Automotive Industries Pension Plan Checklist Item #6

## Does the application describe the assumptions used, including the new entrant profile, the total contribution base units, and the average contribution rates?

#### See section 3.01.

The application filed on behalf of the Automotive Industries Pension Plan includes a Supplemental Report to the Actuarial Status Certification as of January 1, 2016 under IRC Section 432 for Checklist Item #5. The Supplemental Report, attached as Document No. 5.2, sets forth the Actuarial Assumptions and Methodology used by the Fund Actuary in the determination that the Pension Plan is in critical and declining status. Exhibits II and III of the supplemental report includes the total contribution base units, average contribution rate and new entrant profile.

Unless otherwise noted, the above certification and supplemental report are based on the actuarial assumptions and plan of benefits from the actuarial valuation certificate from the Actuarial Valuation and Review as of January 1, 2015. The actuarial valuation is attached as Document No. 6.1.



### Automotive Industries Pension Plan

Actuarial Valuation and Review as of January 1, 2015

This report has been prepared at the request of the Board of Trustees to assist in administering the Fund and meeting filing requirements of federal government agencies. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes. Copyright © 2015 by The Segal Group, Inc. All rights reserved.

## \* Segal Consulting

100 Montgomery Street, SUITE 500 San Francisco, CA 94104 T 415.263.8200 www.segalco.com

May 29, 2015

Board of Trustees Automotive Industries Pension Plan Alameda, California

Dear Trustees:

We are pleased to submit the Actuarial Valuation and Review as of January 1, 2015. It establishes the funding requirements for the current year and analyzes the preceding year's experience. It also summarizes the actuarial data and includes the actuarial information that is required to be filed with Form 5500 to federal government agencies.

The census information upon which our calculations were based was prepared by the Fund Office, under the direction of Michael Schumacher. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Paul C. Poon, ASA, MAAA, Enrolled Actuary.

We look forward to reviewing this report with you at your next meeting and to answering any questions you may have.

Sincerely,

Segal Consulting, a Member of the Segal Group

Redacted by the U.S. Department of the Treasury By: N J. Tim Biddle Senior Vice President JB/hy Bill Boyle cc: Kara Dantono William Craig Dobbs

John O'Donnell

Kimberly Hancock, Esq. Philip M. Miller, Esq. Jessica Roster, CPA Michael Schumacher

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#### INTRODUCTION

There are several ways of evaluating funding adequacy for a pension plan. In monitoring the Plan's financial position, the Trustees should keep in mind all of these concepts.

#### > Funding Standard Account

The ERISA Funding Standard Account is charged with the normal cost and amortization of changes in the unfunded actuarial accrued liability measured as of each valuation date. The accumulation of actual contributions made in excess of the minimum required contributions is called the credit balance. If actual contributions fall short of the minimum required contribution on a cumulative basis, a funding deficiency has occurred.

#### > PPA'06

The Pension Protection Act of 2006 (PPA'06) calls on plan sponsors to actively monitor the projected Funding Standard Account credit balance, the funded percentage (the ratio of the actuarial value of assets to the present value of benefits earned to date) and cash flow sufficiency. Based on these measures, plans are then categorized as critical (*Red Zone*), endangered (*Yellow Zone*), or neither (*Green Zone*).

The Multiemployer Pension Reform Act of 2014 (MEPRA), among other things, makes permanent these provisions of PPA'06.

#### > Solvency Projections

Pension plan funding anticipates that, over the long term, both contributions and investment earnings will be needed to cover benefit payments and expenses. To the extent that contributions are less than benefit payments, investment earnings and fund assets will be needed to cover the shortfall. In some situations, a plan may be faced with insufficient assets to cover its current obligations and will need assistance from the Pension Benefit Guaranty Corporation (PBGC). MEPRA provides additional options for plans facing insolvency.

The current year's actuarial valuation results follow.

#### IMPORTANT INFORMATION ABOUT ACTUARIAL VALUATIONS

An actuarial valuation is a budgeting tool with respect to the financing of future uncertain obligations of a pension plan. As such, it will never forecast the precise future contribution requirements or the precise future stream of benefit payments. In any event, it is an estimated forecast – the actual cost of the plan will be determined by the benefits and expenses paid, not by the actuarial valuation.

In order to prepare a valuation, Segal Consulting ("Segal") relies on a number of input items. These include:

- Plan of benefits Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. For example, a plan may require the award of a Social Security disability pension as a condition for receiving a disability pension from the plan. If so, changes in the Social Security law or administration may change the plan's costs without any change in the terms of the plan itself. It is important for the Trustees to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
- Participant data An actuarial valuation for a plan is based on data provided to the actuary by the plan. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. For most plans, it is not possible or desirable to take a snapshot of the actual work force on the valuation date. In any event, the actuarial valuation is based on a future work force that is presumed to be the same as the active population included in the valuation, but in fact, employment varies from year to year, sometimes quite considerably. It is not necessary to have perfect data for an actuarial valuation: the valuation is an estimated forecast, not a prediction. The uncertainties in other factors are such that even perfect data does not produce a "perfect" result. Notwithstanding the above, it is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
- Assets Part of the cost of a plan will be paid from existing assets the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the auditor. Some plans include assets, such as private equity holdings, real estate, or hedge funds, that are not subject to valuation by reference to transactions in the marketplace. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
- > Actuarial assumptions In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year, as well as forecasts of the plan's benefits for each of those events. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions the actuary selects within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results and will have no impact on the actual cost of the plan. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.



Given the above, the user of Segal's actuarial valuation (or other actuarial calculations) needs to keep the following in mind:

- > The actuarial valuation is prepared for use by the Trustees. It includes information for compliance with federal filing requirements and for the plan's auditor. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial snapshot is a measurement at a specific date it is not a prediction of a plan's future financial condition. We have not been retained to perform and did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- Critical events for a plan include, but are not limited to, decisions about changes in benefits and contributions. The basis for such decisions needs to consider many factors such as the risk of changes in employment levels and investment losses, not just the current valuation results.
- > ERISA requires a plan's enrolled actuary to provide a statement for inclusion in the plan's annual report disclosing any event or trend that the actuary has not taken into account, if, to the best of the actuary's knowledge, such an event or trend may require a material increase in plan costs or required contribution rates. If the Trustees are currently aware of any event that was not considered in this valuation and that may materially increase the cost of the Plan, they must advise Segal, so that we can evaluate it and take it into account.
- > A certification of "zone" status under PPA'06 is a separate document from the actuarial valuation.
- Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Trustees should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- > Segal's report shall be deemed to be final and accepted by the Trustees upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

As Segal Consulting has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

The actuarial valuation report as of January 1, 2015 is based on financial and demographic information as of that date. Changes subsequent to that date are not reflected and could affect future actuarial costs of the Plan. We are prepared to work with the Trustees to analyze the effects of any subsequent developments.

#### A. CHANGES SINCE LAST VALUATION

- 1. On December 16, 2014, the Multiemployer Pension Reform Act of 2014 (MEPRA) was enacted. MEPRA expanded and clarified various zone status rules, made changes to withdrawal liability rules for plans in the red or yellow zones, enabled suspension of benefits for deeply troubled (critical and declining) plans, and granted PBGC flexibility in facilitating plan mergers and approving partitions. This report does not discuss the implications of MEPRA for this plan.
- 2. The rate of return on the market value of plan assets was 6.2% for the 2014 plan year. The rate of return on the actuarial value of assets was 10.7% as a result of the asset valuation method. The current assumed long-term rate of return on investments is 7.25%. Given the low fixed income interest rate environments, target asset allocation and expectations of future investment returns for various asset classes, we will continue to monitor the Plan's actual and anticipated investment returns.
- 3. This plan was initially classified as critical (Red Zone) for 2008 and the Trustees have adopted a Rehabilitation Plan. Under the Rehabilitation Plan. new collective bargaining agreements negotiated after April 27, 2008 will include the maximum benefit reductions allowed by law. These reductions include the removal of all early retirement subsidies, joint and survivor subsidies, disability pensions, the 36-payment pre-retirement death benefit and all benefit options besides the single life annuity, QJSA and QOSA. The Rehabilitation Plan also includes supplemental offbenefit contributions to the plan beginning January 1, 2013. Benefit reductions are recognized in this valuation for all active participants. As detailed in Subsection 1B, the plan was certified to be in critical and declining status under MEPRA for 2015.

#### B. 2015 ACTUARIAL STATUS (ZONE) CERTIFICATION

 The 2015 certification, previously issued, was based on the liabilities calculated in the 2014 actuarial valuation, projected to December 31, 2014, and estimated asset information as of December 31, 2014. This Plan was classified as critical (*Red Zone*) and declining because the funded percentage was 61.1%, there was a projected deficiency in the Funding Standard Account within one year, and there was a projected insolvency within 20 years.

#### C. FUNDED PERCENTAGE AND FUNDING STANDARD ACCOUNT

- Based on this January 1, 2015 actuarial valuation, the funded percentage as of that date is 61.1%. This will be reported on the 2015 Annual Funding Notice to be provided within 120 days after the end of this plan year.
- The funding deficiency in the Funding Standard Account as of December 31, 2014 was \$332,583,760, an increase of \$108,841,411 from the prior year. PPA'06 requires plan sponsors to monitor the projected credit balance/funding deficiency.
- 3. We are available to work with the Trustees to develop credit balance projections.

#### **D.** SOLVENCY PROJECTIONS

 Based on this valuation, the current value of assets plus projected investment earnings and future contribution income will exceed projected benefit payments and administrative expenses for at least 15 years (through December 31, 2029), assuming experience is consistent with the January 1, 2015 assumptions. This is the same as projected in the January 1, 2014 actuarial valuation. Chart 20 shows the projected market value of assets until the expected insolvency year. The plan of benefits and assumptions used for this projection are those used for the 2015 zone certification with some exceptions, as shown in Section 2G. If requested by the Trustees, we can perform additional projections of the financial status of the Plan.

