



**SHEET METAL WORKERS LOCAL
PENSION FUND
P.O. BOX 368
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(248) 641-4902 or Toll Free (866) 599-3176**

SHEET METAL WORKERS LOCAL PENSION FUND

PENALTY OF PERJURY STATEMENT/PUBLIC DISCLOSURE STATEMENT

Pursuant to Sections 2.03 and 2.04 of IRS Revenue Procedure 2017-43, the undersigned Trustee makes the following two statements:

Under penalties of perjury I declare that I have examined this application, including the accompanying documents, and, to the best of my knowledge and belief, the application contains all of the relevant facts relating to this request, and such facts are true, correct and complete.

I acknowledge that, pursuant to Section 432(e)(9)(G)(ii) of the Internal Revenue Code, the application for approval of the proposed suspension of benefits, and the application's supporting material, will be publicly disclosed through publication to the Treasury Department's website.

[REDACTED]

Tom Wiant, Chairman

Signed: March 25, 2019



July 27, 2018

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Internal Revenue Service
Employee Plans Compliance Unit
Group 7602 (TEGE:EP:EPCU)
230 S. Dearborn Street
Room 1700, 17th Floor
Chicago, Illinois 60604

**Re: Pension Protection Act (PPA) Actuarial Certification for Plan Year Beginning
May 1, 2018 – Sheet Metal Workers Local Pension Plan**

In accordance with IRC Section 432(b)(3)(A), we have prepared and attached an actuarial certification for the plan year beginning May 1, 2018 for Sheet Metal Workers Local Pension Plan.

In our opinion, the assumptions used for the actuarial certification are individually reasonable based on the experience of the plan and on reasonable expectations of anticipated experience under the plan. The projections in this report are dependent on the assumptions used. Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in these projections. Actual results will differ from projected amounts to the extent that actual experience is better or worse than expected.

On the basis of the foregoing and as a member of the American Academy of Actuaries (AAA) who meets the Qualification Standards of the AAA to render the actuarial opinion contained herein, I hereby certify that, to the best of my knowledge and belief, this letter is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices.

_____

Kevin M. Campe, EA, MAIA
Principal and Consulting Actuary

cc: Board of Trustees
Mr. Michael Novara
Mr. Paul Newcomer
Ms. Mary Weir
Ms. Kristy Lowell

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Sheet Metal Workers Local Pension Plan
PPA Actuarial Certification for Plan Year Beginning May 1, 2018

Funding Status Projection Results

<u>Plan Year Beginning</u>	<u>Funded Percentage</u>	<u>Contributions</u>	<u>Credit Balance at End of Year</u>
5/1/2017	43.4%	3,889,000	(3,403,000)
5/1/2018	41.4	3,850,000	(7,671,000)
5/1/2019	40.6	3,500,000	(12,057,000)
5/1/2020	39.6	3,500,000	(16,201,000)
5/1/2021	39.0	3,500,000	(20,299,000)
5/1/2022	38.0	3,325,000	(24,660,000)
5/1/2023	36.6	3,325,000	(28,549,000)
5/1/2024	34.9	3,325,000	(32,929,000)
5/1/2025	32.8	3,325,000	(38,411,000)
5/1/2026	30.5	3,325,000	(44,126,000)
5/1/2027	27.7	3,325,000	(49,271,000)

An accumulated funding deficiency is projected to occur for the plan year ending April 30, 2018.

The funded percentage as of May 1, 2018 is projected to be 41.4%.

The Plan fails Critical Tests 2 and 3 (refer to the Appendix), as described under IRC Section 432(b)(2).

The Plan is projected to become insolvent in the plan year beginning May 1, 2033.

PPA Certification

Based on the actuarial assumptions and methods, financial and participant data, and Plan provisions, as used for the actuarial valuation for the Plan year ended April 30, 2018, I hereby certify that the Sheet Metal Workers Local Pension Plan is “critical and declining” for the plan year beginning May 1, 2018 as defined in the Pension Protection Act of 2006 as amended by the Multiemployer Pension Reform Act of 2014 (“MPRA”).


Further, I hereby certify that to the best of my knowledge and belief, the actuarial assumptions employed in preparing this certification are individually reasonable and represent my best estimate of future experience. Additionally, the “projected industry activity” assumption, as required under IRC Section 432(b)(3)(B)(iii), has been provided by the Board of Trustees.

Sheet Metal Workers Local Pension Plan
PPA Actuarial Certification for Plan Year Beginning May 1, 2018

Scheduled Progress

The Pension Protection Act (PPA) requires the actuary to certify whether the plan is making scheduled progress in meeting the requirements of its Rehabilitation Plan. The Rehabilitation Plan for the Sheet Metal Workers Local Pension Plan reduced certain benefits and increased the Plan's contribution rates. The Trustees determined using reasonable actuarial assumptions and methods that they were unable to adopt a Rehabilitation Plan that would enable the Plan to emerge from critical status by the end of the 13-year Rehabilitation Period on April 30, 2024 which began on May 1, 2011 (as extended three additional years under the Worker, Retiree, and Employer Recovery Act of 2008).

As a result, the Trustees adopted a Rehabilitation Plan that, in their judgment, consisted of all reasonable measures to either emerge from critical status by a later date than the 13-year period mentioned above or forestall insolvency. As required under the PPA, the Trustees have been and will continue to review the Rehabilitation Plan annually. Based on implementation of the Rehabilitation Plan, assumed future contracts adopted by the bargaining parties and reflecting the Plan's experience through April 30, 2018, I hereby certify that the Plan is making scheduled progress as of May 1, 2018 as required under IRC Section 432(b)(3)(A)(ii).



Kevin M. Campe
Enrolled Actuary #17-5356

July 27, 2018
Date

Sheet Metal Workers Local Pension Plan
PPA Actuarial Certification for Plan Year Beginning May 1, 2018

Summary of Assumptions/Methods

1. Our forecast of future minimum funding requirements is based on:
 - May 1, 2017 actuarial valuation.
 - April 30, 2018 unaudited financial statements provided by the Fund's administrator, which provides the market value of assets as of April 30, 2018 and the income and disbursements for the plan year ended April 30, 2018. The results reflect an estimated rate of return on market assets of 6.70% (net of investment-related administrative expenses) for the plan year ended April 30, 2018.
 - Investment returns after April 30, 2018 are based on the Fund's target asset allocation and Horizon 10-year capital market survey assumptions for the first nine years and Horizon 10-year capital market survey assumptions thereafter. The assumed annual rate of return on market assets (net of investment-related administrative expenses) is 6.64% for plan years ending April 30, 2019 through April 30, 2027 and 7.40% for plan years after April 30, 2027.
 - No future asset gains or losses other than the gains or losses related to the asset smoothing method.
 - Input from the Fund's Board of Trustees that hours worked will be:
 - 1,100,000 hours for plan year ending April 30, 2019,
 - 1,000,000 hours for the plan years ending April 30, 2020 through April 30, 2022, and
 - 950,000 hours for each plan year thereafter.
 - The assumption of a stable active population for each plan year after April 30, 2017.
 - Plan provisions identical to those used in the May 1, 2017 actuarial valuation.
 - All other actuarial assumptions and methods being the same as those used in the May 1, 2017 actuarial valuation except for the following:
 - Administrative expenses are assumed to decrease to \$385,000 for the plan year ending April 30, 2019, further decrease to \$287,000 for the plan year ending April 30, 2020, and then increase by 2% per year thereafter. This assumption was refined to reflect the short-term increase in expenses related to the application for the proposed benefit suspension.
2. This actuarial certification is based on 1) the proposed Multiemployer Plan Funding Guidance provided by the IRS on March 18, 2008, 2) the December 2007 Practice Note issued by the Multiemployer Plans Subcommittee of the Pension Committee of the American Academy of Actuaries, and 3) action taken by the Board of Trustees on or before June 28, 2018.

Sheet Metal Workers Local Pension Plan
PPA Actuarial Certification for Plan Year Beginning May 1, 2018

Plan Identification

Name: Sheet Metal Workers Local Pension Plan
EIN: 34-6666753
Plan Number: 001
Address: 1890 Venture Circle SE
Massillon, OH 44646
Telephone Number: (330) 833-2888

Enrolled Actuary Identification

Name: Mr. Kevin M. Campe
Enrollment Number: 17-5356
Address: Milliman, Inc.
71 S. Wacker Drive
31st Floor
Chicago, IL 60606
Telephone Number: (312) 726-0677

Sheet Metal Workers Local Pension Plan
PPA Actuarial Certification for Plan Year Beginning May 1, 2018

Summary of Zone Status Definitions Under PPA as Amended by MPRA

Critical (“Red Zone”) Status - IRC Section 432(b)(2) and 432(b)(4)

Any one of four tests under IRC Section 432(b)(2):

- Test 1 Less than 65% funded and market value of assets plus contributions for current year plus next following 6 plan years is less than present value of projected benefit payments and administrative costs over that 7-year period or
- Test 2 Projected funding deficiency in current year or next following 3 plan years (4 plan years if 65% funded or less)¹ or
- Test 3 Present value of vested benefits (actives) is less than present value of benefits (inactives), and present value of projected contributions is less than the unit credit normal cost plus interest on the unfunded present value of accrued benefits and projected funding deficiency in current or next 4 plan years¹ or
- Test 4 Market assets plus projected contributions over current year plus next 4 plan years is less than the present value of benefit payments plus administrative costs over same 5 year period.

Within 30 days after the date of this certification, a plan that is not in critical status but is projected to be in critical status in any of the succeeding 5 plan years *may* elect under IRC Section 432(b)(4) to be in critical status effective for the current plan year.

Critical and Declining (“Deep Red Zone”) Status – IRC Section 432(b)(6)

In critical status and either:

- Projected insolvency in current year or any of the 14 following plan years or
- Projected insolvency in current year or any of the 19 following plan years if:
 - Ratio of ratio of inactive participants to active participants exceeds 2 to 1 or
 - Less than 80% funded

Endangered (“Yellow Zone”) Status – IRC Section 432(b)(1)

Not in critical status and either:

- Less than 80% funded or
- Projected funding deficiency in current plan year or next following 6 plan years²

Seriously Endangered (“Orange Zone”) Status - IRC Section 432(b)(1)

Not in critical status and both:

- Less than 80% funded and
- Projected funding deficiency in current plan year or next following 6 plan years²

¹ Not taking into account an extension of amortization periods under IRC Section 431(d), if any

² Taking into account an extension of amortization periods under IRC Section 431(d), if any



Sheet Metal Workers Local Pension Plan

Supplemental Information to Actuarial Certification for the Plan Year
Beginning May 1, 2018

Prepared by:

Kevin M. Campe, EA, MAAA
Principal and Consulting Actuary

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Supplemental Information to Actuarial Certification for the Plan Year Beginning May 1, 2018 of the Sheet Metal Workers Local Pension Plan

This supplement to the Actuarial Certification for the Plan Year Beginning May 1, 2018 for the Sheet Metal Workers Local Pension Plan (the “Plan”) has been completed in accordance with our understanding of IRC §432(e)(9) (including §1.432(e)(9)-1 and Revenue Procedure 2017-43).

Purpose of the Report

This supplement is meant to fulfill the additional disclosure requirements laid out in Revenue Procedure 2017-43 Section 3.01 which are not explicitly shown in the original certification. This information is based on the Actuarial Certification for the Plan Year Beginning May 1, 2018 dated July 27, 2018.

Limited Distribution

Milliman’s work is prepared solely for the internal business use of the Board of Trustees Sheet Metal Workers Local Pension Plan (the “Plan Sponsor”) and the Plan’s Trustees and may not be provided to third parties without our prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman’s consent to release its work product to any third party may be conditioned on the third party signing a release, subject to the following exceptions:

- The Plan Sponsor may provide a copy of Milliman’s work, in its entirety, to the Plan’s professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman’s work for any purpose other than to benefit the Plan.
- The Plan Sponsor may distribute certain work product that Milliman and the Plan Sponsor mutually agree is appropriate as may be required by the Pension Protection Act of 2006.

Any third party recipient of this work product who desires professional guidance should not rely upon Milliman’s work product, but should engage qualified professionals for advice appropriate to its own specific needs.

Reliance

In preparing the report, we relied on our Actuarial Certification for the Plan Year Beginning May 1, 2018 dated July 27, 2018 and our May 1, 2017 Actuarial Valuation dated March 22, 2018.

Limited Use

Actuarial computations presented here were prepared to meet the requirement set forth in IRC §432(e)(9) (taking into account §1.432(e)(9)-1 and Revenue Procedure 2017-43).

Actuarial computations for other purposes may yield significantly different results from those shown in this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, 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 plan funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuarial assignment, we did not perform an analysis of the potential range of such future measurements.


The consultants who worked on this assignment are pension actuaries. Milliman’s advice is not intended to be a substitute for qualified legal or accounting counsel.

Certification

In our opinion, each assumption used, other than those assumptions mandated directly by the Internal Revenue Code and regulations thereon, is individually reasonable (taking into account the experience of the Plan and reasonable expectations) and, in combination, such other assumptions offer our best estimate of anticipated experience under the Plan.

On the basis of the foregoing, I hereby certify that to the best of my knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States promulgated by the American Academy of Actuaries. I am a member of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Respectfully submitted,


Kevin M. Campe, EA, MAAA
Principal and Consulting Actuary
Enrolled Actuary Number 17-05356

March 29, 2019

Date

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A. Solvency Projection

The following table shows the plan-year-by-year market value of assets projection to insolvency. The plan years ending April 30, 2018 through April 30, 2034 are shown.

Plan year beginning May 1	2017	2018	2019	2020	2021	2022	2023	2024
1. Market value of assets (beginning of year)	\$41,435,167	\$42,052,579	\$42,098,180	\$41,663,342	\$40,932,869	\$39,812,138	\$38,084,799	\$35,920,018
2. Employer contributions	3,888,546	3,850,000	3,500,000	3,500,000	3,500,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	N/A	5,279,598	5,165,653	5,046,151	4,902,053	4,768,944	4,628,607	4,488,680
b. Terminated vested participants	N/A	390,162	620,033	883,090	1,167,990	1,488,745	1,775,009	2,032,699
c. Current actives	N/A	454,705	554,983	664,011	848,298	995,052	1,155,571	1,256,468
d. New entrants	N/A	0	0	0	0	0	0	0
e. Total	5,473,636	6,124,465	6,340,669	6,593,252	6,918,341	7,252,741	7,559,187	7,777,847
5. Administrative expenses	503,746	385,000	287,000	292,740	298,595	304,567	310,658	316,871
6. Investment returns	2,706,248	2,705,066	2,692,831	2,655,519	2,596,205	2,504,969	2,380,064	2,228,977
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$42,052,579	\$42,098,180	\$41,663,342	\$40,932,869	\$39,812,138	\$38,084,799	\$35,920,018	\$33,379,277
8. Available resources (1) + (2) + (3) - (5) + (6)	\$47,526,215	\$48,222,645	\$48,004,011	\$47,526,121	\$46,730,479	\$45,337,540	\$43,479,205	\$41,157,124
9. Solvency ratio (8) / (4e)	8.68	7.87	7.57	7.21	6.75	6.25	5.75	5.29
Plan year beginning May 1	2025	2026	2027	2028	2029	2030	2031	2032
1. Market value of assets (beginning of year)	\$33,379,277	\$30,505,590	\$27,225,591	\$23,779,853	\$19,941,452	\$15,727,016	\$11,196,003	\$6,319,804
2. Employer contributions	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	4,337,710	4,179,513	4,018,912	3,853,835	3,684,730	3,512,093	3,336,453	3,158,393
b. Terminated vested participants	2,286,701	2,506,178	2,711,970	2,915,441	3,093,642	3,254,311	3,386,797	3,476,990
c. Current actives	1,306,144	1,447,083	1,526,487	1,614,219	1,687,030	1,696,545	1,742,106	1,758,897
d. New entrants	0	0	0	0	0	0	0	0
e. Total	7,930,555	8,132,774	8,257,369	8,383,495	8,465,402	8,462,949	8,465,356	8,394,280
5. Administrative expenses	323,208	329,672	336,265	342,990	349,850	356,847	363,984	371,264
6. Investment returns	2,055,076	1,857,447	1,822,896	1,563,084	1,275,816	963,783	628,141	269,621
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$30,505,590	\$27,225,591	\$23,779,853	\$19,941,452	\$15,727,016	\$11,196,003	\$6,319,804	\$1,148,881
8. Available resources (1) + (2) + (3) - (5) + (6)	\$38,436,145	\$35,358,365	\$32,037,222	\$28,324,947	\$24,192,418	\$19,658,952	\$14,785,160	\$9,543,161
9. Solvency ratio (8) / (4e)	4.85	4.35	3.88	3.38	2.86	2.32	1.75	1.14

A. Solvency Projection

Plan year beginning May 1	2033
1. Market value of assets (beginning of year)	\$1,148,881
2. Employer contributions	3,325,000
3. Withdrawal liability payments	0
4. Benefit payments	
a. Current retirees and beneficiaries	2,978,565
b. Terminated vested participants	3,547,827
c. Current actives	1,789,137
d. New entrants	0
e. Total	8,315,529
5. Administrative expenses	378,689
6. Investment returns	<u>8,641</u>
7. Market value of assets (end of year)	
(1) + (2) + (3) - (4e) - (5) + (6)	Insolvent
8. Available resources	
(1) + (2) + (3) - (5) + (6)	\$4,103,833
9. Solvency ratio (8) / (4e)	0.49

B. Projected Total Contribution Base Units and Contribution Rates

The following table shows the assumed contribution base units (hours) and contribution rate used to produce the Actuarial Certification for the Plan Year Beginning May 1, 2018.

