

**Sheet Metal Workers' National Pension Fund**

*Actuarial Valuation and Review as of  
January 1, 2009*

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THE SEGAL COMPANY  
101 North Wacker Drive, Suite 500 Chicago, IL 60606  
T 312.984.8500 F 312.984.8590 www.segalco.com

*October 22, 2009*

*Board of Trustees  
Sheet Metal Workers' National Pension Fund  
Alexandria, Virginia*

*Dear Trustees:*

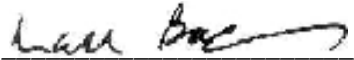
*We are pleased to submit the Actuarial Valuation and Review as of January 1, 2009. It establishes the funding requirements for the current year and analyzes the preceding year's experience. It also summarizes the actuarial data and includes the certification that is required to be filed with federal government agencies.*

*The census information upon which our calculations were based was prepared by the Fund Office, under the direction of Mr. John Holback. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Daniel V. Ciner, 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,*

*THE SEGAL COMPANY*

By:   
\_\_\_\_\_  
*Lall Bachan, ASA, MAAA, EA  
Senior Vice President and Actuary*

## SECTION 1

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## SECTION 1: Valuation Summary for the Sheet Metal Workers' National Pension Fund

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### Significant Issues

1. The Pension Protection Act of 2006 (PPA'06) revised the minimum funding rules beginning in 2008, increased the maximum deductible limits, and expanded the reporting and disclosure requirements for multiemployer plans. The provisions of PPA'06 have been fully reflected in this valuation. More information on the PPA'06 funding provisions is shown in Section 2.
2. Beginning in 2008, the law requires an annual actuarial certification of the Plan's funded status within the first 90 days of the Plan Year. This involves projections of the funded percentage (determined as the ratio of the actuarial value of assets to the Unit Credit accrued liability based on the funding assumptions), the Funding Standard Account credit balance and cash flows.
3. The 2009 certification, previously issued, was based on the liabilities calculated in the 2008 actuarial valuation, projected forward to December 31, 2008, and estimated asset information as of December 31, 2008. This Plan was classified as in critical status (*Red Zone*) because there was a projected funding deficiency in the Funding Standard Account within 2 years.
4. The Worker, Retiree, and Employer Recovery Act of 2008 (WRERA) permits plans that are in critical status in 2009 to extend the remedial period for the rehabilitation three additional years. The Trustees have elected to utilize this provision of WRERA.
5. Based on this January 1, 2009 actuarial valuation, the funded percentage is 48.9%, which will be reported on the 2009 Annual Funding Notice. The actuarial liability measurement in this valuation may also serve as the basis for the 2010 PPA'06 zone certification.
6. An application submitted to the IRS to change the actuarial cost method from the Entry Age Normal cost method with shortfall adjustment to the Unit Credit cost method effective January 1, 2007 was approved on September 23, 2009. We have updated the prior year (2008) figures to reflect the change.
7. This valuation recognizes an application and anticipated IRS approval, effective January 1, 2009, of a five-year extension of the remaining period of all Funding Standard Account amortization charges, as permitted in IRC Section 431(d).
8. A projection of the Funding Standard Account indicates the credit balance will be depleted in the Plan Year ending December 31, 2012, assuming future market value rates of return of 7.50%, administrative expenses increase by 3% per year, the active population decreases 1% each year, all other experience emerges as projected and there are no future changes in the Plan provisions. This projection takes into consideration all deferred net investment losses and effects of the Rehabilitation Plan, but only contribution rate increases already in effect.

## SECTION 1: Valuation Summary for the Sheet Metal Workers' National Pension Fund

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9. The market value rate of investment return during 2008 was -27.6%. Under the asset smoothing method, market investment gains and losses are gradually recognized. As a result of this deferred recognition of investment gains and losses and adjustment to be within 20% of market value, the actuarial return was -13.1%. As of January 1, 2009, the actuarial value of assets is equal to 120% of market value (the statutory limit).
10. The Trustees adopted a Rehabilitation Plan in 2008 that includes a Default and an Alternative Schedule, the details of which are described in Section 4, Exhibit VIII. The effects of the adoption of the schedules by bargaining parties are recognized in this valuation.
11. The number of active participants increased by 1.5% since the prior year. We look to the Trustees for input regarding expected future employment levels.
12. The actuarial valuation report as of January 1, 2009 is based on financial information as of that date. Changes in the value of assets subsequent to that date are not reflected. Any changes would affect the future actuarial costs of the Plan. We are prepared to work with the Trustees to model the effects of these and any other subsequent developments.

**SECTION 1: Valuation Summary for the Sheet Metal Workers' National Pension Fund**

**Summary of Key Valuation Results**

	<b>2009</b>	<b>2008**</b>
<b>Certified Zone Status</b>	<i>Critical</i>	<i>Critical</i>
<b>Assets:</b>		
Market value of assets (MVA)	\$2,344,664,521	\$3,302,494,430
Actuarial value of assets (AVA)	2,813,597,425	3,293,939,234
<b>Cost Elements on a Funding Standard Account Basis:</b>		
Normal cost, including administrative expenses	\$130,579,914	\$131,614,647
Actuarial accrued liability	5,749,182,057	5,597,612,337
Unfunded actuarial accrued liability (based on AVA)	2,935,584,632	2,303,673,103
<b>Statutory Funding Information:</b>		
Minimum funding standard requirement*	\$158,645,696	\$169,290,174
Maximum deductible contribution	9,706,002,226	9,922,289,223
Expected contributions for coming Plan Year	362,457,073	337,717,464
Actual contributions	- -	368,921,470
Annual Funding Notice percentage (PPA funded percentage)	48.9%	52.2%
Funding Standard Account deficiency projected in Plan Year ending	2012	2013
<b>Demographic Data:</b>		
Number of active participants	70,448	69,408
Number of inactive participants with vested rights	25,517	24,436
Number of retired participants and beneficiaries	43,794	43,166

\*Amount required to maintain \$0 credit balance.

\*\*Reflects change to Unit Credit cost method retroactive to January 1, 2007.

**SECTION 1: Valuation Summary for the Sheet Metal Workers' National Pension Fund**

**Comparison of Funded Percentages**

	2009		Funded Percentages as of January 1	
	Liability	Assets	2009	2008
1. Present Value of Future Benefits	\$6,908,758,473	\$2,813,597,425	40.7%	48.8%
2. PPA'06 Liability / Annual Funding Notice	5,749,182,057	2,813,597,425	48.9%	52.2%
3. Current Liability	8,557,468,443	2,344,664,521	27.4%	36.5%

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 7.50% and the actuarial value of assets.
2. 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 7.50% and the actuarial value of assets.
3. Used to determine maximum tax-deductible contributions and reported on Schedule MB to Form 5500. Based on the present value of accrued benefits, using prescribed investment return assumption of 4.82% for 2009 and 5.06% for 2008, and the market value of assets.

**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

**A. PARTICIPANT DATA**

The Actuarial Valuation and Review considers the number and demographic characteristics of covered participants, including active participants, inactive vested participants, pensioners and beneficiaries.

More detailed information for this valuation year and the preceding year can be found in Section 3, Exhibit A.

This section presents a summary of significant statistical data on these participant groups.

*A historical perspective of how the participant population has changed over the past several years can be seen in this chart.*

**CHART 1**  
**Participant Population: 1999 – 2008**

<b>Year Ended December 31</b>	<b>Active Participants</b>	<b>Inactive Vested Participants</b>	<b>Pensioners and Beneficiaries</b>	<b>Ratio of Non-Actives to Actives</b>
1999	70,721	15,499	34,858	0.71
2000	73,555	16,729	35,851	0.71
2001	74,082	17,781	36,694	0.74
2002	71,734	19,545	37,798	0.80
2003	69,072	21,290	39,133	0.87
2004	68,286	22,275	40,361	0.92
2005	67,130	23,452	41,372	0.97
2006	68,046	24,020	42,077	0.97
2007	69,408	24,436	43,166	0.97
2008	70,448	25,517	43,794	0.98

**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

**Active Participants**

Pension plan costs are affected by the age and pension credits of active participants. In this year's valuation, there were 70,448 active participants with an average age of 41.6 and average pension credits of 12.4. This compares to 41.6 and 12.5, respectively, for the 69,408 active participants in the prior year.

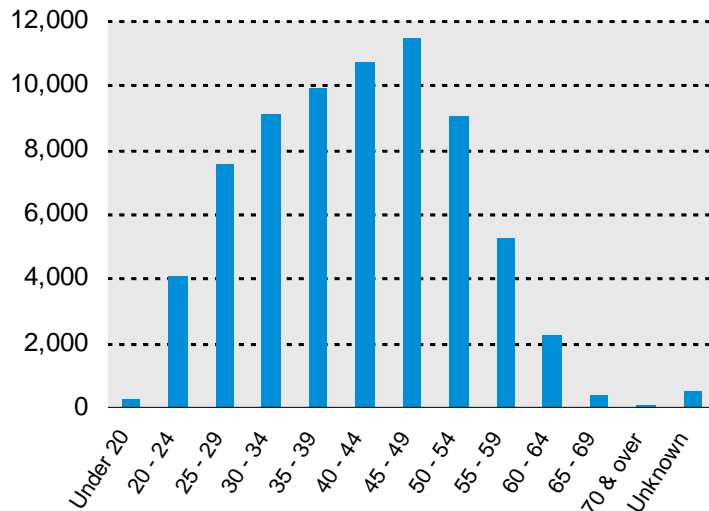
Among active participants, there were 524 with unknown age. The actuarial calculations were adjusted for missing information by assuming that it was the same as information provided for other active participants with similar known characteristics.

**Inactive Vested Participants**

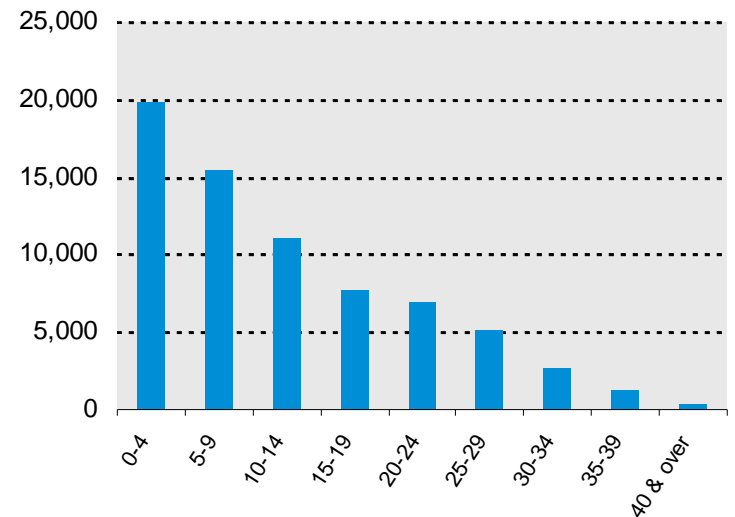
Participants who leave the coverage of the Plan after satisfying the requirements for a deferred pension, or an immediate pension but elect to defer commencement, are considered "inactive vesteds" and are included in the pension plan cost. In this year's valuation, there were 25,517 inactive vesteds, versus 24,436 in the prior valuation. No cost is included for other inactive participants, even though some may return to active employment before incurring a permanent break in service.