#### **SECTION 1:** Actuarial Valuation Summary as of January 1, 2015 for the Automotive Industries Pension Plan

#### SUMMARY OF KEY VALUATION RESULTS

	2015	2014
Certified Zone Status	Critical and Declining	Critical
Demographic Data:		
Number of active participants	4,026	3,979
Number of inactive participants with vested rights	10,470	10,602
Number of retired participants and beneficiaries	11,300	11,377
Assets:		
Market value of assets (MVA)	\$1,297,668,067	\$1,327,287,980
Actuarial value of assets (AVA)	1,199,472,038	1,185,912,766
AVA as a percent of MVA	92.4%	89.3%
Cash Flow:		
Projected employer contributions (excluding withdrawal liability payments)	\$21,140,860	\$20,126,527
Actual contributions		28,305,650 <sup>(1)</sup>
Projected benefit payments and expenses	141.923,742	140,892,673
Insolvency projected in Plan Year beginning <sup>(2)</sup>	2030	2030
Statutory Funding Information:		
Minimum required contribution	\$473,831,388	\$361,681,320
Maximum deductible contribution	3,221,905,003	3,173,300,382
Annual Funding Notice percentage	61.1%	60.7%
Funding Standard Account deficiency projected in Plan Year	Yes	Yes
Cost Elements on a Funding Standard Account Basis:		
Normal cost, including administrative expenses	\$6,195,281	\$6,126,874
Actuarial accrued liability	1,989,735,216	1,982,679,153
Unfunded actuarial accrued liability (based on AVA)	790,263,178	796,766,387

 (1) Includes \$6,788,280 in withdrawal liability payments and \$33,666 in liquidated damages.
 (2) Includes 5% annual contribution rate increases through 2019 under the Rehabilitation Plan. Does not reflect any future withdrawal liability payments.

#### SECTION 1: Actuarial Valuation Summary as of January 1, 2015 for the Automotive Industries Pension Plan

#### **COMPARISON OF FUNDED PERCENTAGES**

	2015		Funded Percentages as of January 1*	
	Liability	Assets	2015	2014
1. Present Value of Future Benefits	\$2,007,936,237	\$1,199,472,038	59.7%	59.3%
2. Actuarial Accrued Liability	1,989,735,216	1,199,472,038	60.3%	59.8%
3. PPA'06 Liability and Annual Funding Notice	1,962,292,229	1,199,472,038	61.1%	60.7%
4. Accumulated Benefits Liability	1,962,292,229	1,297,668,067	66.1%	67.9%
5. Current Liability	3,133,469,524	1,297,668,067	41.4%	43.0%

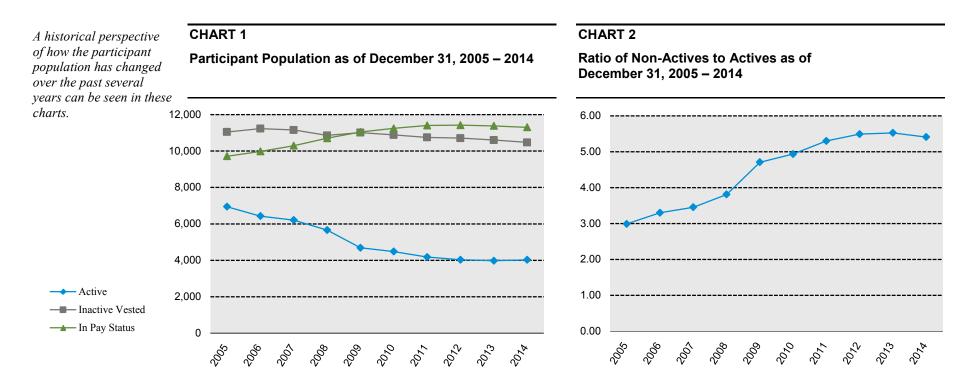
#### Notes:

- 1. Includes the value of benefits earned through the valuation date (accrued benefits) plus the value of benefits projected to be earned in the future for current participants. Used to develop the actuarial accrued liability, based on long-term funding investment return assumption of 7.25% and the actuarial value of assets. The funded percentage using market value of assets is 64.6% for 2015 and 66.3% for 2014.
- 2. Represents the portion of present value of future benefits allocated by the actuarial cost method to years prior to the valuation date. Used in determining Scheduled Cost, based on long-term funding investment return assumption of 7.25% and the actuarial value of assets. The funded percentage using market value of assets is 65.2% for 2015 and 66.9% for 2014.
- 3. Measures present value of accrued benefits using the current participant census and financial data. As defined by the Pension Protection Act of 2006, based on long-term funding investment return assumption of 7.25% and the actuarial value of assets.
- 4. Provides present value of accrued benefits for disclosure in the audited financial statements, based on long-term funding investment return assumption of 7.25%, and the market value of assets.
- 5. Used to determine maximum tax-deductible contributions and is reported on Schedule MB to Form 5500. Based on the present value of accrued benefits, using a prescribed mortality table and investment return assumption of 3.51% for 2015 and 3.64% for 2014, and the market value of assets. The funded percentage is also shown on the Schedule MB if it is less than 70%.
- \*Disclosure: These measurements are not necessarily appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligation or the need for or the amount of future contributions.

#### A. PARTICIPANT DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered participants, including 4,026 active participants, 10,470 inactive vested participants, and 11,300 pensioners, beneficiaries and suspensions, as of December 31, 2014.

This section presents a summary of significant statistical data on these participant groups. More detailed information for this valuation year and the preceding year can be found in Section 3, Exhibits A and B. Chart 2 shows the number of non-active participants relative to the number of active participants, one indication of the Plan's maturity. A higher ratio shows a more mature plan.



 $\star$  Segal Consulting

#### **Active Participants**

Pension plan costs are affected by the age and years of Credited Service of active participants. In this year's valuation, there were 4,026 active participants with an average age of 45.1 and average years of Credited Service of 12.4. This compares to 45.3 and 12.5, respectively, for the 3,979 active participants in the prior year.

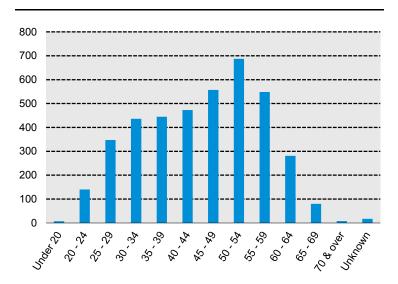
Among active participants, there were 17 with unknown age. The actuarial calculations were adjusted for missing information by assuming that it was the same as information provided for other active participants with similar known characteristics.

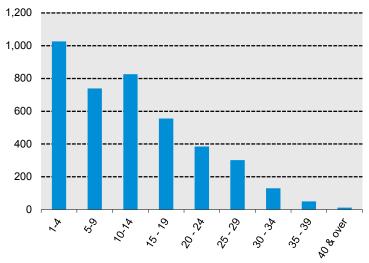
#### CHART 3

Distribution of Active Participants by Age as of December 31, 2014



Distribution of Active Participants by Years of Credited Service as of December 31, 2014





These charts show a distribution of active participants by age and by years of Credited Service.

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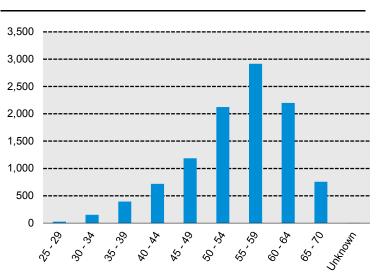
#### **Inactive Vested Participants**

Participants who leave the coverage of the Plan after satisfying the requirements for a deferred pension or an immediate pension but elect to defer commencement are considered to be "inactive vested" and are included in the pension plan cost. In this year's valuation, there were 10,470 inactive vested participants with an average age of 54.4 and average monthly benefit of \$874. This compares to 53.9 and \$864, respectively, for the 10,602 inactive vested participants in the prior year. No cost is included for other inactive participants, even though some may return to active employment before incurring a permanent break in service.

#### CHART 5

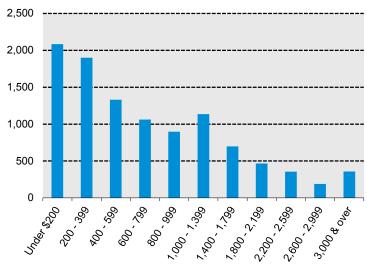
These charts show a distribution of inactive vested participants by age and by monthly amount.

Distribution of Inactive Vested Participants by Age as of December 31, 2014



#### CHART 6

Distribution of Inactive Vested Participants by Monthly Amount as of December 31, 2014





#### **Pensioners and Beneficiaries**

During the fiscal year ended December 31, 2014, there were 247 pensions awarded, as detailed in this chart. The average monthly pension awarded, after adjustment for optional forms of payment, was \$872. The chart below presents both the number and average monthly amount of pensions awarded in each of the years shown, by type and in total.

#### CHART 7

#### Pension Awards: 2005 – 2014

	Total Normal Early Disability		Total		Normal		bility	Unreduc	ed Early	Rule	of 85	
Year Ended December 31	Number	Average Amount	Number	Average Amount	Number	Average Amount	Number	Average Amount	Number	Average Amount	Number	Average Amount
2005	555	\$1,331	116	\$786	194	\$989	21	\$2,184	145	\$987	79	\$3,377
2006	511	1,255	120	690	177	920	27	2,445	124	957	63	3,346
2007	541	1,177	131	544	177	991	21	1,852	148	952	64	3,283
2008	678	1,360	134	687	276	1,102	29	1,882	133	1,015	106	3,172
2009	577	1,287	197	594	221	967	26	2,044	57	1,130	76	3,871
2010	463	1,105	169	518	181	727	17	1,736	35	1,801	61	3,281
2011	462	1,105	146	547	224	625	16	2,397	19	2,056	57	3,611
2012	311	1,157	212	534	42	1,627	6	2,822	17	2,012	34	3,742
2013	288	875	230	510	21	1,410	9	1,422	6	1,936	22	3,663
2014	247	872	203	672	33	1,268	4	1,593	1	1,101	6	4,940

As of this year's valuation date, 8,837 pensioners and 2,410 beneficiaries were receiving total monthly benefits of \$11,029,028. For comparison, in the previous year, there were 8,922 pensioners and 2,385 beneficiaries receiving monthly benefits of \$10,998,330. There were 53 suspended pensioners in this valuation compared with 70 in the prior year.

These charts show the distribution of the current pensioners based on their age and monthly amount, by type of pension.

Rule of 85

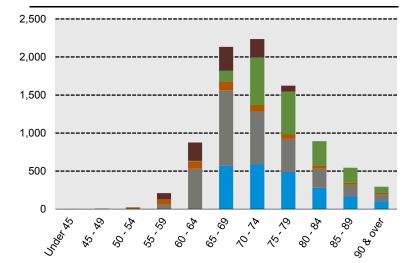
Disability

■Early ■Normal

■ Unreduced Early

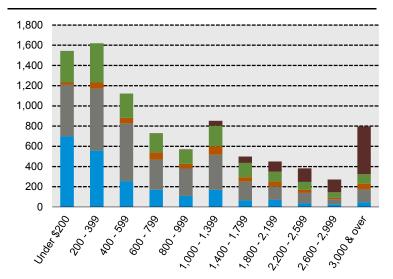
#### CHART 8

Distribution of Pensioners by Type and by Age as of December 31, 2014



#### CHART 9

Distribution of Pensioners by Type and by Monthly Amount as of December 31, 2014



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In Chart 10, additions to the pension rolls include new pensions awarded and suspended pensioners who have been reinstated. Terminations include pensioners who died or were suspended during the prior plan year. The change in average age and average amounts of pensioners in payment status is shown as the Fund matures over time.