<u>Plan Year Beginning May 1</u>	<u>Total Contribution Base Units (hours)</u>	<u>Average Contribution Rate</u> <u>(Hourly)</u>
2018	1,100,000	\$3.50
2019	1,000,000	\$3.50
2020	1,000,000	\$3.50
2021	1,000,000	\$3.50
2022	950,000	\$3.50
2023	950,000	\$3.50
2024	950,000	\$3.50
2025	950,000	\$3.50
2026	950,000	\$3.50
2027	950,000	\$3.50
2028	950,000	\$3.50
2029	950,000	\$3.50
2030	950,000	\$3.50
2031	950,000	\$3.50
2032	950,000	\$3.50
2033	950,000	\$3.50

C. New Entrant Profile

Although the active population is assumed to remain stable, no assumption was made with respect to the demographic characteristics of new entrants as benefit accruals have been suspended since August 1, 2013.



Sheet Metal Workers Local Pension Plan

Report of Required Actuarial Information -

Application for Proposed Benefit Suspensions as of May 1, 2020

Prepared by:

Kevin M. Campe, EA, MAAA

Principal and Consulting Actuary

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Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of May 1, 2020 for the Sheet Metal Workers Local Pension Plan

This report includes the Actuarial Certification of Plan Solvency and a presentation of additional actuarial information required for the application to suspend benefits for the Sheet Metal Workers Local Pension Plan (the “Plan”). This report has been completed in accordance with our understanding of IRC §432(e)(9) (including §1.432(e)(9)-1 and Revenue Procedure 2017-43).

Purpose of the Report

The Plan was certified as “critical and declining” for the plan years beginning May 1, 2016, May 1, 2017 and May 1, 2018. The Trustees have chosen to pursue benefit suspensions which are allowed to such plans under §432. We have completed our analysis of the Trustees’ proposed benefit suspensions and determined that the proposed suspensions of benefits would likely enable the Plan to avoid insolvency (as defined in IRC §418E) assuming the proposed suspensions continue indefinitely and occur no later than May 1, 2020. In addition, we have also completed the analysis required to satisfy §432(e)(9)(D)(iv) (taking into account §1.432(e)(9)-1 and Revenue Procedure 2017-43) which requires that the proposed suspension does not materially exceed the level necessary to avoid insolvency. This report also includes additional information required for the application to suspended benefits.

Specifically, this report contains the materials required in checklist items 6, 9, 11, 25, 26, 27 and 28 included in Revenue Procedure 2017-43.

Limited Distribution

Milliman’s work is prepared solely for the internal business use of the Board of Trustees Sheet Metal Workers Local Pension Plan (the “Plan Sponsor”) and the Plan’s Trustees and may not be provided to third parties without our prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman’s consent to release its work product to any third party may be conditioned on the third party signing a release, subject to the following exceptions:

- The Plan Sponsor may provide a copy of Milliman’s work, in its entirety, to the Plan’s professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman’s work for any purpose other than to benefit the Plan.
- The Plan Sponsor may distribute certain work product that Milliman and the Plan Sponsor mutually agree is appropriate as may be required by the Pension Protection Act of 2006 and the Multiemployer Pension Reform Act of 2014.

Any third party recipient of this work product who desires professional guidance should not rely upon Milliman’s work product, but should engage qualified professionals for advice appropriate to its own specific needs.

Reliance

In preparing the report, we relied on our May 1, 2017 Actuarial Valuation, and, without audit, information (some oral and some in writing) supplied by the Plan’s administrator, auditor, and investment consultant. This information includes, but is not limited to, plan documents and provisions, participant data, and financial information. In general, the participant data used for purposes of this application are the same data used for the May 1, 2017 Actuarial Valuation. Additional individual participant information (i.e. missing pop-up amounts, years of service) was supplied by the Plan Administrator subsequent to the May 1, 2017 valuation to refine the benefit payment projections.

We found this information to be reasonably consistent and comparable with information used for other purposes. The results depend on the integrity of this information. If any of this information is incomplete or inaccurate, our results may be different and our calculations may need to be revised.

Limited Use

Actuarial computations presented here were prepared to meet the requirement set forth in IRC §432(e)(9) (taking into account §1.432(e)(9)-1 and Revenue Procedure 2017-43).

Determinations for other purposes may yield significantly different results from those shown in this report. Other calculations may be needed for other purposes, such as judging benefit security at termination.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, 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 plan funded status); and changes in plan provisions or applicable law.


The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

Certification

In my opinion, each assumption used, other than those assumptions mandated directly by the Internal Revenue Code and regulations thereon, is reasonable (taking into account the experience of the Plan and reasonable expectations).

On the basis of the foregoing, I hereby certify that to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States promulgated by the American Academy of Actuaries. I am a member of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Respectfully submitted,



Kevin M. Campe, EA, MAAA
Principal and Consulting Actuary
Enrolled Actuary Number 17-05356

March 29, 2019

Date

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A. Summary of Key Information and Results

The application filed on behalf of the Sheet Metal Workers Local Pension Plan sets forth the following proposed benefit suspension to be effective May 1, 2020. The suspension is expected to continue indefinitely.

The application proposes that there shall be a reduction in monthly benefits such that the revised monthly amount is based upon a specific percentage reduction of a participant's accrued benefit depending upon into which "group" of participants an individual is categorized; therefore the proposed suspension treats participants differently. The proposed reductions are subject to the individual limitations described in §432(e)(9)(D)(i), (ii), and (iii) and aggregate limitations described in §432(e)(9)(D)(iv).

The groups defined for purposes of this application and the proposed percentage reduction in their benefits are:

Non-Active Participants		
	Retirement Date	Proposed Suspension Reduction
Group 1	Before August 1, 2009 and all terminated vested participants	35%
Group 2	On or after August 1, 2009	30%
Active Participants		
	Hire Date	Proposed Suspension Reduction
Group 3	Before May 1, 2006	25%
Group 4	On or after May 1, 2006	No reduction

Active Participants are Plan Participants who worked at least 435 hours during the plan year ended April 30, 2017 or April 30, 2018 and who have not retired as of April 30, 2018. Non-Active Participants include Terminated Vested Participants, Retired Participants, Disabled Participants, Beneficiaries of Participants, and Alternate Payees.

The following summary shows the results of the tests required to certify that the proposed suspensions meet the requirements set forth by the law.

1. Key Information

a.	Projected year of insolvency without consideration of proposed suspension	Year Beginning May 1, 2033
b.	Proposed effective date of suspension of benefits	May 1, 2020
c.	End of extended period	April 30, 2050
d.	Projected funded percentage under IRC §432(j)(2) at end of extended period (See Exhibit J)	113.09%
e.	Number of Plan active participants (based on May 1, 2017 actuarial valuation)	655
f.	Is the proposed suspension in combination with a partition?	No

2. Limitation on Aggregate Size of Suspension

- a. We certify that the proposed suspension is reasonably estimated to enable the Plan to avoid insolvency, as required under regulation §1.432(e)(9)-1(d)(5)(ii)(A) based on the following analysis.
 - i. The solvency ratio is projected on a deterministic basis to be at least 1.0 for each plan year throughout the extended period (see Exhibit D).
 - ii. The Plan's projected funded percentage at the end of the extended period exceeds 100% (see Exhibit J).
- b. We certify that the proposed suspension does not materially exceed the level that is necessary to avoid insolvency, as required under regulation §1.432(e)(9)-1(d)(5)(iii)(A) based on the following analysis.
 - i. The Plan would fail one or more of the tests listed in 2a if the dollar amount of the proposed benefit suspension for each participant and beneficiary were reduced (but not below zero) by the greater of 5% of the individual's monthly amount proposed to be suspended and 2% of the individual's monthly amount without regard to the proposed suspension. Exhibit E demonstrates that if the suspension is reduced by the aforementioned amounts, it will no longer be sufficient to enable the Plan to satisfy the requirement to avoid insolvency under §1.432(e)(9)-1(d)(5)(i)(A). The projection in Exhibit E does not satisfy the requirement in §1.432(e)(9)-1(d)(5)(ii)(3) because the Plan's funded percentage at the end of the extended period does not exceed 100%* and in at least one of the last five years of the extended period the Plan's available resources are projected to decrease. Therefore, as specified in §1.432(e)(9)-1(d)(5)(iii)(A) "an alternative, similar but smaller suspension of benefits would not be sufficient to enable the Plan to satisfy the requirement to avoid insolvency under paragraph (d)(5)(i)(A)."
 - * It can be demonstrated that the Plan's funded percentage at April 30, 2050 (the end of the extended period) with a smaller suspension does not exceed 100% as follows: The Plan's assets at April 30, 2050 with the smaller suspension are projected to be \$16,429,051 as shown in Exhibit E. The Plan's liabilities at April 30, 2050 with the proposed suspension are projected to be \$27,653,238 as shown in Exhibit J. Because the ratio of \$16,429,051 to \$27,653,238 is less than 100%, and a smaller suspension will provide larger liabilities at April 30, 2050, the Plan's funded percentage at April 30, 2050 with a smaller suspension will also be less than 100%.
 - ii. The PBGC did not issue an order partitioning the Plan.

The proposed suspension satisfies the limitations on aggregate size of suspension set forth in Regulation §1.432(e)(9)-1(d)(5).

B. Development of Projected April 30, 2019 Market Value of Assets

The table below shows the actual change in the market value of assets from May 1, 2017 through April 30, 2018 and from May 1, 2018 through December 31, 2018. It also sets forth the projected market value of assets from January 1, 2019 through April 30, 2019. The calculations are based on the following information:

- The market value of assets as of May 1, 2017 and May 1, 2018 and the employer contributions, benefit payments and administrative expenses from May 1, 2017 through April 30, 2018, are based financial statements prepared by the auditor.
- The market value of assets as of December 31, 2018 and the employer contributions, benefit payments and administrative expenses from May 1, 2018 through December 31, 2018 are based on unaudited financial statements prepared by the Plan Administrator.
- Estimated employer contributions from January 1, 2019 through April 30, 2019 are based on 4/12ths of the assumed contribution of \$3.74 million (equal to the product of the assumed 1.1 million hours and an average contribution rate of \$3.40/hour) for the 2018/2019 plan year.
- Estimated benefit payments from January 1, 2019 through April 30, 2019 are based on 4/12ths of the expected benefit payments projected for the 2018/2019 plan year by the valuation system based on the data and assumptions described in Exhibit K.
- The administrative expenses from January 1, 2018 through April 30, 2019 are based on the full year's administrative expense assumption described in Exhibit K, less the expenses for May 1, 2018 through December 31, 2018 reported in the Plan Administrator's unaudited December 31, 2018 financial statements.
- Investment returns from January 1, 2019 through April 30, 2019 are based on an assumed return of 2.16% (4 months of the annual expected return) during that period.

	May 1, 2017 through April 30, 2018	May 1, 2018 through Dec. 31, 2018	Jan. 1, 2019 through April 30, 2019	Total for 2018/2019 Plan Year
1. Market value of assets (beginning of period)	\$41,435,167	\$42,133,231	\$39,522,869	\$42,133,231
2. Employer contributions	3,973,912	2,757,059	1,246,667	4,003,726
3. Withdrawal liability payments	0	0	0	0
4. Benefit payments				
a. Current retirees and beneficiaries	N/A	N/A	1,752,596	N/A
b. Terminated vested participants	N/A	N/A	62,222	N/A
c. Current actives	N/A	N/A	120,692	N/A
d. New entrants	N/A	N/A	0	N/A
e. Total	5,473,636	3,761,195	1,935,510	5,696,705
5. Administrative expenses	646,961	361,631	208,369	570,000
6. Investment returns	<u>2,844,749</u>	<u>-1,244,595</u>	<u>843,934</u>	<u>-400,661</u>
7. Market value of assets (end of year)				
(1) + (2) + (3) - (4e) - (5) + (6)	\$42,133,231	\$39,522,869	\$39,469,591	\$39,469,591

C. Deterministic Projection of Current Plan without Proposed Suspension

The following table shows the projection of the plan-year-by-plan-year market value of assets projected to the year of insolvency for the plan years beginning May 1, 2018 through May 1, 2033.

Plan year beginning May 1	2018	2019	2020	2021	2022	2023	2024	2025
1. Market value of assets (beginning of year)	\$42,133,231	\$39,469,591	\$39,009,325	\$38,364,077	\$37,403,599	\$35,944,349	\$34,028,465	\$31,732,917
2. Employer contributions	4,003,726	3,450,000	3,450,000	3,450,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	N/A	577,090	823,703	1,092,066	1,394,615	1,664,705	1,909,508	2,146,776
b. Terminated vested participants	N/A	302,613	403,081	534,864	654,465	866,370	1,003,947	1,133,445
c. Current actives	N/A	5,146,516	5,029,073	4,886,446	4,754,230	4,614,251	4,469,938	4,318,613
d. New entrants	N/A	0	0	0	0	0	0	0
e. Total	5,696,705	6,026,219	6,255,857	6,513,376	6,803,310	7,145,326	7,383,393	7,598,834
5. Administrative expenses	570,000	400,000	320,000	326,400	332,928	339,587	346,378	353,306
6. Investment returns	<u>(400,661)</u>	<u>2,515,953</u>	<u>2,480,609</u>	<u>2,429,298</u>	<u>2,351,988</u>	<u>2,244,029</u>	<u>2,109,223</u>	<u>1,950,015</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$39,469,591	\$39,009,325	\$38,364,077	\$37,403,599	\$35,944,349	\$34,028,465	\$31,732,917	\$29,055,792
8. Available resources (1) + (2) + (3) - (5) + (6)	\$45,166,296	\$45,035,544	\$44,619,934	\$43,916,975	\$42,747,659	\$41,173,791	\$39,116,310	\$36,654,626
9. Solvency ratio (8) / (4e)	7.93	7.47	7.13	6.74	6.28	5.76	5.30	4.82
Plan year beginning May 1	2026	2027	2028	2029	2030	2031	2032	2033
1. Market value of assets (beginning of year)	\$29,055,792	\$25,987,752	\$22,549,833	\$18,950,421	\$14,962,341	\$10,615,791	\$5,859,356	\$739,149
2. Employer contributions	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	2,346,614	2,541,960	2,736,926	2,901,468	3,043,806	3,172,967	3,271,334	3,355,377
b. Terminated vested participants	1,292,471	1,412,999	1,551,839	1,652,501	1,720,448	1,826,940	1,891,155	1,953,207
c. Current actives	4,159,632	3,998,065	3,831,771	3,661,247	3,487,036	3,309,715	3,129,924	2,948,370
d. New entrants	0	0	0	0	0	0	0	0
e. Total	7,798,717	7,953,024	8,120,536	8,215,216	8,251,290	8,309,622	8,292,413	8,256,954
5. Administrative expenses	360,372	367,579	374,931	382,430	390,078	397,880	405,837	413,954
6. Investment returns	<u>1,766,049</u>	<u>1,557,684</u>	<u>1,571,055</u>	<u>1,284,566</u>	<u>969,818</u>	<u>626,067</u>	<u>253,043</u>	<u>3,735</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$25,987,752	\$22,549,833	\$18,950,421	\$14,962,341	\$10,615,791	\$5,859,356	\$739,149	Insolvent
8. Available resources (1) + (2) + (3) - (5) + (6)	\$33,786,469	\$30,502,857	\$27,070,957	\$23,177,557	\$18,867,081	\$14,168,978	\$9,031,562	\$3,653,930
9. Solvency ratio (8) / (4e)	4.33	3.84	3.33	2.82	2.29	1.71	1.09	0.44

D. Deterministic Projection of Proposed Suspension

The table shows the projection of the plan-year-by-plan-year market value of assets over the extended projection period for the plan years beginning May 1, 2018 through May 1, 2049.