*These charts show a distribution of active participants by age and by pension credits.*

**CHART 2**  
**Distribution of Active Participants by Age as of December 31, 2008**



**CHART 3**  
**Distribution of Active Participants by Pension Credits as of December 31, 2008**



**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

**Pensioners and Beneficiaries**

During the fiscal year ended December 31, 2008, there were 1,763 pensions awarded, as detailed in this chart. The average monthly pension awarded, after adjustment for optional forms of payment, was \$951. 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 4**

**Pension Awards: 1999 – 2008**

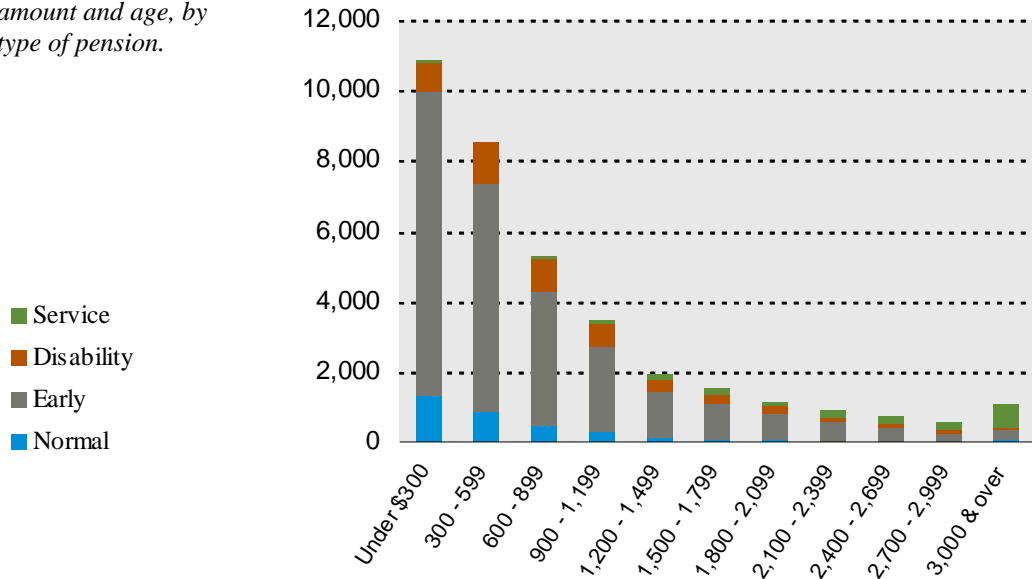
Year Ended December 31	Total		Normal		55/30		Early		Disability	
	Number	Average Amount	Number	Average Amount	Number	Average Amount	Number	Average Amount	Number	Average Amount
1999	1,442	\$1,009	573	\$844	--	--	695	\$1,162	154	\$932
2000	1,947	982	248	472	--	--	1,440	1,072	259	973
2001	1,720	944	159	400	--	--	1,379	1,019	182	850
2002	1,925	941	215	467	--	--	1,440	1,019	270	902
2003	2,299	1,217	236	540	273	\$3,081	1,492	1,043	298	918
2004	2,414	1,289	272	497	523	2,713	1,362	981	257	864
2005	1,992	1,163	215	499	380	2,569	1,247	895	150	777
2006	1,875	1,110	237	523	307	2,553	1,114	898	217	794
2007	1,934	1,113	300	594	336	2,404	1,079	896	219	907
2008	1,763	951	267	594	214	2,343	1,194	798	88	740

**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

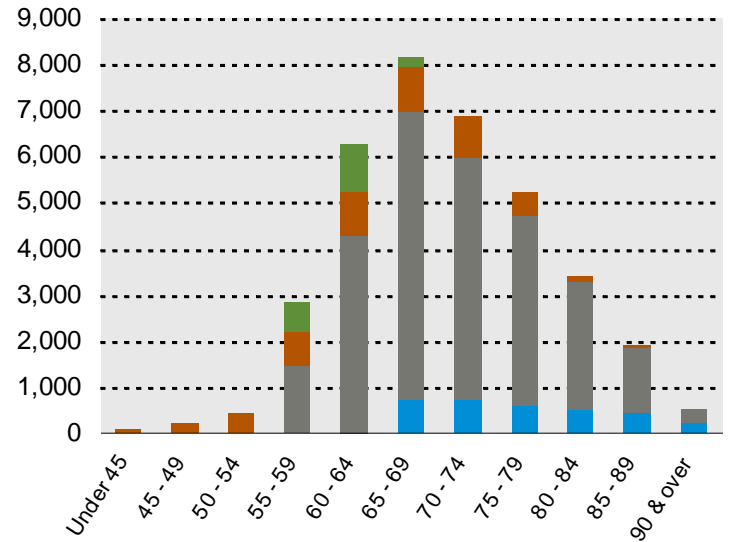
As of this year's valuation date, 36,019 pensioners and 7,741 beneficiaries were receiving total monthly benefits of \$33,712,979 (including one-twelfth of annual required COLA payments, rolled back to the levels in effect December 31, 2002). For comparison, in the previous year, there were 35,742 pensioners and 7,419 beneficiaries receiving monthly benefits of \$33,025,653 (including one-twelfth of annual required COLA payments; rolled back to the levels in effect December 31, 2002). There were 34 suspended pensioners in this valuation compared with 5 in the prior year.

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

**CHART 5**  
**Distribution of Pensioners by Type and by Monthly Amount as of December 31, 2008**



**CHART 6**  
**Distribution of Pensioners by Type and by Age as of December 31, 2008**



**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

In Chart 7, 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 7**  
**Progress of Pension Rolls: 1999 – 2008**

Year Ended December 31	Additions	Terminations	In Payment Status at Year End		
			Number	Average Age	Average Amount*
1999	1,442	1,741	29,922	69.6	\$642
2000	1,947	1,311	30,558	69.8	694
2001	1,720	1,138	31,140	70.0	722
2002	1,925	1,181	31,884	70.0	744
2003	2,299	1,236	32,947	70.1	784
2004	2,414	1,414	33,947	70.0	831
2005	1,992	1,316	34,623	70.2	852
2006	1,875	1,400	35,098	70.4	873
2007	1,934	1,285	35,747	70.5	852
2008	1,763	1,491	36,019	70.8	861

\* Includes one-twelfth of annual required COLA payments. In 2008, COLA benefits were rolled back to the levels in effect December 31, 2002.

**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

**B. FINANCIAL INFORMATION**

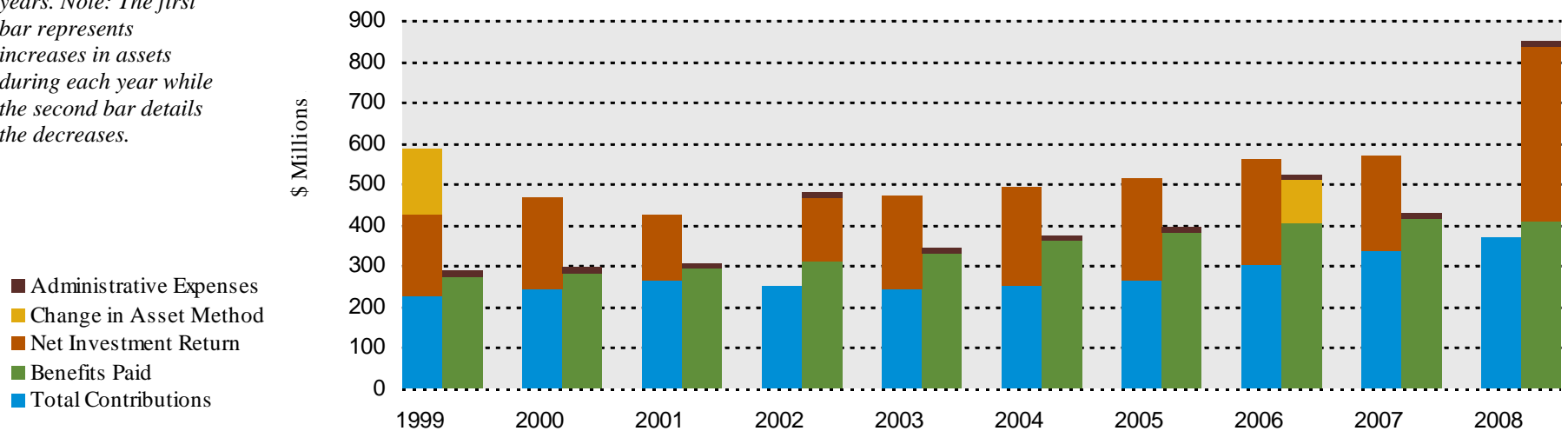
Pension plan funding anticipates that, over the long term, both contributions (less administrative expenses) and investment earnings (less investment fees) will be needed to cover benefit payments. Pension plan assets change as a result of the net impact of these income and expense components. Chart 8 shows these changes over the last ten years. A summary of these transactions for the valuation year is presented in Section 3, Exhibit C.

PPA'06 requires Trustees to monitor plan solvency, the ability to pay benefits when due. If a plan is projected to be unable to pay benefits within five years (or within seven years, if the PPA'06 funded percentage is less than 65%), the plan will be categorized in the Red Zone. More information about PPA'06 can be found in Subsection F.

Benefit payments during the year totaled \$407,497,609. They are projected to increase to \$494,661,986 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.

*This chart depicts the components of changes in the actuarial value of assets over the last ten years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.*

**CHART 8**  
**Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended December 31, 1999 – 2008**



## SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund

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. For this reason, the Trustees have approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the pension plan cost are more stable.

The current asset smoothing method was adopted effective January 1, 2007, with an initial value equal to the market value of assets.

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. This removes any consideration of the impact of sales of assets from the determination of the actuarial cost of the Plan.

As shown below, the actuarial value of assets was adjusted by \$445,716,868 to bring it within the permissible corridor of 80%-120% of market value. As a result, a greater portion of the 2008 investment loss is recognized this year. There are \$468,932,904 of net losses deferred for future recognition.

*This chart shows the determination of the actuarial value of assets as of December 31, 2008.*

### CHART 9

#### Determination of Actuarial Value of Assets as of December 31, 2008

1	Market value of assets, December 31, 2008			\$2,344,664,521
2	Calculation of unrecognized return	Original	Unrecognized	
		<u>Amount*</u>	<u>Return**</u>	
	(a) Year ended December 31, 2008	-\$1,151,332,711	-\$921,066,169	
	(b) Year ended December 31, 2007	10,693,995	6,416,397	
	(c) Year ended December 31, 2006	N/A	N/A	
	(d) Year ended December 31, 2005	N/A	N/A	
	(e) Year ended December 31, 2004	N/A	<u>N/A</u>	
	(f) Total unrecognized return			-914,649,772
3	Preliminary actuarial value: (1) - (2f)			3,259,314,293
4	Adjustment to be within 20% corridor			-445,716,868
5	Final actuarial value of assets as of December 31, 2008: (3) + (4)			<u>\$2,813,597,425</u>
6	Actuarial value as a percentage of market value: (5) ÷ (1)			120.0%
7	Amount deferred for future recognition: (1) - (5)			-\$468,932,904

\*Total return minus expected return on a market value basis

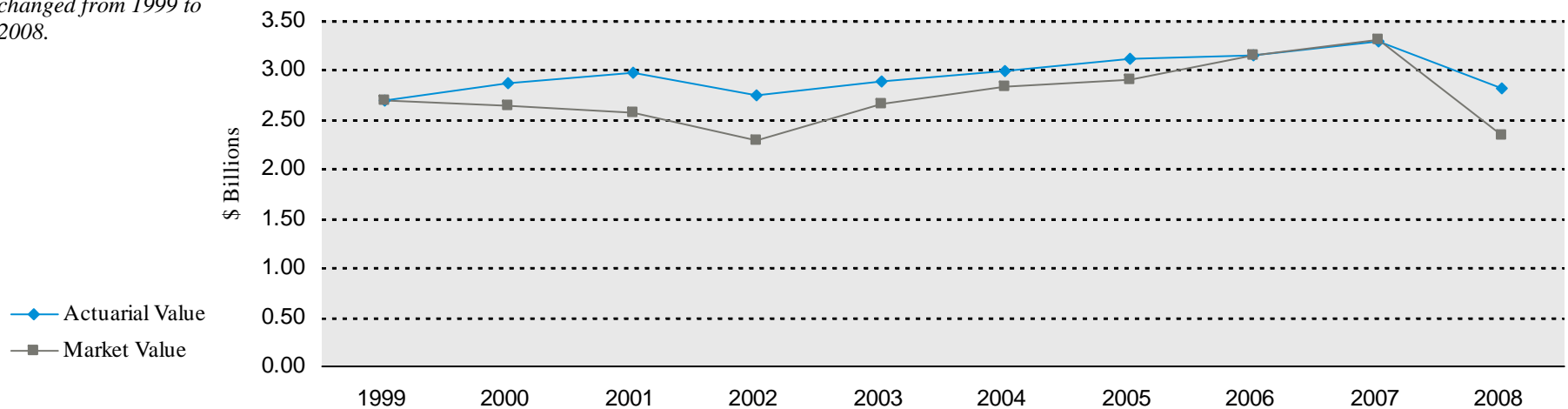
\*\*Recognition at 20% per year over 5 years

**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

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 Subsections E and F.