This chart shows a year-by-year history of changes in the pensioner group.

#### CHART 10

Progress of Pension Rolls: 2005 – 2014

Year Ended			In P	ayment Status at Ye	ar End
December 31	Additions	Terminations	Number	Average Age	Average Amount
2005	565	328	7,801	70.9	\$931
2006	519	317	8,003	70.9	968
2007	544	352	8,195	71.0	997
2008	720	347	8,568	70.8	1,039
2009	589	361	8,796	71.0	1,070
2010	478	346	8,928	71.2	1,086
2011	473	370	9,031	71.4	1,101
2012	323	361	8,993	71.9	1,118
2013	307	378	8,922	72.4	1,123
2014	269	354	8,837	72.9	1,131

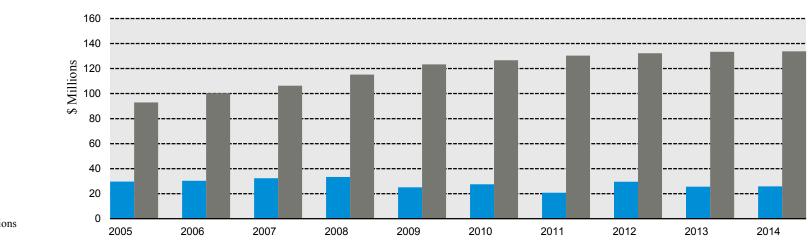
#### **B.** FINANCIAL INFORMATION

Pension plan funding anticipates that, over the long term, both contributions (less administrative expenses) and investment earnings (less investment fees) will be needed to cover benefit payments. Pension plan assets change as a result of the net impact of these income and expense components. A summary of these transactions for the valuation year is presented in Section 3, Exhibit C. Contributions net of administrative expenses were \$25,886,020 for the year. Benefit payments during the year totaled \$133,798,195 and are projected to increase to approximately \$168 million ten years from now. To the extent that future contributions are projected to be less than benefit payments, investment earnings or fund assets will be needed to cover the shortfall.

#### CHART 11

This chart depicts the net employer contributions and benefits paid over the last ten years.

Comparison of Net Employer Contributions and Benefits Paid for Years Ended December 31, 2005 – 2014



Benefits PaidNet Contributions

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Because the Plan is funded by negotiated contribution rates, it is desirable to have a level and predictable pension plan cost from one year to the next. The Trustees have approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full effect of market fluctuations is not recognized in a single year. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized gains and losses and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Because the Plan is projected to become insolvent and the insolvency is based on the market value of assets, we recommend that the market value of assets be used for valuation purposes beginning with the January 1, 2016 actuarial valuation.

# This chart shows the determination of the actuarial value of assets as of December 31, 2014.

#### CHART 12

Determination of Actuarial Value of Assets as of December 31, 2014

1	Market value of assets, December 31, 2014			\$1,297,668,067
		Original	Unrecognized	
2	Calculation of unrecognized return	Amount*	Return**	
	(a) Year ended December 31, 2014	-\$3,774,597	-\$3,019,677	
	(b) Year ended December 31, 2013	151,803,947	91,082,368	
	(c) Year ended December 31, 2012	65,755,166	26,302,066	
	(d) Year ended December 31, 2011	-80,843,640	-16,168,728	
	(e) Year ended December 31, 2010	64,082,062	0	
	(f) Total unrecognized return			98,196,029
3	Preliminary actuarial value: (1) - (2f)			1,199,472,038
Ļ	Adjustment to be within 20% corridor			0
5	Final actuarial value of assets as of December 31, 2014: (3) + (4)			<u>\$1,199,472,038</u>
5	Actuarial value as a percentage of market value: $(5) \div (1)$			92.4%
7	Amount deferred for future recognition: (1) - (5)			\$98,196,029

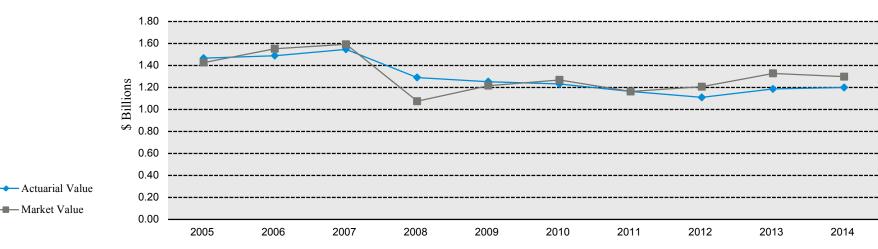
\* Total return on market value basis minus expected return on actuarial basis using the net investment return assumption

\*\* Recognition at 20% per year over 5 years

Both the actuarial value and the market value of assets are representations of the Fund's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial value is significant because it is subtracted from the Plan's total actuarial accrued liability to determine the portion that is not funded and is used to determine the PPA'06 funded percentage. Amortization of the unfunded portion is an important element in the contribution requirements of the Plan as detailed in Subsection E.

#### CHART 13

This chart shows how the actuarial value of assets and the market value of assets have changed from 2005 to 2014.



Actuarial Value of Assets vs. Market Value of Assets as of December 31, 2005 - 2014

#### C. EMPLOYMENT EXPERIENCE

The Trustees are in the best position to select the appropriate employment level assumption to use for funding the Plan. Total months of contributions, number of actives and their average months of contributions are shown in Chart 14.

Certifications under PPA'06 and MEPRA include a projection of future contributions. Any projection of industry activity, including future employment and contribution levels, must be based on reasonable information for the projection period provided by the Trustees. The industry activity assumption used for the 2015 actuarial certification was that the total number of contributory months would decline by 2% per year for the next five years, and remain level thereafter.

The employment level assumption is 11.5 months for each active participant. The experience in recent years has shown a trend of per capita months at about this level. We look to the Trustees for guidance as to whether this continues to be reasonable for the long term.

#### This chart provides a history of the various measures of employment.

#### CHART 14

#### Employment History: 2005 - 2014

	Total Months of Contributions		Active Participants		-	Months ibutions
Year Ended December 31	Number	Percent Change	Number	Percent Change	Number	Percent Change
2005	79,452	-8.2%	6,946	-6.9%	11.4	-1.7%
2006	75,015	-5.6%	6,426	-7.5%	11.7	2.6%
2007	71,943	-4.1%	6,211	-3.3%	11.6	-0.9%
2008	65,874	-8.4%	5,661	-8.9%	11.6	0.0%
2009	55,385	-15.9%	4,687	-17.2%	11.8	1.7%
2010	52,392	-5.4%	4,484	-4.3%	11.7	-0.8%
2011	48,940	-6.6%	4,180	-6.8%	11.7	0.0%
2012	46,993	-4.0%	4,031	-3.6%	11.7	0.0%
2013	46,296	-1.5%	3,979	-1.3%	11.6	-0.9%
2014	46,771	1.0%	4,026	1.2%	11.6	0.0%
			Most recent five	-year average months:	11.7	
			Ten-year averag	e months:	11.6	

#### **D.** ACTUARIAL EXPERIENCE

To calculate the cost requirements and solvency projections of the Plan, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions and, to the extent that there are differences in that year, the contribution requirement is adjusted. If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long run, experience will return to that originally assumed. For contribution requirements to remain stable, assumptions should approximate experience.

When compared to the projected actuarial accrued liability of \$1,987,142,180 as of December 31, 2014, the net experience variation other than investment experience was not significant. On the following pages is a discussion of the major components of the actuarial experience.

# This chart provides a summary of the prior year's actuarial experience.

#### CHART 15

#### Actuarial Experience for the Year Ended December 31, 2014

1	Net gain from investments*	\$39,404,588
2	Net gain from administrative expenses	599,412
3	Net gain from other experience	<u>1,738,284</u>
4	Net experience gain: $(1) + (2) + (3)$	<u>\$41,742,284</u>

\* Details in Chart 16.

#### **Investment Rate of Return**

Because earnings on investments significantly affect the cost of the Plan, an assumption is made about the rate of return on plan assets. The rate of return is investment income net of investment expenses, expressed as a percentage of the average actuarial value of assets during the year.

Investment income for the purposes of the actuarial valuation consists of projected investment income at the actuarially assumed rate (net of investment expenses), and the adjustment for market value changes.

This chart shows the portion of the gain due to investment experience.

#### CHART 16

#### Actuarial Value Investment Experience for the Year Ended December 31, 2014

1	Net investment income	\$121,471,447
2	Average actuarial value of assets	1,131,956,679
3	Rate of return: $(1) \div (2)$	10.73%
4	Assumed rate of return	7.25%
5	Expected net investment income: (2) x (4)	\$82,066,859
6	Actuarial gain: $(1) - (5)$	<u>\$39,404,588</u>

For your information, the following chart shows the rate of return on an actuarial basis compared to the market value investment return for the last 20 years, including five-year, ten-year and 20-year averages.

As indicated below, the experience in the past few years has shown both higher and lower rates of return than the assumption. Overall, interest rates have declined substantially in the current economic environment. Based upon this experience, the current asset allocation, and future expectations, we have maintained the assumed rate of return of 7.25%. However, we will continue to monitor the plan's actual and anticipated investment returns and may revise our assumed rate of return in a future actuarial valuation, if warranted.

#### CHART 17

	Actuarial Value Investment Return		Market Value Investment Return			Actuarial Value Investment Return		Market Value Investment Return	
Year Ended December 31	Amount	Percent*	Amount	Percent	Year Ended December 31	Amount	Percent*	Amount	Percent
1995	\$135,029,500	21.08%	\$190,537,929	28.60%	2005	\$53,952,656	3.74%	\$74,528,689	5.39%
1996	112,854,729	14.95%	121,975,932	14.60%	2006	92,832,022	6.49%	195,157,758	14.03%
1997	187,327,378	22.24%	205,092,727	21.88%	2007	131,895,915	9.08%	114,762,992	7.58%
1998	195,373,452	19.54%	213,521,275	19.19%	2008	-175,242,416	-11.64%	-435,550,927	-28.08%
1999	81,780,749	7.05%	74,274,648	5.75%	2009	60,972,513	4.91%	239,476,303	23.35%
2000	177,747,357	14.75%	54,220,234	4.08%	2010	77,802,636	6.47%	151,288,010	12.97%
2001	79,973,253	5.87%	-9,069,183	-0.67%	2011	42,140,746	3.58%	4,437,230	0.37%
2002	45,393,706	3.19%	-89,236,183	-6.68%	2012	48,750,735	4.38%	146,396,089	13.17%
2003	61,192,070	4.28%	184,138,629	15.25%	2013	183,962,564	17.42%	228,350,850	19.81%
2004	60,565,457	4.20%	100,886,814	7.52%	2014	121,471,447	10.73%	78,292,262	6.15%
					Total	\$1,775,776,469		\$1,843,482,078	
				Mos	st recent five-year	average return:	8.35%		10.29%
				Mc	st recent ten-year	average return:	5.01%		6.24%
					20-year	average return:	7.39%		7.62%

#### Investment Return – Actuarial Value vs. Market Value: 1995 - 2014

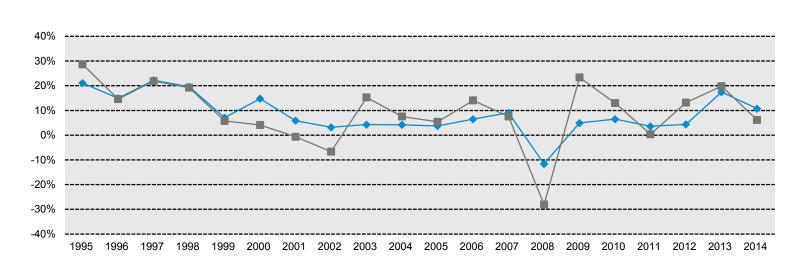
*Note: Each year's yield is weighted by the average asset value in that year.* 

\*The investment return for 2000 includes the effect of a change in the method for determining the Actuarial Value of Assets.