Plan year beginning May 1	2018	2019	2020	2021	2022	2023	2024	2025
1. Market value of assets (beginning of year)	\$42,133,231	\$39,469,591	\$39,009,325	\$39,575,268	\$39,984,428	\$40,070,144	\$39,913,025	\$39,571,822
2. Employer contributions	4,003,726	3,450,000	3,450,000	3,450,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	N/A	577,090	640,420	847,866	1,080,834	1,288,619	1,477,184	1,660,685
b. Terminated vested participants	N/A	302,613	296,965	391,838	481,211	628,160	725,054	815,969
c. Current actives	N/A	5,146,516	4,145,485	4,024,887	3,910,492	3,789,770	3,665,725	3,536,065
d. New entrants	N/A	0	0	0	0	0	0	0
e. Total	5,696,705	6,026,219	5,082,870	5,264,591	5,472,537	5,706,549	5,867,963	6,012,719
5. Administrative expenses	570,000	400,000	320,000	326,400	332,928	339,587	346,378	353,306
6. Investment returns	<u>(400,661)</u>	<u>2,515,953</u>	<u>2,518,813</u>	<u>2,550,151</u>	<u>2,566,181</u>	<u>2,564,017</u>	<u>2,548,138</u>	<u>2,520,610</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$39,469,591	\$39,009,325	\$39,575,268	\$39,984,428	\$40,070,144	\$39,913,025	\$39,571,822	\$39,051,407
8. Available resources (1) + (2) + (3) - (5) + (6)	\$45,166,296	\$45,035,544	\$44,658,138	\$45,249,019	\$45,542,681	\$45,619,574	\$45,439,785	\$45,064,126
9. Solvency ratio (8) / (4e)	7.93	7.47	8.79	8.59	8.32	7.99	7.74	7.49

Plan year beginning May 1	2026	2027	2028	2029	2030	2031	2032	2033
1. Market value of assets (beginning of year)	\$39,051,407	\$38,355,604	\$37,505,358	\$36,923,608	\$36,232,827	\$35,466,907	\$34,606,904	\$33,699,236
2. Employer contributions	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	1,816,411	1,968,269	2,119,120	2,246,685	2,357,502	2,458,125	2,535,235	2,601,182
b. Terminated vested participants	925,190	1,008,202	1,103,109	1,172,267	1,219,422	1,290,917	1,335,140	1,377,771
c. Current actives	3,400,543	3,263,428	3,123,017	2,979,809	2,834,327	2,687,106	2,538,706	2,389,725
d. New entrants	0	0	0	0	0	0	0	0
e. Total	6,142,144	6,239,899	6,345,246	6,398,761	6,411,251	6,436,148	6,409,081	6,368,678
5. Administrative expenses	360,372	367,579	374,931	382,430	390,078	397,880	405,837	413,954
6. Investment returns	<u>2,481,713</u>	<u>2,432,232</u>	<u>2,813,427</u>	<u>2,765,410</u>	<u>2,710,409</u>	<u>2,649,025</u>	<u>2,582,250</u>	<u>2,512,242</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$38,355,604	\$37,505,358	\$36,923,608	\$36,232,827	\$35,466,907	\$34,606,904	\$33,699,236	\$32,753,845
8. Available resources (1) + (2) + (3) - (5) + (6)	\$44,497,748	\$43,745,257	\$43,268,854	\$42,631,588	\$41,878,158	\$41,043,052	\$40,108,317	\$39,122,523
9. Solvency ratio (8) / (4e)	7.24	7.01	6.82	6.66	6.53	6.38	6.26	6.14

D. Deterministic Projection of Proposed Suspension (continued)

Plan year beginning May 1	2034	2035	2036	2037	2038	2039	2040	2041
1. Market value of assets (beginning of year)	\$32,753,845	\$31,793,231	\$30,853,980	\$29,945,005	\$29,101,645	\$28,339,645	\$27,672,629	\$27,127,479
2. Employer contributions	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	2,650,955	2,688,193	2,708,760	2,711,231	2,700,564	2,685,243	2,657,945	2,615,109
b. Terminated vested participants	1,411,852	1,421,233	1,438,804	1,440,546	1,442,334	1,438,178	1,422,945	1,393,340
c. Current actives	2,240,790	2,092,543	1,945,641	1,800,752	1,658,577	1,519,852	1,385,294	1,255,587
d. New entrants	0	0	0	0	0	0	0	0
e. Total	6,303,597	6,201,969	6,093,205	5,952,529	5,801,475	5,643,273	5,466,184	5,264,036
5. Administrative expenses	422,233	430,678	439,291	448,077	457,039	466,180	475,503	485,013
6. Investment returns	<u>2,440,216</u>	<u>2,368,396</u>	<u>2,298,521</u>	<u>2,232,246</u>	<u>2,171,514</u>	<u>2,117,437</u>	<u>2,071,537</u>	<u>2,036,161</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$31,793,231	\$30,853,980	\$29,945,005	\$29,101,645	\$28,339,645	\$27,672,629	\$27,127,479	\$26,739,591
8. Available resources (1) + (2) + (3) - (5) + (6)	\$38,096,828	\$37,055,949	\$36,038,210	\$35,054,174	\$34,141,120	\$33,315,902	\$32,593,663	\$32,003,627
9. Solvency ratio (8) / (4e)	6.04	5.97	5.91	5.89	5.88	5.90	5.96	6.08
Plan year beginning May 1	2042	2043	2044	2045	2046	2047	2048	2049
1. Market value of assets (beginning of year)	\$26,739,591	\$26,513,887	\$26,468,977	\$26,633,818	\$27,022,754	\$27,659,549	\$28,566,143	\$29,762,943
2. Employer contributions	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	2,566,210	2,510,579	2,444,154	2,375,868	2,300,598	2,215,977	2,127,841	2,033,344
b. Terminated vested participants	1,371,290	1,344,109	1,306,804	1,266,286	1,219,334	1,171,593	1,120,226	1,067,687
c. Current actives	1,131,344	1,013,112	901,381	796,566	699,019	609,011	526,675	452,018
d. New entrants	0	0	0	0	0	0	0	0
e. Total	5,068,844	4,867,800	4,652,339	4,438,720	4,218,951	3,996,581	3,774,742	3,553,049
5. Administrative expenses	494,713	504,608	514,700	524,994	535,494	546,204	557,128	568,270
6. Investment returns	<u>2,012,854</u>	<u>2,002,497</u>	<u>2,006,880</u>	<u>2,027,650</u>	<u>2,066,240</u>	<u>2,124,379</u>	<u>2,203,669</u>	<u>2,305,726</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$26,513,887	\$26,468,977	\$26,633,818	\$27,022,754	\$27,659,549	\$28,566,143	\$29,762,943	\$31,272,349
8. Available resources (1) + (2) + (3) - (5) + (6)	\$31,582,731	\$31,336,777	\$31,286,157	\$31,461,474	\$31,878,500	\$32,562,724	\$33,537,685	\$34,825,398
9. Solvency ratio (8) / (4e)	6.23	6.44	6.72	7.09	7.56	8.15	8.88	9.80

E. Deterministic Projection Demonstrating Proposed Suspension Does Not Materially Exceed the Level that is Necessary to Avoid Insolvency

The table shows the projection of the plan-year-by-plan-year market value of assets over the extended projection period for the plan years beginning May 1, 2018 through May 1, 2049.

Plan year beginning May 1	2018	2019	2020	2021	2022	2023	2024	2025
1. Market value of assets (beginning of year)	\$42,133,231	\$39,469,591	\$39,009,325	\$39,468,789	\$39,758,073	\$39,708,883	\$39,399,723	\$38,890,352
2. Employer contributions	4,003,726	3,450,000	3,450,000	3,450,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	N/A	577,090	656,569	869,311	1,108,271	1,321,405	1,514,809	1,702,992
b. Terminated vested participants	N/A	302,613	304,640	402,082	493,802	644,951	744,557	838,023
c. Current actives	N/A	5,146,516	4,224,781	4,102,467	3,986,603	3,864,277	3,738,551	3,607,071
d. New entrants	N/A	0	0	0	0	0	0	0
e. Total	5,696,705	6,026,219	5,185,990	5,373,860	5,588,676	5,830,633	5,997,917	6,148,086
5. Administrative expenses	570,000	400,000	320,000	326,400	332,928	339,587	346,378	353,306
6. Investment returns	<u>(400,661)</u>	<u>2,515,953</u>	<u>2,515,454</u>	<u>2,539,544</u>	<u>2,547,414</u>	<u>2,536,060</u>	<u>2,509,924</u>	<u>2,471,087</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$39,469,591	\$39,009,325	\$39,468,789	\$39,758,073	\$39,708,883	\$39,399,723	\$38,890,352	\$38,185,047
8. Available resources (1) + (2) + (3) - (5) + (6)	\$45,166,296	\$45,035,544	\$44,654,779	\$45,131,933	\$45,297,559	\$45,230,356	\$44,888,269	\$44,333,133
9. Solvency ratio (8) / (4e)	7.93	7.47	8.61	8.40	8.11	7.76	7.48	7.21

Plan year beginning May 1	2026	2027	2028	2029	2030	2031	2032	2033
1. Market value of assets (beginning of year)	\$38,185,047	\$37,286,895	\$36,216,607	\$35,378,991	\$34,409,276	\$33,340,822	\$32,152,434	\$30,890,150
2. Employer contributions	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	1,862,651	2,018,357	2,173,043	2,303,823	2,417,405	2,520,528	2,599,519	2,667,055
b. Terminated vested participants	950,352	1,035,741	1,133,386	1,204,526	1,253,010	1,326,610	1,372,087	1,415,924
c. Current actives	3,469,563	3,330,385	3,187,780	3,042,247	2,894,311	2,744,509	2,593,411	2,441,624
d. New entrants	0	0	0	0	0	0	0	0
e. Total	6,282,566	6,384,483	6,494,209	6,550,596	6,564,726	6,591,647	6,565,017	6,524,603
5. Administrative expenses	360,372	367,579	374,931	382,430	390,078	397,880	405,837	413,954
6. Investment returns	<u>2,419,786</u>	<u>2,356,774</u>	<u>2,706,524</u>	<u>2,638,311</u>	<u>2,561,350</u>	<u>2,476,139</u>	<u>2,383,570</u>	<u>2,285,724</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$37,286,895	\$36,216,607	\$35,378,991	\$34,409,276	\$33,340,822	\$32,152,434	\$30,890,150	\$29,562,316
8. Available resources (1) + (2) + (3) - (5) + (6)	\$43,569,461	\$42,601,090	\$41,873,200	\$40,959,872	\$39,905,548	\$38,744,081	\$37,455,167	\$36,086,919
9. Solvency ratio (8) / (4e)	6.93	6.67	6.45	6.25	6.08	5.88	5.71	5.53

E. Deterministic Projection Demonstrating Proposed Suspension Does Not Materially Exceed the Level that is Necessary to Avoid Insolvency (continued)

Plan year beginning May 1	2034	2035	2036	2037	2038	2039	2040	2041
1. Market value of assets (beginning of year)	\$29,562,316	\$28,190,055	\$26,808,878	\$25,425,538	\$24,073,824	\$22,767,170	\$21,516,619	\$20,346,571
2. Employer contributions	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	2,717,988	2,756,036	2,776,970	2,779,334	2,768,215	2,752,340	2,724,207	2,680,124
b. Terminated vested participants	1,450,955	1,460,536	1,478,594	1,480,366	1,482,189	1,477,888	1,462,193	1,431,699
c. Current actives	2,289,792	2,138,575	1,988,651	1,840,710	1,695,480	1,553,723	1,416,182	1,283,569
d. New entrants	0	0	0	0	0	0	0	0
e. Total	6,458,735	6,355,147	6,244,215	6,100,410	5,945,884	5,783,951	5,602,582	5,395,392
5. Administrative expenses	422,233	430,678	439,291	448,077	457,039	466,180	475,503	485,013
6. Investment returns	<u>2,183,707</u>	<u>2,079,648</u>	<u>1,975,166</u>	<u>1,871,773</u>	<u>1,771,269</u>	<u>1,674,580</u>	<u>1,583,037</u>	<u>1,498,801</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$28,190,055	\$26,808,878	\$25,425,538	\$24,073,824	\$22,767,170	\$21,516,619	\$20,346,571	\$19,289,967
8. Available resources (1) + (2) + (3) - (5) + (6)	\$34,648,790	\$33,164,025	\$31,669,753	\$30,174,234	\$28,713,054	\$27,300,570	\$25,949,153	\$24,685,359
9. Solvency ratio (8) / (4e)	5.36	5.22	5.07	4.95	4.83	4.72	4.63	4.58

Plan year beginning May 1	2042	2043	2044	2045	2046	2047	2048	2049
1. Market value of assets (beginning of year)	\$19,289,967	\$18,348,057	\$17,535,912	\$16,878,932	\$16,387,135	\$16,079,835	\$15,974,093	\$16,084,968
2. Employer contributions	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	2,629,863	2,572,699	2,504,464	2,434,344	2,357,082	2,270,216	2,179,743	2,082,781
b. Terminated vested participants	1,409,001	1,381,040	1,342,660	1,300,975	1,252,679	1,203,578	1,150,752	1,096,729
c. Current actives	1,156,518	1,035,599	921,320	814,112	714,340	622,284	538,083	461,744
d. New entrants	0	0	0	0	0	0	0	0
e. Total	5,195,382	4,989,338	4,768,444	4,549,431	4,324,101	4,096,078	3,868,578	3,641,254
5. Administrative expenses	494,713	504,608	514,700	524,994	535,494	546,204	557,128	568,270
6. Investment returns	<u>1,423,186</u>	<u>1,356,800</u>	<u>1,301,164</u>	<u>1,257,628</u>	<u>1,227,295</u>	<u>1,211,540</u>	<u>1,211,580</u>	<u>1,228,608</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$18,348,057	\$17,535,912	\$16,878,932	\$16,387,135	\$16,079,835	\$15,974,093	\$16,084,968	\$16,429,051
8. Available resources (1) + (2) + (3) - (5) + (6)	\$23,543,439	\$22,525,250	\$21,647,376	\$20,936,566	\$20,403,936	\$20,070,171	\$19,953,546	\$20,070,305
9. Solvency ratio (8) / (4e)	4.53	4.51	4.54	4.60	4.72	4.90	5.16	5.51

F. Deterministic Projection of Proposed Suspension Assuming Annual Rate of Return is Reduced by 1.00%

The table shows the projection of the plan-year-by-plan-year market value of assets over the extended projection period as required under regulation 1.432(e)(9)-1(d)(5)(vi)(B)(1) and Revenue Procedure 2017-43, Section 6.05(1) for the plan years beginning May 1, 2018 through May 1, 2047.