*This chart shows how the actuarial value of assets and the market value of assets have changed from 1999 to 2008.*

**CHART 10**  
**Actuarial Value of Assets vs. Market Value of Assets as of December 31, 1999 - 2008**



**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

**C. EMPLOYMENT EXPERIENCE**

The Trustees are in the best position to select the appropriate employment level assumption to use in long term planning for funding the Plan. Total hours of contributions, number of actives and their average hours of contributions are shown in Chart 11.

The long term assumption for is 1,650 hours for each active participant. The experience in recent years has shown a trend of higher per capita hours. For this valuation, the assumption has remained 1,650 hours for each active participant.

We look to the Trustees for guidance as to whether this is reasonable for the long term.

Certifications under PPA'06 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.

For the 2009 certification, the Trustees' assumption included 1% per year declines in the number of active participants.

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

**CHART 11**  
**Employment History: 1999 - 2008**

Year Ended December 31	Total Hours of Contributions		Active Participants		Average Hours of Contributions	
	Number	Percent Change	Number	Percent Change	Number	Percent Change
1999	127,760,415	2.3%	70,721	0.6%	1,807	1.7%
2000	134,897,755	5.6%	73,555	4.0%	1,834	1.5%
2001	134,642,481	-0.2%	74,082	0.7%	1,817	-0.9%
2002	124,317,535	-7.7%	71,734	-3.2%	1,733	-4.6%
2003	115,685,896	-6.9%	69,072	-3.7%	1,675	-3.3%
2004	117,072,062	1.2%	68,286	-1.1%	1,714	2.3%
2005	115,206,108	-1.6%	67,130	-1.7%	1,716	0.1%
2006	123,536,965	7.2%	68,046	1.4%	1,815	5.8%
2007	126,703,434	2.6%	69,408	2.0%	1,825	0.6%
2008	125,911,765	-0.6%	70,448	1.5%	1,787	-2.1%
Five-year average hours:					1,771	
Ten-year average hours:					1,772	

*Note: The total hours of contributions are based on total contributions divided by the average contribution rate for the year, which may differ from the hours reported to the Fund Office.*

**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

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**D. ACTUARIAL EXPERIENCE**

To calculate the cost requirements 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 \$5,723,317,498 as of December 31, 2008, 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.*

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**CHART 12**  
**Actuarial Experience for the Year Ended December 31, 2008**

1	Net loss from investments*	-\$673,202,972
2	Net gain from administrative expenses	874,606
3	Net loss from other experience	<u>-28,077,961</u>
4	Net experience loss: (1) + (2) + (3)	<u>-\$700,406,327</u>

\* Details in Chart 13.

**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

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**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 interest and dividend income, and the adjustment for market value changes, the adjustment of the value of debt securities, and the gain or loss on the sale of debt securities. Investment expenses are subtracted.

The actuarial value of assets does not yet fully recognize past net investment losses. As a result, the impact of favorable future investment returns will be dampened as recognition of past net investment losses is phased in. Therefore, the rate of return on an actuarial basis may fall below the assumed rate of return for the next few years, even if market returns are favorable.

*This chart shows the portion of the loss due to investment experience.*

**CHART 13**

**Actuarial Value Investment Experience for the Year Ended December 31, 2008**

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1	Net investment income	-\$428,115,997
2	Average actuarial value of assets	3,267,826,328
3	Rate of return: (1) ÷ (2)	-13.10%
4	Assumed rate of return	7.50%
5	Expected net investment income: (2) x (4)	\$245,086,975
6	Actuarial loss: (1) – (5)	<u>-\$673,202,972</u>

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## SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return compares to actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the market value investment return for the last fourteen years, including five-, ten- and fourteen-year averages.

As the assumed rate of return is a long-term assumption, we have maintained the current assumption of 7.50%.

### CHART 14

#### Investment Return – Actuarial Value vs. Market Value: 1995 - 2008

Year Ended 12/31	Net Interest and Dividend Income		Adjustment Toward Market		Change in Asset Method		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1995	\$63,772,250	3.34%	\$99,462,547	5.21%	--	--	\$163,234,797	8.55%	\$334,727,761	20.69%
1996	64,133,828	3.20%	106,694,964	5.32%	--	--	170,828,792	8.52%	229,161,544	12.12%
1997	73,693,329	3.76%	95,300,524	4.86%	--	--	168,993,853	8.62%	283,878,769	14.49%
1998	68,599,858	2.84%	136,724,697	5.66%	--	--	205,324,555	8.50%	314,421,636	13.04%
1999	72,666,507	3.08%	127,895,379	5.42%	\$162,839,711	6.90%	363,401,597	15.40%	190,707,659	7.54%
2000	91,548,426	3.44%	134,755,219	5.06%	--	--	226,303,645	8.50%	3,560,195	0.13%
2001	86,932,998	3.06%	72,866,523	2.57%	--	--	159,799,521	5.63%	-36,479,361	-1.39%
2002	81,481,128	2.77%	-236,188,046	-8.03%	--	--	-154,706,918	-5.26%	-194,048,412	-7.69%
2003	75,650,122	2.80%	153,910,300	5.70%	--	--	229,560,422	8.50%	458,228,754	20.44%
2004	61,327,635	2.18%	178,291,814	6.32%	--	--	239,619,449	8.50%	298,949,842	11.55%
2005	55,574,045	1.90%	193,554,686	6.60%	--	--	249,128,731	8.50%	201,693,098	7.31%
2006	60,924,181	1.99%	198,903,423	6.51%	-106,644,214	-3.49%	153,183,390	5.01%	370,984,124	13.07%
2007	69,660,148	2.24%	165,413,046	5.33%	--	--	235,073,194	7.57%	243,628,390	7.84%
2008	68,521,370	2.10%	-496,637,367	-15.20%	--	--	-428,115,997	-13.10%	-905,604,097	-27.64%
Total	\$994,485,825		\$930,947,709		\$56,195,497		\$1,981,629,031		\$1,793,809,902	
							Five-year average return:	2.96%		1.44%
							Ten-year average return:	4.44%		2.32%
							Fourteen-year average return:	5.36%		5.11%

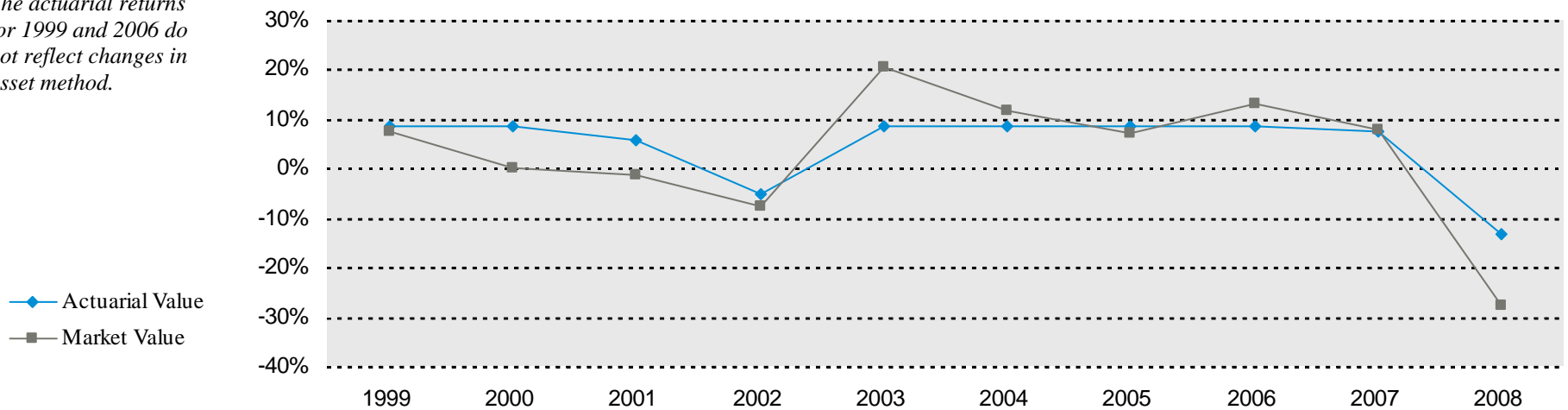
Note: Each year's yield is weighted by the average asset value in that year.

**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

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

*This chart illustrates how this leveling effect has actually worked over the past ten years. The actuarial returns for 1999 and 2006 do not reflect changes in asset method.*

**CHART 15**  
**Market Value and Actuarial Rates of Return for Years Ended December 31, 1999 - 2008**



## SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund

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### **Administrative Expenses**

Administrative expenses for the year ended December 31, 2008 totaled \$13,710,257, compared to the assumption of \$14,556,165 payable monthly (\$14,000,000 payable as of the beginning of the year). This resulted in a gain of \$874,606 for the year when adjusted for timing. We have maintained the assumption of \$14,000,000 for the current year.

There were no changes in actuarial assumptions or cost methods in this valuation.

Since benefit accruals are tied to contribution rates, increases in contribution rates are recognized as plan amendments. This valuation reflects the contribution rate increases reported as adopted as of the valuation date.

### **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,
- retirement experience (earlier or later than projected),
- the number of disability retirements, and
- mortality (more or fewer deaths than projected).

Another difference may be a significant change among the participants, such as the reemployment of previously inactive participants who are not vested but have credit for prior service.

The net loss from this other experience amounted to \$28,077,961 for the last plan year. This represents less than 0.5% of the total actuarial accrued liability.

**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

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**E. SUMMARY OF CONTRIBUTION REQUIREMENTS**

**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. Employers are not liable for satisfying the ERISA minimum funding standard for any plan year in which the plan is in critical status pursuant to Section 432, but only if the plan adopts and complies with a rehabilitation plan in accordance with Section 432(e). The accumulation of the actual contributions in excess of the minimum funding standard under ERISA is called the credit balance.

PPA'06 requires the Internal Revenue Service to permit multiemployer plans facing a funding deficiency within ten years to extend the schedule for paying off their liabilities by five years. To qualify, the trustees of a plan in this situation will have to adopt a program to improve the funding of the plan, and provide advance notification to participants and other interested parties. The plan will also have to pass a cash flow sufficiency test. The extension period could be for up to ten years if a formal application for the longer period is approved by the IRS.

Employers who contribute to defined benefit pension plans are also subject to maximum deductible contribution limitations prescribed by the IRS. The maximum deductible rules were changed by PPA'06 effective with the 2006 Plan Year. For the development of the maximum deductible contribution amount, see Section 3, Exhibit E.

Based on the assumption that 70,448 participants will work an average of 1,650 hours at a \$3.1182 average contribution rate, the contributions projected for the year beginning January 1, 2009 are \$362,457,073 as shown in Chart 16. Contributions for the year beginning January 1, 2009 are projected to be less than the maximum allowable deduction level and to exceed the minimum funding standard.

*This chart summarizes the contribution information for the valuation year.*

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**CHART 16**

**Contribution Requirements vs. Contributions Projected for Year Beginning January 1, 2009**

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ERISA minimum funding standard	\$158,645,696
Projected contributions	362,457,073
Maximum deductible contribution	9,706,002,226

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**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

**Funding Standard Account**

The Funding Standard Account is charged with 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.

On December 31, 2008, the Funding Standard Account had a credit balance of \$213,465,856, as was shown on the 2008 Schedule MB.

This reserve may be drawn upon to meet charges to the account if contributions fall below the net charge in the future.

The minimum funding standard for the year beginning January 1, 2009, as shown in Chart 16, is \$158,645,696. For the year beginning January 1, 2009, the minimum contribution necessary to avoid a decrease in the current credit balance is \$358,661,734. The projected contributions for the year of \$362,457,073 are projected to be sufficient to meet this cost.