Subsection B described the actuarial asset valuation method that gradually recognizes fluctuations in the market value rate of return. The goal of this is to stabilize the actuarial rate of return and to produce more level pension plan costs.

#### CHART 18

This chart illustrates how this method has actually worked over the past twenty years. The actuarial return for year 2000 reflects a change in asset method.



# Market Value and Actuarial Rates of Return for Years Ended December 31, 1995 - 2014

----- Actuarial Value

- Market Value

#### **Administrative Expenses**

Administrative expenses declined from \$2,939,650 in 2013 to \$2,419,630 in 2014, which resulted in a gain of \$599,412. We have maintained the assumption of \$3,000,000 for the current year. However, we will continue to monitor the plan's expenses and will lower the assumption for future valuations, if expenses continue at the current level.

#### **Mortality Experience**

Mortality experience (more or fewer than expected deaths) yields actuarial gains or losses. The average number of deaths for nondisabled pensioners over the past seven years was 311 per year compared to 299 projected deaths per year. The assumed mortality rates for disabled pensioners were updated effective January 1, 2014. The number of deaths for disabled pensioners over the past year was 25 compared to 26 projected deaths. We will continue to monitor the mortality experience and the margin for future mortality improvement.

#### **Other Experience**

There are other differences between projected and actual experience that appear when a new valuation is compared with projections from the previous valuation. These include:

- > the extent of turnover among the participants, and
- > retirement experience (earlier or later than projected).

The net gain from mortality and other experience amounted to \$1,738,284 for the last plan year, which is 0.1% of the projected actuarial accrued liability.

#### E. SUMMARY OF CONTRIBUTION REQUIREMENTS

#### **Changes Since Last Valuation**

The actuarial assumptions and plan of benefits are unchanged from the prior valuation.

The average contribution rate for benefit accruals decreased slightly from \$398.95 per month in 2014 to \$398.43 per month in 2015. After reflecting the three years of 5% increases effective January 1, 2015 under the Default Schedule, the projected total contribution rate for 2015 is \$461.23 per month. The 5% increases do not count for benefit accruals.

#### Contributions

ERISA imposes a minimum funding standard that requires the Plan to maintain a Funding Standard Account. Contributions meet the legal requirement on a cumulative basis if that account shows no deficiency. The Funding Standard Account for the prior Plan Year is shown in Section 3, Exhibit F.

Employers who contribute to defined benefit pension plans are also subject to maximum deductible contribution limitations prescribed by the IRS. For the development of the maximum deductible contribution amount, see Section 3, Exhibit G. The employment level assumptions from the 2015 zone certification estimates 45,836 contributory months for 2015. Based on the average total contribution rate of \$461.23, the contributions projected for the year beginning January 1, 2015 are \$21,140,860 as shown in Chart 19. Contributions for the year beginning January 1, 2015 are projected to be less than the maximum allowable deduction level including the current funding deficiency. (See Section 4, Exhibit IV for the development of the minimum required contribution.)

#### **Funding Standard Account**

On December 31, 2014, the Funding Standard Account had a funding deficiency of \$332,583,760, as shown on the 2014 Schedule MB. For a plan that is in critical status under PPA '06, employers will generally not be penalized if a funding deficiency develops, provided the parties fulfill their obligations in accordance with the Rehabilitation Plan developed by the Trustees and the negotiated bargaining agreements reflect that Rehabilitation Plan.

We are available to work with the Trustees to develop credit balance projections.

This chart summarizes the contribution information for the valuation year.

#### CHART 19

Contribution Requirements vs. Contributions Projected for Year Beginning January 1, 2015

ERISA minimum required contribution	\$473,831,388
Projected contributions <sup>(1)</sup>	21,140,860
Maximum deductible contribution	3,221,905,003

<sup>(1)</sup>Does not include any withdrawal liability payments.

#### F. PENSION PROTECTION ACT OF 2006 (PPA'06)

PPA'06 calls on trustees to actively monitor their plans' financial prospects to identify emerging funding challenges so they can be addressed effectively. Trustees are required to review formal projections of the financial status of their plans at least annually

#### 2015 Actuarial Status Certification

The actuarial certification of plan status under PPA'06 is required not later than the 90th day of the plan year.

The 2015 certification was based on the liabilities calculated in the 2014 actuarial valuation, adjusted for subsequent events and projected to December 31, 2014, and estimated asset information as of December 31, 2014. In addition, the Trustees provided an industry activity assumption that the total number of contributory months would decline by 2% per year for five years, and remain level thereafter. This Plan was classified as critical and declining because the funded percentage was 61.1%, there was a projected deficiency in the Funding Standard Account within one year, and there was a projected insolvency within 20 years.

#### **Rehabilitation Plan**

This plan was first categorized as in critical status in 2008. The Trustees adopted a Rehabilitation Plan to enable the plan to cease being in critical status by the end of the Rehabilitation Period. Under the Rehabilitation Plan, new collective bargaining agreements negotiated on or after April 28, 2008 will include the maximum benefit reductions allowed by law. These reductions include the removal of all early retirement subsidies, joint and survivor subsidies, disability pensions, the 36-payment pre-retirement death benefit and all benefit options besides the single life annuity, QJSA or QOSA. The Rehabilitation Plan also includes supplemental off-benefit contributions to the plan beginning January 1, 2013.

The Trustees elected under the Worker, Retiree and Employer Recovery Act of 2008 (WRERA) to freeze the Zone Status for 2009 at the level it was assigned for 2008, (i.e., critical). As a result, an update to the Rehabilitation Plan was not required in the 2009 Plan Year. The Trustees also elected under WRERA to extend the Rehabilitation Period by three additional years.

Due to the adverse experience, the Trustees have determined that they could not make any reasonable updates to the original Rehabilitation Plan to enable expected emergence from critical status. As a result, the Rehabilitation Plan was restated in 2012 for the Trustees' decision to forestall plan insolvency. Working toward that goal, the Trustees have eliminated early retirement benefits for inactive participants and have reduced the supplemental off-benefit contributions to encourage continued plan participation.

#### 2016 Actuarial Status Certification

Based on the assumptions and methods employed for this 2015 valuation, this plan will likely be categorized as in critical and declining status for 2016. The actual status for the 2016 Plan Year will involve the following:

- > Trustee elections under MEPRA,
- > Updated asset information,
- > Trustee input on industry activity, and
- Projections of benefit liabilities that recognize adopted plan changes, changes in collectively bargained contribution rates and other significant events.

#### G. SOLVENCY PROJECTION

The Plan is operating under a Rehabilitation Plan that was amended on March 8, 2011 with an intent to forestall insolvency. Once the fund's assets are exhausted, PBGC financial assistance will be needed to continue payment of Plan benefits at the reduced PBGC guaranteed benefit level. Accordingly, this report does not contain a long-term "scheduled cost" measure that the Trustees could use to evaluate whether benefit levels are sustainable given negotiated contributions. Instead, this section provides information about the Plan's projected insolvency based on the Rehabilitation Plan.

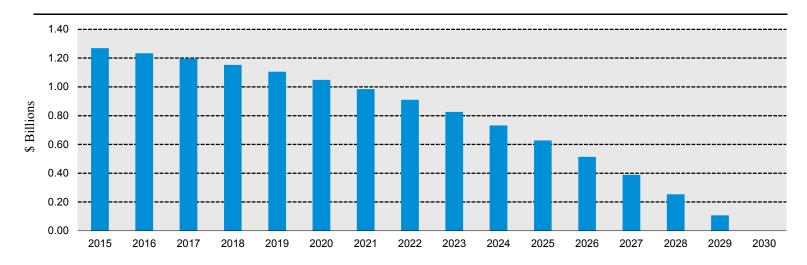
Based on this valuation, Chart 20 illustrates that assets are projected to be exhausted in 2030, the same as in the prior year's valuation.

These projections are based on the plan of benefits and assumptions used for the 2015 PPA certification, adjusted for and including the following:

- assumes all non-retired members are covered under the Rehabilitation Plan Default Schedule,
- reflects the Trustees' decision to increase contribution rates by 5% per year over 7 years, beginning January 1, 2013 (the additional contributions do not count toward benefit accruals),
- > assumes no future withdrawal liability payments, and
- the total contributory months will decline by 2% per year for the next five years, then remain level thereafter.

#### CHART 20

#### Projected Market Value of Assets for Years Ending December 31



This chart shows the projected market value of assets until projected insolvency. It does not reflect any reduction in benefits or PBGC assistance that may occur as a result of insolvency. Under MEPRA, if a plan is projected to be unable to pay benefits within 15 years (or within 20 years, if the PPA'06 funded percentage is less than 80% or if the ratio of inactives to actives is at least 2 to 1), the plan will be categorized in "critical and declining" status. Plans in critical and declining status may be able to suspend certain accrued benefits (but not below 110% of the PBGC guaranteed benefit), including those in pay status, if specified conditions are met.

Section 432(e)(3)(B) requires that the Trustees annually update the Rehabilitation Plan and Schedules. We will work with the Trustees to provide annual cash flow projections to assist the Trustees with those updates and to prepare our required assessment of scheduled progress in meeting the requirements of that Plan.