Plan year beginning May 1	2018	2019	2020	2021	2022	2023	2024	2025
1. Market value of assets (beginning of year)	\$42,133,231	\$39,344,386	\$38,496,833	\$38,653,359	\$38,625,347	\$38,246,878	\$37,599,798	\$36,743,485
2. Employer contributions	4,003,726	3,450,000	3,450,000	3,450,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	N/A	577,090	640,420	847,866	1,080,834	1,288,619	1,477,184	1,660,685
b. Terminated vested participants	N/A	302,613	296,965	391,838	481,211	628,160	725,054	815,969
c. Current actives	N/A	5,146,516	4,145,485	4,024,887	3,910,492	3,789,770	3,665,725	3,536,065
d. New entrants	N/A	0	0	0	0	0	0	0
e. Total	5,696,705	6,026,219	5,082,870	5,264,591	5,472,537	5,706,549	5,867,963	6,012,719
5. Administrative expenses	570,000	400,000	320,000	326,400	332,928	339,587	346,378	353,306
6. Investment returns	<u>(525,866)</u>	<u>2,128,666</u>	<u>2,109,396</u>	<u>2,112,979</u>	<u>2,101,996</u>	<u>2,074,056</u>	<u>2,033,028</u>	<u>1,980,699</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$39,344,386	\$38,496,833	\$38,653,359	\$38,625,347	\$38,246,878	\$37,599,798	\$36,743,485	\$35,683,159
8. Available resources (1) + (2) + (3) - (5) + (6)	\$45,041,091	\$44,523,052	\$43,736,229	\$43,889,938	\$43,719,415	\$43,306,347	\$42,611,448	\$41,695,878
9. Solvency ratio (8) / (4e)	7.91	7.39	8.60	8.34	7.99	7.59	7.26	6.93

Plan year beginning May 1	2026	2027	2028	2029	2030	2031	2032	2033
1. Market value of assets (beginning of year)	\$35,683,159	\$34,422,969	\$32,984,085	\$31,733,959	\$30,335,130	\$28,819,665	\$27,166,590	\$25,420,033
2. Employer contributions	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	1,816,411	1,968,269	2,119,120	2,246,685	2,357,502	2,458,125	2,535,235	2,601,182
b. Terminated vested participants	925,190	1,008,202	1,103,109	1,172,267	1,219,422	1,290,917	1,335,140	1,377,771
c. Current actives	3,400,543	3,263,428	3,123,017	2,979,809	2,834,327	2,687,106	2,538,706	2,389,725
d. New entrants	0	0	0	0	0	0	0	0
e. Total	6,142,144	6,239,899	6,345,246	6,398,761	6,411,251	6,436,148	6,409,081	6,368,678
5. Administrative expenses	360,372	367,579	374,931	382,430	390,078	397,880	405,837	413,954
6. Investment returns	<u>1,917,326</u>	<u>1,843,594</u>	<u>2,145,051</u>	<u>2,057,362</u>	<u>1,960,864</u>	<u>1,855,953</u>	<u>1,743,361</u>	<u>1,624,810</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$34,422,969	\$32,984,085	\$31,733,959	\$30,335,130	\$28,819,665	\$27,166,590	\$25,420,033	\$23,587,210
8. Available resources (1) + (2) + (3) - (5) + (6)	\$40,565,113	\$39,223,984	\$38,079,205	\$36,733,891	\$35,230,916	\$33,602,738	\$31,829,114	\$29,955,888
9. Solvency ratio (8) / (4e)	6.60	6.29	6.00	5.74	5.50	5.22	4.97	4.70

F. Deterministic Projection of Proposed Suspension Assuming Annual Rate of Return is Reduced by 1.00% (continued)

Plan year beginning May 1	2034	2035	2036	2037	2038	2039	2040	2041
1. Market value of assets (beginning of year)	\$23,587,210	\$21,687,555	\$19,754,095	\$17,791,717	\$15,831,249	\$13,883,367	\$11,956,137	\$10,070,308
2. Employer contributions	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	2,650,955	2,688,193	2,708,760	2,711,231	2,700,564	2,685,243	2,657,945	2,615,109
b. Terminated vested participants	1,411,852	1,421,233	1,438,804	1,440,546	1,442,334	1,438,178	1,422,945	1,393,340
c. Current actives	2,240,790	2,092,543	1,945,641	1,800,752	1,658,577	1,519,852	1,385,294	1,255,587
d. New entrants	0	0	0	0	0	0	0	0
e. Total	6,303,597	6,201,969	6,093,205	5,952,529	5,801,475	5,643,273	5,466,184	5,264,036
5. Administrative expenses	422,233	430,678	439,291	448,077	457,039	466,180	475,503	485,013
6. Investment returns	<u>1,501,175</u>	<u>1,374,187</u>	<u>1,245,118</u>	<u>1,115,138</u>	<u>985,632</u>	<u>857,223</u>	<u>730,858</u>	<u>608,167</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$21,687,555	\$19,754,095	\$17,791,717	\$15,831,249	\$13,883,367	\$11,956,137	\$10,070,308	\$8,254,426
8. Available resources (1) + (2) + (3) - (5) + (6)	\$27,991,152	\$25,956,064	\$23,884,922	\$21,783,778	\$19,684,842	\$17,599,410	\$15,536,492	\$13,518,462
9. Solvency ratio (8) / (4e)	4.44	4.19	3.92	3.66	3.39	3.12	2.84	2.57
Plan year beginning May 1	2042	2043	2044	2045	2046	2047		
1. Market value of assets (beginning of year)	\$8,254,426	\$6,505,895	\$4,835,180	\$3,262,306	\$1,791,864	\$437,014		
2. Employer contributions	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000		
3. Withdrawal liability payments	0	0	0	0	0	0		
4. Benefit payments								
a. Current retirees and beneficiaries	2,566,210	2,510,579	2,444,154	2,375,868	2,300,598	2,215,977		
b. Terminated vested participants	1,371,290	1,344,109	1,306,804	1,266,286	1,219,334	1,171,593		
c. Current actives	1,131,344	1,013,112	901,381	796,566	699,019	609,011		
d. New entrants	0	0	0	0	0	0		
e. Total	5,068,844	4,867,800	4,652,339	4,438,720	4,218,951	3,996,581		
5. Administrative expenses	494,713	504,608	514,700	524,994	535,494	546,204		
6. Investment returns	<u>490,027</u>	<u>376,692</u>	<u>269,165</u>	<u>168,272</u>	<u>74,595</u>	<u>5,244</u>		
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$6,505,895	\$4,835,180	\$3,262,306	\$1,791,864	\$437,014	Insolvent		
8. Available resources (1) + (2) + (3) - (5) + (6)	\$11,574,739	\$9,702,980	\$7,914,645	\$6,230,584	\$4,655,965	\$3,221,054		
9. Solvency ratio (8) / (4e)	2.28	1.99	1.70	1.40	1.10	0.81		

G. Deterministic Projection of Proposed Suspension Assuming Annual Rate of Return is Reduced by 2.00%

The table shows the projection of the plan-year-by-plan-year market value of assets until the year of insolvency (plan year beginning May 1, 2039) as required under regulation 1.432(e)(9)-1(d)(5)(vi)(B)(2) and Revenue Procedure 2017-43, Section 6.05(2) for the plan years beginning May 1, 2018 through May 1, 2039.

Plan year beginning May 1	2018	2019	2020	2021	2022	2023	2024	2025
1. Market value of assets (beginning of year)	\$42,133,231	\$39,218,390	\$37,986,086	\$37,743,571	\$37,297,434	\$36,483,459	\$35,385,710	\$34,065,199
2. Employer contributions	4,003,726	3,450,000	3,450,000	3,450,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	N/A	577,090	640,420	847,866	1,080,834	1,288,619	1,477,184	1,660,685
b. Terminated vested participants	N/A	302,613	296,965	391,838	481,211	628,160	725,054	815,969
c. Current actives	N/A	5,146,516	4,145,485	4,024,887	3,910,492	3,789,770	3,665,725	3,536,065
d. New entrants	N/A	0	0	0	0	0	0	0
e. Total	5,696,705	6,026,219	5,082,870	5,264,591	5,472,537	5,706,549	5,867,963	6,012,719
5. Administrative expenses	570,000	400,000	320,000	326,400	332,928	339,587	346,378	353,306
6. Investment returns	<u>(651,862)</u>	<u>1,743,915</u>	<u>1,710,355</u>	<u>1,694,854</u>	<u>1,666,490</u>	<u>1,623,387</u>	<u>1,568,830</u>	<u>1,504,358</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$39,218,390	\$37,986,086	\$37,743,571	\$37,297,434	\$36,483,459	\$35,385,710	\$34,065,199	\$32,528,532
8. Available resources (1) + (2) + (3) - (5) + (6)	\$44,915,095	\$44,012,305	\$42,826,441	\$42,562,025	\$41,955,996	\$41,092,259	\$39,933,162	\$38,541,251
9. Solvency ratio (8) / (4e)	7.88	7.30	8.43	8.08	7.67	7.20	6.81	6.41

Plan year beginning May 1	2026	2027	2028	2029	2030	2031	2032	2033
1. Market value of assets (beginning of year)	\$32,528,532	\$30,781,262	\$28,845,909	\$27,040,320	\$25,066,331	\$22,956,145	\$20,688,871	\$18,308,623
2. Employer contributions	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	1,816,411	1,968,269	2,119,120	2,246,685	2,357,502	2,458,125	2,535,235	2,601,182
b. Terminated vested participants	925,190	1,008,202	1,103,109	1,172,267	1,219,422	1,290,917	1,335,140	1,377,771
c. Current actives	3,400,543	3,263,428	3,123,017	2,979,809	2,834,327	2,687,106	2,538,706	2,389,725
d. New entrants	0	0	0	0	0	0	0	0
e. Total	6,142,144	6,239,899	6,345,246	6,398,761	6,411,251	6,436,148	6,409,081	6,368,678
5. Administrative expenses	360,372	367,579	374,931	382,430	390,078	397,880	405,837	413,954
6. Investment returns	<u>1,430,246</u>	<u>1,347,125</u>	<u>1,589,588</u>	<u>1,482,202</u>	<u>1,366,143</u>	<u>1,241,754</u>	<u>1,109,670</u>	<u>971,356</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$30,781,262	\$28,845,909	\$27,040,320	\$25,066,331	\$22,956,145	\$20,688,871	\$18,308,623	\$15,822,346
8. Available resources (1) + (2) + (3) - (5) + (6)	\$36,923,406	\$35,085,808	\$33,385,566	\$31,465,092	\$29,367,396	\$27,125,019	\$24,717,704	\$22,191,024
9. Solvency ratio (8) / (4e)	6.01	5.62	5.26	4.92	4.58	4.21	3.86	3.48

G. Deterministic Projection of Proposed Suspension Assuming Annual Rate of Return is Reduced by 2.00% (continued)

Plan year beginning May 1	2034	2035	2036	2037	2038	2039
1. Market value of assets (beginning of year)	\$15,822,346	\$13,249,063	\$10,621,113	\$7,942,466	\$5,242,811	\$2,531,416
2. Employer contributions	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000	3,325,000
3. Withdrawal liability payments	0	0	0	0	0	0
4. Benefit payments						
a. Current retirees and beneficiaries	2,650,955	2,688,193	2,708,760	2,711,231	2,700,564	2,685,243
b. Terminated vested participants	1,411,852	1,421,233	1,438,804	1,440,546	1,442,334	1,438,178
c. Current actives	2,240,790	2,092,543	1,945,641	1,800,752	1,658,577	1,519,852
d. New entrants	0	0	0	0	0	0
e. Total	6,303,597	6,201,969	6,093,205	5,952,529	5,801,475	5,643,273
5. Administrative expenses	422,233	430,678	439,291	448,077	457,039	466,180
6. Investment returns	<u>827,547</u>	<u>679,697</u>	<u>528,849</u>	<u>375,951</u>	<u>222,119</u>	<u>67,745</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$13,249,063	\$10,621,113	\$7,942,466	\$5,242,811	\$2,531,416	Insolvent
8. Available resources (1) + (2) + (3) - (5) + (6)	\$19,552,660	\$16,823,082	\$14,035,671	\$11,195,340	\$8,332,891	\$5,457,981
9. Solvency ratio (8) / (4e)	3.10	2.71	2.30	1.88	1.44	0.97

H. Deterministic Projection of Proposed Suspension Assuming the Industry Activity Assumption Continues Under the Same Trend as the Plan Experienced Over the Last 10 Years (1.1% per year)

The table shows the projection of the plan-year-by-plan-year market value of assets over the extended projection period as required under regulation 1.432(e)(9)-1(d)(5)(vi)(C)(1) and Revenue Procedure 2017-43, Section 6.05(3) for the plan years beginning May 1, 2018 through May 1, 2049.

Plan year beginning May 1	2018	2019	2020	2021	2022	2023	2024	2025
1. Market value of assets (beginning of year)	\$42,133,231	\$39,576,665	\$39,916,778	\$41,383,998	\$42,802,540	\$44,207,732	\$45,507,669	\$46,770,757
2. Employer contributions	4,109,662	4,218,269	4,264,670	4,311,581	4,422,183	4,470,827	4,520,006	4,569,726
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	N/A	577,090	640,420	847,866	1,080,834	1,288,619	1,477,184	1,660,685
b. Terminated vested participants	N/A	302,613	296,965	391,838	481,211	628,160	725,054	815,969
c. Current actives	N/A	5,146,516	4,145,485	4,024,887	3,910,492	3,789,770	3,665,725	3,536,065
d. New entrants	N/A	0	0	0	0	0	0	0
e. Total	5,696,705	6,026,219	5,082,870	5,264,591	5,472,537	5,706,549	5,867,963	6,012,719
5. Administrative expenses	570,000	400,000	320,000	326,400	332,928	339,587	346,378	353,306
6. Investment returns	<u>(399,523)</u>	<u>2,548,063</u>	<u>2,605,420</u>	<u>2,697,951</u>	<u>2,788,475</u>	<u>2,875,245</u>	<u>2,957,424</u>	<u>3,037,719</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$39,576,665	\$39,916,778	\$41,383,998	\$42,802,540	\$44,207,732	\$45,507,669	\$46,770,757	\$48,012,177
8. Available resources (1) + (2) + (3) - (5) + (6)	\$45,273,370	\$45,942,997	\$46,466,868	\$48,067,131	\$49,680,269	\$51,214,218	\$52,638,720	\$54,024,896
9. Solvency ratio (8) / (4e)	7.95	7.62	9.14	9.13	9.08	8.97	8.97	8.99

Plan year beginning May 1	2026	2027	2028	2029	2030	2031	2032	2033
1. Market value of assets (beginning of year)	\$48,012,177	\$49,246,747	\$50,507,140	\$52,397,025	\$54,425,849	\$56,647,558	\$59,064,852	\$61,747,492
2. Employer contributions	4,619,993	4,670,813	4,722,192	4,774,136	4,826,651	4,879,745	4,933,422	4,987,689
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	1,816,411	1,968,269	2,119,120	2,246,685	2,357,502	2,458,125	2,535,235	2,601,182
b. Terminated vested participants	925,190	1,008,202	1,103,109	1,172,267	1,219,422	1,290,917	1,335,140	1,377,771
c. Current actives	3,400,543	3,263,428	3,123,017	2,979,809	2,834,327	2,687,106	2,538,706	2,389,725
d. New entrants	0	0	0	0	0	0	0	0
e. Total	6,142,144	6,239,899	6,345,246	6,398,761	6,411,251	6,436,148	6,409,081	6,368,678
5. Administrative expenses	360,372	367,579	374,931	382,430	390,078	397,880	405,837	413,954
6. Investment returns	<u>3,117,093</u>	<u>3,197,058</u>	<u>3,887,871</u>	<u>4,035,878</u>	<u>4,196,387</u>	<u>4,371,577</u>	<u>4,564,137</u>	<u>4,778,058</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$49,246,747	\$50,507,140	\$52,397,025	\$54,425,849	\$56,647,558	\$59,064,852	\$61,747,492	\$64,730,607
8. Available resources (1) + (2) + (3) - (5) + (6)	\$55,388,891	\$56,747,039	\$58,742,271	\$60,824,610	\$63,058,809	\$65,501,000	\$68,156,573	\$71,099,285
9. Solvency ratio (8) / (4e)	9.02	9.09	9.26	9.51	9.84	10.18	10.63	11.16

H. Deterministic Projection of Proposed Suspension Assuming the Industry Activity Assumption Continued Under the Same Trend as the Plan Experienced Over the Last 10 Years (1.1% per year) (continued)

