.00%	3.57%	2.59%	6.99%	4.65%
2018	7.00%	6.86%	9.33%	8.55%	7.43%
2017	7.00%	6.87%	14.17%	9.10%	7.78%
2016	7.50%	6.72%	-9.61%	9.52%	5.33%
2015	7.50%	11.08%	8.45%	10.32%	10.77%
2014	7.50%	11.35%	16.96%	9.90%	16.50%
2013	7.50%	9.55%	11.10%	1.80%	6.02%
2012	7.50%	8.96%	1.79%	0.83%	3.74%
2011	7.50%	10.67%	16.27%	0.21%	4.38%
2010	7.50%	9.00%	39.52%	-0.67%	2.57%
2009	7.50%	-24.08%	-26.98%	N/A	N/A
2008	7.50%	4.44%	-0.36%	N/A	N/A
2007	7.50%	5.65%	4.96%	N/A	N/A
2006	7.50%	5.92%	6.54%	N/A	N/A



* Time-Weighted Basis

Section 1.6

Statement of Changes from Prior Valuation

Actuarial Basis

The following changes were made in the actuarial basis from the prior year:

1. To comply with change in RPA '94 prescribed interest, the interest rate for RPA '94 current liability purposes was changed from 3.08% to 2.89%.
2. To comply with changes in RPA '94 prescribed mortality, the mortality assumption for RPA '94 current liability purposes was changed from the IRS prescribed static mortality table for 2019 valuation dates as set forth in IRS Notice 2018-02 to the IRS prescribed static mortality table for 2020 valuation dates.

Plan of Benefits

There were no changes in the plan of benefits since the prior valuation.

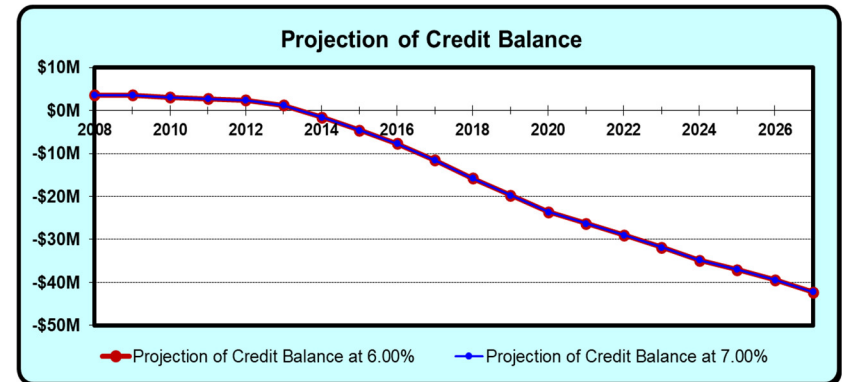
Section 1.7

Projections

Credit Balance Projection

The Funding Standard Account Credit Balance is a measure of compliance with ERISA's minimum funding standards. A non-negative credit balance indicates that minimum funding standards have been met. A negative credit balance indicates that minimum funding standards have not been met.

The blue line on the "Projection of Credit Balance" graph shows that the credit balance has been negative (i.e., there has been a funding deficiency) since the Plan Year beginning March 1, 2014 and is projected to remain negative in all years in the projection period. The projection includes the effect of implementing an increase in the weekly contribution rate of \$5.00 effective each March 1st in the projection period. It also assumes that the Plan will earn a 7.00% return on the market value of assets in all future years and that all non-investment valuation assumptions are met in all future years. The red line shows the "Projection of Credit Balance" under the same conditions, but if investment returns were 1% lower through the projection period. We note that these two lines are very closely aligned because, as the asset level declines, the return on assets has a smaller effect on the Credit Balance.



Funded Percentage Projection

The funded percentage is an important concept under funding reform. Under the Pension Protection Act of 2006, a plan is considered "endangered" (in "the yellow zone") if the funding ratio falls below 80% or if there is a funding deficiency (negative credit balance) projected within 7 years. Generally, the plan is considered "critical" (in "the red zone") if the funding ratio falls below 65% or if there is a funding deficiency projected within 5 years. A plan is generally considered "critical and declining" if it is "critical" and projected to become insolvent within twenty years. The funded percentage is measured by the actuarial value of assets divided by the present value of accrued benefits (determined using funding assumptions).

Section 1.7

Projections (Continued)

The “Projection of Funded Percentage” graph reflects the \$5.00 contribution increases described on the previous page. The blue line shows that the funded percentage is projected to steadily decrease during the projection period under the assumption that the Plan will earn a 7.00% return on the market value of assets in all future years. The funded percentage is projected to drop to 0% (i.e. the plan is projected to run out of money) in the Plan Year ending February 28, 2025.

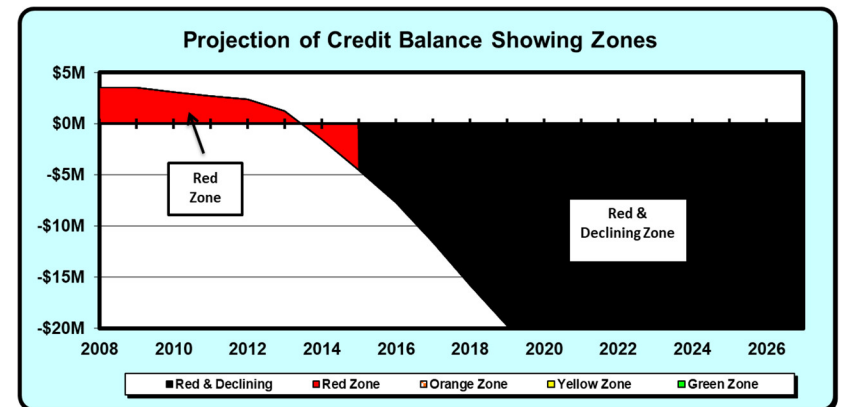
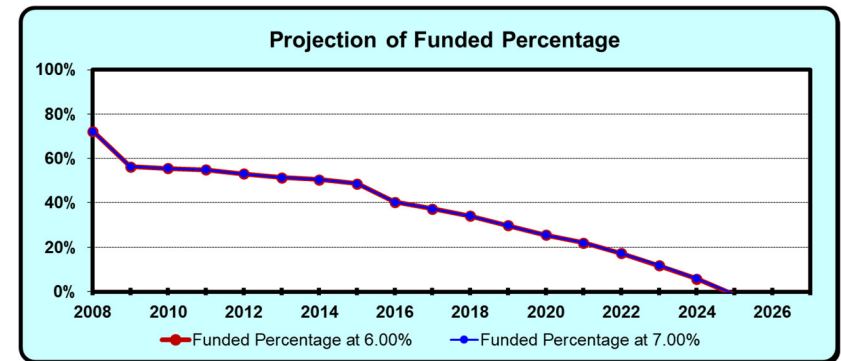
The red line shows the funding ratio under the same conditions, but if investment returns were 1% lower through the projection period. We note that these two lines are very closely aligned because, as the asset level declines, the return on assets has a smaller effect on the Funded Percentage.

Zone Projections

The “Projection of Credit Balance Showing Zones” graph to the right shows that the plan is projected to be Critical and Declining for the duration of the projection period.

The graph reflects the \$5.00 contribution increases described on the previous page. The projection assumes that the Plan will earn a 7.00% return on the market value of assets in all future years and all non-investment valuation assumptions are met in all future years.

Actual future credit balance values will differ from those projected to the extent that future experience deviates from that assumed.



Section 1.7

Projections **(Continued)**

Projection Assumptions

The Plan's assets, liabilities and funding standard account credit balance were projected forward from the March 1, 2020 valuation based on the following:

- All non-investment valuation assumptions are met during the projection period. The investment return for the Plan Year beginning March 1, 2020 is estimated to be 14.0%. The Plan is assumed to attain its investment assumption of 7.00% per year on the market value of assets from March 1, 2021 forward.
- Current differences between the market value of assets and the actuarial value of assets are phased in during the projection period in accordance with the regular operation of the asset valuation method.
- The active population as a whole will have similar demographic characteristics from year to year. The active plan participant count is assumed to remain at 23 participants for the duration of the projection period.
- Contributions will be made to the Plan on 1,150 weeks per year (23 actives x 50 weeks per year) for the March 1, 2020 Plan Year and each subsequent year.
- The weekly contribution rate of \$116.50 as of March 1, 2021 will increase by \$5.00 each subsequent March 1st during the projection period.
- The projections reflect 20 years of withdrawal liability payments for employers who withdrew from the Plan prior to March 1, 2017. For those employers who withdrew on or after March 1, 2017 the projections reflect withdrawal liability payments in perpetuity.