#### H. DISCLOSURE REQUIREMENTS

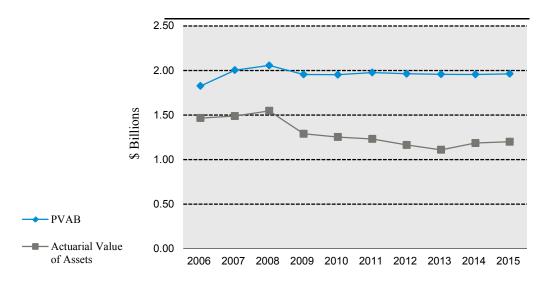
Present Value of Accumulated Plan Benefits (PVAB)

Financial reporting, in accordance with the Financial Accounting Standards Board Accounting Standards Codification (FASB ASC) 960, requires determination of the present value of accumulated plan benefits. It is the singlesum value of the benefits, vested or not, earned by participants as of the valuation date. These present values are determined based on the plan of benefits reflected for Funding Standard Account purposes and are based upon the actuarial assumptions used to determine the ERISA funding costs of the ongoing Plan. These are not appropriate liability measurements for other purposes such as if the Plan were to terminate.

A historical comparison over the past ten years is shown in these charts.

#### CHART 21

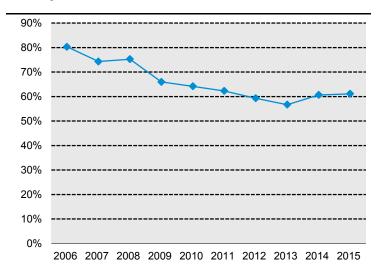
Present Value of Accumulated Plan Benefits vs. Actuarial Value of Assets as of January 1, 2006 - 2015



The funded percentages based on the actuarial value of assets are 61.1% and 60.7% for the 2015 and 2014 valuations, respectively. If the market value of assets were used to determine the funded percentage, the 61.1% figure for 2015 would become 66.1%. The PVAB funded percentage for 2015 is not the same as that used to determine the annual certification required under PPA'06. The 2015 values shown in Charts 21 and 22 reflect current participant and financial information, whereas the annual certification was based on prior participant data and estimated financial results. Chart 21 below compares the present value of accumulated plan benefits with the actuarial value of assets over the past ten years. Chart 22 shows the relationship of these measures as a percentage.

#### CHART 22

Actuarial Value of Assets as a Percentage of Present Value of Accumulated Plan Benefits as of January 1, 2006 - 2015



## ★ Segal Consulting

For a detailed breakdown of this information and reconciliation from last year to this year, see Section 4, Exhibit VI.

#### **Annual Funding Notice**

PPA'06 requires the annual funding notice to be provided to participants, employers, unions and government agencies. The notice must be sent by 120 days after the end of the plan year. The actuary's "best estimate" assumptions are the basis for the measurement of the funding notice percentage.

The value of plan benefits earned to date as of January 1, 2015 is \$1,962,292,229 using the long-term funding interest rate of 7.25%. As the actuarial value of assets is \$1,199,472,038, the Plan's funded percentage is 61.1%, compared to 60.7% in the prior year. The funded percentage is one measure of a plan's funded status. It is not indicative of how well funded a plan may be in the future, especially in the event of plan termination.

The actuarial information to be provided in the annual funding notice is shown in Section 3, Exhibit E.

#### **Current Liability**

ERISA also requires the disclosure by the actuary of the funding percentage based on "current liability" assumptions and the market value of assets, if it is less than 70%. As shown in Section 4, Exhibit V, the Plan's current liability as of January 1, 2015 is \$3,133,469,524 using an interest rate of 3.51%. As the market value of assets is \$1,297,668,067, this funded current liability percentage is 41.4%. This will be disclosed on the 2015 Schedule MB of IRS Form 5500.

#### EXHIBIT A

Table of Plan Coverage

	Year Ended	Change From	
Category	2014	2013	Prior Year
Active participants in valuation:			
Number	4,026	3,979	1.2%
Average age	45.1	45.3	N/A
Average years of Credited Service	12.4	12.5	N/A
Average credited contribution rate for coming year for benefit accruals	\$398.43	\$398.95	-0.1%
Number with unknown age	17	24	N/A
Total active vested participants	3,000	3,108	-3.5%
Inactive participants with rights to a pension:			
Number	10,470	10,602	-1.2%
Average age	54.4	53.9	N/A
Average monthly benefit	\$874	\$864	1.2%
Pensioners (including disableds):			
Number in pay status	8,837	8,922	-1.0%
Average age	72.9	72.4	N/A
Average monthly benefit	\$1,131	\$1,123	0.7%
Number in suspended status	53	70	-24.3%
Beneficiaries:			
Number in pay status	2,410	2,385	1.0%
Average age	75.2	75.0	N/A
Average monthly benefit	\$431	\$412	4.6%

#### EXHIBIT B

Participant Population: 2005 – 2014

Year Ended December 31	Active Participants	Inactive Vested Participants	Pensioners and Beneficiaries	Ratio of Non-Actives to Actives
2005	6,946	11,047	9,714	2.99
2006	6,426	11,231	9,979	3.30
2007	6,211	11,156	10,293	3.45
2008	5,661	10,856	10,698	3.81
2009	4,687	11,011	11,044	4.71
2010	4,484	10,882	11,243	4.93
2011	4,180	10,749	11,402	5.30
2012	4,031	10,709	11,419	5.49
2013	3,979	10,602	11,377	5.52
2014	4,026	10,470	11,300	5.41

#### EXHIBIT C

Summary Statement of Income and Expenses on an Actuarial Basis

	Year Ended December 31, 2014	Year Ended December 31, 2013				
Contribution income:						
Employer contributions	\$21,483,704	\$19,987,191				
Withdrawal liability payments	6,788,280	8,566,118				
Liquidated damages	33,666	7,608				
Less administrative expenses	-2,419,630	-2,939,650				
Net contribution income	\$25,880	5,020 \$25,621,267				
Investment income:						
Expected investment income	\$82,066,859	\$76,546,903				
Adjustment toward market value	<u>39,404,588<sup>(1)</sup></u>	<u>107,415,661</u>				
Net investment income	121,47	<u>1,447</u> <u>183,962,564</u>				
Total income available for benefits	\$147,357	7,467 \$209,583,831				
Less benefit payments	-\$133,798	8,195 -\$133,359,572				
Change in reserve for future benefits	<u>\$13,559</u>	<u>9,272</u> <u>\$76,224,259</u>				

(1) Recognizes the \$5,747,487 difference in market value on December 31, 2013 between the draft audit report used for the prior year's valuation and the final audit report.

## EXHIBIT D

**Financial Information Table** 

		Year Ended December 31, 2014		Year Ended December 31, 2013	
Cash equivalents		\$13,894,118		\$12,275,829	
Accounts receivable:					
Employer contributions	\$1,500,916		\$1,450,000		
Accrued investment income	<u>5,157,569</u>		7,327,726		
Total accounts receivable		6,658,485		8,777,726	
Investments:					
Common stock	\$633,908,820		\$672,596,203		
Corporate obligations	188,110,956		198,752,423		
Collective trusts	136,023,143		125,810,664		
Limited partnerships	87,348,619		84,535,525		
Limited liability companies and other private equity	42,329,503		0		
U.S. Government and Government Agency obligations	25,682,181		78,541,565		
Real estate investment fund	64,798,679		59,259,838		
U.S. Treasury notes	66,773,205		52,183,868		
Cash equivalents	33,893,127		35,065,683		
Real estate investment trusts	2,047,131		2,849,549		
Real estate	0		940,000		
Mutual funds	816,199		560,534		
Total investments at market value		<u>1,281,731,563</u>		<u>1,311,095,852</u>	
Total assets		\$1,302,284,166		\$1,332,149,407	
Less accounts payable		-\$4,616,099		-\$4,861,427	
Net assets at market value		\$1,297,668,067		\$1,327,287,980*	
Net assets at actuarial value		\$1,199,472,038		\$1,185,912,766	

\*Based on a draft audit report used for the prior year's valuation. The market value in the final audit report was revised by \$5,747,487 to \$1,333,035.47.



#### EXHIBIT E

Annual Funding Notice for Plan Year Beginning January 1, 2015 and Ending December 31, 2015

	2015 Plan Year	2014 Plan Year	2013 Plan Year
Actuarial valuation date	January 1	January 1	January 1
Funded percentage	61.1%	60.7%	56.7%
Value of assets	\$1,199,472,038	\$1,185,912,766	\$1,109,688,507
Value of liabilities	1,962,292,229	1,954,700,784	1,957,159,781

Fair value of assets as of December 31, 2015	Not available
Fair value of assets as of December 31, 2014	\$1,297,668,067
Fair value of assets as of December 31, 2013	1,327,287,980

## **Critical or Endangered Status**

The Plan was in critical status in the plan year for the following five reasons:

- 1. The plan had a projected Funding Standard Account funding deficiency within 4 years; and
- 2. The plan had a funded percentage less than 65% and a projected funding deficiency within 5 years; and
- 3. The plan's inactive vested liability exceeded that for actives and the plan had a projected funding deficiency within 5 years and the plan's projected contributions fall short of the plan's normal cost plus interest on unfunded liability; and
- 4. The plan was in critical status last year and had a projected funding deficiency within 10 years; and
- 5. The plan was in critical status last year and had a projected insolvency within 30 years.

The plan was also in critical and declining status because:

- 1. The plan had a ratio of inactives to actives of at least 2 to 1 and had a projected insolvency within 20 years; and
- 2. The plan had a funded percentage less than 80% and had a projected insolvency within 20 years.



#### EXHIBIT F

#### **Minimum Required Contribution**

#### **Funding Standard Account**

ERISA imposes a minimum funding standard that requires the Plan to maintain a Funding Standard Account. Contributions meet the legal requirement on a cumulative basis if that account shows no deficiency. The accumulation of the actual contributions in excess of the minimum required contributions under ERISA is called the credit balance. If actual contributions fall short of the minimum required contributions on a cumulative basis, a funding deficiency has occurred.

The Funding Standard Account is charged with a normal cost and the amortization of increases in the unfunded actuarial accrued liability due to 1) plan amendments, 2) experience losses and 3) changes in actuarial assumptions and funding methods. The account is credited

with employer contributions, withdrawal liability payments, and the amortization of decreases in the unfunded actuarial accrued liability due to 1) plan amendments, 2) experience gains and 3) changes in actuarial assumptions and funding methods.

Increases or decreases in the actuarial accrued liability due to assumption changes and plan amendments are amortized over 15 years and short-term benefits, such as 13th checks, are amortized over the scheduled payout period. The Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 (PRA 2010) allowed eligible plans to amortize certain losses over periods up to 29 years.

#### Funding Standard Account for the Year Ended December 31, 2014

	Charges			Credits	
1	Prior year funding deficiency	\$223,742,349	6	Prior year credit balance	\$0
2	Normal cost, including administrative expenses	6,345,213	7	Employer contributions	28,305,650
3	Total amortization charges	122,965,605	8	Total amortization credits	15,602,828
4	Interest to end of the year	25,596,355	9	Interest to end of the year	2,157,284
5	Total charges	\$378,649,522	10	Full-funding limitation credit	0
			11	Total credits	\$46,065,762
			12	Credit balance/(Funding deficiency): (11) – (5)	-\$332,583,760

#### **EXHIBIT G**

#### Maximum Deductible Contribution

Employers that contribute to defined benefit pension plans are allowed a current deduction for payments to such plans. There are various measures of a plan's funded level that are considered in the development of the maximum deductible contribution amount.