Plan year beginning May 1	2034	2035	2036	2037	2038	2039	2040	2041
1. Market value of assets (beginning of year)	\$64,730,607	\$68,063,863	\$71,813,155	\$76,019,012	\$80,750,877	\$86,061,282	\$92,003,536	\$98,647,326
2. Employer contributions	5,042,554	5,098,022	5,154,100	5,210,795	5,268,114	5,326,063	5,384,650	5,443,881
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	2,650,955	2,688,193	2,708,760	2,711,231	2,700,564	2,685,243	2,657,945	2,615,109
b. Terminated vested participants	1,411,852	1,421,233	1,438,804	1,440,546	1,442,334	1,438,178	1,422,945	1,393,340
c. Current actives	2,240,790	2,092,543	1,945,641	1,800,752	1,658,577	1,519,852	1,385,294	1,255,587
d. New entrants	0	0	0	0	0	0	0	0
e. Total	6,303,597	6,201,969	6,093,205	5,952,529	5,801,475	5,643,273	5,466,184	5,264,036
5. Administrative expenses	422,233	430,678	439,291	448,077	457,039	466,180	475,503	485,013
6. Investment returns	<u>5,016,532</u>	<u>5,283,917</u>	<u>5,584,253</u>	<u>5,921,675</u>	<u>6,300,805</u>	<u>6,725,643</u>	<u>7,200,827</u>	<u>7,732,063</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$68,063,863	\$71,813,155	\$76,019,012	\$80,750,877	\$86,061,282	\$92,003,536	\$98,647,326	\$106,074,221
8. Available resources (1) + (2) + (3) - (5) + (6)	\$74,367,460	\$78,015,124	\$82,112,217	\$86,703,406	\$91,862,757	\$97,646,809	\$104,113,510	\$111,338,257
9. Solvency ratio (8) / (4e)	11.80	12.58	13.48	14.57	15.83	17.30	19.05	21.15
Plan year beginning May 1	2042	2043	2044	2045	2046	2047	2048	2049
1. Market value of assets (beginning of year)	\$106,074,221	\$114,338,951	\$123,513,846	\$133,685,812	\$144,931,695	\$157,342,679	\$171,013,421	\$186,042,760
2. Employer contributions	5,503,764	5,564,305	5,625,513	5,687,393	5,749,955	5,813,204	5,877,149	5,941,798
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	2,566,210	2,510,579	2,444,154	2,375,868	2,300,598	2,215,977	2,127,841	2,033,344
b. Terminated vested participants	1,371,290	1,344,109	1,306,804	1,266,286	1,219,334	1,171,593	1,120,226	1,067,687
c. Current actives	1,131,344	1,013,112	901,381	796,566	699,019	609,011	526,675	452,018
d. New entrants	0	0	0	0	0	0	0	0
e. Total	5,068,844	4,867,800	4,652,339	4,438,720	4,218,951	3,996,581	3,774,742	3,553,049
5. Administrative expenses	494,713	504,608	514,700	524,994	535,494	546,204	557,128	568,270
6. Investment returns	<u>8,324,524</u>	<u>8,982,997</u>	<u>9,713,492</u>	<u>10,522,204</u>	<u>11,415,474</u>	<u>12,400,322</u>	<u>13,484,060</u>	<u>14,674,461</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$114,338,951	\$123,513,846	\$133,685,812	\$144,931,695	\$157,342,679	\$171,013,421	\$186,042,760	\$202,537,700
8. Available resources (1) + (2) + (3) - (5) + (6)	\$119,407,795	\$128,381,646	\$138,338,151	\$149,370,415	\$161,561,630	\$175,010,002	\$189,817,502	\$206,090,749
9. Solvency ratio (8) / (4e)	23.56	26.37	29.74	33.65	38.29	43.79	50.29	58.00

I. Deterministic Projection of the Proposed Suspension Assuming the Industry Activity Assumption Continues Under the Same Trend as the Plan Experienced Over the Last 10 Years, Reduced by 1.0% (0.1% per year)

The table shows projection of the plan-year-by-plan-year market value of assets over the extended projection period as required under regulation 1.432(e)(9)-(1)(d)(5)(vi)(C)(2) and Revenue Procedure 2017-43, Section 6.05(4) for the plan years beginning May 1, 2018 through May 1, 2049.

Plan year beginning May 1	2018	2019	2020	2021	2022	2023	2024	2025
1. Market value of assets (beginning of year)	\$42,133,231	\$39,563,142	\$39,845,245	\$41,207,001	\$42,468,961	\$43,659,794	\$44,685,326	\$45,609,442
2. Employer contributions	4,096,283	4,162,956	4,167,119	4,171,286	4,235,971	4,240,207	4,244,448	4,248,692
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	N/A	577,090	640,420	847,866	1,080,834	1,288,619	1,477,184	1,660,685
b. Terminated vested participants	N/A	302,613	296,965	391,838	481,211	628,160	725,054	815,969
c. Current actives	N/A	5,146,516	4,145,485	4,024,887	3,910,492	3,789,770	3,665,725	3,536,065
d. New entrants	N/A	0	0	0	0	0	0	0
e. Total	5,696,705	6,026,219	5,082,870	5,264,591	5,472,537	5,706,549	5,867,963	6,012,719
5. Administrative expenses	570,000	400,000	320,000	326,400	332,928	339,587	346,378	353,306
6. Investment returns	<u>(399,667)</u>	<u>2,545,366</u>	<u>2,597,507</u>	<u>2,681,664</u>	<u>2,760,327</u>	<u>2,831,460</u>	<u>2,894,010</u>	<u>2,950,384</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$39,563,142	\$39,845,245	\$41,207,001	\$42,468,961	\$43,659,794	\$44,685,326	\$45,609,442	\$46,442,493
8. Available resources (1) + (2) + (3) - (5) + (6)	\$45,259,847	\$45,871,464	\$46,289,871	\$47,733,552	\$49,132,331	\$50,391,875	\$51,477,405	\$52,455,212
9. Solvency ratio (8) / (4e)	7.94	7.61	9.11	9.07	8.98	8.83	8.77	8.72

Plan year beginning May 1	2026	2027	2028	2029	2030	2031	2032	2033
1. Market value of assets (beginning of year)	\$46,442,493	\$47,194,143	\$47,891,562	\$49,097,642	\$50,339,460	\$51,662,278	\$53,059,413	\$54,590,508
2. Employer contributions	4,252,941	4,257,194	4,261,451	4,265,712	4,269,978	4,274,248	4,278,522	4,282,801
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	1,816,411	1,968,269	2,119,120	2,246,685	2,357,502	2,458,125	2,535,235	2,601,182
b. Terminated vested participants	925,190	1,008,202	1,103,109	1,172,267	1,219,422	1,290,917	1,335,140	1,377,771
c. Current actives	3,400,543	3,263,428	3,123,017	2,979,809	2,834,327	2,687,106	2,538,706	2,389,725
d. New entrants	0	0	0	0	0	0	0	0
e. Total	6,142,144	6,239,899	6,345,246	6,398,761	6,411,251	6,436,148	6,409,081	6,368,678
5. Administrative expenses	360,372	367,579	374,931	382,430	390,078	397,880	405,837	413,954
6. Investment returns	<u>3,001,225</u>	<u>3,047,704</u>	<u>3,664,806</u>	<u>3,757,297</u>	<u>3,854,169</u>	<u>3,956,915</u>	<u>4,067,491</u>	<u>4,189,090</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$47,194,143	\$47,891,562	\$49,097,642	\$50,339,460	\$51,662,278	\$53,059,413	\$54,590,508	\$56,279,767
8. Available resources (1) + (2) + (3) - (5) + (6)	\$53,336,287	\$54,131,461	\$55,442,888	\$56,738,221	\$58,073,529	\$59,495,561	\$60,999,589	\$62,648,445
9. Solvency ratio (8) / (4e)	8.68	8.68	8.74	8.87	9.06	9.24	9.52	9.84

I. Deterministic Projection of Proposed Suspension Assuming the Industry Activity Assumption Continued Under the Same Trend as the Plan Experienced Over the Last 10 Years, Reduced by 1.0% (0.1% per year) (continued)

Plan year beginning May 1	2034	2035	2036	2037	2038	2039	2040	2041
1. Market value of assets (beginning of year)	\$56,279,767	\$58,165,069	\$60,299,592	\$62,710,138	\$65,451,343	\$68,559,761	\$72,071,463	\$76,037,532
2. Employer contributions	4,287,084	4,291,371	4,295,662	4,299,958	4,304,258	4,308,562	4,312,870	4,317,183
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	2,650,955	2,688,193	2,708,760	2,711,231	2,700,564	2,685,243	2,657,945	2,615,109
b. Terminated vested participants	1,411,852	1,421,233	1,438,804	1,440,546	1,442,334	1,438,178	1,422,945	1,393,340
c. Current actives	2,240,790	2,092,543	1,945,641	1,800,752	1,658,577	1,519,852	1,385,294	1,255,587
d. New entrants	0	0	0	0	0	0	0	0
e. Total	6,303,597	6,201,969	6,093,205	5,952,529	5,801,475	5,643,273	5,466,184	5,264,036
5. Administrative expenses	422,233	430,678	439,291	448,077	457,039	466,180	475,503	485,013
6. Investment returns	<u>4,324,049</u>	<u>4,475,799</u>	<u>4,647,381</u>	<u>4,841,853</u>	<u>5,062,675</u>	<u>5,312,592</u>	<u>5,594,886</u>	<u>5,913,807</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$58,165,069	\$60,299,592	\$62,710,138	\$65,451,343	\$68,559,761	\$72,071,463	\$76,037,532	\$80,519,473
8. Available resources (1) + (2) + (3) - (5) + (6)	\$64,468,666	\$66,501,561	\$68,803,343	\$71,403,872	\$74,361,236	\$77,714,736	\$81,503,716	\$85,783,509
9. Solvency ratio (8) / (4e)	10.23	10.72	11.29	12.00	12.82	13.77	14.91	16.30
Plan year beginning May 1	2042	2043	2044	2045	2046	2047	2048	2049
1. Market value of assets (beginning of year)	\$80,519,473	\$85,550,365	\$91,179,180	\$97,467,627	\$104,465,369	\$112,234,263	\$120,837,331	\$130,339,288
2. Employer contributions	4,321,500	4,325,822	4,330,148	4,334,478	4,338,812	4,343,151	4,347,494	4,351,842
3. Withdrawal liability payments	0	0	0	0	0	0	0	0
4. Benefit payments								
a. Current retirees and beneficiaries	2,566,210	2,510,579	2,444,154	2,375,868	2,300,598	2,215,977	2,127,841	2,033,344
b. Terminated vested participants	1,371,290	1,344,109	1,306,804	1,266,286	1,219,334	1,171,593	1,120,226	1,067,687
c. Current actives	1,131,344	1,013,112	901,381	796,566	699,019	609,011	526,675	452,018
d. New entrants	0	0	0	0	0	0	0	0
e. Total	5,068,844	4,867,800	4,652,339	4,438,720	4,218,951	3,996,581	3,774,742	3,553,049
5. Administrative expenses	494,713	504,608	514,700	524,994	535,494	546,204	557,128	568,270
6. Investment returns	<u>6,272,949</u>	<u>6,675,401</u>	<u>7,125,338</u>	<u>7,626,978</u>	<u>8,184,526</u>	<u>8,802,702</u>	<u>9,486,332</u>	<u>10,240,511</u>
7. Market value of assets (end of year) (1) + (2) + (3) - (4e) - (5) + (6)	\$85,550,365	\$91,179,180	\$97,467,627	\$104,465,369	\$112,234,263	\$120,837,331	\$130,339,288	\$140,810,321
8. Available resources (1) + (2) + (3) - (5) + (6)	\$90,619,209	\$96,046,980	\$102,119,966	\$108,904,089	\$116,453,214	\$124,833,912	\$134,114,030	\$144,363,370
9. Solvency ratio (8) / (4e)	17.88	19.73	21.95	24.54	27.60	31.24	35.53	40.63

J. Projection of Funded Percentage

The table shows the projected market value of assets, plan liability and funded percentage for the plan years beginning May 1, 2018 through May 1, 2049 for the proposed suspension as required under regulation 1.432(e)(9)-1(d)(5)(vi)(D) and Revenue Procedure 2017-43, Section 6.06.

Plan year beginning May 1	2018	2019	2020	2021	2022	2023	2024	2025
1. Market value of assets (beginning of year)	\$42,133,231	\$39,469,591	\$39,009,325	\$39,575,268	\$39,984,428	\$40,070,144	\$39,913,025	\$39,571,822
2. Unit credit accrued liability*	102,336,456	103,109,392	81,322,843	81,363,365	81,218,987	80,850,627	80,216,826	79,375,250
3. Funded percentage: (1) / (2)	41.17%	38.28%	47.97%	48.64%	49.23%	49.56%	49.76%	49.85%
Plan year beginning May 1	2026	2027	2028	2029	2030	2031	2032	2033
1. Market value of assets (beginning of year)	\$39,051,407	\$38,355,604	\$37,505,358	\$36,923,608	\$36,232,827	\$35,466,907	\$34,606,904	\$33,699,236
2. Unit credit accrued liability*	78,329,585	77,082,387	75,653,239	74,022,479	72,230,493	70,309,139	68,237,203	66,058,524
3. Funded percentage: (1) / (2)	49.86%	49.76%	49.58%	49.88%	50.16%	50.44%	50.72%	51.01%
Plan year beginning May 1	2034	2035	2036	2037	2038	2039	2040	2041
1. Market value of assets (beginning of year)	\$32,753,845	\$31,793,231	\$30,853,980	\$29,945,005	\$29,101,645	\$28,339,645	\$27,672,629	\$27,127,479
2. Unit credit accrued liability*	63,779,926	61,420,382	59,012,347	56,560,033	54,093,494	51,622,516	49,154,187	46,708,171
3. Funded percentage: (1) / (2)	51.35%	51.76%	52.28%	52.94%	53.80%	54.90%	56.30%	58.08%
Plan year beginning May 1	2042	2043	2044	2045	2046	2047	2048	2049
1. Market value of assets (beginning of year)	\$26,739,591	\$26,513,887	\$26,468,977	\$26,633,818	\$27,022,754	\$27,659,549	\$28,566,143	\$29,762,943
2. Unit credit accrued liability*	44,311,778	41,961,056	39,665,012	37,442,078	35,295,106	33,235,380	31,271,255	29,408,397
3. Funded percentage: (1) / (2)	60.34%	63.19%	66.73%	71.13%	76.56%	83.22%	91.35%	101.21%
Plan year beginning May 1	2050							
1. Market value of assets (beginning of year)	\$31,272,349							
2. Unit credit accrued liability*	27,653,238							
3. Funded percentage: (1) / (2)	113.09%							

*The interest rate for calculating the unit credit accrued liability is 6.5% which is the assumption used in the May 1, 2017 actuarial valuation.

K. Response to Revenue Procedure 2017-43 Sections 6.03, 6.04 and Appendix B

The following is a response to Sections 6.03, 6.04 and Appendix B of Revenue Procedure 2017-43. In many cases, we have referenced other materials that are included in this application. Between this response, the May 1, 2017 Actuarial Valuation, the May 1, 2018 PPA Actuarial Certification, and our report titled “Supplemental Information to Actuarial Certification for the Plan Year Beginning May 1, 2018”, all assumptions used in the projections required under Section 3.01, 3.02, 4.02(1), 4.03, 6.05 and 6.06 of Revenue Procedure 2017-43 have been described. This section responds to the items in Revenue Procedure 2017-43 Appendix B in the same order laid out in Appendix B.

Part 1 – Actuarial Assumptions and Methods Used for Projections

Investment Returns

Plan Year Beginning May 1	Return
2017*	7.04%
2018**	-0.98%
2019 – 2027	6.62%
2028+	7.85%

* Based on the April 30, 2017 and April 30, 2018 audited financial statements.

** Estimated return based on the December 31, 2018 unaudited financial statements and assuming 2.16% return for January 1, 2019 through April 30, 2019. 2.16% is 4 months of 6.62%, which is the amount derived for the entire year.

Mortality Assumptions

- Active and Terminated Vested Participants: RP-2014 Blue Collar Employee Mortality Table adjusted to reflect Mortality Improvement Scale MP-2018 from the 2006 base year, and projected forward using MP-2018 on a generational basis.
- Current and Future Retirees, Disabled Participants and Beneficiaries: RP-2014 Blue Collar Healthy Annuitant Mortality Table adjusted to reflect Mortality Improvement Scale MP-2018 from the 2006 base year, and projected forward using MP-2018 on a generational basis.