*Chart 17 presents the Funding Standard Account information for the year ended December 31, 2008.*

**CHART 17  
Funding Standard Account for the Year Ended December 31, 2008**

Charges			Credits		
1	Normal cost, including administrative expenses	\$131,614,646	5	Prior year credit balance	\$309,829,060*
2	Total amortization charges	557,285,472	6	Employer contributions	368,921,470
3	Interest to end of the year	<u>51,667,509</u>	7	Total amortization credits	222,591,831
4	Total charges	\$740,567,627	8	Interest to end of the year	53,691,122
			9	Full-funding limitation credit	<u>0</u>
			10	Total credits	\$954,033,483
			11	Credit balance: (10) – (4)	<u>\$213,465,856</u>

\* Recognizes approval of retroactive change to Unit Credit cost method, effective January 1, 2007

**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

**Projection of Funding Standard Account**

A 10-year projection of the Funding Standard Account based on this 2009 valuation, assuming the Plan will experience a market rate of return equal to the assumed rate of 7.50% each year into the future, administrative expenses increase by 3% per year, the active population decreases 1% each year, and that all other experience emerges as projected, and with no plan amendments or assumption changes, indicates the credit balance will be depleted by December 31, 2012. Chart 18 shows the projected credit balance in the Funding Standard Account.

The projections do not take into account the pattern of scheduled contribution rate increases as defined in the Rehabilitation Plan that were not reported as bargained for this valuation.

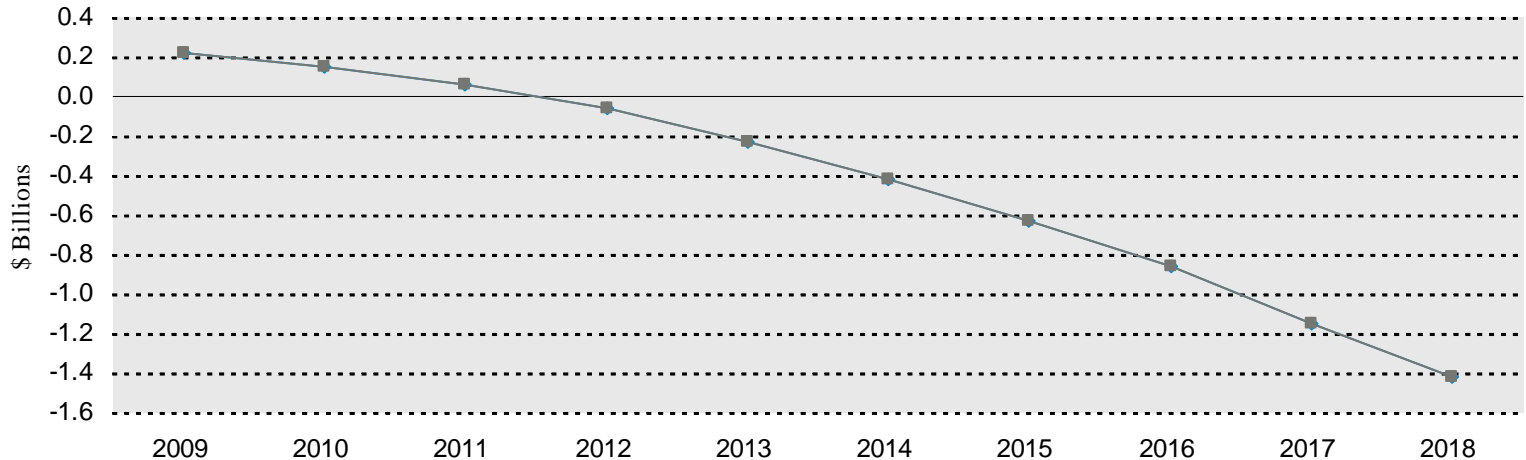
The projection shown is not the same as that used to determine the annual certification required under PPA'06 prepared earlier this year. The projection shown in Chart 18 reflects updated participant and financial information. It also applies a different contribution base assumption.

The chart shows how the credit balance would be affected by a specific industry activity and investment return scenario. If requested, we are available to develop additional scenarios based on different assumptions.

*This chart shows the projected credit balance for the next 10 years.*

**CHART 18**

**Projected Funding Standard Account Credit Balance for Years Ending December 31 (Including 5-Year Amortization Extension)**



## SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund

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

PPA'06 preserves the current basic structure of ERISA's funding rules for multiemployer pension plans, while tightening them in some regards and adding new flexibility for trustees and bargaining parties in other areas. To identify emerging funding challenges so they can be addressed effectively, PPA'06 calls on trustees to actively monitor their plans' financial prospects. Trustees are required to review formal projections of the financial status of their plans at least annually.

#### 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."

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.

For a plan that is in critical status, 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.

Red Zone plans have new 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. 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*).

The corrective actions for endangered plans are based on the adoption of a formal Funding Improvement Plan, designed to gradually improve 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.

## SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund

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### **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 G and is based on the actuary's best estimate assumptions.

### **2009 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 2009 certification was previously completed, based on projections from the 2008 actuarial valuation, adjusted for subsequent events.

The Plan was certified to be in critical status (*Red Zone*) for 2009, because the credit balance was projected to be depleted in 2010.

The Plan was also in critical status in 2008. The Trustees have adopted a Rehabilitation Plan.

### **2010 Actuarial Status Certification**

The actual status for the 2010 Plan Year will involve the following:

- 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.

**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

**G. DISCLOSURE REQUIREMENTS**

**Present Value of Accumulated Plan Benefits (PVAB)**

Financial reporting, in accordance with the Financial Accounting Standards Board's Statement of Financial Accounting Standards (SFAS) No. 35, requires determination of the present value of accumulated plan benefits. It is the single-sum 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's funding costs of the ongoing Plan. These are not appropriate liability measurements for other purposes such as if the Plan were to terminate.

Chart 19 shows the present value of vested and accumulated plan benefits and the funded percentages based on the actuarial value of assets, for the 2009 and 2008 valuations. If the market value of assets were used to determine the funded percentage, the figure for 2009 would become 40.8%. The PVAB funded percentage for 2009 is not the same as that used to determine the annual certification required under PPA'06. The values shown in Charts 19, 20, and 21 reflect current participant and financial information, whereas the annual certification was based on prior participant data and estimated financial results.

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

*This chart shows the calculation of the funded percentage.*

**CHART 19  
Present Value of Vested and Accumulated Plan Benefits**

		January 1	
		2009	2008
1	Present value of vested accumulated plan benefits	\$5,364,815,232	\$5,906,213,280
2	Present value of accumulated benefits	5,749,182,057	6,310,819,838
3	Actuarial value of assets	2,813,597,425	3,293,939,234
4	PVAB funded percentage: (3) ÷ (2)	48.9%	52.2%

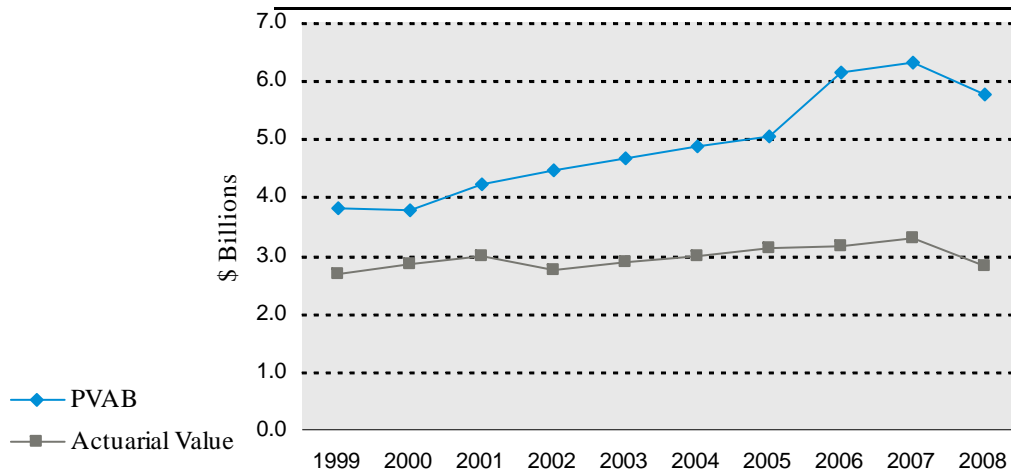
**SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

Chart 20 below compares the present value of accumulated plan benefits with the actuarial value of assets over the past ten years. Chart 21 shows the relationship of these measures as a percentage.

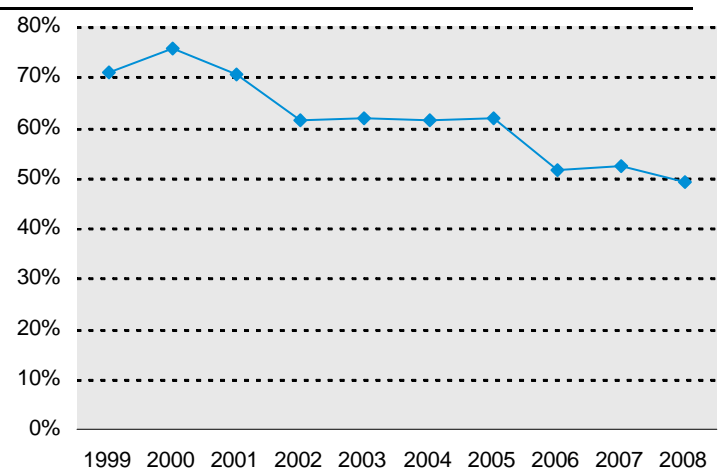
The increase in the present value of accumulated plan benefits in 2006, and the corresponding decrease in the funded percentage, was primarily due to changes in actuarial assumptions. The decrease in the present value of accumulated plan benefits in 2008 was primarily due to the effects of the Rehabilitation Plan.

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

**CHART 20**  
**Present Value of Accumulated Plan Benefits vs. Actuarial Value of Assets as of December 31, 1999 - 2008**



**CHART 21**  
**Actuarial Value of Assets as a Percentage of Present Value of Accumulated Plan Benefits as of December 31, 1999 - 2008**



## **SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

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### **Annual Funding Notice**

PPA'06 transforms the annual funding notice introduced by the Pension Funding Equity Act of 2004 and requires the notice be provided to participants, employers, unions and government agencies. In addition, beginning with the 2008 Plan Year, it must include much more information, and it must be sent by 120 days after the end of the Plan Year (instead of up to 11½ months after the year ends). In addition, the actuary's "best estimate" assumptions (rather than the "current liability" assumptions) are the basis for the measurement of the funding notice percentage.

As shown in Chart 19, the value of plan benefits earned to date as of January 1, 2009 is \$5,749,182,057 using the long-term funding interest rate of 7.50%. As the actuarial value of assets is \$2,813,597,425, the Plan's funded percentage is 48.9%, as compared to 52.2% 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.

Although the annual funding notice was revised, ERISA still 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, 2009 is \$8,557,468,443 using an interest rate of 4.82%. As the market value of assets is \$2,344,664,521, this funded current liability percentage is 27.4%. This will be disclosed on the 2009 Schedule MB of IRS Form 5500.

### **Disclosure of Any Recent Adverse Developments**

As amended in 1980, ERISA requires the 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 and that may materially increase the cost of the Plan, they must advise The Segal Company, so that we can evaluate it and take it into account.

## **SECTION 2: Valuation Results for the Sheet Metal Workers' National Pension Fund**

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### **H. WITHDRAWAL LIABILITY**

The actuarial present value of vested plan benefits for withdrawal liability purposes is not the same figure as determined for SFAS No. 35 purposes because the two calculations involve different benefit provisions.

A separate report on withdrawal liability is provided.