Actual future valuation results will differ from those projected to the extent that future experience deviates from that anticipated.

Section 1.8

Risk Assessment and Disclosure

Measuring pension obligations and calculating actuarially determined contribution requirements requires the use of assumptions regarding future economic and demographic experience. The results presented in this valuation are dependent on the assumptions set forth in Section 6.2. A different set of assumptions will produce a different set of results. Actual future results will differ from those projected to the extent that future experience deviates from that anticipated. The discussion below will outline the effects of future experience differing from the assumptions used in the funding valuation and the potential volatility of future measurements resulting from such differences.

Assessment of Risk

We have worked to stress test various scenarios through the use of our valuation software, paying particular attention to the risks most likely to affect the projected insolvency date of the Plan, and have summarized the results below. Additionally, based on the size and funded percentage of the Plan we do not recommend stochastic modeling.

Risks

Current projections indicate that the Plan is expected to become insolvent (i.e. run out of money) during the Plan Year Beginning March 1, 2024; absent significant changes to the Plan's circumstances we do not expect the following risks to dramatically affect the projected insolvency date. The following risks should be understood in that context. Though these risks do have the ability to affect the Plan's funded status, we do not anticipate material changes to the Plan's fundamental position as result of any of the minor deviations outlined below:

- a. Investment Risk (the potential that investment returns will be different than expected)

See Section 1.7 for an illustration of the effect on the projections of the credit balance and the funded ratio of annual future returns that are 1% less than the assumption throughout the projection period.

- b. Interest Rate Risk (the potential that interest rates will be different than expected)

A decrease in the interest rate used to value liabilities will result in increases in the reported liability which will result in increases in required contributions over the short term. For example, a 1% decrease in the interest rate assumption would increase reported liabilities by 9.70%.

Section 1.8

Risk Assessment and Disclosure **(Continued)**

- c. Longevity and Other Demographic Risks (the potential that mortality or other demographic experience will be different than expected)

If 10% fewer people than expected die at each age, the actuarial accrued liability would be \$1.1 million higher. This \$1.1 million represents an increase in the actuarial accrued liability of 2.6%.

- d. Contribution Risk (the potential of actual future contributions deviating from expected future contributions)

If Contribution Base Units (CBUs) are smaller than expected, contributions will be lower than expected. The effect on the unfunded liability will be minimally offset by accruals that are lower than expected, however the overall result may lead to an acceleration of the projected insolvency date.

Plan Maturity Measures

Current projections indicate that the Plan is expected to become insolvent (i.e. run out of money) during the Plan Year Beginning March 1, 2024. The following measures will help illustrate the risks associated with a maturing plan:

- a. Ratio of Retired Life Actuarial Accrued Liability to Total Actuarial Accrued Liability

The retired life actuarial accrued liability increased from 60.2% to 65.0% of the total actuarial accrued liability over the last 10 years. As this percentage grows, the Plan becomes more reliant on investment return than contributions to make benefit payments and pay expenses.

- b. Ratio of Expected Benefit Payments to Contributions

Benefit payments have fluctuated between 296% and 392% of contributions of the over the last 10 years. As benefit payments increase as a percentage of contributions, the Fund relies more on stable investment returns to continue to provide benefits.

- c. Ratio of Contributions Offset by Benefit Payments to Market Value of Assets

Contributions offset by benefit payments have decreased from -9.3% to -17.8% of market value of assets over the last 10 years. Plans with negative cash flow are less able to recover from asset losses and so have amplified investment risk.

Section 1.8

Risk Assessment and Disclosure **(Continued)**

Additional Historical Information

Historical information has been included in the discussion above where available. The following is additional historical information significant to understanding the risks associated with the Plan.

a. **Funded Status (Actuarial Value of Assets)**

Please see Section 1.4 for a history of the funded status of the Plan, which has decreased from 54.9% to 25.5% over the last 10 years.

b. **Actuarially Determined Contribution**

Please see Section 2.3 for a history of the minimum required contribution, which has increased from \$12,545,755 to \$27,328,448 over the last 5 years.

c. **Actuarial Gains and Losses (investment and non-investment)**

Please see Section 1.3 for a 5-year history of actuarial gains and losses, shown separately by investment and non-investment sources.

d. **Normal Cost**

Please see Section 1.2 for a history of the Plan's normal cost, which has varied from \$332,124 to \$426,053 over the last 5 years.

e. **Comparison of Actual Contributions to Actuarially Determined Contributions**

Please see Section 1.2 for a 5-year history of the Plan's actual and minimum required contributions.

f. **Plan Participant Count**

Please see Section 5.1 for a history of the Plan's participant count, which has decreased from 945 to 833 over the last 10 years.

PART II

VALUATION RESULTS

Section 2.1

Summary Statistics

		Plan Year Beginning March 1,				
		2020	2019	2018	2017	2016
Number of Plan Participants						
Active		23	24	59	90	93
Persons with Deferred Benefits		330	339	328	329	338
Other Persons in Pay Status		<u>480</u>	<u>488</u>	<u>471</u>	<u>455</u>	<u>450</u>
Total		833	851	858	874	881
Assets						
Market Value	\$	11,563,896	\$ 12,755,961	\$ 14,923,440	\$ 16,081,031	\$ 16,341,114
Actuarial Value		11,110,061	13,260,508	15,280,470	16,757,474	18,008,669
Liabilities and Normal Cost						
Funding Method		Unit Credit	Unit Credit	Unit Credit	Unit Credit	Unit Credit
Actuarial Accrued Liability	\$	43,485,116	\$ 44,409,145	\$ 44,795,622	\$ 44,860,209	\$ 44,614,780
Normal Cost		342,248	332,124	346,893	426,053	367,448
RPA '94 Current Liability		65,992,083	66,512,799	68,994,080	66,298,502	65,039,396
Unfunded Actuarial Accrued Liability						
Unfunded Actuarial Accrued Liability	\$	32,375,055	\$ 31,148,637	\$ 29,515,152	\$ 28,102,735	\$ 26,606,111
Amortization Period (in years)		Infinite *	Infinite	Infinite	Infinite	Infinite
Contributions						
Minimum Funding Requirement	\$	27,328,448	\$ 24,525,817	\$ 20,749,697	\$ 16,671,969	\$ 12,545,755
Actual Employer Contributions		1,047,225 **	903,088	977,644	871,913	931,287
Maximum Deductible Contribution (Estimated)		82,243,117	80,844,446	82,202,655	77,117,247	74,078,320

* Anticipated plan contributions are insufficient to pay interest on the unfunded liability. The Plan is expected to be insolvent during the Plan Year Beginning March 1, 2024.

** Estimated

Section 2.2

Actuarial Accrued Liability and Current Liability as of March 1, 2020

	<u>Number</u>	<u>Actuarial Accrued Liability</u>	<u>RPA '94 Current Liability</u>
Liabilities			
Active	23	\$ 1,094,796	\$ 1,964,232 *
Inactive Vested	330	14,117,216	25,647,251
All Persons in Pay Status	<u>480</u>	<u>28,273,104</u>	<u>38,380,600</u>
Total	833	\$ 43,485,116	\$ 65,992,083
Expected Changes in Liabilities			
Expected Increase in Liability Due to Benefits Accruing During Year		\$ 342,248	\$ 376,756
Expected Disbursements During Year		\$ 3,813,480	\$ 3,813,480
Assumed Interest Rate		7.00%	2.89%
Assets and RPA '94 Funded Percentage			
Actuarial Value of Assets as of March 1, 2020			\$ 11,110,061
RPA '94 Funded Current Liability Percentage			16.8%

* Vested portion of RPA '94 Current Liability for Actives is \$1,830,826.