One of the limits is the excess of 140% of "current liability" over assets. "Current liability" is one measure of the actuarial present value of all benefits earned by the participants as of the valuation date. This is the limit that applies to your Plan as shown below. Contributions received by the Plan in excess of the maximum deductible amount are not prohibited; only the deductibility of these contributions is subject to challenge and may have to be deferred to a later year. In addition, if contributions are not fully deductible, an excise tax in an amount equal to 10% of the non-deductible contributions may be imposed. However, the plan sponsor may elect to exempt the non-deductible amount up to the ERISA full-funding limitation from the excise tax.

You should review with Fund Counsel the interpretation and applicability of all laws and regulations concerning any issues as to the deductibility of contribution amounts.

This chart presents the calculation of the maximum deductible contribution for the January 1, 2015 -December 31, 2015 year.

#### **Maximum Deductible Contribution**

1.	Normal cost, including administrative expenses	\$6,195,281
2.	Amortization of unfunded actuarial accrued liability (fresh start as of January 1, 2015)	106,125,377
3.	Preliminary maximum deductible contribution: $(1) + (2)$ , with interest to the end of the plan year	120,463,905
4.	Full-funding limitation (FFL)	1,664,304,786
5.	Preliminary maximum deductible contribution, adjusted for FFL: lesser of (3) and (4)	120,463,905
6.	Current liability, projected to the end of the plan year	3,115,200,434
7.	Actuarial value of assets, projected to the end of the plan year	1,139,375,605
8.	Excess of 140% of current liability over projected assets at end of plan year: [140% of (6)] - (7), not less than zero	3,221,905,003
9.	End of year minimum required contribution	473,831,388
10.	Maximum deductible contribution: greatest of (5), (8), and (9)	<u>\$3,221,905,003</u>

#### EXHIBIT H

Pension Protection Act of 2006 (PPA '06)

This section summarizes key provisions of PPA'06 as expanded and clarified by the Multiemployer Pension Reform Act of 2014 (MEPRA).

#### **PPA'06 Zone Status**

Based on projections of the credit balance in the Funding Standard Account, the funded percentage, and cash flow sufficiency tests, plans are categorized in one of three "zones," critical status, endangered status, or neither.

A plan is classified as being in critical status (the *Red Zone*) if:

- The PPA'06 funded percentage is less than 65%, and either there is a projected Funding Standard Account deficiency within five years or the plan is projected to be unable to pay benefits within seven years, or
- > There is a projected Funding Standard Account deficiency within four years, or
- > There is an inability to pay benefits within five years, or
- > The present value of vested benefits for inactive participants exceeds that for actives, contributions are less than the value of the current year's benefit accruals plus interest on existing unfunded accrued benefit liabilities, and there is a projected Funding Standard Account deficiency within five years, or

- The plan was in critical status the prior year and had a projected Funding Standard Account deficiency within 10 years or a projected insolvency within 30 years, or
- As permitted by MEPRA, the plan is projected to be in the Red Zone within the next five years and the plan sponsor elects to be in critical status.

A plan is further classified as being in "critical and declining" status if:

- There is an inability to pay benefits projected within 15 years, or
- The ratio of inactives to actives is at least 2 to 1, and there is an inability to pay benefits projected within 20 years, or
- The PPA'06 funded percentage is less than 80%, and there is an inability to pay benefits projected within 20 years.

Amortization extensions cannot be used for testing *Red Zone* criteria.

The corrective action for a critical plan is the adoption of a formal Rehabilitation Plan, designed to allow the plan to emerge from critical status by the end of the rehabilitation period. If the Trustees determine that such emergence is



not reasonable, the rehabilitation plan is designed to emerge as of a later date or to forestall insolvency.

*Red Zone* plans have tools, such as the ability to reduce or eliminate early retirement subsidies, to remedy the situation. Plans in the *Red Zone* may not pay lump sums. Other than critical and declining plans, they may not reduce benefits of participants who retired before being notified of the plan's critical status (other than rolling back recent benefit increases) or alter core retirement benefits payable at normal retirement age.

A plan is classified as being in endangered status (the *Yellow Zone*) if:

- The PPA'06 funded percentage is less than 80%, or
- There is a projected Funding Standard Account deficiency within seven years, and
- > The plan is not in critical status (*Red Zone*).

A plan that was in the Green Zone in the prior year will not enter the Yellow Zone in the current year (although otherwise requires to do so) if the plan's current provisions are certified by the actuary to be sufficient (with no further action) to allow the plan to emerge from the Yellow Zone at the end of the 11 years. The corrective actions for an endangered plan are based on the adoption of a formal Funding Improvement Plan, designed to improve gradually the current funded percentage, to forestall a funding deficiency and to keep the plan out of critical status.

A plan that has both of the endangered conditions present is classified as seriously endangered. Trustees of those plans must take interim measures to delay the projected funding deficiency by one year and improve the plan's funded percentage.

A plan is classified as being in the *Green Zone* if it is neither in critical status (the *Red Zone*) nor in endangered status (the *Yellow Zone*).

## **Funded Percentage**

For purposes of PPA'06, the funded percentage is determined using the actuarial value of assets and the "Unit Credit accrued liability." This liability is generally equivalent to the present value of benefits earned to date, as discussed in Subsection H of Section 2, and is based on the actuary's best estimate assumptions.

## EXHIBIT I

#### **Section 415 Limitations**

Section 415 of the Internal Revenue Code specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan. If an individual is covered solely by multiemployer plans, the plans do not have to be combined for any of the limits. If the individual is covered by a single-employer plan, all plans maintained by the same employer are combined in applying these tests. Multiemployer plan benefits do not need to be combined with single-employer plan benefits in testing against the pay-based limit.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for noncompliance is disqualification; the plan could lose its tax exemption, employers could lose their deductions and active participants could be taxed on their vested benefits.

In particular, Section 415(b) of the IRC as amended by the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) limits the maximum annual benefit payable to a dollar limit of \$160,000 indexed for inflation. The dollar limit indexed for inflation has remained unchanged at \$210,000 for 2014 and 2015. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances for such things as age at retirement and form of benefits chosen.

While the actual determination of the exact limits applicable to each participant's benefit can only be done when the individual retires and applies for benefits, the overall impact of the Section 415 dollar limits has been reflected in this valuation for plan funding purposes, based on our understanding of the requirements of IRC Sections 404, 412, 415, and 431 and the data available to us.

Fund Counsel's review and interpretation of the law and regulations must be sought in this area as well.

#### EXHIBIT J

#### **General Background**

An outline of the major developments in connection with the Plan's background and position is given below:

Changes in Benefit Amounts and Average Contribution Rate since January 1, 1976:

Effe	ctive Date	Average Monthly	Monthly	Pension Amount	Improvement
Year	Month	Credited Contribution Rate	Per Year of Past Service	Future Service (per \$100 of Contributions)	to Existing Retirees
1976	January		\$ 5.00	\$2.75	
1980	January	\$ 87.58	5.50	3.03	10%
1981	November	103.49			(1)
1984	September	126.33	6.05	3.33	10%
1986	January	139.13	6.96	3.83	15%
1989	January	153.00	7.27	4.00	4.5%
1990	January	163.60	7.71	4.24	6%
1991	December	180.00			(1)
1992	January	183.00	7.71	\$4.45/\$4.24 <sup>(2)</sup>	4.25%
1993	January	187.00		\$4.50/\$4.24 <sup>(3)</sup>	1%
1994	January	191.25		4.50/	4% <sup>(1)</sup>
1995	January	200.67			
1996	January	220.37		\$4.50/\$4.24 <sup>(5)</sup>	
1997	January	195.75		\$4.73/\$4.24 <sup>(5)</sup>	2% <sup>(1)</sup>

Effec	tive Date	Average Monthly	Monthly	Pension Amount	Improvement
Year	Month	Credited Contribution Rate	Per Year of Past Service	Future Service (per \$100 of Contributions)	to Existing Retirees
1998	January	\$205.64		\$4.90/\$4.73 <sup>(4)</sup> /\$4.24 <sup>(5)</sup>	1%(1)
1999	January	208.60	10.00	\$5.00/\$4.24 <sup>(5)</sup>	2% <sup>(1)</sup>
2000	January	222.52			
2001	January	235.22			
2002	January	324.40			
2003	January	352.56			
2003	July			\$5.00/\$3.00 <sup>(6)</sup>	
2004	January	365.78			
2005	January	390.04		\$0.50/\$1.00/\$2.00 <sup>(7)</sup>	
2006	January	393.84			
2007	January	404.09			
2008	January	395.33			
2008	July			\$1.00 <sup>(8)</sup>	
2009	January	381.89			
2010	January	394.93			
2011	January	393.62			
2012	January	399.53			
2013	January	405.25			
2014	January	398.95			
2015	January	398.43			

<b>Changes in Benefit</b> A	Amounts and Average	Contribution F	Rate since Januar	y 1, 1976 (continued):

<sup>(1)</sup> Additional, one-time only, pension payment was granted.

<sup>(2)</sup> The lower factor applies to service after January 1, 1992.

- <sup>(3)</sup> The lower factor applies to service after January 1, 1994.
- <sup>(4)</sup> The lower factor applies to service after January 1, 2000.
- <sup>(5)</sup> The lower factor applies to service after January 1, 2005.
- <sup>(6)</sup> The lower factor applies to service after July 1, 2003.
- <sup>(7)</sup> The first factor applies to the first \$250 of monthly contributions, the second factor applies to the second \$250 of monthly contributions, and the last factor applies to monthly contributions in excess of \$500. All three factors apply to service after January 1, 2005.
- <sup>(8)</sup> This factor applies to service after July 1, 2008.



## **Other Developments:**

Date	Event
September 1, 1955:	Board of Trustees executed Trust Agreement.
	Pension Plan was adopted.
July 12, 1956:	Favorable determination letter from the Internal Revenue Service was received.
January 1, 1976:	Plan revised to satisfy ERISA.
	Funding Standard Account was established.
January 1, 1985:	Early Retirement reduction factor was lowered to 1/3 of 1% per month.
January 1, 1986:	Plan amended to satisfy REA.
	Partial vested-rights adopted for participants with at least 5 years of service.
	Early Retirement reduction was dropped for participants retiring at age 62 or later and lowered to 1/4 of 1% per month for ages between 55 and 62.
	Eligibility requirements for Early Retirement and Disability pensions were lowered to 5 years of service.
	Pre-retirement death benefits are payable on the basis of vested percentage.
January 1, 1997:	Full vesting adopted for participants with at least 5 years of service.
October 1, 1997:	Plan amended to provide Unreduced Rule of 85 Retirement.
October 1, 1999:	Joint and Survivor factors were increased and now reflect a simplified formula
January 1, 2002:	One-time IAP rollover allowed for all non-retired participants. Future rollovers at retirement will no longer be allowed.
January 1, 2003:	Eligibility requirements for Disability Pension amended to require receipt of a Social Security Disability award.
January 15, 2008:	Board adopts the Segal interest rate method and the market value of assets for determining withdrawal liability.
March 4, 2008:	For collective bargaining agreements effective on or after March 4, 2008, the \$700 per month cap on contribution rates was eliminated.