**SECTION 3: Supplementary Information for the Sheet Metal Workers' National Pension Fund**

**EXHIBIT A**

**Table of Plan Coverage**

Category	Year Ended December 31		Change From Prior Year
	2008	2007	
<b>Participants in Fund Office tabulation</b>	73,748	73,030	1.0%
<b>Less: Participants with less than one year of vesting service</b>	3,300	3,622	N/A
<b>Active participants in valuation:</b>			
Number			
Employer elected the Default Schedule	15,800	14,289	10.6%
Employer elected the Alternative Schedule with 55/30	24,438	21,782	12.2%
Employer elected the Alternative Schedule without 55/30	30,179	27,084	11.4%
Rehabilitation Plan schedule unknown as of data collection date	31	6,253	-99.5%
Total	70,448	69,408	1.5%
Average age	41.6	41.6	N/A
Average pension credits	12.4	12.5	N/A
Average contribution as of the valuation date	\$3.10	\$2.85	8.8%
Number with unknown age	524	430	21.9%
Total active vested participants	51,584	51,511	0.1%
<b>Inactive participants with rights to a pension</b>	25,517	24,436	4.4%
<b>Pensioners:</b>			
Number in pay status	36,019	35,742	0.8%
Average age	70.8	70.5	N/A
Average monthly benefit*	\$861	\$852	1.1%
Number in suspended status	34	5	580.0%
<b>Beneficiaries in pay status</b>	7,741	7,419	4.3%

\* Includes one-twelfth of annual required COLA payments. In 2008, COLA benefits were rolled back to the levels in effect December 31, 2002.

**SECTION 3: Supplementary Information for the Sheet Metal Workers' National Pension Fund**

**EXHIBIT B**

**Comparison of Active Participants by Local**

Local	As of December 31, 2008					As of December 31, 2007				
	Number of Members	Average Age	Average Service	Average Hours	Average Rate as of 12/31/08	Number of Members	Average Age	Average Service	Average Hours	Average Rate as of 12/31/07
001	486	43.10	15.19	1,767.54	\$4.62	482	42.45	14.95	1,824.25	\$4.21
002	1,288	41.31	13.80	1,759.34	6.85	1,205	41.45	14.14	1,721.00	6.30
003	485	41.89	12.00	1,813.62	3.39	454	42.12	12.59	1,752.59	3.15
004	243	40.64	13.25	1,826.18	0.33	220	40.93	13.95	1,825.85	0.31
005	554	42.18	10.17	1,745.13	2.58	570	42.52	10.40	1,736.03	2.34
007	1,194	40.79	12.35	1,652.65	1.19	1,206	40.25	11.86	1,707.91	1.05
009	1,048	41.44	11.18	1,712.28	0.58	1,027	41.55	11.35	1,669.69	0.60
010	2,832	41.60	13.72	1,636.77	2.77	2,970	41.64	13.58	1,684.15	2.51
012	1,163	41.07	13.51	1,754.22	5.78	1,142	40.73	13.40	1,746.26	5.16
015	860	43.78	7.83	1,836.07	1.93	762	43.57	8.20	1,827.20	1.82
016	1,468	40.53	10.88	1,728.65	1.31	1,378	40.83	11.20	1,697.21	1.23
017	1,515	42.11	13.79	1,773.95	6.72	1,420	41.84	13.66	1,749.83	6.13
018	2,918	41.57	14.42	1,761.63	5.72	2,939	41.45	14.17	1,802.81	5.21
019	428	43.04	11.96	1,880.28	2.93	444	42.86	11.61	1,872.82	2.61
020	2,994	40.64	12.81	1,773.56	3.38	2,949	40.42	12.72	1,781.50	3.06
023	244	43.11	13.04	1,767.03	1.71	240	43.39	12.85	1,666.12	1.72
024	1,560	41.82	13.99	1,739.73	2.56	1,451	41.58	13.73	1,760.52	2.64
025	721	42.64	15.00	1,650.11	6.88	821	42.57	14.56	1,687.62	6.35
026	335	38.48	9.38	1,642.88	1.61	394	37.53	7.87	1,743.48	1.39
027	627	43.80	15.24	1,624.29	7.07	646	43.73	15.15	1,598.22	6.44
028	2,630	42.10	13.32	1,612.13	8.21	2,464	42.07	13.55	1,606.11	7.54

**SECTION 3: Supplementary Information for the Sheet Metal Workers' National Pension Fund**

**EXHIBIT B (continued)**

**Comparison of Active Participants by Local**

Local	As of December 31, 2008					As of December 31, 2007				
	Number of Members	Average Age	Average Service	Average Hours	Average Rate as of 12/31/08	Number of Members	Average Age	Average Service	Average Hours	Average Rate as of 12/31/07
029	173	37.53	11.46	1,824.27	\$3.06	158	37.32	11.97	1,801.08	\$2.81
032	604	42.08	9.11	1,638.99	2.59	600	41.28	9.05	1,720.82	2.33
033	2,535	41.16	12.36	1,722.96	4.06	2,604	41.06	12.33	1,762.25	3.66
036	2,238	41.50	12.87	1,705.70	1.84	2,194	41.38	12.78	1,738.34	1.76
038	697	40.95	13.51	1,617.52	6.54	714	40.95	13.34	1,673.92	6.04
040	515	42.30	12.53	1,649.58	0.82	520	41.97	12.58	1,705.37	0.82
041	16	35.28	1.78	1,446.63	0.89	6	38.31	3.25	1,652.67	2.12
044	300	43.98	15.27	1,765.98	0.61	305	43.90	14.87	1,728.23	0.57
045	424	39.63	13.26	1,762.38	4.00	442	39.56	12.98	1,786.45	3.64
046	396	40.43	12.71	1,688.45	1.81	388	40.07	12.41	1,712.56	1.62
048	285	42.23	14.61	1,784.22	4.13	302	42.42	14.50	1,792.94	3.91
049	776	43.65	10.42	1,972.68	2.84	891	43.84	9.09	1,927.82	2.14
054	793	41.79	12.78	1,880.12	3.63	729	41.68	13.67	1,862.67	3.40
058	141	42.60	10.55	1,512.67	4.68	136	42.83	11.39	1,497.26	4.23
063	317	43.00	13.83	1,593.23	5.07	338	43.08	13.60	1,633.74	4.55
066	2,972	41.07	11.56	1,778.81	3.04	2,801	41.20	11.88	1,796.15	3.03
067	823	41.12	11.62	1,779.56	4.31	755	41.06	12.31	1,927.87	4.06
068	505	43.01	10.68	1,862.44	2.85	427	43.78	12.02	1,845.41	2.63
071	319	41.60	13.76	1,776.78	3.90	311	41.76	13.84	1,776.93	3.47
073	2,692	44.57	15.22	1,785.47	2.92	2,789	44.17	14.68	1,802.03	2.66
080	125	38.16	6.14	1,369.07	3.51	121	37.60	6.26	1,398.36	3.38

**SECTION 3: Supplementary Information for the Sheet Metal Workers' National Pension Fund**

**EXHIBIT B (continued)**

**Comparison of Active Participants by Local**

Local	As of December 31, 2008					As of December 31, 2007				
	Number of Members	Average Age	Average Service	Average Hours	Average Rate as of 12/31/08	Number of Members	Average Age	Average Service	Average Hours	Average Rate as of 12/31/07
083	282	42.60	13.83	1,736.37	\$6.24	266	42.52	13.89	1,696.02	\$5.61
085	914	40.57	12.21	1,810.94	0.65	769	41.37	13.33	1,837.68	0.61
088	1,335	40.69	9.97	1,920.60	1.56	999	40.86	11.39	1,866.43	1.43
091	629	38.95	12.57	1,746.20	3.12	609	38.83	12.55	1,753.77	2.87
100	716	42.38	11.86	1,700.23	4.48	738	42.24	11.72	1,697.07	4.11
103	430	41.80	11.84	1,713.87	1.17	422	41.87	12.07	1,728.73	1.18
104	3,890	41.71	12.44	1,619.99	1.66	4,053	41.34	11.96	1,643.13	1.63
105	3,845	39.78	10.64	1,746.09	1.90	3,600	39.85	10.97	1,728.97	1.77
110	638	42.75	13.48	1,709.33	5.15	631	42.52	13.58	1,758.35	4.69
112	284	42.14	11.30	1,771.61	1.71	257	42.66	12.28	1,775.98	1.70
124	477	39.94	11.04	1,780.45	1.36	380	40.38	12.87	1,788.86	1.27
137	446	41.91	11.35	1,843.59	6.12	434	42.48	11.73	1,836.62	5.48
162	1,234	40.67	10.92	1,702.60	2.05	1,143	41.10	11.30	1,687.41	2.05
170	1,044	43.83	10.40	2,063.32	1.27	1,147	43.88	10.06	2,030.78	1.19
177	560	39.96	10.68	1,760.21	0.71	560	39.96	10.46	1,778.10	0.56
183	--	--	--	--	--	189	44.13	13.95	2,037.56	0.49
202	112	46.25	13.84	1,759.96	1.21	134	44.95	12.13	1,958.66	1.14
204	209	46.95	13.18	1,300.13	1.11	208	47.52	13.61	1,992.23	1.05
206	477	40.17	9.84	1,704.69	2.77	485	40.51	9.95	1,725.93	2.56
213	279	41.83	10.32	1,610.97	1.36	295	41.90	10.18	1,736.62	1.34
214	604	40.66	12.02	1,841.28	1.47	581	40.61	12.03	1,824.61	1.37

**SECTION 3: Supplementary Information for the Sheet Metal Workers' National Pension Fund**

**EXHIBIT B (continued)**

**Comparison of Active Participants by Local**

Local	As of December 31, 2008					As of December 31, 2007				
	Number of Members	Average Age	Average Service	Average Hours	Average Rate as of 12/31/08	Number of Members	Average Age	Average Service	Average Hours	Average Rate as of 12/31/07
218	406	41.99	14.25	1,736.26	\$2.31	399	41.75	14.17	1,632.46	\$2.01
219	379	40.07	13.62	1,749.18	3.76	393	39.52	13.01	1,820.92	3.36
237	294	49.59	16.64	1,927.40	2.10	312	48.57	15.23	2,024.92	1.91
256	29	51.02	7.49	1,721.28	0.61	26	53.05	8.29	1,917.19	0.55
263	314	39.31	12.44	1,902.46	3.79	286	39.40	12.69	1,820.06	3.37
265	1,838	40.99	13.49	1,569.85	0.76	2,086	40.39	12.64	1,639.32	0.66
268	494	41.10	12.57	1,743.13	2.67	489	40.82	12.34	1,808.33	2.42
270	230	38.87	9.06	1,729.98	3.39	184	38.79	10.23	1,719.39	3.21
273	280	40.86	12.25	1,587.13	2.02	253	41.37	13.75	1,630.66	1.86
292	447	44.00	14.98	1,632.39	1.21	453	44.32	15.46	1,698.44	1.26
293	11	46.49	6.86	1,723.82	2.07	9	45.97	8.11	1,583.56	2.21
312	1,033	38.49	10.85	1,808.94	0.26	976	38.43	10.79	1,872.66	0.26
359	678	41.44	10.36	1,709.75	1.41	599	42.52	11.18	1,680.79	1.31
361	144	43.23	14.12	1,875.75	3.84	147	43.30	14.41	1,822.17	3.69
367	3	53.42	13.56	2,050.67	0.61	3	52.42	12.56	2,044.00	0.55
399	172	42.90	9.47	1,751.67	3.71	167	44.07	10.27	1,705.33	3.34
435	344	39.82	9.16	1,807.55	3.32	294	39.40	9.44	1,679.89	3.15
441	342	40.76	11.22	1,769.06	3.23	331	40.11	11.10	1,836.78	2.99

**SECTION 3: Supplementary Information for the Sheet Metal Workers' National Pension Fund**

**EXHIBIT B (continued)**

**Comparison of Active Participants by Local**

Local	As of December 31, 2008					As of December 31, 2007				
	Number of Members	Average Age	Average Service	Average Hours	Average Rate as of 12/31/08	Number of Members	Average Age	Average Service	Average Hours	Average Rate as of 12/31/07
450	123	48.90	16.37	2,264.66	\$1.90	125	48.13	16.05	2,313.74	\$1.85
464	398	47.13	11.11	2,173.85	0.65	403	46.11	10.80	2,287.24	0.58
480	563	45.62	15.81	2,139.84	1.59	544	45.57	16.17	2,134.82	1.45
555	251	43.22	7.10	1,732.83	0.77	279	41.50	6.36	1,875.96	0.78
997	31	49.14	9.16	1,754.26	3.75	35	47.96	8.48	1,800.69	3.43
Total	<u>70,448</u>	<u>41.62</u>	<u>12.44</u>	<u>1,741.69</u>	<u>\$3.10*</u>	<u>69,408</u>	<u>41.57</u>	<u>12.47</u>	<u>1,757.51</u>	<u>\$2.85*</u>

\* Does not reflect contribution rate increases scheduled to occur during the year.