Section 2.3

Development of Minimum Required Contribution - Summary

	Plan Year Beginning March 1,				
	2020	2019	2018	2017	2016
1. Normal Cost	\$ 342,248	\$ 332,124	\$ 346,893	\$ 426,053	\$ 367,448
2. Net Amortization	1,607,952	2,850,977	3,275,463	3,572,983	3,660,298
3. Interest	<u>136,514</u>	<u>222,817</u>	<u>253,565</u>	<u>279,933</u>	<u>281,942</u>
4. Total Net Charges	\$ 2,086,714	\$ 3,405,918	\$ 3,875,921	\$ 4,278,969	\$ 4,309,688
5. Credit Balance / (Funding Deficiency) with Interest	\$ (25,241,734)	\$ (21,119,899)	\$ (16,873,776)	\$ (12,393,000)	\$ (8,236,067)
6. Full Funding Credit (See Section 2.5)	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
7. Minimum Required Contribution	\$ 27,328,448	\$ 24,525,817	\$ 20,749,697	\$ 16,671,969	\$ 12,545,755

Section 2.4

Development of Minimum Required Contribution - Amortization Record

		<i>Initial Amount</i>	<i>Date of First Charge or Credit</i>	<i>Remaining Period</i>	<i>Outstanding Balance Beg. of Year</i>	<i>Amortization Charge or Credit</i>
1. <u>Amortization Charges</u>						
a. Actuarial Loss	\$	375,701	3/1/2006	1.000	\$ 39,253	\$ 39,253
b. Actuarial Loss		571,181	3/1/2007	2.000	115,208	59,552
c. Actuarial Loss		406,891	3/1/2008	3.000	118,891	42,339
d. Actuarial Loss		8,766,306	3/1/2009	4.000	3,299,656	910,422
e. Actuarial Loss		71,446	3/1/2012	7.000	42,555	7,380
f. Actuarial Loss		122,848	3/1/2013	8.000	80,934	12,667
g. Actuarial Loss		89,186	3/1/2015	10.000	68,882	9,166
h. Assumption Change		8,105,147	3/1/2016	11.000	6,673,080	831,684
i. Actuarial Loss		204,540	3/1/2017	12.000	178,373	20,988
j. Actuarial Loss		207,723	3/1/2019	14.000	199,457	21,315
k. Total Charges					\$ 10,816,289	\$ 1,954,766
2. <u>Amortization Credits</u>						
a. Actuarial Gain	\$	585,570	3/1/2010	5.000	\$ 266,304	\$ 60,700
b. Assumption Change		97,750	3/1/2011	6.000	51,585	10,115
c. Actuarial Gain		357,760	3/1/2011	6.000	188,798	37,018
d. Actuarial Gain		226,585	3/1/2014	9.000	162,599	23,325
e. Method Change		1,142,139	3/1/2016	6.000	775,109	151,977
f. Actuarial Gain		138,070	3/1/2016	11.000	113,673	14,168
g. Actuarial Gain		108,566	3/1/2018	13.000	99,624	11,140
h. Actuarial Loss		373,948	3/1/2020	15.000	373,948	38,371
i. Total Credits					\$ 2,031,640	\$ 346,814
3. Credit Balance					\$ (23,590,406)	
4. Balance Test = (1) - (2) - (3)					\$ 32,375,055	
5. Unfunded Actuarial Accrued Liability					\$ 32,375,055	

Section 2.5

Development of Minimum Required Contribution - Full Funding Limitation

	ERISA Accrued Liability	RPA '94 Current Liability
1. Liability (Beginning of Year)	\$ 43,485,116	\$ 65,992,083
2. Normal Cost	\$ 342,248	\$ 376,756
3. Expected Disbursements During Year	\$ 3,813,480	\$ 3,813,480
4. Assumed Interest Rate	7.00%	2.89%
5. Projected Liability (End of Year)	\$ 42,950,585	\$ 64,418,706
6. Applicable Percentage	100%	90%
7. Assets		
a. Market Value	\$ 11,563,896	N/A
b. Actuarial Value	\$ 11,110,061	\$ 11,110,061
c. Lesser of (a) and (b)	\$ 11,110,061	\$ 11,110,061
8. Credit Balance	\$ 0	N/A
9. Assets Projected to End of Year	\$ 7,943,071	\$ 7,943,071
10. Initial Full Funding Limitation (FFL) = (5) x (6) – (9)	\$ 35,007,514	\$ 50,033,764
11. Full Funding Limitation, not less than RPA '94 FFL	\$ 50,033,764	N/A
12. Total Net Charges from Section 2.3	\$ 2,086,714	N/A
13. Full Funding Credits	\$ 0	N/A

Section 2.6

Funding Standard Account Information

		Plan Year Beginning March 1,				
		2020	2019	2018	2017	2016
<u>Charges</u>	Prior Year Funding Deficiency	\$ 23,590,406	\$ 19,738,223	\$ 15,769,884	\$ 11,582,243	\$ 7,697,259
	Normal Cost for Plan Year	342,248	332,124	346,893	426,053	367,448
	Amortization Charges	1,954,766	3,159,420	3,583,906	3,870,286	3,957,601
	Interest	1,812,119	1,626,084	1,379,048	1,111,501	841,562
	Other Charges	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total Charges	\$ 27,699,539	\$ 24,855,851	\$ 21,079,731	\$ 16,990,083	\$ 12,863,870
<u>Credits</u>	Prior Year Credit Balance	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Employer Contributions	1,047,225 *	903,088	977,644	871,913	931,287
	Amortization Credits	346,814	308,443	308,443	297,303	297,303
	Interest	60,277 *	53,914	55,421	50,983	53,037
	Full Funding Limitation Credit	0	0	0	0	0
	Other Credits	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total Credits	\$ 1,454,316 *	\$ 1,265,445	\$ 1,341,508	\$ 1,220,199	\$ 1,281,627
<u>Balance</u>	End of Year					
	Credit Balance / (Funding Deficiency)	\$ (26,245,223) *	\$ (23,590,406)	\$ (19,738,223)	\$ (15,769,884)	\$ (11,582,243)
	= Credits Less Charges					

* Estimated. Will be recalculated when amount and timing of actual contribution is known.

Section 2.7

Estimated Maximum Deductible Contribution

1.	Normal Cost for Plan Year Beginning March 1, 2020	\$	342,248
2.	Unfunded Accrued Liability as of March 1, 2020, not less than 0	\$	32,375,055
3.	Ten Year Amortization of Unfunded Accrued Liability	\$	4,307,925
4.	Interest on (1) and (3) to End of Year	\$	325,512
5.	Limitation Under Section 404(a)(1)(A) (iii) of Internal Revenue Code = (1) + (3) + (4)	\$	4,975,685
6.	Minimum Required Contribution	\$	27,328,448
7.	Greater of (5) and (6)	\$	27,328,448
8.	Full Funding Limitation (See Section 2.8)	\$	50,033,764
9.	Excess of 140% of Current Liability over Assets	\$	82,243,117
10.	Limitation on Maximum Deductible Contribution for Plan Year Beginning March 1, 2020 = Lesser of (7) and (8), but not less than (9)	\$	82,243,117

Section 2.8

Estimated Maximum Deductible Contribution - Full Funding Limitation

	<u>ERISA Accrued Liability</u>	<u>RPA '94 Current Liability</u>
1. Liability (Beginning of Year)	\$ 43,485,116	\$ 65,992,083
2. Normal Cost	\$ 342,248	\$ 376,756
3. Expected Disbursements During Year	\$ 3,813,480	\$ 3,813,480
4. Assumed Interest Rate	7.00%	2.89%
5. Projected Liability (End of Year)	\$ 42,950,585	\$ 64,418,706
6. Applicable Percentage	100%	90%
7. Assets		
a. Market Value	\$ 11,563,896	N/A
b. Actuarial Value	\$ 11,110,061	\$ 11,110,061
c. Lesser of (a) and (b)	\$ 11,110,061	\$ 11,110,061
8. Assets Projected to End of Year	\$ 7,943,071	\$ 7,943,071
9. Full Funding Limitation (FFL) = (5) x (6) – (8)	\$ 35,007,514	\$ 50,033,764
10. IRC Section 404 Full Funding Limitation = Greater of ERISA FFL and RPA '94 FFL	\$ 50,033,764	