## **Other Developments (continued):**

Date	Event
March 28, 2008:	Plan certified as being in "Critical" status under PPA '06. A Rehabilitation Plan was adopted that include supplemental off-benefit contributions beginning January 1, 2013 and the following benefit reductions:
	1. Early retirement and joint and survivor adjustment factors will be based on the plan's actuarial equivalence basis.
	2. The "Rule of 85" unreduced early retirement benefit will no longer be available.
	3. The Plan's disability benefit will no longer be available to new applicants.
	4. The 36-payment pre-retirement death benefit is eliminated.
	5. Payment forms, except for a life annuity or automatic joint and 50% survivor annuity, will no longer be available to new retirees.
March 5, 2009:	Board elects under WRERA to freeze 2009 plan status under PPA'06 and to extend Rehabilitation Period by three years.
February 1, 2011:	The commencement of the Vested Benefit (for inactive vested participants) prior to Normal Retirement Age was eliminated.
March 8, 2011:	Board adopts resolution to forestall plan insolvency under the Rehabilitation Plan.
	Board adopts simplified method under PBGC Technical Update 10-3 for determining withdrawal liability.
March 8, 2012:	Board elects to reduce annual supplemental off-benefit contribution under Rehabilitation Plan Default Schedule from 12.5% to 5.0%.
October 19, 2012:	Date of most recent favorable determination letter from the IRS.
March 31, 2015:	Plan certified as being in "Critical and Declining" under PPA'06 and MEPRA.



## May 29, 2015

## **CERTIFICATE OF ACTUARIAL VALUATION**

This is to certify that Segal Consulting, a Member of The Segal Group, Inc. ("Segal") has prepared an actuarial valuation of the Automotive Industries Pension Plan as of January 1, 2015 in accordance with generally accepted actuarial principles and practices. It has been prepared at the request of the Board of Trustees to assist in administering the Fund and meeting filing requirements of federal government agencies. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

The valuation is based on the assumption that the Plan is qualified as a multiemployer plan for the year and on draft information supplied by the auditor with respect to contributions and assets and reliance on the Plan Administrator with respect to the participant data. Segal Consulting does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results. Adjustments for incomplete or apparently inconsistent data were made as described in the attached Exhibit VII.

I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in this actuarial valuation is complete and accurate, except as noted in Exhibit I. Each prescribed assumption for the determination of Current Liability was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

Redacted by the U.S. Department of the Treasury

Paul C. Poon, ASA, MAAA Associate Actuary Enrolled Actuary No. 14-06069

### EXHIBIT I

## **Summary of Actuarial Valuation Results**

Tł	e valuation was made with respect to the following data supplied to us by the Plan Administrator:		
1	Pensioners as of the valuation date (including 2,410 beneficiaries in pay status and 53 pensioners in suspended status)	)	11,300
2	Participants inactive during year ended December 31, 2014 with vested rights (including 2 participants with unknown	age)	10,470
3	Participants active during the year ended December 31, 2014 (including 17 participants with unknown age)		4,026
	Fully vested	3,000	
	Not vested	1,026	
4	Total participants		25,796
Tł	e actuarial factors as of the valuation date are as follows:		
1	Normal cost, including administrative expenses <sup>(1)</sup>		\$6,195,281
2	Actuarial present value of projected benefits		2,007,936,237
3	Present value of future normal costs		18,201,021
4	Actuarial accrued liability		1,989,735,216
	Pensioners and beneficiaries	\$1,217,466,920	
	Inactive participants with vested rights	529,848,023	
	Active participants	242,420,273	
5	Actuarial value of assets (\$1,297,668,067 at market value as reported by Lindquist LLP)		1,199,472,038
6	Unfunded actuarial accrued liability		\$790,263,178

<sup>(1)</sup>Estimated based on expected contributions. Actual normal cost will be based on actual contributions.

## EXHIBIT II

## Information on Plan Status as of January 1, 2015

1	Plan status (as certified on March 31, 2015, for the 2015 zone certification)	Critical and Declining
2	Scheduled progress (as certified on March 31, 2015, for 2015 zone certification)	Yes
3	Actuarial value of assets for Funding Standard Account	\$1,199,472,038
4	Accrued liability under unit credit cost method	1,962,292,229
5	Funded percentage for monitoring plan's status	61.1%
6	Plan year in which insolvency is expected	2030
7	Reduction in unit credit accrued liability resulting from the reduction in adjustable benefits since the prior valuation date	\$0



## EXHIBIT III

Schedule of Active Participant Data (Schedule MB, line 8b)

					Years o	f Credited S	Service						
Age	Total	1-4	5-9	10-14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 & over			
Under 25	147	144	3										
25 - 29	347	233	108	6									
30 - 34	436	210	136	85	5								
35 - 39	445	126	121	135	60	3							
40 - 44	473	113	91	144	91	31	3						
45 - 49	557	78	110	138	112	69	49	1					
50 - 54	687	65	78	153	119	128	95	47	2				
55 - 59	548	34	62	100	91	95	85	55	26				
60 - 64	281	4	22	43	65	50	53	22	18	4			
65 - 69	80	4	6	20	11	8	17	3	4	7			
70 & over	8			2	2	1		2		1			
Unknown	17	15	2										
Total	4,026	1,026	739	826	556	385	302	130	50	12			

The participant data is for the year ended December 31, 2014.

## EXHIBIT IV

## Funding Standard Account

The table below presents the Funding Standard Account for the Plan Year ending December 31, 2015.

	Charges		Credits			
1	Prior year funding deficiency	\$332,583,760	6	Prior year credit balance	\$0	
2	Normal cost, including administrative expenses	6,195,281	7	Amortization credits	19,943,817	
3	Amortization charges	122,965,604	8	Interest on (6) and (7)	1,445,927	
4	Interest on (1), (2) and (3)	33,476,487	9	Full-funding limitation credit	0	
5	Total charges	\$495,221,132	10	Total credits	\$21,389,744	
Mi	nimum contribution with interest required to avoid a fundi	ng deficiency: $(5) - (10)$	), not	less than zero	\$473,831,388	
Fu	l funding limitations (FFL) and credits:					
1	ERISA FFL (accrued liability FFL)				\$854,201,697	
2	RPA'94 override (90% current liability FFL)				1,664,304,786	
3	FFL credit				0	



## EXHIBIT IV (continued)

#### Funding Standard Account

# Schedule of Funding Standard Account Bases (Charges) (Schedule MB, line 9c)

Type of Base	Date Established	Amortization Amount	Years Remaining	Outstanding Balance
Combined Base	01/01/2012	\$114,042,943	5.82	\$564,473,916
Plan Amendment	01/01/2012	\$71,720	12	\$602,894
Experience Loss	01/01/2012	3,929,674	12	33,033,552
Experience Loss	01/01/2013	4,468,373	13	39,491,166
Change in Assumptions	01/01/2014	452,894	14	4,184,960
Total		\$122,965,604		\$641,786,488



## EXHIBIT IV (continued)

## Funding Standard Account

# Schedule of Funding Standard Account Bases (Credits) (Schedule MB, line 9h)

Type of Base	Date Established	Amortization Amount	Years Remaining	Outstanding Balance
Plan Amendment	07/01/2012	\$2,549,656	12.5	\$21,992,906
Plan Amendment	01/01/2013	4,388	13	38,784
Plan Amendment	07/01/2013	1,234,444	13.5	11,162,749
Plan Amendment	01/01/2014	810,548	14	7,489,866
Experience Gain	01/01/2014	11,003,792	14	101,680,481
Experience Gain	01/01/2015	4,340,989	15	41,742,284
Total		\$19,943,817		\$184,107,070



# EXHIBIT IV (continued)

## Funding Standard Account

# **Equation of Balance**

1	Net outstanding balance of bases	\$457,679,418
2	Credit balance/(Funding deficiency)	-332,583,760
3	Unfunded actuarial accrued liability: (1) - (2)	\$790,263,178



# EXHIBIT V

### **Current Liability**

The table below presents the current liability for the Plan Year beginning January 1, 2015.

Item	An	nount
1. Retired participants and beneficiaries receiving payments		\$1,691,351,507
2. Inactive vested participants		1,026,865,805
3. Active participants		
a. Non-vested benefits	\$10,913,180	
b. Vested benefits	404,339,032	
c. Total active		415,252,212
4. Total		<u>\$3,133,469,524</u>
Expected increase in current liability due to benefits accruing during the plan year		\$12,663,495
Expected release from current liability for the plan year		138,923,742
Expected plan disbursements for the plan year, including administrative expenses of \$3,000,000		141,923,742
Current value of assets		1,297,668,067
Percentage funded for Schedule MB		41.41%

Note: The actuarial assumptions used to calculate these values are shown in Exhibit VII.

### EXHIBIT VI

### Actuarial Present Value of Accumulated Plan Benefits

The actuarial present value of accumulated plan benefits calculated in accordance with FAS ASC 960 is shown below as of January 1, 2015 and as of January 1, 2014. In addition, the factors that affected the change between the two dates follow.

	Benefit Information Date		
	January 1, 2015	January 1, 2014	
Actuarial present value of vested accumulated plan benefits:			
Participants currently receiving payments	\$1,217,466,920	\$1,235,098,846	
Other vested benefits	743,708,297	718,680,242	
Total vested benefits	\$1,961,175,217	\$1,953,779,088	
Actuarial present value of non-vested accumulated plan benefits	<u>1,117,012</u>	<u>921,696</u>	
Total actuarial present value of accumulated plan benefits	<u>\$1,962,292,229</u>	<u>\$1,954,700,784</u>	
Factors		Change in Actuarial Present Value of Accumulated Plan Benefits	
Benefits accumulated, net experience gain or loss, changes in data		\$4,524,018	
Benefits paid		-133,798,195	
Interest		136,865,622	
Total		\$7,591,445	



# Statement of Actuarial Assumptions/Methods (Schedule MB, line 6)

Rationale for Assumptions:	significant e conjunction	The information and analysis used in selecting each demographic assumption that has a significant effect on this actuarial valuation is shown in this exhibit. Current data is reviewed in conjunction with each annual valuation. Based on professional judgment, no assumption changes are warranted at this time.				
Mortality Rates:	Healthy:	RP-2000 Combined Healthy Mortality Tables, set back 1 year				
	Disabled:	RP-2000 Combined Healthy Mortality Tables, set forward 3 years.				
	anticipates th	RP-2000 mortality tables (set forward 2 years for disabled lives) reasonably he projected mortality experience of the Plan as of the measurement date. The -year setback is a provision made for future mortality improvement.				