**SECTION 3: Supplementary Information for the Sheet Metal Workers' National Pension Fund**

**EXHIBIT C**

**Summary Statement of Income and Expenses on an Actuarial Basis**

	Year Ended December 31, 2008	Year Ended December 31, 2007
<b>Contribution income:</b>		
Employer contributions and withdrawal liability payments	\$376,555,160	\$334,578,402
Liquidated damages	48,476	133,521
Adjustments for withdrawal liability receivable	-7,682,166	887,463
Less administrative expenses	<u>-13,710,257</u>	<u>-12,494,983</u>
Net contribution income	\$355,211,213	\$323,104,403
<b>Settlement income</b>	60,584	125,992
<b>Investment income:</b>		
Interest, dividends and other income	\$78,482,517	\$79,976,698
Adjustment toward market	-496,637,367	165,413,046
Less investment fees	<u>-9,961,147</u>	<u>-10,316,550</u>
Net investment income	<u>-428,115,997</u>	<u>235,073,194</u>
<b>Total income available for benefits</b>	-\$72,844,200	\$558,303,589
<b>Less benefit payments</b>	-\$407,497,609	-\$417,082,179
<b>Change in reserve for future benefits</b>	<u>-\$480,341,809</u>	<u>\$141,221,410</u>

**SECTION 3: Supplementary Information for the Sheet Metal Workers' National Pension Fund**

**EXHIBIT D**

**Financial Information Table**

	Year Ended December 31, 2008	Year Ended December 31, 2007
<b>Cash equivalents</b>	\$66,937,021	\$72,515,451
<b>Accounts receivable:</b>		
Employer contributions	\$46,056,499	\$40,604,462
Accrued interest and dividends	7,623,190	8,572,020
Payment for securities sold	223,250,492	52,598,797
Miscellaneous	<u>552,648</u>	<u>426,708</u>
Total accounts receivable	277,482,829	102,201,987
<b>Investments:</b>		
Corporate stocks	\$890,518,246	\$1,566,920,096
Debt securities	444,421,000	460,072,403
Securities loaned to third parties	440,964,122	593,903,816
Real estate	39,685,716	50,145,030
Limited partnerships and other securities	<u>447,616,559</u>	<u>550,004,361</u>
Total investments at market value	<u>2,263,205,643</u>	<u>3,221,045,706</u>
<b>Total assets</b>	<b>\$2,607,625,493</b>	<b>\$3,395,763,144</b>
<b>Less accounts payable:</b>		
Accounts payable	-\$262,922,888	-\$93,203,324
Medical benefit accounts	<u>-38,084</u>	<u>-65,390</u>
Total accounts payable	-262,960,972	-93,268,714
<b>Net assets at market value</b>	<u><b>\$2,344,664,521</b></u>	<u><b>\$3,302,494,430</b></u>
<b>Net assets at actuarial value</b>	<u><b>\$2,813,597,425</b></u>	<u><b>\$3,293,939,234</b></u>

### SECTION 3: Supplementary Information for the Sheet Metal Workers' National Pension Fund

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#### EXHIBIT E

#### Reorganization

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Under the reorganization provisions of the IRC, the Minimum Contribution Requirement (MCR) is calculated as the amount that amortizes the unfunded liability for current pensioners over ten years and the unfunded vested liability for non-pensioners over 25 years. The MCR is applicable only if this amount is larger than the Funding Standard Account requirement before the application of the credit balance.

For the year beginning January 1, 2009, the MCR does not exceed the Funding Standard Account requirement before the application of the credit balance, and is therefore not applicable for the current year. If the MCR is applicable, the Plan is said to be “in reorganization.” When a plan is in reorganization, contribution requirements are greater than the normal ERISA funding requirements, Plans must give notice to its participating employers and union(s) that it is in reorganization, cut-backs in recent benefit increases are permitted and any new benefit increases must be adequately funded. We are prepared to discuss the implications of reorganization status in more detail.

The Trustees should be aware that the Plan changes adopted and recent adverse experience when fully reflected will increase the MCR more rapidly than the Funding Standard Account requirement and potentially place the Plan in reorganization. We will continue to monitor experience and review the applicability of the MCR to determine whether this may be avoided.

The funding requirements of ERISA and application of those rules are quite complicated. We can work with Legal Counsel to seek their advice as to the interpretation and applicability of the law and to determine how these issues apply to your Plan.

### SECTION 3: Supplementary Information for the Sheet Metal Workers' National Pension Fund

#### EXHIBIT F

#### 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, 2009 - December 31, 2009 year.*

#### Maximum Deductible Contribution

1.	Normal cost, including administrative expenses	\$130,579,914
2.	Amortization of unfunded actuarial accrued liability	397,835,693
3.	Preliminary maximum deductible contribution: (1) + (2), with interest to the end of the Plan Year	568,046,777
4.	Full-funding limitation (FFL)	5,320,330,000
5.	Preliminary maximum deductible contribution, adjusted for FFL: lesser of (3) and (4)	568,046,777
6.	Current liability for maximum deductible contribution, projected to the end of the plan year	8,771,344,451
7.	Actuarial value of assets, projected to the end of the plan year	2,573,880,006
8.	Excess of 140% of current liability over projected assets at end of plan year: [140% of (6)] - (7), not less than zero	9,706,002,226
9.	End of year minimum funding standard	158,645,696
10.	Maximum deductible contribution: greatest of (5), (8), and (9)	<u>\$9,706,002,226</u>

### SECTION 3: Supplementary Information for the Sheet Metal Workers' National Pension Fund

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#### EXHIBIT G

#### Section 415 Limitations

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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 non-compliance 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 at age 62 to a dollar limit of \$160,000 indexed for inflation. The dollar limit indexed for inflation is \$185,000 for 2008 and \$195,000 for 2009. 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, and 415 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.

**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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EIN 52-6112463/ PN 001

October 22, 2009

**CERTIFICATE OF ACTUARIAL VALUATION**

This is to certify that The Segal Company (“Segal”) has prepared an actuarial valuation of the Sheet Metal Workers' National Pension Fund as of January 1, 2009 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 was based on the assumption that the Plan was qualified as a multiemployer plan for the year and on information supplied by the auditor with respect to contributions and assets and by the Plan Administrator with respect to the participant data. The Segal Company does not customarily audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. Segal does, however, 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.



Daniel V. Ciner, MAAA  
Vice President and Actuary  
Enrolled Actuary No. 08-05773

**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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EIN 52-6112463/ PN 001

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**Certificate Contents**

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<b>EXHIBIT I</b>	Summary of Actuarial Valuation Results
<b>EXHIBIT II</b>	Information on Plan Status
<b>EXHIBIT III</b>	Participants in Active Service by Age and by Pension Credits
<b>EXHIBIT IV</b>	Funding Standard Account
<b>EXHIBIT V</b>	Current Liability
<b>EXHIBIT VI</b>	Actuarial Present Value of Accumulated Plan Benefits
<b>EXHIBIT VII</b>	Statement of Actuarial Assumptions/Methods
<b>EXHIBIT VIII</b>	Summary of Plan Provisions

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**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT I**

**Summary of Actuarial Valuation Results**

The valuation was made with respect to the following data supplied to us by the Plan Administrator:

1	Pensioners as of the valuation date (including 7,741 beneficiaries in pay status and 34 pensioners in suspended status)		43,794
2	Participants inactive during year ended December 31, 2008 with vested rights (including 126 beneficiaries with rights to deferred pensions)		25,517
3	Participants active during the year ended December 31, 2008 (including 524 participants with unknown age)		70,448
	Fully vested	51,584	
	Not vested	18,864	

The actuarial factors as of the valuation date are as follows:

1	Normal cost, including administrative expenses		\$130,579,914
2	Actuarial accrued liability		5,749,182,057
	Pensioners and beneficiaries	\$3,321,500,993	
	Inactive participants with vested rights	444,059,991	
	Active participants	1,983,621,073	
3	Actuarial value of assets* (\$2,344,664,521 at market value as reported by Calibre CPA Group)		2,813,597,425
4	Unfunded actuarial accrued liability		\$2,935,584,632

\* Excludes receivable withdrawal liability payments.

**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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EIN 52-6112463/ PN 001

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**EXHIBIT II**

**Information on Plan Status as of January 1, 2009**

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1 Plan status (as certified on March 31, for the 2009 zone certification)	<i>Critical</i>
2 Actuarial value of assets for Funding Standard Account	\$2,813,597,425
3 Accrued liability under unit credit cost method	5,749,182,057
4 Funded percentage for monitoring plan's status	48.9%

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**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT III**

**Participants in Active Service by Age and by Pension Credits  
(Schedule MB, line 8b)**

The participant data is for the year ended December 31, 2008.

Age	Years of Pension Credit									
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 20	236	236	--	--	--	--	--	--	--	--
20 - 24	4,055	3,914	141	--	--	--	--	--	--	--
25 - 29	7,541	4,670	2,745	126	--	--	--	--	--	--
30 - 34	9,093	3,304	3,702	2,026	61	--	--	--	--	--
35 - 39	9,926	2,325	3,003	3,004	1,507	87	--	--	--	--
40 - 44	10,711	1,803	2,291	2,302	2,459	1,776	80	--	--	--
45 - 49	11,428	1,506	1,748	1,765	1,886	2,682	1,695	146	--	--
50 - 54	9,015	915	1,096	1,004	1,047	1,504	2,029	1,325	95	--
55 - 59	5,273	396	493	522	515	677	1,020	902	684	64
60 - 64	2,233	156	221	238	199	229	309	254	380	247
65 - 69	361	33	55	61	22	26	39	24	44	57
70 & over	52	17	9	8	2	4	3	--	2	7
Unknown	524	507	16	1	--	--	--	--	--	--
<b>Total</b>	<b>70,448</b>	<b>19,782</b>	<b>15,520</b>	<b>11,057</b>	<b>7,698</b>	<b>6,985</b>	<b>5,175</b>	<b>2,651</b>	<b>1,228</b>	<b>352</b>

*Note: Excludes 3,300 participants with less than one year of vesting service.*

**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT IV  
Funding Standard Account**

The table below presents the Funding Standard Account for the Plan Year ending December 31, 2009.