Section 2.9

Development of Actuarial Gain/(Loss)

	Plan Year Beginning March 1,				
	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
1. Unfunded accrued liability at beginning of year	\$ 31,148,637	\$ 29,515,152	\$ 28,102,735	\$ 26,606,111	\$ 18,986,435
2. Normal Cost for Plan Year	\$ 332,124	\$ 346,893	\$ 426,053	\$ 367,448	\$ 325,594
3. Interest on (1) and (2) to end of year	\$ 2,203,653	\$ 2,090,343	\$ 1,997,015	\$ 1,888,149	\$ 1,448,402
4. Contributions for Plan Year	\$ 903,088	\$ 977,644	\$ 871,913	\$ 931,287	\$ 944,276
5. Interest on (4) to end of Plan Year	\$ 32,323	\$ 33,830	\$ 30,172	\$ 32,226	\$ 34,982
6. Expected unfunded accrued liability at end of year = (1) + (2) + (3) – (4) – (5)	\$ 32,749,003	\$ 30,940,914	\$ 29,623,718	\$ 27,898,195	\$ 19,781,173
7. Unfunded accrued liability as of year end (before any changes in (9) below)	\$ 32,375,055	\$ 31,148,637	\$ 29,515,152	\$ 28,102,735	\$ 19,643,103
8. Gain/(Loss) = (6) – (7)	\$ 373,948	\$ (207,723)	\$ 108,566	\$ (204,540)	\$ 138,070
9. Change in unfunded accrued liability due to:					
a. Assumption Change	\$ 0	\$ 0	\$ 0	\$ 0	\$ 8,105,147
b. Plan Change	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
c. Method Change	\$ 0	\$ 0	\$ 0	\$ 0	\$ (1,142,139)
10. Unfunded accrued liability as of year end = (7) + (9a) + (9b) + (9c)	\$ 32,375,055	\$ 31,148,637	\$ 29,515,152	\$ 28,102,735	\$ 26,606,111

Section 2.10

Presentation of ASC 960 Disclosures

Present Value of Accumulated Benefits	As of March 1,				
	2020	2019	2018	2017	2016
1. Vested Accumulated Benefits					
a. Persons in Pay Status	\$ 28,273,104	\$ 29,213,253	\$ 28,699,445	\$ 27,402,220	\$ 27,620,102
b. Persons with Deferred Benefits	14,117,216	14,190,920	12,839,915	12,320,642	12,344,028
c. Active Participants	<u>1,032,099</u>	<u>949,883</u>	<u>3,221,032</u>	<u>5,074,394</u>	<u>4,561,853</u>
d. Total	\$ 43,422,419	\$ 44,354,056	\$ 44,760,392	\$ 44,797,256	\$ 44,525,983
2. Present Value of Non-Vested Accumulated Benefits	\$ 62,697	\$ 55,089	\$ 35,230	\$ 62,953	\$ 88,797
3. Total Present Value of Accumulated Benefits	\$ 43,485,116	\$ 44,409,145	\$ 44,795,622	\$ 44,860,209	\$ 44,614,780
4. Present Value of Administration Expenses*	\$ 587,809	\$ 600,187	\$ 605,258	N/A	N/A
5. Market Value of Assets	\$ 11,563,896	\$ 12,755,961	\$ 14,923,440	\$ 16,081,031	\$ 16,341,114

Reconciliation of Present Value of Accumulated Benefits

1. Present Value of Accumulated Benefits as of Plan Year Begin	\$ 44,409,145	\$ 44,795,622	\$ 44,860,209	\$ 44,614,780
2. Changes During the Year due to:				
a. Benefits Accumulated During the Year**	\$ (743,736)	\$ (198,781)	\$ 11,198	\$ 291,159
b. Decrease in the Discount Period	2,997,420	3,023,308	3,031,461	3,015,878
c. Benefits Paid	(3,177,713)	(3,211,004)	(3,107,246)	(3,061,608)
d. Plan Amendment	0	0	0	0
e. Assumption Change	0	0	0	0
f. Plan Mergers	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
g. Total Change	\$ (924,029)	\$ (386,477)	\$ (64,587)	\$ 245,429
3. Present Value of Accumulated Benefits as of Plan Year End	\$ 43,485,116	\$ 44,409,145	\$ 44,795,622	\$ 44,860,209

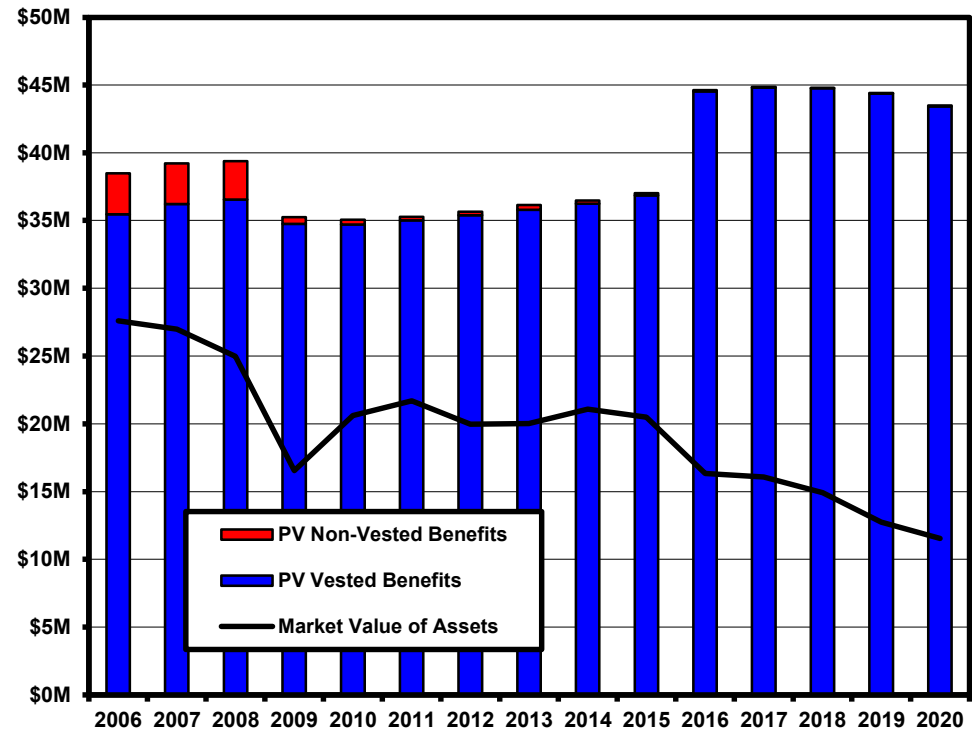
* Modeled after the method described in ERISA 4044.

** Includes the effects of actuarial experience gains and losses.

Section 2.11

Historical ASC 960 Information

<u>March 1,</u>	<u>Present Value of</u>		<u>Market</u>
	<u>Vested</u>	<u>Accum.</u>	<u>Value</u>
	<u>Benefits</u>	<u>Benefits</u>	<u>of Assets</u>
2020	\$ 43,422,419	\$ 43,485,116	\$ 11,563,896
2019	44,354,056	44,409,145	12,755,961
2018	44,760,392	44,795,622	14,923,440
2017	44,797,256	44,860,209	16,081,031
2016	44,525,983	44,614,780	16,341,114
2015	36,859,981	37,018,897	20,500,389
2014	36,242,558	36,470,553	21,087,477
2013	35,795,217	36,140,274	20,024,515
2012	35,381,973	35,648,518	19,980,920
2011	35,002,482	35,274,109	21,706,699
2010	34,692,959	35,064,221	20,602,063
2009	34,745,221	35,239,999	16,538,574
2008	36,536,409	39,372,333	24,970,884
2007	36,206,815	39,205,217	26,983,049
2006	35,468,477	38,478,367	27,618,337



Note: The discount rate used for valuation purposes was changed from 7.50% to 7.00%, first effective March 1, 2016.