Other Demographic Assumptions

Retirement Rates

Age	Active Retirement Rates	Terminated Vested Retirement Rates*
55	10%	5%
56	10%	5%
57	10%	5%
58	10%	5%
59	10%	5%
60	10%	5%
61	20%	20%
62	50%	20%
63	50%	10%
64	50%	10%
65 & older	100%	100%

* Applies to both current and future assumed terminated vested participants.

Termination

Age	Less than 2 Years of Service	2 - 4 Years of Service	4 or More Years of Service: Ultimate Rates (Sarason T-5)
20 & under	30.00%	15.00%	7.88%
21	30.00%	15.00%	7.83%
22	30.00%	15.00%	7.79%
23	30.00%	15.00%	7.74%
24	30.00%	15.00%	7.69%
25	30.00%	15.00%	7.64%
26	30.00%	15.00%	7.58%
27	30.00%	15.00%	7.50%
28	30.00%	15.00%	7.39%
29	30.00%	15.00%	7.26%
30	30.00%	15.00%	7.11%
31	30.00%	15.00%	6.94%
32	30.00%	15.00%	6.76%
33	30.00%	15.00%	6.56%
34	30.00%	15.00%	6.35%
35	30.00%	15.00%	6.13%
36	30.00%	15.00%	5.90%
37	30.00%	15.00%	5.66%
38	30.00%	15.00%	5.42%
39	30.00%	15.00%	5.18%
40	30.00%	15.00%	4.93%
41	30.00%	15.00%	4.68%
42	30.00%	15.00%	4.42%
43	30.00%	15.00%	4.16%
44	30.00%	15.00%	3.89%
45	30.00%	15.00%	3.89%
46	30.00%	15.00%	3.63%
47	30.00%	15.00%	3.35%
48	30.00%	15.00%	3.06%
49	30.00%	15.00%	2.75%
50	30.00%	15.00%	2.41%
51	30.00%	15.00%	2.06%
52	30.00%	15.00%	1.70%
53	30.00%	15.00%	1.34%
54	30.00%	15.00%	1.00%
55 & over	30.00%	15.00%	0.00%

Disability

None.

Exclusion of Terminated Vested Participants

None. All terminated vested participants are included.

Assumptions Regarding Form and Commencement of Benefits

- Future retirees are assumed to elect the following forms of payment: 45% elect the single life annuity, 10% elect the ten year certain and life annuity, 20% elect the joint and 50% survivor annuity with pop-up, and 25% elect the joint and 75% survivor with pop-up.
- Terminated vested participants are assumed commence benefits immediately upon retiring. The retirement rates for current and future terminated vested participants are described above.
- We assume no future disabilities because the disability benefit was eliminated effective September 1, 2013.

Assumptions Regarding Missing or Incomplete Data

- Active, terminated vested, retiree and disabled records where gender is not reported are assumed to be male.
- Beneficiary, deferred beneficiary, and alternate payee records where gender is not reported are assumed to be female.
- Spouses are assumed to be opposite gender of the member if gender is not reported.
- Female spouses are assumed to be 3 years younger than male spouses.
- 100% of active and terminated vested participants are assumed to be married.
- For missing pop-up amounts, it was assumed that the pop-up benefit is 112% and 119% of the current benefit for the 50% joint and survivor and 75% joint and survivor options, respectively.

New Entrant Profile

- No assumption was made with respect to the demographic characteristics of new entrants because benefit accruals were suspended effective August 1, 2013. There is no impact on projected plan liabilities and benefit payments from new entrants to the Plan during the projection period. However, we have assumed that there will be replacement of current participants by new entrants based on Trustee input related to projected contribution base units (see below).

Contribution Base Units and Rates

The table below shows the assumed contribution base units (hours) and average contribution rate used for projections shown in this report.

Plan Year Beginning May 1	Total Contribution Base Units (Hours)	Average Contribution Rate (Hourly)
2018	1,178,226	\$3.40
2019	1,000,000	\$3.45
2020	1,000,000	\$3.45
2021	1,000,000	\$3.45
2022	950,000	\$3.50
2023	950,000	\$3.50
2024	950,000	\$3.50
2025	950,000	\$3.50
2026	950,000	\$3.50
2027	950,000	\$3.50
2028	950,000	\$3.50
2029	950,000	\$3.50
2030	950,000	\$3.50
2031	950,000	\$3.50
2032	950,000	\$3.50
2033	950,000	\$3.50
2034	950,000	\$3.50
2035	950,000	\$3.50
2036	950,000	\$3.50
2037	950,000	\$3.50
2038	950,000	\$3.50
2039	950,000	\$3.50
2040	950,000	\$3.50
2041	950,000	\$3.50
2042	950,000	\$3.50
2043	950,000	\$3.50
2044	950,000	\$3.50
2045	950,000	\$3.50
2046	950,000	\$3.50
2047	950,000	\$3.50
2048	950,000	\$3.50
2049	950,000	\$3.50

Total estimated hours for the plan year May 2018 through April 2019 are $811,559 + 366,667 = 1,178,226$. The 811,559 hours for May 2018 through December 2018 was provided by the Fund Office. We are estimating 366,667 hours for January 2019 through April 2019 based on 4/12ths of the 1.1 million hours assumption for the 2018/2019 plan year.

Withdrawal Liability Payments

- No withdrawal liability payments are currently being made and no future withdrawal liability payments are assumed.

Administrative Expenses (Other than Investment-Related Expenses)

- The annual administrative expense assumption is \$570,000 for the year beginning May 1, 2018. This is based on the expenses incurred from May 1, 2018 through December 31, 2018 and the anticipated increase in expenses for the remainder of the year due to work related to the resubmission of the application for the proposed suspension of benefits. The administrative expenses are assumed to decrease to \$400,000 for the year beginning May 1, 2019 and further decrease to \$320,000 for the year beginning May 1, 2020. After May 1, 2020, administrative expenses are assumed to increase by 2.0% per year thereafter for inflation.

Projection Methodology

- No data grouping techniques were used to produce projections.
- No changes or adjustments were made to cash flow projections produced by our valuation software.

Part 2 – Supporting Documentation for Selection of Certain Actuarial Assumptions

Investment Returns

The components of the target portfolio used in the projections, expressed in terms of the asset classes used for setting the Plan's investment policy are as follows:

Asset Class	Allocations
US Equity - Large Cap	2.4%
US Equity - Value	7.5%
US Equity - Mid Cap Value	7.5%
US Equity - Small Cap Value	5.0%
Global Equity	3.0%
Non-US Equity – Developed	10.4%
Non-US Equity – Emerging	0.7%
US Fixed Income	11.6%
Global Bonds	0.6%
US Treasuries (Cash Equivalents)	0.4%
Real Estate	20.0%
Hedge Funds	15.9%
Private Equity	15.0%

The components of the target portfolio were allocated as follows among the asset classes provided in Appendix B of Revenue Procedure 2017-43:

Asset Class	Allocations
US Equity – Large Cap	10.5%
US Equity – Small/Mid Cap	13.3%
Non-US Equity – Developed	11.7%
Non-US Equity – Emerging	1.0%
US Corporate Bonds – Core	11.9%
Non-US Debt Developed	0.3%
US Treasuries (Cash Equivalents)	0.4%
Real Estate	20.0%
Hedge Funds (includes 100% of Absolute Return Assets)	15.9%
Private Equity	15.0%

The 10 and 20-year expected returns (arithmetic returns) shown on Exhibit 15 of the 2018 edition of the Horizon Survey of Capital Market Assumptions were used. The associated standard deviations and correlation coefficients from Exhibit 15 were also used.

This process produced a median geometric return of 6.62% using the 10-year capital market assumptions and a median geometric return of 7.85% using the 20-year capital market assumptions, which were then used to project future investment returns.

Demographic Experience

- An experience study was completed by the prior actuarial firm for the period May 1, 2010 to April 30, 2015. The retirement rates from active status and termination rates were updated as of May 1, 2015 as a result of the experience study. The results of the experience analysis as provided by the prior actuarial firm are shown below. Our understanding is that the prior actuarial firm did not prepare a formal experience study report.

For PYE	Exp Retmnts Would Have Been	Actual Retmnts Were	Actual Retmnts Not Elig	Expected per Valuation	Actual per Valuation
4/30/2015	10.90	4	-	18.80	4.00
4/30/2014	9.40	8	2	15.40	8.00
4/30/2013	10.30	10	4	15.20	10.00
4/30/2012	9.10	5	-	13.50	5.00
4/30/2011	7.50	9	1	19.40	9.00
Total	47.20	36	7	82.30	36

For PYE	Exp w/d's Would Have Been	Actual w/d's Were	Expected per Valuation	Actual per Valuation
4/30/2015	44.84	50	35.0	50
4/30/2014	43.91	48	35.3	48.0
4/30/2013	44.43	41	34.5	41.0
4/30/2012	41.90	20	32.5	20.0
4/30/2011	51.54	70	40.0	70.0
Total	226.61	229	177.300	229

- The historical actuarial gains and losses over the last ten years are shown below. The May 1, 2018 actuarial valuation has not been completed at the time of this filing; as such, the actuarial gains and losses for the plan year beginning May 1, 2017 are unavailable.

Plan Year Ending April 30	Demographic and Administrative Expense (Gain)/Loss	Asset (Gain)/Loss	Total (Gain)/Loss
2017	\$(686,979)	\$2,537,985	\$1,851,006
2016	(205,159)	3,903,376	3,698,217
2015	263,280	2,936,285	3,199,565
2014	30,444	(802,801)	(772,357)
2013	494,878	(647,011)	(152,133)
2012	(1,007,671)	7,955,392	6,947,721
2011	15,363	(2,382,945)	(2,367,582)
2010	170,143	(6,229,620)	(6,059,477)
2009	(237,956)	16,572,030	16,334,074
2008	700,026	1,344,216	2,044,242

- The detailed demographic (gain)/loss for the 2016-2017 plan year by changes in status is provided below. Note the sum of the amounts shown in the table do not match the total shown above due to the (gain)/loss on administrative expenses and benefit payments.

	May 1, 2017 Status				
May 1, 2016 Status	Active	Deferred	In Pay	Non Participating*	Total
Active	\$8,336	\$46,288	\$(73,078)	\$(705)	\$(19,159)
Deferred	(5,491)	(69,270)	288	(250,746)	(325,219)
In Pay	0	(34,385)	380,621	(775,403)	(429,168)
Not in Data	92	0	111,317	0	111,409
Total	2,938	(57,367)	419,148	(1,026,855)	(662,137)

* Due to deaths, benefit expirations, and data corrections.

- The demographic (gain)/loss for the 2015-2016 plan year by changes in status is provided below. Note the sum of the amounts shown in the table do not match the total shown above due to the (gain)/loss on administrative expenses and benefit payments, and the difference between our replication of the May 1, 2015 actuarial valuation results and the prior actuarial firm's May 1, 2015 actuarial valuation results.

	May 1, 2016 Status				
May 1, 2015 Status	Active	Deferred	In Pay	Non Participating*	Total
Active	\$9,191	\$13,062	\$(4,732)	\$(88,091)	\$(70,570)
Deferred	(1,405)	14,930	(62,982)	(3,054)	(52,511)
In Pay	0	0	337,507	(842,005)	(504,498)
Not in Data	0	0	27,372	0	27,372
Total	7,785	27,992	297,165	(933,150)	(600,206)

* Due to deaths, benefit expirations, and data corrections.

- The details of the demographic (gain)/loss for years prior to 2015-2016 are unavailable.
- Regarding the assumption that 100% of the active and terminated vested participants are married, we do not receive data on the marital status of the active or terminated vested population. This assumption determines the projected survivor benefits payable to assumed surviving spouses for projected pre-retirement deaths from active and terminated vested status. Given the limitations of the available data and the relatively small impact of the assumption, we believe that the current assumption remains reasonable.
- The distribution of benefit form elections as provided by the Plan Administrator for the last five years (plan years ending April 30, 2013 – April 30, 2017) is shown below. The analysis includes retirements from both active and terminated vested status.

Benefit Form	Percentage Electing
Single Life	42.7%
Five Year Certain and Life	4.5%
Ten Year Certain and Life	9.0%
Joint and 50% Survivor	7.9%
Joint and 50% Survivor with Pop-up	12.3%
Joint and 75% Survivor	3.4%
Joint and 75% Survivor with Pop-up	20.2%

- The retirement rates by age for active participants for the last two years (plan years ending April 30, 2016 and April 30, 2017) are shown below. We did not prepare a retirement experience analysis covering years prior to May 1, 2015 as the prior actuarial firm completed an experience analysis that covered those years.

Age	Exposures	Number Retired	Retirement Rate
55	40	4	10%
56	36	1	3%
57	28	2	7%
58	27	2	7%
59	19	2	11%
60	15	1	7%
61	16	3	19%
62	7	3	43%
63	1	0	0%
64	1	0	0%
65 & over	4	0	0%

- The retirement rates by age for terminated participants for the last five years (plan years ending April 30, 2013 through April 30, 2017) are shown below.

Age	Exposures	Number Retired	Retirement Rate
55	85	5	6%
56	70	2	3%
57	72	2	3%
58	69	2	3%
59	58	2	3%
60	45	4	9%
61	38	8	21%
62	27	4	15%
63	16	1	6%
64	12	3	25%
65 & over	31	2	6%

Mortality Assumptions

- The Plan is not large enough to develop a credible mortality table based exclusively on Plan experience. We have relied on the most recent mortality tables (RP-2014) published by the Society of Actuaries in which credible mortality experience was analyzed. The Plan's participants consist primarily of blue-collar participants; as such, the blue-collar variations of the RP-2014 tables were used.
- With respect to future mortality improvement, the MP-2018 mortality improvement scale was used to project future improvement in mortality from 2006 on a generational basis.

New Entrant Profile

No assumption was made with respect to the demographic characteristics of new entrants because benefit accruals were suspended effective August 1, 2013. There is no impact on projected plan liabilities and benefit payments from new entrants to the Plan during the projection period. However, we have assumed that there will be replacement of current participants by new entrants based on Trustee input related to projected contribution base units (see below).

Contribution Base Units and Employer Withdrawals

- The table below shows the 10-year history of the employers that contributed 5% or more of annual contributions to the Plan as provided on Schedule R (Form 5500).

Plan Year Beginning May 1	Employer Name	Estimated Contribution Base Units*	Hourly Contribution Rate	Total Contributions
2017	EAST COAST METAL SYSTEMS, INC.	124,750	\$4.60	\$573,852
2017	THE K COMPANY, INC.	83,898	5.18	434,593
2017	R G SMITH CO., INC.	65,308	5.18	338,298
2017	METAL MASTERS, INC.	55,088	5.18	285,354
2016	EAST COAST METAL SYSTEMS, INC.	109,408	4.60	503,277
2016	THE K COMPANY, INC.	81,901	5.18	424,248
2016	R G SMITH CO., INC.	69,216	5.18	358,537
2016	METAL MASTERS, INC.	46,713	5.18	241,975
2015	THE K COMPANY, INC.	82,637	5.18	428,058
2015	EAST COAST METAL SYSTEMS, INC.	90,329	4.60	415,514
2015	R G SMITH CO., INC.	59,532	5.18	308,377
2015	METAL MASTERS, INC.	45,617	5.18	236,295
2015	SHEET METAL CRAFTERS	42,298	5.18	219,103
2015	OHIO FABRICATORS, INC.	38,941	5.18	201,712
2014	EAST COAST METAL SYSTEMS, INC.	95,260	4.60	438,198
2014	THE K COMPANY, INC.	66,050	5.18	342,139
2014	R G SMITH CO., INC.	54,007	5.18	279,758
2014	METAL MASTERS, INC.	52,584	5.18	272,386
2014	OHIO FABRICATORS, INC.	39,168	5.18	202,890
2014	SHEET METAL CRAFTERS	86,325	2.18	188,189
2013	EAST COAST METAL SYSTEMS, INC.	90,020	4.60	414,091
2013	THE K COMPANY, INC.	59,621	5.18	308,837
2013	R G SMITH CO., INC.	57,535	5.18	298,031
2013	OHIO FABRICATORS, INC.	43,266	5.18	224,120
2013	METAL MASTERS, INC.	37,050	5.18	191,921
2012	EAST COAST METAL SYSTEMS, INC.	83,266	4.60	383,024
2012	THE K COMPANY, INC.	62,053	5.18	321,435
2012	R G SMITH CO., INC.	45,724	5.18	236,851
2012	OHIO FABRICATORS, INC.	41,575	5.18	215,361
2012	SHEET METAL CRAFTERS	40,172	5.18	208,093
2012	METAL MASTERS, INC.	35,231	5.18	182,494
2011	EAST COAST METAL SYSTEMS, INC.	96,036	4.03	387,027
2011	THE K COMPANY, INC.	61,132	4.54	277,540
2011	R G SMITH CO., INC.	46,070	4.54	209,160
2011	OHIO FABRICATORS, INC.	45,656	4.54	207,279
2011	METAL MASTERS, INC.	40,331	4.54	183,101
2011	SHEET METAL CRAFTERS	36,881	4.54	167,439
2010	EAST COAST METAL SYSTEMS, INC.	60,372	4.03	243,298
2010	R G SMITH CO., INC.	50,135	4.54	227,612
2010	METAL MASTERS INC.	40,811	4.54	185,281
2010	THE K COMPANY, INC.	37,006	4.54	168,007
2009	GLOBAL INSULATION, INC.	82,434	3.75	309,129
2009	EAST COAST METAL SYSTEMS, INC.	64,256	3.33	213,972
2009	THE K COMPANY, INC.	50,141	3.75	188,029
2009	OHIO FABRICATORS, INC.	43,467	3.75	163,003

* Calculated as Total Contributions divided by Hourly Contribution Rate.