<b>Charges</b>		<b>Credits</b>			
1	Normal cost, including administrative expenses	\$130,579,914	5	Prior year credit balance	\$213,465,856
2	Amortization charges	477,076,774	6	Amortization credits	246,613,441
3	Interest on (1) and (2)	<u>45,574,252</u>	7	Interest on (5) and (6)	34,505,947
4	Total charges	\$653,230,940	8	Full-funding limitation credit	<u>0</u>
			9	Total credits	\$494,585,244
Minimum contribution with interest required to avoid a funding deficiency: (4) – (9), not less than zero					\$158,645,696

**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT IV (continued)**

**Funding Standard Account**

**Determination of Full-Funding Limitation Credit**

<b>(A) ERISA Full-Funding Limit</b>		<b>(B) Current Liability Override</b>			
1	Projected accrued liability	\$5,871,995,998	1 90% of projected current liability for Funding Standard Account	\$7,894,210,006	
2	Lesser of projected market and actuarial values of assets	2,071,766,239	2	Projected actuarial value of assets	2,573,880,006
3	Credit balance, with interest to December 31, 2009	229,475,795	3	Credit balance, with interest to December 31, 2009	N/A
4	ERISA FFL: (1) – (2) + (3), not less than zero	4,029,705,554	4	Current Liability override: (1) – (2), not less than zero	5,320,330,000
5	Minimum funding standard for the year, disregarding the credit balance and any interest on the credit balance				\$388,121,491
6	ERISA full-funding limitation credit: (5) – [greater of 4(A) and 4(B)], not less than zero				0

**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT IV (continued)  
Funding Standard Account**

**Schedule of Funding Standard Account Bases: Amortization Charges as of January 1, 2009  
(Schedule MB, line 9c)**

Type of Base	Date Established	Amortization Amount	Years Remaining*	Outstanding Balance
Plan Amendment	01/01/1989	\$14,770,975	15	\$140,164,057
Initial Base	01/01/1989	39,990,461	9	274,226,728
Prior Local 137 Combined Bases	01/01/1990	75,592	14	689,839
Prior Local 38 Combined Bases	01/01/1990	447,017	7	2,545,248
Prior Local 12 Combined Bases	01/01/1990	1,227,045	9	8,414,222
Plan Amendment	01/01/1990	4,751,277	16	46,691,365
Prior Local 51 Combined Bases	01/01/1991	41,541	12	345,432
Prior Local 49 Combined Bases	01/01/1991	286,736	7	1,632,633
Prior Local 17 Combined Bases	01/01/1991	411,698	12	3,423,440
Plan Amendment	01/01/1991	4,891,545	17	49,607,634
Plan Amendment	01/01/1992	24,338,561	18	253,947,568
Plan Amendment	01/01/1993	5,201,026	19	55,682,235
Plan Amendment	01/01/1994	6,086,650	20	66,704,077
Plan Amendment	01/01/1995	1,519,236	21	17,007,074
Actuarial Loss	01/01/1996	17,855	7	101,663
Plan Amendment	01/01/1996	6,412,433	22	73,188,179
Assumption Change	01/01/1996	9,939,332	22	113,442,372
Plan Amendment	01/01/1997	8,866,050	23	102,998,601
Plan Amendment	01/01/1998	2,160,881	24	25,512,855
Actuarial Loss	01/01/1998	5,040,096	9	34,561,471
Prior Local 38 Combined Bases	01/01/1999	538,165	11	4,232,172
Plan Amendment	01/01/1999	555,299	25	6,654,127

**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT IV (continued)  
Funding Standard Account**

**Schedule of Funding Standard Account Bases: Amortization Charges as of January 1, 2009  
(Schedule MB, line 9c)**

Type of Base	Date Established	Amortization Amount	Years Remaining*	Outstanding Balance
Actuarial Loss	01/01/1999	5,275,114	10	38,924,472
Change in Funding Method	01/01/2000	1,315,629	6	6,638,513
Actuarial Loss	01/01/2000	4,068,170	11	31,992,421
Plan Amendment	01/01/2000	19,037,631	26	231,249,069
Plan Amendment	01/01/2001	192,228	27	2,364,307
Actuarial Loss	01/01/2001	5,338,829	12	44,394,631
Plan Amendment	01/01/2002	10,255,333	28	127,590,503
Actuarial Loss	01/01/2002	35,807,007	13	312,784,173
Plan Amendment	01/01/2003	3,719,186	29	46,762,729
Actuarial Loss	01/01/2003	60,459,486	14	551,743,608
Actuarial Loss	01/01/2004	4,431,608	15	42,052,210
Plan Amendment	01/01/2004	12,476,476	30	158,403,396
Actuarial Loss	01/01/2005	7,680,390	16	75,476,108
Actuarial Loss	01/01/2006	3,351,823	17	33,992,532
Plan Amendment	01/01/2006	3,205,525	32	41,404,609
Plan Amendment	01/01/2007	3,652,210	33	47,535,252
Actuarial Loss	01/01/2007	4,600,188	18	47,998,174
Change in Asset Method	01/01/2007	10,417,797	13	91,002,356
Change in Assumptions	01/01/2007	75,824,731	33	986,895,086
Actuarial Loss	01/01/2008	4,486,880	19	48,036,578

**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT IV (continued)**

**Funding Standard Account**

**Schedule of Funding Standard Account Bases: Amortization Charges as of January 1, 2009  
(Schedule MB, line 9c)**

<b>Type of Base</b>	<b>Date Established</b>	<b>Amortization Amount</b>	<b>Years Remaining*</b>	<b>Outstanding Balance</b>
Actuarial Loss	01/01/2009	<u>63,911,062</u>	20	<u>700,406,327</u>
Total		\$477,076,774		\$4,949,420,046

*\* The years remaining for all charge bases have been extended five years as of January 1, 2009 under IRC Section 431(d)(1).*

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**EXHIBIT IV (continued)**  
**Funding Standard Account**

**Schedule of Funding Standard Account Bases: Amortization Credits as of January 1, 2009**  
**(Schedule MB, line 9h)**

Type of Base	Date Established	Amortization Amount	Years Remaining	Outstanding Balance
Assumption Change	01/01/1989	\$4,851,477	11	\$38,152,404
Prior Local 501 Combined Bases	01/01/1990	22,415	12	186,393
Change in Method	01/01/1991	40,286	10	297,263
Assumption Change	01/01/1992	11,419,593	13	99,753,327
Change in Method	01/01/1992	15,774,802	13	137,797,286
Plan Amendment	07/01/1994	13,461	21.5	152,195
Actuarial Gain	01/01/1995	21,511,327	1	21,511,327
Plan Amendment	01/01/1996	14,769,689	17	149,786,899
Actuarial Gain	01/01/1997	5,462,306	3	15,270,232
Prior Local 38 Combined Bases	01/01/1999	1,046,592	5	4,551,968
Change in Asset Method	01/01/2000	22,673,696	1	22,673,696
Plan Amendment	09/01/2003	21,285,335	24.67	253,840,538
Plan Amendment	01/01/2005	3,079,758	26	37,409,653
Change in Funding Method	01/01/2007	45,147,422	8	284,275,318
Plan Amendment	01/01/2008	2,607,010	14	23,791,156
Plan Amendment	03/01/2008	49,137,498	14.17	451,547,655
Plan Amendment	08/01/2008	<u>27,770,774</u>	14.58	<u>259,372,248</u>
Total		\$247,613,441		\$1,800,369,558

**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT IV (continued)**

**Funding Standard Account**

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**Balancing Equation**

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1	Net outstanding balance of bases	\$3,149,050,488
2	Credit balance	<u>213,465,856</u>
3	Unfunded actuarial accrued liability: (1) - (2)	\$2,935,584,632

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**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT V**

**Current Liability**

The table below presents the current liability for the Plan Year beginning January 1, 2009.

<b>Item</b>	<b>Amount</b>
1. Retired participants and beneficiaries receiving payments	\$4,385,465,826
2. Inactive vested participants	785,854,877
3. Active participants	
a. Non-vested	673,010,129
b. Vested	<u>2,713,137,611</u>
c. Total active	3,386,147,740
4. Total	<u>\$8,557,468,443</u>
Projected increase in current liability due to benefits accruing during the plan year	\$220,822,425
Expected release from current liability for the plan year	419,939,495
Expected plan disbursements for the plan year, including administrative expenses	434,495,660
Current value of assets	\$2,344,664,521
Percentage funded for Schedule MB	27.4%

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

**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT VI**

**Actuarial Present Value of Accumulated Plan Benefits**

The actuarial present value of accumulated plan benefits is shown below as of January 1, 2009 and as of January 1, 2008.

	<b>Benefit Information Date</b>	
	<b>January 1, 2009</b>	<b>January 1, 2008</b>
Actuarial present value of vested accumulated plan benefits:		
Participants currently receiving payments	\$3,321,500,993	\$3,590,757,976
Other vested benefits	<u>2,043,314,239</u>	<u>2,315,455,304</u>
Total vested benefits	\$5,364,815,232	\$5,906,213,280
Actuarial present value of non-vested accumulated plan benefits	<u>384,366,825</u>	<u>404,606,558</u>
Total actuarial present value of accumulated plan benefits	<u>\$5,749,182,057</u>	<u>\$6,310,819,838</u>

The amounts shown above have been calculated in accordance with Actuarial Standard of Practice No. 4 promulgated by the Actuarial Standards Board for calculating such values. The actuarial assumptions used are shown in Exhibit VII.

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**EXHIBIT VI (continued)**

**Actuarial Present Value of Accumulated Plan Benefits**

The factors that affected the change in the actuarial present value of accumulated plan benefits from the preceding to the current benefit information date are as follows:

<b>Factors</b>	<b>Change in Actuarial Present Value of Accumulated Plan Benefits</b>
Plan amendments	-\$729,679,083
Benefits accumulated, net experience gain or loss, changes in data	163,055,372
Benefits paid	-407,497,609
Changes in actuarial assumptions	0
Interest	<u>412,483,539</u>
Total	<u>-\$561,637,781</u>

Plan changes recognized in the actuarial present value of accumulated plan benefits as of January 1, 2009 include the changes to the Plan specified by the Rehabilitation Plan.

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**EXHIBIT VII**

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

**Mortality Rates:** Healthy: RP-2000 Combined Healthy Blue Collar Mortality Table  
 Disabled: RP-2000 Combined Healthy Blue Collar Mortality Table for males, with participants under age 60 set forward to age 65 and participants over age 60 set forward 5 years

**Termination Rates Before Retirement:**

Age	Rate (%)				
	Mortality		Disability	Withdrawal*	
	Male	Female		Construction	Production
20	0.03	0.02	0.05	6.53	7.89
25	0.04	0.02	0.05	5.22	7.67
30	0.07	0.03	0.05	4.78	7.17
35	0.11	0.05	0.06	4.41	6.22
40	0.14	0.09	0.09	3.75	5.06
45	0.18	0.14	0.18	3.03	3.80
50	0.24	0.20	0.40	1.12	2.16
55	0.42	0.28	0.85	0.33	0.94
60	0.83	0.49	1.74	0.00	0.09

*\*Withdrawal rates cut out upon eligibility for early retirement*

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<b>Retirement Rates</b>	<b>Age</b>	<b>Rate (%)</b>
	55	10
	56-58	2
	59	8
	60-61	15
	62-69	50
	70	100

*Upon eligibility for the 55/30 Pension, the rates until age 62 are the maximum of 15% or the above rates plus 5%, with 30% in the first year of eligibility.*

**Description of Weighted Average Retirement Age:**

Age 61, determined as follows: The overall weighted retirement age is the average of the individual retirement ages, assuming no other decrements, based on all the active participants included in the January 1, 2009 actuarial valuation.

**Retirement Age for Inactive Vested Participants:**

65

**Future Benefit Accruals:**

For Construction employees: 1,650 hours per year  
 For Production employees: 1,700 hours per year  
 The Rehabilitation Plan schedule covering each participant is assumed to remain unchanged.

**Unknown Data for Participants:**

Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male. For participants with unknown schedule under the Rehabilitation Plan, it was assumed that employers who had not previously made required contribution increases would elect the Default Schedule, and that all other employers would elect the Alternative Schedule (with those previously contributing the 55/30 rate continuing to do so).

**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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**Definition of Active Participants:** Employees with at least 435 hours in the most recent plan year and who have accumulated at least one year of vesting service, excluding those who have retired as of the valuation date.

**Exclusion of Inactive Vested:** Liabilities for inactive participants over the age 70 are excluded from the valuation.

**Percent Married:** 80%

**Age of Spouse:** Females are 3 years younger than males.

**Benefit Election:** Married participants are assumed to elect the 50% Joint and Survivor annuity with a pop-up feature, and non-married participants are assumed to elect the Life Annuity.

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**Net Investment Return:** 7.50%

**Annual Administrative Expenses:** \$14,000,000, payable beginning of the year, for the year beginning January 1, 2009 (equivalent to \$14,556,165 payable monthly throughout the year)

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**Actuarial Value of Assets:** The market value of assets less unrecognized returns in each of the last five years, no earlier than January 1, 2007. Unrecognized return is equal to the difference between the actual market return and the projected return on the market value, and is recognized (20% per year) over a five-year period. The actuarial value is further adjusted, if necessary, to be within 20% of the market value. The actuarial value is initialized at market value as of January 1, 2007.

**Actuarial Cost Method:** Unit Credit Actuarial Cost Method. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis.

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**Benefits Valued:** Unless otherwise indicated, includes all benefits summarized in Exhibit VIII.