PART III

WITHDRAWAL LIABILITY INFORMATION

Section 3.1

Withdrawal Liability Summary

		As of February 28/29,				
		<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
1. Present Value of Vested Benefits						
a. Active Participants	\$	1,177,530	\$ 1,095,037	\$ 3,685,225	\$ 5,798,972	\$ 5,247,554
b. Persons with Deferred Benefits		16,136,711	16,286,561	14,792,467	14,226,588	14,312,676
c. Retirees and Beneficiaries		<u>30,315,951</u>	<u>31,366,038</u>	<u>30,813,735</u>	<u>29,416,128</u>	<u>29,685,150</u>
d. Total	\$	47,630,192	\$ 48,747,636	\$ 49,291,427	\$ 49,441,688	\$ 49,245,380
2. Market Value of Assets	\$	11,563,896	\$ 12,755,961	\$ 14,923,440	\$ 16,081,031	\$ 16,341,114
3. Unfunded Vested Benefit Liability (UVB)	\$	36,066,296	\$ 35,991,675	\$ 34,367,987	\$ 33,360,657	\$ 32,904,266
4. Unamortized Balance of Affected Benefits	\$	1,202,970	\$ 1,398,470	\$ 1,581,181	\$ 1,751,938	\$ 1,911,525

The above value of UVB is used in the determination of withdrawal liability. The plan of benefits for the February 29, 2020 calculation is the same as those described in Section 7.1 except as noted below:

1. Benefits which are first effective March 1, 2020 or later are not reflected in the UVB as of February 29, 2020.
2. Death benefits unrelated to pension benefits and disability benefits other than those in pay status are not included in the UVB.

The actuarial basis for the February 29, 2020 calculation is the same as used in the March 1, 2020 actuarial valuation of the plan as described in Section 6.2 except that (1) a 6.00% discount rate was used for the determination of the UVB and (2) as indicated, the market value of assets is used in the determination of UVB.

Withdrawal liabilities are determined using the method described in Section 10 of the Plan document.

The Unamortized Balance of Affected Benefits is based on our current understanding of the PBGC's Technical Update 10-3 (Simplified Methods for Applying the Requirement to Disregard Benefit Reductions in Determining Withdrawal Liability). The initial balance of Affected Benefits was \$2,645,173 as of February 28, 2010.

Section 3.2

Basic Withdrawal Liability Pools

Unfunded				Unfunded			
Year	Vested	Basic Pools		Year	Vested	Basic Pools	
Ended	Benefit	Original	Unamortized	Ended	Benefit	Original	Unamortized
February 28/29,	Liability	Balance	Balance	February 28/29,	Liability	Balance	Balance
2001	\$ 0	\$ 0	\$ 0	2011	\$ 16,722,698	\$ 3,544,666	\$ 1,949,566
2002	4,025,729	4,025,729	402,573	2012	18,806,880	3,174,279	1,904,568
2003	9,085,191	5,260,748	789,112	2013	19,180,859	1,622,790	1,054,814
2004	5,866,372	(2,754,495)	(550,899)	2014	18,586,029	735,121	514,585
2005	6,905,562	1,365,789	341,447	2015	19,749,402	2,530,080	1,897,560
2006	7,850,140	1,339,467	401,840	2016	32,904,266	14,648,075	11,718,460
2007	9,223,766	1,835,488	642,421	2017	33,360,657	2,682,006	2,279,705
2008	11,565,525	2,895,395	1,158,158	2018	34,367,987	3,367,045	3,030,340
2009	18,206,647	7,339,528	3,302,788	2019	35,991,675	4,151,755	3,944,167
2010	14,090,896	(3,050,369)	(1,525,184)	2020	36,066,296	2,810,276	2,810,276

Section 3.3

Reallocated Withdrawal Liability Pools

Year Ended February 28/29,	Reallocated Pools		Year Ended February 28/29,	Reallocated Pools	
	Original Balance	Unamortized Balance		Original Balance	Unamortized Balance
2001	\$ 0	\$ 0	2011	\$ 20,578	\$ 11,318
2002	0	0	2012	42,036	25,222
2003	30,193	4,529	2013	1,382,034	898,322
2004	39,863	7,973	2014	123,034	86,124
2005	72,229	18,057	2015	0	0
2006	164,890	49,467	2016	0	0
2007	0	0	2017	0	0
2008	0	0	2018	5,794,238	5,214,814
2009	0	0	2019	0	0
2010	0	0	2020	0	0

Section 3.4

Withdrawn Employer Contributions

<u>6-year Period</u>		<u>Contributions for Employers that Withdrew Prior to 6-year Period End</u>						
<u>Beginning</u>	<u>Ending</u>							<u>6-Year</u>
<u>March 1</u>	<u>February 28/29,</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Total</u>
1995	2001	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1996	2002	\$ 8,556	\$ 7,314	\$ 12,169	\$ 9,235	\$ 4,176	\$ 0	\$ 41,450
1997	2003	25,116	29,215	26,317	20,385	13,698	4,080	118,811
1998	2004	29,215	26,317	20,385	13,698	4,080	0	93,695
1999	2005	38,289	33,590	22,938	13,005	7,565	3,142	118,529
2000	2006	53,317	45,044	34,850	30,928	26,975	1,488	192,602
2001	2007	45,044	34,850	30,928	26,975	1,488	0	139,285
2002	2008	34,850	30,928	26,975	1,488	0	0	94,241
2003	2009	30,928	26,975	1,488	0	0	0	59,391
2004	2010	26,975	1,488	0	0	0	0	28,463
2005	2011	1,488	0	0	0	0	0	1,488
2006	2012	63,144	62,450	63,840	55,461	57,564	15,029	317,488
2007	2013	279,802	247,487	254,163	272,894	273,628	284,284	1,612,258
2008	2014	247,487	254,163	272,894	273,628	284,284	0	1,332,456
2009	2015	372,576	388,974	360,972	419,220	116,050	30,400	1,688,192
2010	2016	388,974	360,972	419,220	116,050	30,400	0	1,315,616
2011	2017	433,530	489,648	183,293	92,382	59,371	44,907	1,303,131
2012	2018	680,722	428,824	268,407	200,898	175,328	63,763	1,817,942
2013	2019	508,231	360,257	289,142	258,838	137,824	0	1,554,292
2014	2020	360,257	289,142	258,838	137,824	0	0	1,046,061

Section 3.5

Contribution History

Year Ended February 28/29,	Total Plan Contribs**	6-Year Contribution Totals			Year Ended February 28/29,	Total Plan Contribs**	6-Year Contribution Totals		
		Total Plan	Withdrawn Employers	Adjusted Plan***			Total Plan	Withdrawn Employers	Adjusted Plan ***
1997	\$ 785,463	n/a	n/a	n/a	2009	\$ 850,551	* \$ 4,920,672	\$ 59,391	\$ 4,861,281
1998	767,998	n/a	n/a	n/a	2010	783,507	4,871,183	28,463	4,842,720
1999	838,061	n/a	n/a	n/a	2011	796,227	4,877,994	1,488	4,876,506
2000	850,154	n/a	n/a	n/a	2012	788,908	4,890,318	317,488	4,572,830
2001	894,268	n/a	n/a	n/a	2013	865,351	4,963,124	1,612,258	3,350,866
2002	882,718	\$ 5,018,661	\$ 41,450	\$ 4,977,211	2014	636,941	4,721,485	1,332,456	3,389,029
2003	839,277	5,072,475	118,811	4,953,664	2015	440,833	4,311,767	1,688,192	2,623,575
2004	832,996	5,137,473	93,695	5,043,778	2016	384,995	3,913,255	1,315,616	2,597,639
2005	789,416	5,088,828	118,529	4,970,299	2017	359,172	3,476,200	1,303,131	2,173,069
2006	776,584	5,015,259	192,602	4,822,657	2018	231,384	2,918,676	1,817,942	1,100,734
2007	792,545	4,913,536	139,285	4,774,251	2019	101,060	2,154,385	1,554,292	600,093
2008	878,580	4,909,398	94,241	4,815,157	2020	100,979	1,618,423	1,046,061	572,362

* Excluding mandatory Critical Status surcharges in 2008.