Termination Rates before Retirement:			Rate (%)		
		Morta			
	Age	Male	Female	Disability	Withdrawal*
	20	0.03	0.02	0.05	21.20
	25	0.04	0.02	0.06	15.80
	30	0.04	0.02	0.08	11.60
	35	0.07	0.04	0.11	8.40
	40	0.10	0.06	0.17	6.20
	45	0.14	0.10	0.27	4.20
	50	0.20	0.16	0.45	2.60
	55	0.32	0.24	0.76	1.00
	60	0.59	0.44	1.22	0.00

\* Withdrawal rates under age 55 are increased by 6 percentage points for the first 5 years of service. Withdrawal rates do not apply at retirement eligibility.

The termination rates and disability rates were based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual number of terminations and disability retirements and the projected number based on the prior year's assumption over the most recent 7 years.

<b>Retirement Rates:</b>			
	Age	<b>Retirement Rates</b>	
	55 - 60	5%	_
	61	15	
	62	35	
	63	25	
	64	25	
	65	50	
	66	30	
	67	100	
	estimated future exp made between the a	perience and professional ju	nd current demographic data, adjusted to reflect dgment. As part of the analysis, a comparison was and the projected number based on the prior
Description of Weighted Average			
Retirement Age:	calculated as the sur probability of surviv other decrements. T	m of the product of each po ving from current age to tha 'he overall weighted retirem	average retirement age for each participant is tential current or future retirement age times the t age and then retiring at that age, assuming no tent age is the average of the individual retirement ed in this actuarial valuation.
<b>Retirement Age for Inactive</b>			
Vested Participants:	Age 65		
	demographic data, a	adjusted to reflect the plan of ent. As part of the analysis,	nts was based on historical and current lesign, estimated future experience and the ages of new retirees from inactive vested

Future Benefit Accruals:	Work-year of 11.2 months of contributions per active participant.
	The future benefit accruals were based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, a comparison was made between the assumed and the actual benefit accruals over the most recent 10 years.
Unknown Data for Participants:	Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.
Definition of Active Participants:	Active participants are defined as those with at least five months in the most recent Plan Year, excluding those who have retired as of the valuation date.
<b>Exclusion of Inactive Vesteds:</b>	Inactive participants over age 70 excluded from the valuation.
	The exclusion of inactive vested participants over age 70 was based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, the ages of new retirees from inactive vested status were reviewed.
Percent Married:	85%
Age of Spouse:	Females 4 years younger than males.
Benefit Election:	All future pensioners are assumed to elect the Life Option at retirement.
	The benefit elections were based on historical and current demographic data, adjusted to reflect the plan design, estimated future experience and professional judgment. As part of the analysis, a comparison was made between the assumed and the actual option election patterns over the most recent 7 years.
Net Investment Return:	7.25%
	The net investment return assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes as provided by SegalRogerscasey, as well as the Plan's target asset allocation.

Annual Administrative Expenses:	\$3,000,000, payable monthly (equivalent to \$2,888,977 payable at the beginning of the year).
	The annual administrative expenses were based on historical and current data, adjusted to reflect estimated future experience and professional judgment.
Actuarial Value of Assets:	The market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period. The actuarial value is further adjusted, if necessary, to be within 20% of the market value.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the current age minus Credited Service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rates have always been in place. Normal Cost is adjusted by the ratio of the actual contributions credited for benefit accruals received during the plan year to the expected contribution. For 2015, the expected contributions are \$21,140,860.
Benefits Valued:	Unless otherwise indicated, includes all benefits summarized in Exhibit VIII.
Current Liability Assumptions:	
Interest	3.51%, within the permissible range prescribed under IRC Section $431(c)(6)(E)$
Mortality	Mortality prescribed under IRS Regulations 1.431(c)(6)-1 and 1.430(h)(3)-1: RP-2000 tables projected forward to the valuation year plus seven years for annuitants and 15 years for nonannuitants
Justification for Change in Actuarial Assumptions	
(Schedule MB, line 11):	For purposes of determining current liability, the current liability interest rate was changed due to a change in the permissible range and recognizing that any rate within the permissible range satisfies the requirements of IRC Section $431(c)(6)(E)$ and the mortality tables were changed in accordance with IRS Regulations $1.431(c)(6)-1$ and $1.430(h)(3)-1$ .

Estimated Rate of Investment Return:	
On actuarial value of assets (Schedule MB, line 6g):	10.7%, for the Plan Year ending December 31, 2014
On current (market) value of assets (Schedule MB, line 6h):	6.2%, for the Plan Year ending December 31, 2014
Funding Standard Account Contribution Timing	
(Schedule MB, line 3(a)):	Unless otherwise noted, contributions are paid periodically throughout the year pursuant to collective bargaining agreements. The interest credited in the Funding Standard Account is therefore assumed to be equivalent to a July 1 <sup>st</sup> contribution date.

### **EXHIBIT VIII**

Summary of Plan Provisions (Schedule MB, line 6)

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	January 1 through December 31		
Pension Credit Year: Plan Status:	January 1 through December 31		
	Ongoing plan		
Normal Pension:			
Age and Service requirements	65 and 5 years of Credited Service (including 24 months of Future Service).		
Amount	The monthly amount is the sum of (a), (b), (c), (d) and (e).		
	a. \$10.00 for each year of Past Service.		
	b. \$5.00 for each \$100 of the contributions made on the participant's behalf from his Contribution Date through June 30, 2003.		
	c. \$3.00 for each \$100 of the contributions made on the participant's behalf from July 1, 2003 through December 31, 2004.		
	d. 0.5% for the first \$250 of monthly contributions, 1.0% for the next \$250 of monthly contributions, and 2.0% of monthly contributions in excess of \$500 made on the participant's behalf on or after January 1, 2005.		
	e. 1.0% of monthly contributions made on the participant's behalf on or after July 1, 2008.		
	Contribution increases under the Rehabilitation Plan do not count for benefit accruals.		

EIN 94-1133245/ PN 001 **Early Retirement Pension:** Age and Service requirements 55 and 60 months of Credited Future Service. Accrued Normal Pension amount to which the participant would be entitled, reduced by 3 for Amount each year that the retiring employee is younger than 62 (no reduction is applied between ages 62 and 65 for the Unreduced Early Pension, or if participants age and service total at least 85 for the Unreduced Rule of 85 Pension). For participants subject to the Rehabilitation Plan benefit reductions, all Early Retirement Pensions are reduced from age 65, using the plan's actuarial equivalence basis. This benefit is not available to those who retire from inactive status. **Disability Pension:** Age and Service requirements Any age and 5 years of Credited Service (including 24 months of Future Service). Eligible for a Social Security disability benefit. Other requirements Accrued Normal Pension amount to which the participant would be entitled (on his date of Amount disability) without any reduction. For participants subject to the Rehabilitation Plan benefit reductions, the Disability Pension is not available and those who become disabled are eligible only for the Vested Benefit described below. Vested Benefit: Any age and 5 years of Credited Service (including 24 months of Future Service). Age and Service requirements Accrued Normal Pension, payable commencing at Normal Retirement Age, or, if available (on a Amount reduced basis), as early as age 55. Normal Retirement Age The later of age 65 and the fifth anniversary of participation. **Spouse's Benefit:** Age and Service requirements Any age and 5 years of Credited Service (including 24 months of Future Service). 50% of the benefit that the participant would have received had he or she retired the day before Amount death on a Joint and Survivor Annuity. If the participant is not eligible to retire at the time of death, payments will be deferred until the participant's earliest retirement age.

Pre-Retirement Death Benefit:			
Age and Service requirements	Any age and 5 years of Credited Service (including 24 months of Future Service).		
Amount	Return of the total contributions made on account of the participant's employment or, if greater, the participant's unreduced pension at time of death payable for 36 months.		
	This benefit is not payable if benefits are due under the Spouse's Benefit or for participants subject to the Rehabilitation Plan benefit reductions.		
Joint and Survivor Annuity:	All retirements are paid in the form of a 50% joint and survivor annuity unless this form is rejected by the participant and spouse. The benefit amount otherwise payable is reduced to reflect the joint and survivor coverage. If the spouse predeceases the participant, the benefit "pops-up" to the amount is payable before the reduction. If this type of pension is rejected, benefits are payable for the life of the participant without reduction (with a minimum guarantee of 36 monthly payments) or in any other available optional form elected by the participant. For participants subject to the Rehabilitation Plan benefit reductions, the "pop-up" feature and the 36-month guarantee are not available, and the joint and survivor reduction factors are based on the plan's actuarial equivalence basis.		
<b>Optional Forms of Benefit Payment:</b>	➤ 50% Joint and Survivor Option ("QJSA")		
	> 75% Joint and Survivor Option ("QOSA")		
	<ul> <li>Life with 36-Month Guarantee Option</li> </ul>		
	<ul> <li>Life with 120-Month Guarantee Option</li> </ul>		
	<ul> <li>Full 100% Joint and Survivor Option</li> </ul>		
	Aside from a life only annuity, QJSA and QOSA, these options are not available for participants subject to the Rehabilitation Plan benefit reductions.		

Credited Service Schedule:	Commencing January 1, 1976 a year of Future Service is credited during any Plan Year in which the participant completes at least 5 months of covered service. (No fractional credit is granted.) Prior to January 1, 1976, Future Service was granted at the rate of one-twelfth of a year for each month of contribution payments.	
	Past Service is credited for service prior to the Contribution Date up to a maximum of 20 years for members who became participants prior to January 1, 1975 and 10 years for members who entered the Plan after January 1, 1975. For participants who joined the Plan after 1978, the amount of Credited Past Service can not exceed the Credited Future Service earned under the Plan.	
Break-in-Service Rules:		
One-Year Break	A participant incurs a One-Year Break in Service if he or she fails to complete five months of service or 501 hours of service in a Plan Year.	
Permanent Break	A non-vested participant incurs a Permanent Break in Service if the number of consecutive One- Year Breaks in Service is at least 5 and it equals or exceeds the number of years of Credited Service which the employee had previously accumulated. At this time, the non-vested portion of the participant's service and benefits accrued are canceled.	
Participation Rule:	An employee becomes a "Participant" the first day of the first month for which an employer contribution was made.	
Contribution Rate:	The average benefit contribution rate on January 1, 2015 was \$398.43 per month.	
Plan Amendments:	There were no changes in plan provisions reflected in this actuarial valuation.	

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