The table below shows the 10-year experience for certain critical assumptions as required under regulation 1.432(e)(9)-1(d)(5)(vi)(A) and Revenue Procedure 2017-43, Section 6.04.

Plan Year Beginning May 1	Total Employer Contributions	Total Contribution Base Units (Hours)	Annual Change in Hours	Average Hourly Contribution Rate	Withdrawal Liability Payments	Market Value Return on Assets
2017	\$3,973,912	1,180,488	4.8%	\$3.37	\$0	7.0%
2016	3,896,375	1,126,133	3.5%	3.46	0	9.1%
2015	3,815,488	1,087,575	4.1%	3.51	0	0.1%
2014	3,696,518	1,044,941	2.9%	3.54	0	7.4%
2013	3,620,036	1,015,775	1.7%	3.56	0	10.6%
2012	3,476,411	998,372	-3.5%	3.48	0	10.3%
2011	3,262,884	1,034,107	12.1%	3.16	0	-7.9%
2010	2,517,134	922,328	-9.9%	2.73	0	14.6%
2009	2,732,416	1,023,122	-4.1%	2.67	0	25.9%
2008	2,619,413	1,066,839	N/A	2.46	0	-30.3%
Compound Annual Growth Rate, 2008 to 2017			1.1%			

- Explanation for the historical trends experienced by the Plan with respect to contribution base units and contribution rates is documented in several sections within the application, including Section 5.01, 5.02(1)(a), 5.02(1)(e), 5.02(3), 5.02(4) and 5.03.
- Contribution rates have increased by over 50% since the implementation of the Rehabilitation Plan effective August 1, 2009. For example, the contribution rate for Building Trades Journeymen – Akron increased from \$3.41 per hour before the Rehabilitation Plan to the current \$5.18 per hour rate. The original Rehabilitation Plan required annual contribution increases of 10% from 2009 to 2016; however, it was later determined that further increases would harm the funding of Plan. The last required rate increase was a 14% increase in 2012.
- At their November 30, 2017 meeting and reaffirmed at the March 7, 2019 meeting, the Trustees discussed the assumptions for contribution base units for the coming years, ultimately determining that 950,000 for future years will be used. While the Trustees had observed actual hours on average 15% higher than 950,000 during the past five years, the forecasted lesser hours is based on the Trustees' understanding that there had been a short-term upswing in projects that was not predictably sustainable and that several specific projects would be winding down and terminating the near term. This was the basis for the projection and supports the lesser hours forecast.
- The contribution rate projection is based on the expectation that the reduction in contribution base units will disproportionately affect the non-journeymen who are at lower contribution rates to the journeymen.
- No employers have withdrawn from the Plan and been assessed a withdrawal liability during the last five years. In addition, there are no future withdrawal liability payments due to the Plan from previous years' withdrawals.

Take-up rate with respect to selection of benefit/contribution schedule

- All bargaining parties elected the Preferred Schedule of the Rehabilitation Plan.

Projection Methodology

- No approximation techniques were used to produce the projections.
- No changes were made to cash flow projections produced by our valuation software.

Part 3 – Additional Disclosures Relating to Use of Different Assumptions

The following assumptions differed between the projections produced under Section 3.01 and Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06. An explanation for the difference is included.

- **Investment returns** - For the purpose of the projections included in Section 3.01, we used 6.64% for plan years ending April 30, 2019 through April 30, 2027, and 7.40% for plan years after April 30, 2027. This assumption was set based on the Fund's target asset allocations and the median returns shown in Exhibits 17 and 18 of the 2017 edition of the Horizon Survey of Capital Market Assumptions. The investment return assumption used to develop the projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06 were developed using updated target asset allocations and the expected returns (arithmetic) shown in Exhibit 15 of the 2018 edition of the Horizon Survey of Capital Market Assumptions.
- **Administrative expenses** – For the purposes of the projections included in Section 3.01, we assumed that administrative expenses would be \$385,000 for the plan year ending April 30, 2019, \$287,000 for the plan year ending April 30, 2020, and then increase by 2% per year thereafter. The administrative expense assumption was refined for the projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06 to reflect the increase in expenses related to the re-submission of the application for the proposed benefit suspension. We have maintained the 2% per year inflationary adjustment beginning with the 2021-2022 plan year.
- **Mortality improvement scale** – For purposes of the projections included in Section 3.01, we used the MP-2016 mortality improvement scale. For purposes of the projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06 we used the MP-2018 mortality improvement scale.
- **Retirement rates from terminated vested status** – For purposes of the projections included in Section 3.01, we assumed that terminated vested participants would commence benefits at age 60 or 62, depending on their date of termination. For purposes of the projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06 we developed retirement rates by age based on actual experience over the past five years as shown in Part 2 of this exhibit.
- **Form of payment** – For purposes of the projections included in Section 3.01, we assumed that participants would elect the single life annuity form of payment. For purposes of the projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06, we added optional forms of payment based on actual experience over the past five years as shown in Part 2 of this exhibit.
- **Exclusion of terminated vested participants** – For purposes of the projections included in Section 3.01, we assumed that terminated vested participants over age 70 at the valuation date are deceased with no benefit payable. For purposes of the projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06, we included all terminated vested participants.
- **Load for pop-up** – For purposes of the projections included in Section 3.01, we assumed a 1.4% load on liabilities for retirees who elected the pop-up option on their joint and survivor benefit. For purposes of the projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06, we valued the actual individual pop-up amount as provided by the Plan Administrator.
- **Contribution rate** – For purposes of the projections included in Section 3.01, we assumed an average contribution rate of \$3.50 per hour each year into the future. For purposes of the projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06, we used a select and ultimate contribution rate to reflect the temporary increase in non-journeyman who are at lower contribution rates.

L. Proposed Benefit Suspensions

The application filed on behalf of the Sheet Metal Workers Local Pension Plan sets forth the following proposed benefit suspension to be effective May 1, 2020. The suspension is expected to continue indefinitely.

The application proposes that there shall be a reduction in monthly benefits such that the revised monthly amount is based upon a specific percentage reduction of a participant's accrued benefit depending upon into which "group" of participants an individual is categorized; therefore the proposed suspension treats participants differently. The proposed reductions are subject to the individual limitations described in §432(e)(9)(D)(i), (ii), and (iii) and aggregate limitations described in §432(e)(9)(D)(iv).

The groups defined for purposes of this application and the proposed percentage reduction in their benefits are:

Non-Active Participants		
	Retirement Date	Proposed Suspension Reduction
Group 1	Before August 1, 2009 and all terminated vested participants	35%
Group 2	On or after August 1, 2009	30%
Active Participants		
	Hire Date	Proposed Suspension Reduction
Group 3	Before May 1, 2006	25%
Group 4	On or after May 1, 2006	No reduction

Active Participants are Plan Participants who worked at least 435 hours during the plan year ended April 30, 2017 or April 30, 2018 and who have not retired as of April 30, 2018. Non-Active Participants include Terminated Vested Participants, Retired Participants, Disabled Participants, Beneficiaries of Participants, and Alternate Payees.

The table below shows the 10-year experience for certain critical assumptions as required under regulation 1.432(e)(9)-1(d)(5)(vi)(A) and Revenue Procedure 2017-43, Section 6.04.

Plan Year Beginning May 1	Total Employer Contributions	Total Contribution Base Units (Hours)	Annual Change in Hours	Average Hourly Contribution Rate	Withdrawal Liability Payments	Market Value Return on Assets
2017	\$3,973,912	1,180,488	4.8%	\$3.37	\$0	7.0%
2016	3,896,375	1,126,133	3.5%	3.46	0	9.1%
2015	3,815,488	1,087,575	4.1%	3.51	0	0.1%
2014	3,696,518	1,044,941	2.9%	3.54	0	7.4%
2013	3,620,036	1,015,775	1.7%	3.56	0	10.6%
2012	3,476,411	998,372	-3.5%	3.48	0	10.3%
2011	3,262,884	1,034,107	12.1%	3.16	0	-7.9%
2010	2,517,134	922,328	-9.9%	2.73	0	14.6%
2009	2,732,416	1,023,122	-4.1%	2.67	0	25.9%
2008	2,619,413	1,066,839	N/A	2.46	0	-30.3%
Compound Annual Growth Rate, 2008 to 2017			1.1%			

- Explanation for the historical trends experienced by the Plan with respect to contribution base units and contribution rates is documented in several sections within the application, including Section 5.01, 5.02(1)(a), 5.02(1)(e), 5.02(3), 5.02(4) and 5.03.
- Contribution rates have increased by over 50% since the implementation of the Rehabilitation Plan effective August 1, 2009. For example, the contribution rate for Building Trades Journeymen – Akron increased from \$3.41 per hour before the Rehabilitation Plan to the current \$5.18 per hour rate. The original Rehabilitation Plan required annual contribution increases of 10% from 2009 to 2016; however, it was later determined that further increases would harm the funding of Plan. The last required rate increase was a 14% increase in 2012.
- At their November 30, 2017 meeting and reaffirmed at the March 7, 2019 meeting, the Trustees discussed the assumptions for contribution base units for the coming years, ultimately determining that 950,000 for future years will be used. While the Trustees had observed actual hours on average 15% higher than 950,000 during the past five years, the forecasted lesser hours is based on the Trustees' understanding that there had been a short-term upswing in projects that was not predictably sustainable and that several specific projects would be winding down and terminating the near term. This was the basis for the projection and supports the lesser hours forecast.
- The contribution rate projection is based on the expectation that the reduction in contribution base units will disproportionately affect the non-journeymen who are at lower contribution rates to the journeymen.
- No employers have withdrawn from the Plan and been assessed a withdrawal liability during the last five years. In addition, there are no future withdrawal liability payments due to the Plan from previous years' withdrawals.

Take-up rate with respect to selection of benefit/contribution schedule

- All bargaining parties elected the Preferred Schedule of the Rehabilitation Plan.

Projection Methodology

- No approximation techniques were used to produce the projections.
- No changes were made to cash flow projections produced by our valuation software.

Occupational Employment Statistics

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Occupational Employment and Wages, May 2017

47-2211 Sheet Metal Workers

Fabricate, assemble, install, and repair sheet metal products and equipment, such as ducts, control boxes, drainpipes, and furnace casings. Work may involve any of the following: setting up and operating fabricating machines to cut, bend, and straighten sheet metal; shaping metal over anvils, blocks, or forms using hammer; operating soldering and welding equipment to join sheet metal parts; or inspecting, assembling, and smoothing seams and joints of burred surfaces. Includes sheet metal duct installers who install prefabricated sheet metal ducts used for heating, air conditioning, or other purposes.

[National estimates for this occupation](#)
[Industry profile for this occupation](#)
[Geographic profile for this occupation](#)

National estimates for this occupation: [Top](#)

Employment estimate and mean wage estimates for this occupation:

Employment (1)	Employment RSE (3)	Mean hourly wage	Mean annual wage (2)	Wage RSE (3)
132,920	2.1 %	\$25.05	\$52,100	1.0 %

Percentile wage estimates for this occupation:

Percentile	10%	25%	50% (Median)	75%	90%
Hourly Wage	\$13.14	\$16.86	\$23.07	\$30.78	\$41.88
Annual Wage (2)	\$27,330	\$35,060	\$47,990	\$64,030	\$87,120

Industry profile for this occupation: [Top](#)

Industries with the highest published employment and wages for this occupation are provided. For a list of all industries with employment in this occupation, see the [Create Customized Tables](#) function.

Industries with the highest levels of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Building Equipment Contractors	64,880	3.15	\$26.99	\$56,140
Fabricated Metal Product Manufacturing (3323 and 3324 only)	19,650	4.28	\$21.13	\$43,950
Foundation, Structure, and Building Exterior Contractors	15,440	1.76	\$23.49	\$48,860
Federal Executive Branch (OES Designation)	6,650	0.33	\$26.92	\$55,990
Nonresidential Building Construction	3,590	0.46	\$25.11	\$52,240

Industries with the highest concentration of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Fabricated Metal Product Manufacturing (3323 and 3324 only)	19,650	4.28	\$21.13	\$43,950
Building Equipment Contractors	64,880	3.15	\$26.99	\$56,140
Foundation, Structure, and Building Exterior Contractors	15,440	1.76	\$23.49	\$48,860
Ship and Boat Building	1,740	1.30	\$25.68	\$53,410
Rail Transportation	1,550	0.66	\$30.05	\$62,510

Top paying industries for this occupation:

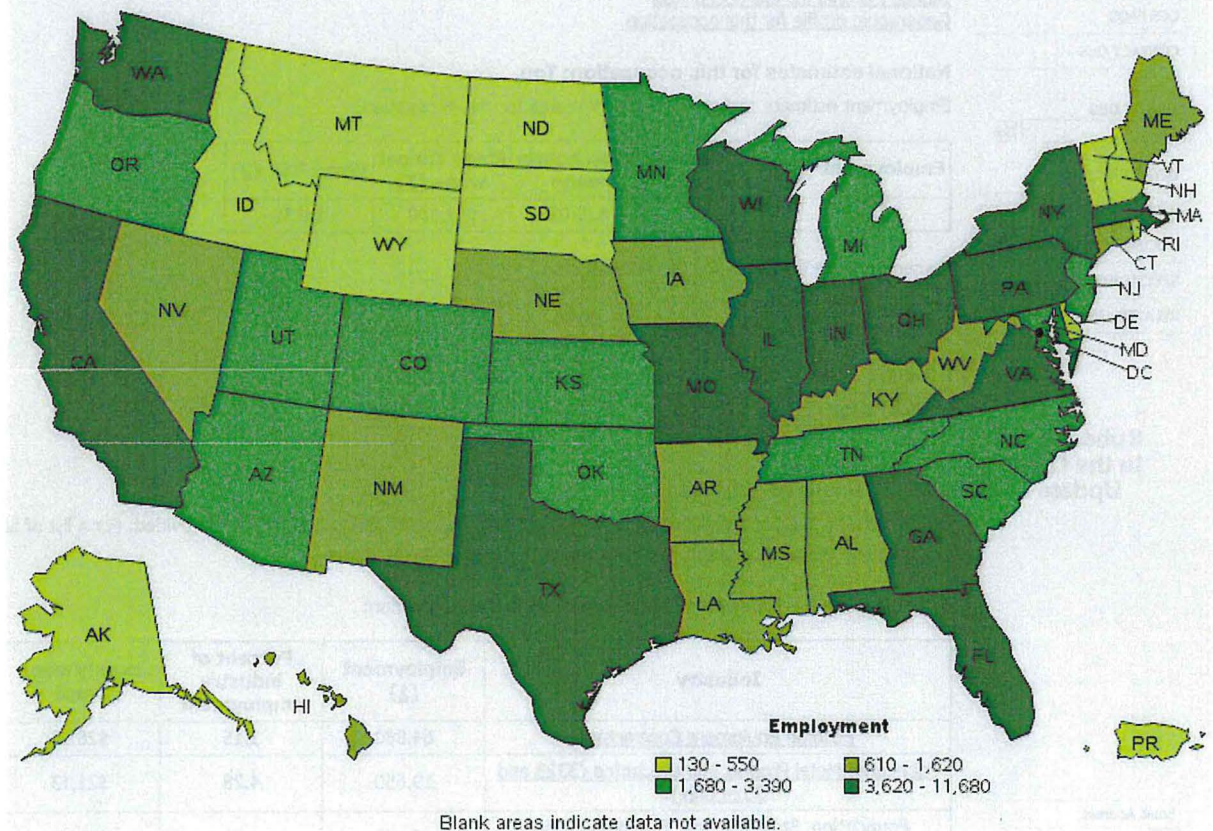
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Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Local Government, excluding schools and hospitals (OES Designation)	330	0.01	\$38.69	\$80,480
General Medical and Surgical Hospitals	70	(Z)	\$35.94	\$74,750
Scientific Research and Development Services	50	0.01	\$34.43	\$71,620
Management of Companies and Enterprises	130	0.01	\$34.30	\$71,330
State Government, excluding schools and hospitals (OES Designation)	110	0.01	\$33.56	\$69,810

Geographic profile for this occupation: [Top](#)

States and areas with the highest published employment, location quotients, and wages for this occupation are provided. For a list of all areas with employment in this occupation, see the [Create Customized Tables](#) function.