** Total Plan contributions excluding withdrawal liability payments (if any) and post-February 28, 2015 Rehabilitation Plan contribution rate increases.

*** Total Plan contributions during the 6-year period ending with the February 28/29 of the year shown, adjusted for withdrawn employer contributions.

Section 3.6

Individual Employer Withdrawal Liability Estimate Worksheet
for Employers who Withdraw During the Plan Year Ending February 28, 2021

Year Ended February 28/29	Unamortized Balances of Withdrawal Liability Pools			Unamortized Balance of Affected Benefits	Contributions During 6-Year Period Ending February 28/29,		Allocated Withdrawal Liability
	Basic Pools	Reallocated Pools	Total		Adjusted Plan Total	Individual Employer	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h) = [(d) + (e)] x [(g) ÷ (f)]
2001	\$ 0	\$ 0	\$ 0	n/a	n/a		
2002	402,573	0	402,573	n/a	\$ 4,977,211		
2003	789,112	4,529	793,641	n/a	4,953,664		
2004	(550,899)	7,973	(542,926)	n/a	5,043,778		
2005	341,447	18,057	359,504	n/a	4,970,299		
2006	401,840	49,467	451,308	n/a	4,822,657		
2007	642,421	0	642,421	n/a	4,774,251		
2008	1,158,158	0	1,158,159	n/a	4,815,157		
2009	3,302,788	0	3,302,788	n/a	4,861,281		
2010	(1,525,184)	0	(1,525,184)	n/a	4,842,720		
2011	1,949,566	11,318	1,960,884	n/a	4,876,506		
2012	1,904,568	25,222	1,929,789	n/a	4,572,830		
2013	1,054,814	898,322	1,953,136	n/a	3,350,866		
2014	514,585	86,124	600,708	n/a	3,389,029		
2015	1,897,560	0	1,897,560	n/a	2,623,575		
2016	11,718,460	0	11,718,460	n/a	2,597,639		
2017	2,279,705	0	2,279,705	n/a	2,173,069		
2018	3,030,340	5,214,814	8,245,155	n/a	1,100,734		
2019	3,944,167	0	3,944,167	n/a	600,093		
2020	2,810,276	0	2,810,276	\$ 1,202,970	572,362		
1. Gross Liability (= Sum of Column (h))							
2. De minimis Amount = 0.75% of UVB but not greater than \$50,000							50,000
3. Deductible = \$100,000 + (2) - (1), but not greater than (2) nor less than \$0							
4. ESTIMATED Net Withdrawal Liability = (1) - (3), but not less than \$0							

PART IV

ASSET INFORMATION

Section 4.1

Historical Asset Information

Plan Year Beginning March 1	Beginning of Year Market Value of Assets	Change in Market Value of Assets During Plan Year				End of Year Market Value of Assets	End of Year Actuarial Value of Assets
		Contributions	Net Investment Return	Benefit Payments	Expenses		
2019	\$ 12,755,961	\$ 903,088	\$ 1,383,475	\$ 3,177,713	\$ 300,915	\$ 11,563,896	\$ 11,110,061
2018	14,923,440	977,644	353,647	3,211,004	287,766	12,755,961	13,260,508
2017	16,081,031	871,913	1,381,744	3,107,246	304,002	14,923,440	15,280,470
2016	16,341,114	931,287	2,145,520	3,061,608	275,282	16,081,031	16,757,474
2015	20,500,389	944,276	(1,858,856)	3,018,836	225,859	16,341,114	18,008,669
2014	21,087,477	910,386	1,685,699	2,974,389	208,784	20,500,389	18,032,462
2013	20,024,515	960,745	3,213,465	2,895,652	215,596	21,087,477	18,393,195
2012	19,980,920	964,408	2,103,032	2,825,911	197,934	20,024,515	18,559,263
2011	21,706,699	825,816	368,998	2,719,765	200,828	19,980,920	18,911,034
2010	20,602,063	796,227	3,182,481	2,708,039	166,033	21,706,699	19,364,590
2009	16,538,574	783,507	6,127,774	2,701,275	146,517	20,602,063	19,475,276
2008	24,970,884	874,494	(6,472,225)	2,677,334	157,245	16,538,574	19,846,288
2007	26,983,049	878,580	(93,917)	2,682,030	114,798	24,970,884	28,413,645
2006	27,618,337	792,545	1,322,153	2,612,512	137,474	26,983,049	29,083,185
2005	27,728,013	776,584	1,752,233	2,515,434	123,059	27,618,337	29,432,961

Section 4.2

Summary of Plan Assets*

	As of March 1,				
	2020	2019	2018	2017	2016
Common Stocks	\$ 5,594,666	\$ 6,008,377	\$ 7,795,181	\$ 9,273,978	\$ 9,405,058
Corporate Notes and Bonds	1,798,552	2,090,099	2,535,765	2,359,235	3,150,720
U.S. Government Agencies' Notes and Bonds	3,658,999	3,863,936	4,053,273	3,775,335	2,937,614
Mutual Funds (Registered Investment Cos.)	0	0	0	0	175,965
Money Market Fund	184,890	447,593	207,032	282,976	320,143
Cash Accounts	280,295	316,903	301,851	356,588	306,643
Receivables and Pre-Payments	50,661	62,512	65,224	76,845	88,886
Liabilities	<u>(4,167)</u>	<u>(33,459)</u>	<u>(34,886)</u>	<u>(43,926)</u>	<u>(43,915)</u>
Net Assets Available for Benefits	\$ 11,563,896	\$ 12,755,961	\$ 14,923,440	\$ 16,081,031	\$ 16,341,114

*Results may differ from audited financial reports. Withdrawal liability payments for upcoming Plan Year are treated as income when assessed for audit purposes and as income when received for actuarial purposes.

Section 4.3

Changes in Assets from Prior Valuation*

	Plan Year Beginning March 1,				
	2019	2018	2017	2016	2015
Market Value of Assets at Beginning of Year	\$ 12,755,961	\$ 14,923,440	\$ 16,081,031	\$ 16,341,114	\$ 20,500,389
Income During Year					
Employer contributions	\$ 903,088	\$ 977,644	\$ 871,913	\$ 931,287	\$ 944,276
Investment income					
Interest and dividends	\$ 245,286	\$ 277,119	\$ 267,247	\$ 320,331	\$ 362,491
Recognized and unrecognized gains (losses)	1,215,574	174,471	1,218,489	1,937,550	(2,086,271)
Investment expenses	(80,162)	(98,850)	(109,592)	(115,072)	(135,076)
Total net investment income	\$ 1,380,698	\$ 352,740	\$ 1,376,144	\$ 2,142,809	\$ (1,858,856)
Other	\$ 2,777	\$ 907	\$ 5,600	\$ 2,711	\$ 0
Total Income	\$ 2,286,563	\$ 1,331,291	\$ 2,253,657	\$ 3,076,807	\$ (914,580)
Disbursements					
Benefits	\$ 3,177,713	\$ 3,211,004	\$ 3,107,246	\$ 3,061,608	\$ 3,018,836
Administrative Expenses	300,915	287,766	304,002	275,282	225,859
Other	0	0	0	0	0
Total Disbursements	\$ 3,478,628	\$ 3,498,770	\$ 3,411,248	\$ 3,336,890	\$ 3,244,695
Market Value of Assets at End of Year	\$ 11,563,896	\$ 12,755,961	\$ 14,923,440	\$ 16,081,031	\$ 16,341,114

*Results may differ from audited financial reports. Withdrawal liability payments for upcoming Plan Year are treated as income when assessed for audit purposes and as income when received for actuarial purposes.