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**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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**Current Liability Assumptions:**

*Interest* 4.82%

*Mortality* Mortality prescribed under IRS Regulations 1.431(c)(6)-1 and 1.430(h)(3)-1, using the static tables with separate tables for annuitants and nonannuitants (RP-2000 tables projected forward to the valuation year plus seven years for annuitants and 15 years for nonannuitants)

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**Estimated Rate of Investment Return:**

*On actuarial value of assets*  
*(Schedule MB, line 6g):* -13.10%, for the Plan Year ended December 31, 2008

*On current (market) value of assets*  
*(Schedule MB, line 6h):* -27.64%, for the Plan Year ended December 31, 2008

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**SECTION 4: Certificate of Actuarial Valuation for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT VIII**

**Summary of Plan Provisions  
(Schedule MB, line 6)**

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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.

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<b>Plan Year:</b>	January 1 through December 31
<b>Pension Credit Year:</b>	January 1 through December 31
<b>Plan Status:</b>	Ongoing plan

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**Normal Pension:**

*Age Requirement* 65

*Service Requirement* 5 years of participation in the Plan

*Amount*

**For Service on and after December 1, 2007:**

Employers that have not made required contribution rate increases: Same as accrual for service after August 31, 2003

Employers that have made required contribution rate increases: For participants in non-55/30 Locals, the total contribution rate (including amounts previously considered supplemental) is subject to benefit accruals. For participants in 55/30 Locals, 70% of the total contribution rate is subject to benefit accruals. The benefit formula is 1.5% of contributions up to 1,200 hours, plus 0.7% of contributions in excess of 1,200 hours. The 1.5% multiplier is applied to the first 1,200 hours at the highest contribution rate in effect during the Plan year.

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**For Service after August 31, 2003 and before December 1, 2007:**

Highest 1,400 Contribution Hours annually earn 0.86% (12/1400) times applicable contributions made on a participant's behalf. Remaining Contribution Hours earn 0.3% times applicable contributions made on a participant's behalf.

Supplemental accruals:

Locals are required to increase their contribution rates by 10% annually for eligibility. Participants of Locals that make the required increases earn a supplemental accrual that brings the total accrual to twice the normal rate in the year following the increase.

**For Service after December 31, 1999 and before September 1, 2003:**

Highest 1,400 Contribution Hours annually earn 1.7142% (24/1400) times applicable contributions made on a participant's behalf. Remaining Contribution Hours earn 0.6% times applicable contributions made on a participant's behalf.

**For Service Before January 1, 2000:**

Benefit accrued according to the rules of the Plan in effect on December 31, 1999

**Past Service:**

\$10.00 for each year of Past Service Credit, if any, up to 10 years

---

**Early Retirement:**

<i>Age Requirement</i>	55
<i>Service Requirement</i>	Fulfill any one of the following: a. 10 years of Pension Credits, including at least 5 years of Future Service, or b. 10 years of Vesting Service, or c. 15 years of Pension Credits, including at least 1 year of Future Service Credit
<i>Amount</i>	Accrued benefit, reduced by 3% per year from age 65 to age 62, and 6% per year from age 62 to age 55

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**Special Early Retirement:**

<i>Age Requirement</i>	55
<i>Service Requirement</i>	The earliest date of the following: a. 10 years of Pension Credits, including at least 5 years of Future Service Credit, or b. 10 years of Vesting Service, or c. 15 years of Pension Credits, including at least 1 year of Future Service Credit
<i>Active Service Requirement</i>	Complete at least 3,500 hours of work in covered employment during the 5 consecutive calendar years immediately preceding retirement
<i>Amount</i>	Accrued benefit, reduced by 3% per year from age 62 to age 60, and 6% per year from age 60 to age 55

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**55/30 Pension:**

<i>Eligibility Requirements</i>	Age 55 with 30 years of Future Service Credit, 24 months of Future Service Credit at a 55/30 Contribution Rate, at least 60 months of the last 120 months of Future Service Credit subject to a 55/30 Contribution Rate, and at least 3,500 hours of work in covered employment during the 5 consecutive calendar year immediately preceding retirement
<i>Amount</i>	Normal Retirement benefit amount, with 80% of non-supplemental contributions through November 30, 2007 (including the 55/30 Contributions) and 70% of all contributions on and after December 1, 2007 subject to benefit accruals

---

**Total Disability:**

<i>Age Requirement</i>	Less than Normal Retirement Age
<i>Service Requirement</i>	10 years of Credited Service, including at least five years of Future Service Credit and worked at least 435 hours in the 24 month period immediately preceding the date of disablement
<i>Amount</i>	Accrued benefit as if eligible for an Early Retirement benefit, payable beginning in the seventh month of disability

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**Vesting:**

<i>Age Requirement</i>	None
<i>Service Requirement</i>	5 years of Vesting Service
<i>Amount</i>	Normal pension accrued, based on plan in effect when last active
<i>Normal Retirement Age</i>	65

---

**Pre-Retirement Death Benefit:**

**Husband and Wife:**

<i>Eligibility</i>	<i>Vested</i>
<i>Amount</i>	50% of the monthly benefit the participant would have received had he/she terminated employment on his/her date of death and survived to his/her Early Retirement Date (or any later date elected by the spouse), retired and elected to receive benefits in the Normal Form of payment
<i>When Paid</i>	The later of immediately or the month in which the Participant would have attained his/her earliest retirement age

**Lump Sum (if Husband and Wife Death Benefit is not payable):**

<i>Eligibility</i>	At least 435 hours within 24 month period preceding death, or 60 months of Future Service Credit that has not been lost due to a Break in Service
<i>Amount</i>	50% of contributions made on behalf of the employee, up to \$5,000. The value of the Lump Sum shall not be less than the actuarial equivalent of the Spouse's monthly benefit otherwise payable.

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**Post-Retirement Death Benefit:**

<i>Husband and Wife</i>	If married, pension benefits are paid in the form of a 50% joint and survivor annuity unless the participant and spouse reject this form. If not rejected, the benefit amount otherwise payable is reduced to reflect the joint and survivor coverage. If not rejected, and the spouse predeceases the employee, and the employee retired on July 1, 1999 or later, the employee's benefit amount will subsequently be increased to the unreduced amount payable had the joint and survivor coverage been rejected. If rejected, or if not married, benefits are payable for the life of the employee, or in any other available optional form elected by the employee in an actuarially equivalent amount.
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*60 Payment Guarantee*

If the member has completed at least 15 years of Pension Credits before retirement and died within 5 years after retirement (if married, and taking Husband and Wife pension, the spouse also died prior to receiving an amount equal to 60 times the amount of the pension the participant had been entitled), the pension benefit will continue to be paid to the participant's designated beneficiary until a total of 60 months payments had been made.

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**Optional Forms of Payment:**

The normal forms of payment are:

- Single life annuity for single participants, and
- 50% joint and survivor annuity with a "pop-up" feature for married participants

The optional forms of payment are:

- Single life annuity with 60 months guaranteed
- Single life annuity with 60 months guaranteed
- Single life annuity with 120 months guaranteed
- 50% joint and survivor annuity with a "pop-up" feature and 60 months guaranteed
- 100% joint and survivor annuity with and without a "pop-up" feature
- Social Security level income option, assuming Social Security benefits start at either age 62 or age 65
- 50% joint and survivor annuity with a "pop-up" feature, with the Social Security level income option, assuming Social Security benefits start at either age 62 or age 65

Note that some of these payment forms are not payable because the Plan is in Critical status. See the summary of the Rehabilitation Plan for details.

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**Participation:**

After completion of 870 hours during a calendar year.

**Past Service Credit:**

Service granted on the basis of days worked or amount earned in covered employment in calendar years prior to a participant's Contribution Date

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**Future Service Credit:** Service granted on the basis of hours of work in a calendar year after a Participant’s Contribution Date in accordance with the following schedule:

<u>Months of Future Service Credit</u>	<u>Hours of Work in Covered Employment During Calendar Year</u>
0	Less than 100
1	100 - 199
2	200 - 299
3	300 - 399
4	400 - 499
5	500 - 599
6	600 - 699
7	700 - 799
8	800 - 899
9	900 - 999
10	1,000 - 1,099
11	1,100 - 1,199
12	1,200 & Over

**Pension Credit:** Sum of the Past Service Credit and Future Service Credit (excluding service lost under the Plan’s break in service rules)

**Vesting Service:** 870 or more hours of work within a Plan year earns one year of Vesting Service

**Contribution Rate:** Varies from \$0.26 to \$8.22 per hour as of the valuation date. The average rate is \$3.12 per hour as of January 1, 2009. 2.5% of employer contributions are allocated to 401(h) Medical Accounts but are subject to pension benefit accruals.

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**Cost of Living Increases:**

<i>Eligibility</i>	Pensioners and beneficiaries whose local contribution rate was increased by 1 cent for each 12 cents of contribution rate in effect as of December 31, 1990 and who separated after December 31, 1990.
<i>Amount</i>	An annual supplement equal to 2% of the participant's total monthly payments for the 12 months immediately preceding the allocation date, multiplied by the number of whole years preceding the allocation date that the participant has received benefits, up to a maximum of 15 years. If the participant has elected a level income option, the 2% factor is applied to the benefit prior to the adjustment for the form of payment.  Effective July 1, 1995, COLA benefits have been eliminated for benefits accrued after June 30, 1995.

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**Plan Provisions for Active Participants  
Whose Employer Elects a Schedule  
Under the Rehabilitation Plan:**

<i>Normal Pension Amount Under the Default Schedule</i>	If a participant's employer elects the Default Schedule under the Rehabilitation Plan, benefit accruals on and after the election date will equal the lesser of 1% of all contributions required to be made on the participant's behalf and the accrual rate in effect when the Default Schedule was adopted.
<i>Early Retirement Amount</i>	Accrued benefit, reduced by 6% per year from age 65 to age 55
<i>Special Early Retirement Under the Default Schedule</i>	Pension is not available.
<i>Special Early Retirement Amount Under the Alternative Schedule</i>	Accrued benefit, reduced by 6% per year from age 62 to age 55
<i>55/30 Pension Amount</i>	

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*Under the Default Schedule* Pension is not available.

*Disability Amount* Benefit payable as if the participant were age 55 and had elected the greatest retirement benefit (i.e., Early Retirement, Special Early Retirement or 55/30 Pension) for which the participation is eligible. Pension payments begin in the seventh month of disability.

*Optional Forms of Payment* The following optional forms of payment were eliminated under each schedule:

- Single life annuity with 120 months guaranteed
- Social Security level income option, assuming Social Security benefits start at either age 62 or age 65
- 50% joint and survivor annuity with a “pop-up” feature, with the Social Security level income option, assuming Social Security benefits start at either age 62 or age 65

*Contribution Rate Increases Scheduled for Employers Who Elected the Alternative Schedule*

<u>Year</u>	<u>Scheduled Increase</u>
2009-10*	7%
2011-12*	7%
2013-14*	7%
2015-17*	7%

*\* Will be recognized in future valuations*

*Cost of Living Increases* Benefit is not available.

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**Plan Provisions Under the Rehabilitation Plan for Inactive Participants Not in Pay Status as of March 1, 2008:**

<i>Early Retirement Amount</i>	Accrued benefit, actuarially reduced from age 65 to age 55
<i>Special Early Retirement</i>	Pension is not available.
<i>55/30 Pension Amount</i>	Pension is not available.
<i>Cost of Living Increases</i>	Benefit is not available.

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**Plan Provisions Under the Rehabilitation Plan for Inactive Participants in Pay Status as of March 1, 2008:**

<i>Cost of Living Increases</i>	All COLA benefits are equal to the amount payable as of December 31, 2002.
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**Changes in Plan Provisions:**

Since benefit accruals are tied directly to contribution rates, the contribution rate increases are treated as a Plan change. The average contribution rate increased from \$2.85 per hour as of January 1, 2008 to \$3.10 per hour as of January 1, 2009. The average rate for 2009, including reported bargained increases, is \$3.12.

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