Section 4.4

Development of Actuarial Value of Assets

1.	Market Value of Assets as of March 1, 2019		\$	12,755,961
2.	Contributions during year		\$	903,088
3.	Disbursements during year		\$	3,478,628
4.	Expected investment income at valuation rate of 7.00% per annum, net of investment expense		\$	805,547
5.	Expected Market Value of Assets as of February 29, 2020		\$	10,985,968
6.	Actual Market Value of Assets as of February 29, 2020		\$	11,563,896
7.	Gain/(Loss) during year		\$	577,928
8.	Unrecognized Prior Gain/(Loss)			
	<u>Year Ending</u> <u>February 28/29</u>	<u>Original</u> <u>Gain/(Loss)</u>	<u>Unrecognized</u> <u>Percentage</u>	<u>Unrecognized</u> <u>Amount</u>
	2020	\$ 577,928	80%	\$ 462,342
	2019	(604,438)	60%	(362,663)
	2018	343,274	40%	137,310
	2017	1,084,232	20%	216,846
	Total			\$ 453,835
9.	Preliminary Actuarial Value of Assets as of March 1, 2020 = (6) - (8)		\$	11,110,061
10.	Actuarial Value of Assets as of March 1, 2020 = (9) but not more than 120% of (6) nor less than 80% of (6)		\$	11,110,061
11.	Actuarial Value of Assets as a Percentage of Market Value of Assets			96.08%

Section 4.5

Investment Rates of Return

Plan Year Beginning March 1,					
	2019	2018	2017	2016	2015
Market Value of Assets					
Market Value as of Beginning of Year	\$ 12,755,961	\$ 14,923,440	\$ 16,081,031	\$ 16,341,114	\$ 20,500,389
Employer Contributions During Year	\$ 903,088	\$ 977,644	\$ 871,913	\$ 931,287	\$ 944,276
Disbursements During Year	\$ 3,478,628	\$ 3,498,770	\$ 3,411,248	\$ 3,336,890	\$ 3,244,695
Market Value as of End of Year	\$ 11,563,896	\$ 12,755,961	\$ 14,923,440	\$ 16,081,031	\$ 16,341,114
Investment Income (Net of Inv. Exp.)	\$ 1,383,475	\$ 353,647	\$ 1,381,744	\$ 2,145,520	\$ (1,858,856)
Average Value of Assets	\$ 11,468,191	\$ 13,662,877	\$ 14,811,364	\$ 15,138,313	\$ 19,350,180
Rate of Return During Year	12.06%	2.59%	9.33%	14.17%	-9.61%
Actuarial Value of Assets					
Actuarial Value as of Beginning of Year	\$ 13,260,508	\$ 15,280,470	\$ 16,757,474	\$ 18,008,669	\$ 18,032,462
Employer Contributions During Year	\$ 903,088	\$ 977,644	\$ 871,913	\$ 931,287	\$ 944,276
Method Change	\$ 0	\$ 0	\$ 0	\$ 0	\$ (1,142,139)
Disbursements During Year	\$ 3,478,628	\$ 3,498,770	\$ 3,411,248	\$ 3,336,890	\$ 3,244,695
Actuarial Value as of End of Year	\$ 11,110,061	\$ 13,260,508	\$ 15,280,470	\$ 16,757,474	\$ 18,008,669
Investment Income (Net of Inv. Exp.)	\$ 425,093	\$ 501,164	\$ 1,062,331	\$ 1,154,408	\$ 1,134,487
Average Value of Assets	\$ 11,972,738	\$ 14,019,907	\$ 15,487,807	\$ 16,805,868	\$ 16,882,253
Rate of Return During Year	3.55%	3.57%	6.86%	6.87%	6.72%

PART V

DEMOGRAPHIC INFORMATION

Section 5.1

Historical Participant Information

<u>March 1</u>	<u>Actives</u>	<u>Terminated w/ Deferred Benefits</u>	<u>All Other Persons in Pay Status</u>	<u>Total</u>	<u>Ratio of Inactives to Actives</u>
2020	23	330	480	833	3521.7%
2019	24	339	488	851	3445.8%
2018	59	328	471	858	1354.2%
2017	90	329	455	874	871.1%
2016	93	338	450	881	847.3%
2015	108	345	448	901	734.3%
2014	153	327	423	903	490.2%
2013	240	307	398	945	293.8%
2012	252	304	400	956	279.4%
2011	263	290	392	945	259.3%
2010	287	282	387	956	233.1%
2009	325	285	380	990	204.6%
2008	334	285	371	990	196.4%
2007	342	282	367	991	189.8%
2006	337	282	355	974	189.0%

Section 5.2

Active Participant Age/Service Distribution as of March 1, 2020

Attained Age	Years of Credited Service										Totals
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	1	0	0	0	0	0	0	0	0	1
25 to 29	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	1	0	0	0	0	0	0	0	0	1
35 to 39	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	0	0	0	0	0	0
45 to 49	0	0	1	0	0	0	0	0	0	0	1
50 to 54	0	1	0	0	0	0	1	0	0	0	2
55 to 59	0	2	3	1	1	2	1	2	1	0	13
60 to 64	0	1	0	2	1	0	0	1	0	0	5
65 to 69	0	0	0	0	0	0	0	0	0	0	0
70 & Up	0	0	0	0	0	0	0	0	0	0	0
Total	0	6	4	3	2	2	2	3	1	0	23

Average Age: 55.5

Average Service: 15.1

Section 5.3

Inactive Participant Information as of March 1, 2020

Terminated with Deferred Benefits					Retirees and Beneficiaries				
Age Last Birthday	Count	Total Annual Benefit	Average Annual Benefit		Age Last Birthday	Count	Total Annual Benefit	Average Annual Benefit	
< 40	3	\$ 7,879	\$ 2,626		< 55	2	\$ 11,136	\$ 5,568	
40 – 44	16	62,049	3,878		55 – 59	5	32,976	6,595	
45 – 49	38	180,682	4,755		60 – 64	41	169,426	4,132	
50 – 54	74	455,505	6,155		65 – 69	94	690,884	7,350	
55 – 59	93	677,398	7,284		70 – 74	117	826,624	7,065	
60 – 64	80	631,557	7,894		75 – 79	97	696,945	7,185	
65 – 69	18	135,877	7,549		80 – 84	80	547,558	6,844	
> 70	8	28,773	3,597		> 85	44	291,484	6,625	
Total	330	\$ 2,179,719	\$ 6,605		Total	480	\$ 3,267,034	\$ 6,806	

Section 5.4

Reconciliation of Participants

	<u>Actives</u>	<u>Terminated With Deferred Benefits</u>	<u>Retirees and Beneficiaries</u>	<u>Total</u>
Counts as of March 1, 2019	24	339	488	851
Terminated without Vesting	0	0	0	0
Terminated with Vesting	(1)	1	0	0
Retired	0	(7)	7	0
Died	(1)	(3)	(22)	(26)
New Beneficiaries / Alt. Payees	0	0	6	6
Rehired	0	0	0	0
New Entrants	1	0	0	1
Temporary Benefit Expired	0	0	0	0
Data Corrections	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>
Net Change	<u>(1)</u>	<u>(9)</u>	<u>(8)</u>	<u>(18)</u>
Counts as of March 1, 2020	23	330	480	833

PART VI

ACTUARIAL BASIS

Section 6.1

Actuarial Methods

Actuarial Cost Method

The Actuarial Cost Method for determining the Actuarial Accrued Liability and Normal Cost is the Unit Credit Cost Method and is the same method used in the prior valuation.

Asset Valuation Method

Twenty percent of the gain or loss on the market value of assets for each Plan Year is recognized over the five succeeding years. The actuarial value determined above will never be permitted to be less than 80% nor more than 120% of the market value of assets. This is the same method as used in the prior valuation.

Section 6.2

Actuarial Assumptions

Interest Rate (Net of Investment Expenses)

For RPA '94 Current Liability 2.89% per year

For Withdrawal Liability 6.00% per year

For All Other Purposes 7.00% per year

Administrative Expenses

The prior year's administrative expenses rounded to the nearest \$5,000.
The 2020 assumption is \$300,000 as of the beginning of the year.

Mortality -- Healthy lives

RP-2014 Blue Collar Generational Mortality with MP-2016 improvement scale starting from 2014.

-- Disabled lives

RP-2014 Disabled Retiree Generational Mortality with MP-2016 improvement scale starting from 2014.

-- RPA 94 current liability

IRS prescribed generational mortality table for 2020 valuation dates are set forth in IRS Notice 2018-02

Retirement Age

Eligible active and terminated vested participants are assumed to retire in accordance with the rates shown:

<u>Age</u>	<u>Retirement Rates</u>
55 – 61	0.05
62	0.30
63 – 64	0.10
65	1.00

Section 6.2

Actuarial Assumptions (Continued)

Withdrawal Rates Varying by Age as Illustrated:

<u>Age</u>	<u>Sample Rates</u>
25	0.099
40	0.028
55	0.000

Disability Rates Varying by Age as Illustrated:

<u>Age</u>	<u>Sample Rates</u>
30	0.002
40	0.004
50	0.009
60	0.019

Service for Future Benefit Accruals

Employees of the remaining employer are assumed to work 50 weeks.

Form of Payment

Single participants will elect a Single Life Annuity. Married participants will elect a 50% J&S Annuity which is the actuarial equivalent of the Single Life Annuity.

Percentage Married

80%

Spouse Age

Spouses of male/female participants are 3 years younger/older than the participants.

PART VII

SUMMARY OF PLAN PROVISIONS

Section 7.1

Plan Provisions

The following is a brief summary of principal plan provisions as in effect on the valuation date. Plan provisions which apply infrequently or to a limited group of participants may be omitted from this summary. The plan document will govern if there is any discrepancy with this summary.

Effective Date March 1, 1958

Participation A person initially becomes an Active Participant when an employer starts to make contributions on his behalf.

Definitions

Plan Year Twelve-month period beginning each March 1.

Covered Employment Employment with respect to which contributions are made or due to be made to the fund.

Contribution Hours Hours worked in Covered Employment or other hours on behalf of which contributions are required to be made to the fund.

Vesting Service The sum of (a) Past Benefit Service prior to March 1, 1976, (b) plan years prior to March 1, 1976 where a minimum of 0.50 Future Benefit Service was earned, and (c) plan years since March 1, 1976 with a minimum of 750 hours of service.

Benefit Service The sum of Future Benefit Service and Past Benefit Service.

Section 7.1

Plan Provisions (Continued)

Future Benefit Service

Future Benefit Service is equal to the sum of (a), (b) and (c) below:

- (a) Service Before March 1, 1973: Benefit service equal to hours of service in a plan year, divided by 1,850 and rounded to the nearest 1/100th, but no more than one year.
- (b) Service on or after March 1, 1973 and before March 1, 1976: Benefit service equal to hours of service in a plan year, divided by 1,700 and rounded to the nearest 1/100th, but no more than one year.
- (c) Service on or after March 1, 1976: Benefit service equal to the participant's hours of service in a plan year, divided by 1,680 and rounded to the nearest 1/100th, but no more than one year.

Past Benefit Service

Collectively bargained employees on March 11, 1957 were granted past benefit service for each full year of membership in the International Printing and Graphic Communications Union before March 11, 1958, up to 15 years.

Collectively bargained employees on March 11, 1959 covered under this plan were granted past benefit service for each full year of union membership before March 11, 1960, up to 15 years.

Accrued Monthly Pension

The accrual rates below apply to participants who have never incurred a break in service. A \$200 minimum monthly benefit is payable for participants, excluding those who were (i) hired after August 1, 2011 and (ii) eligible for a reciprocal pension.

<u>Period</u>	<u>Accrual Rates During Period</u>
Prior to 3/1/2005	\$45.00 per year of Benefit Service
3/1/2005 through 2/28/2007	\$40.00 per year of Benefit Service
3/1/2007 – 2/28/2011	\$35.00 per year of Benefit Service
3/1/2011 – 2/29/2012	\$32.00 per year of Benefit Service
3/1/2012 and later	\$35.00 per year of Benefit Service

Section 7.1

Plan Provisions **(Continued)**

Normal Form of Benefit For Participants who retire on or after April 1, 2009, a Single Life Annuity for unmarried Participants and a 50% Joint and Survivor benefit for married Participants. Participants who retired before April 1, 2009 received fully subsidized 5 C&C for unmarried Participants; fully subsidized 50% Joint and Survivor benefit for married Participants.

Normal Retirement Pension

Eligibility Age requirement: 65
Service requirement: 5 years of Vesting Service.

Benefit The Accrued Monthly Pension payable without reduction.

Early Retirement Pension

Eligibility Age requirement: 55
Service requirement: 5 years of Vesting Service.

Benefit For Participants who retire on or after April 1, 2009, the Accrued Monthly Pension as of early retirement date which is the actuarial equivalent of the benefit payable at the Participant's Normal Retirement Date.

Participants who retired before April 1, 2009 received the Accrued Monthly Pension as of early retirement date reduced by 0.25% for each of the first 36 months that payment precedes age 62, plus 0.4% for each additional month that payment precedes age 62. Employees with age plus service greater than or equal to 80 received the portion of their benefit earned prior to May 1, 2005 with no reduction for early retirement.

Section 7.1

Plan Provisions **(Continued)**

Disability Retirement

Eligibility The Disability Retirement Plan provisions are only applicable to those Participants whose disability benefit commencement dates were on or before April 1, 2009.

Vested Termination

Eligibility Age requirement: None
Service requirement: 5 years of Vesting Service.

*Earliest
Commencement Age* 55

Benefit For Participants who retire on or after April 1, 2009, the actuarial equivalent of the Accrued Monthly Pension payable at Normal Retirement Date.

Participants who retired before April 1, 2009 received the Accrued Monthly Pension reduced by 0.5% for the first 60 months by which the commencement date precedes the NRD, plus 0.4% for each additional month by which the commencement date precedes the NRD. The Rule of 80 did not apply to Vested Terminated Retirees.

Pre-Retirement Death Benefit

Eligibility Age requirement: None
Service requirement: 5 years of Vesting Service

Benefit A monthly benefit payable to the surviving spouse of for life, equal to the spouse's portion of a Joint and 50% Survivor Annuity calculated as if the Participant had retired on the later of (1) the date of his/her death and (2) his/her earliest retirement date, and payable on that date.

Section 7.1

Plan Provisions **(Continued)**

Other Benefits

Pop-Up Benefit

In the event a person who retires with a Normal, Early or Disability Retirement Pension in the form of a Joint and Survivor Annuity with pop-up is predeceased by his or her spouse, the pension payable to such participant will be increased to the amount that would have been payable in the single life form of pension.

Contributions

Employers contribute \$111.50 per week worked for each covered employee for the Plan Year beginning March 1, 2020. Historical and future weekly contribution rates are outlined below:

<u>March 1,</u>	<u>Weekly</u> <u>Contribution</u>	<u>March 1,</u>	<u>Weekly</u> <u>Contribution</u>	<u>March 1,</u>	<u>Weekly</u> <u>Contribution</u>
2007	\$52.50	2012	\$71.50	2017	\$ 96.50
2008	\$52.50	2013	\$76.50	2018	\$101.50
2009	\$57.00	2014	\$81.50	2019	\$106.50
2010	\$61.50	2015	\$86.50	2020	\$111.50
2011	\$66.50	2016	\$91.50		

Optional Forms of Payment

The Plan offers the following benefit options:

- Life Annuity,
- Joint and 50% survivor benefit,
- Joint and 75% survivor benefit,
- Joint and 100% survivor benefit,
- Joint and 50% survivor benefit with pop-up, and
- Joint and 100% survivor benefit with pop-up.

Effective April 1, 2009 each optional form of payment is actuarially equivalent to the life annuity.

Actuarial Equivalence

Unless specified contrary in the Plan, factors for actuarial equivalent benefits shall be based on the 2008 Applicable Mortality Table set forth in Revenue Ruling 2007-67 and 6% interest.