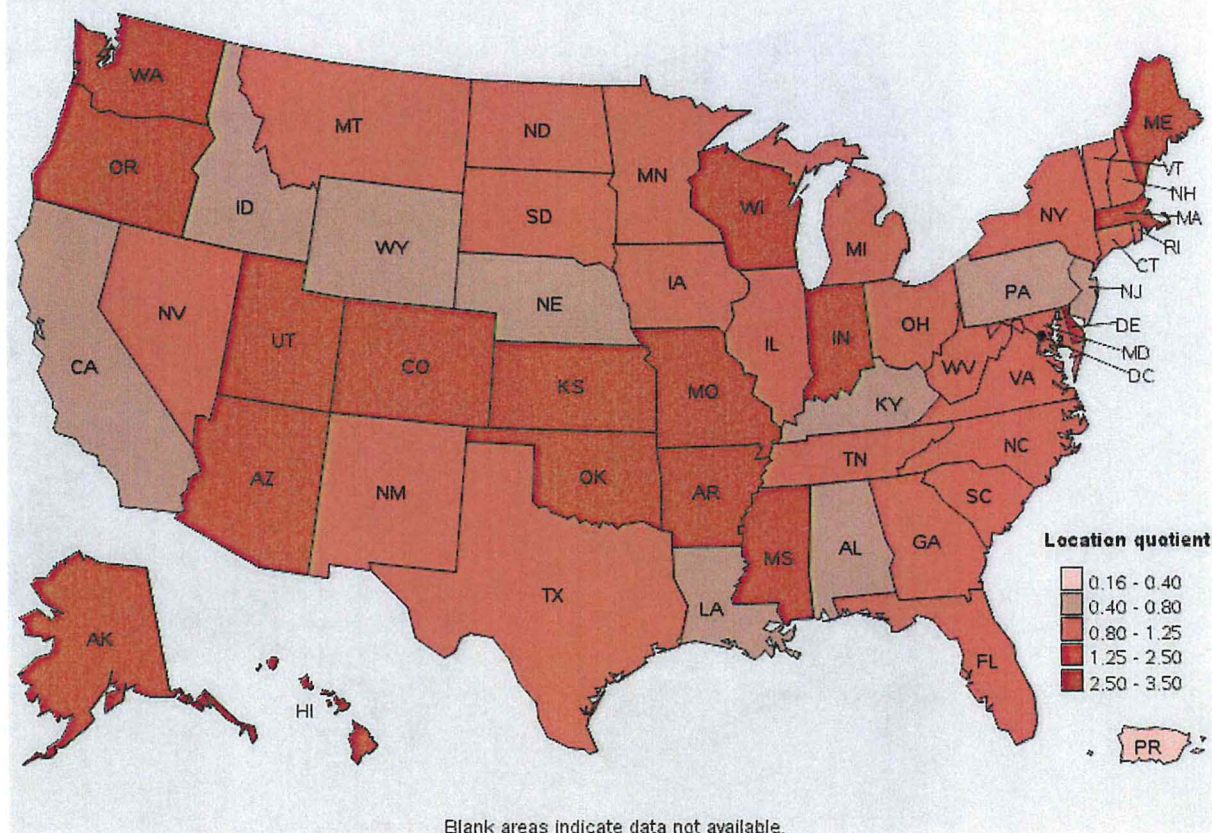
Employment of sheet metal workers, by state, May 2017



States with the highest employment level in this occupation:

State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
California	11,680	0.70	0.75	\$27.64	\$57,480
Texas	11,010	0.93	0.99	\$19.59	\$40,740
New York	8,080	0.88	0.94	\$32.08	\$66,730
Florida	7,910	0.94	1.01	\$18.76	\$39,010
Ohio	4,590	0.85	0.92	\$24.32	\$50,580

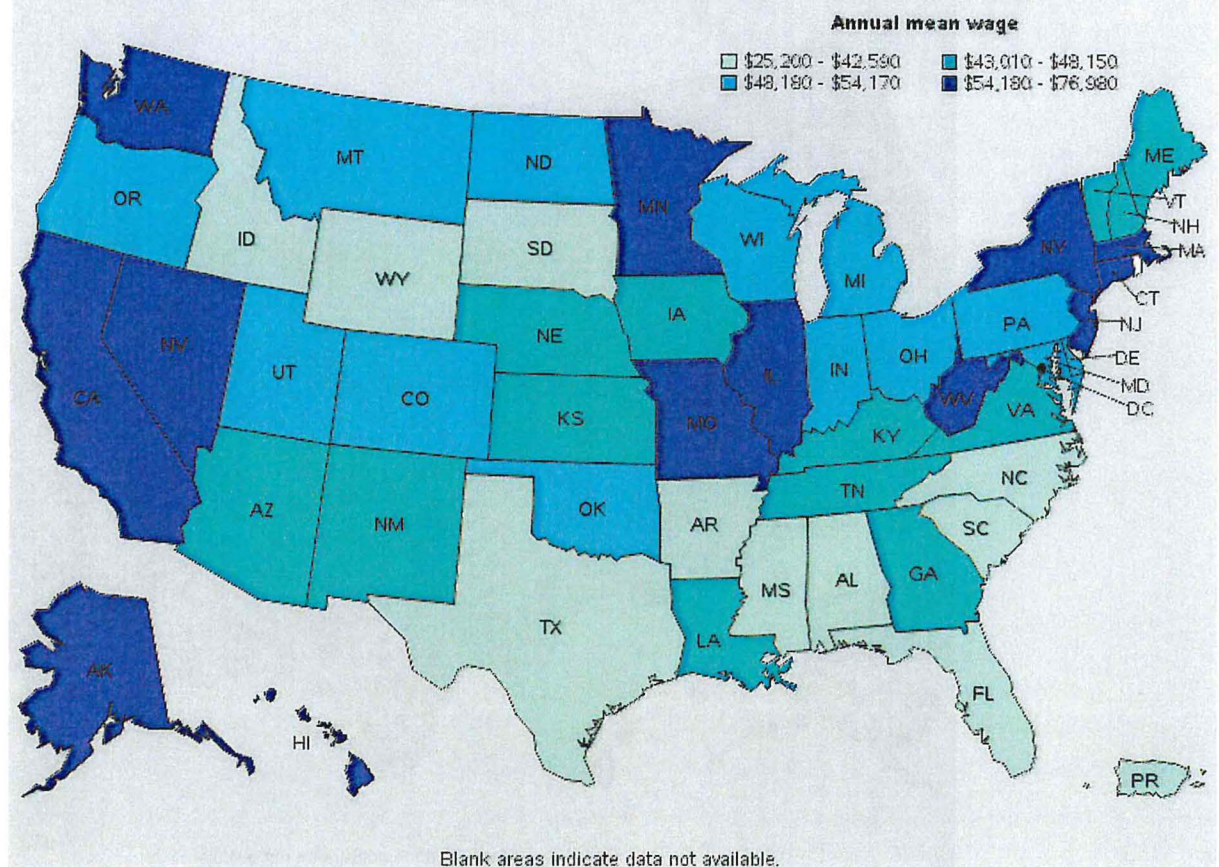
Location quotient of sheet metal workers, by state, May 2017



States with the highest concentration of jobs and location quotients in this occupation:

State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Oklahoma	3,210	2.04	2.19	\$23.91	\$49,730
Alaska	470	1.47	1.57	\$36.97	\$76,900
Wisconsin	4,110	1.46	1.56	\$26.05	\$54,170
Missouri	3,880	1.39	1.49	\$30.48	\$63,400
Oregon	2,530	1.38	1.48	\$24.13	\$50,190

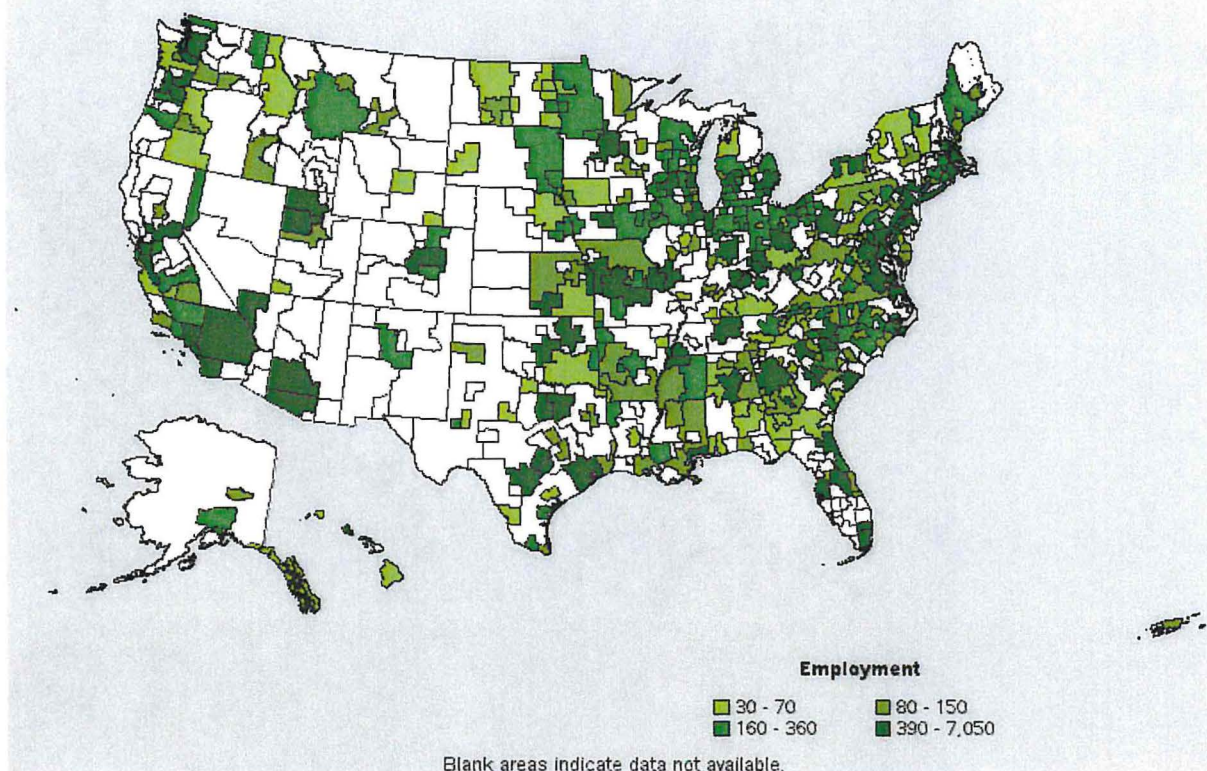
Annual mean wage of sheet metal workers, by state, May 2017



Top paying States for this occupation:

State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Hawaii	750	1.18	1.27	\$37.01	\$76,980
Alaska	470	1.47	1.57	\$36.97	\$76,900
Illinois	4,450	0.75	0.81	\$34.46	\$71,680
Massachusetts	4,380	1.24	1.33	\$32.83	\$68,290
New York	8,080	0.88	0.94	\$32.08	\$66,730

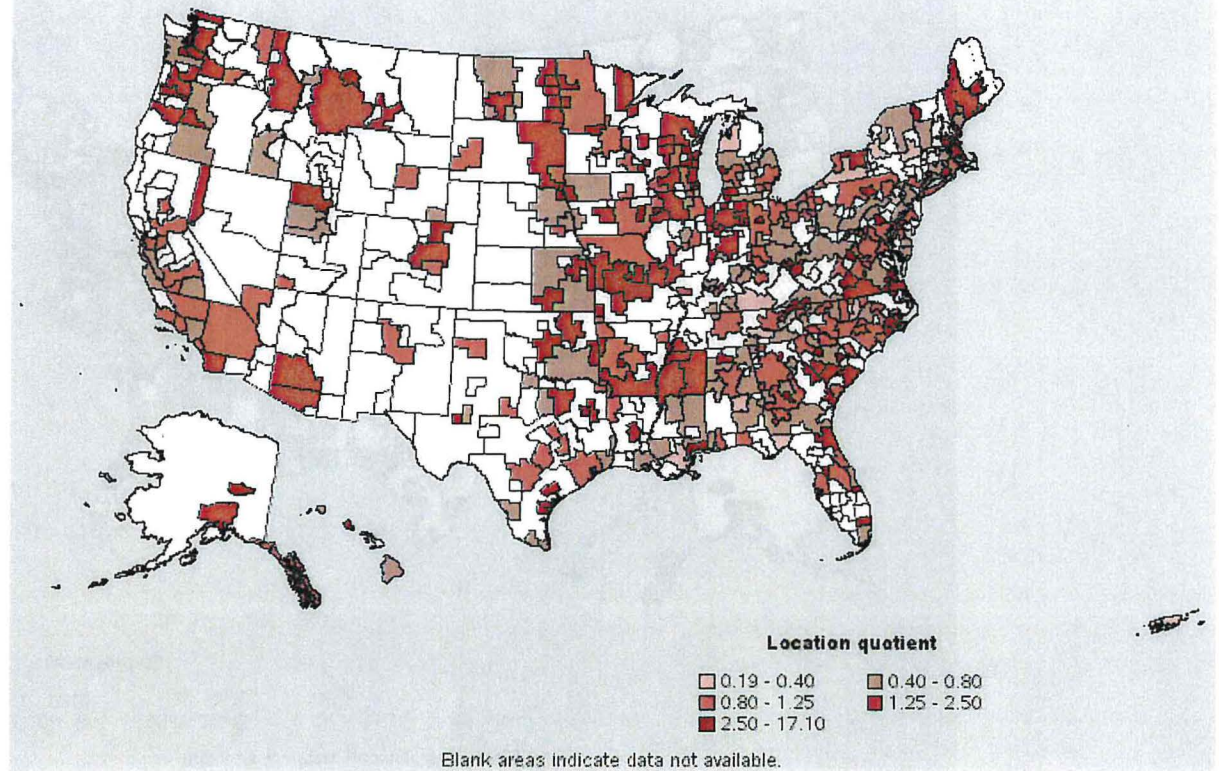
Employment of sheet metal workers, by area, May 2017



Metropolitan areas with the highest employment level in this occupation:

Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
New York-Jersey City-White Plains, NY-NJ Metropolitan Division	5,290	0.79	0.85	\$34.87	\$72,530
Houston-The Woodlands-Sugar Land, TX	3,140	1.07	1.15	\$22.44	\$46,670
Dallas-Plano-Irving, TX Metropolitan Division	2,950	1.18	1.27	\$16.15	\$33,590
Chicago-Naperville-Arlington Heights, IL Metropolitan Division	2,800	0.76	0.82	\$36.46	\$75,830
Phoenix-Mesa-Scottsdale, AZ	2,690	1.36	1.46	\$21.19	\$44,070
Boston-Cambridge-Newton, MA NECTA Division	2,640	1.44	1.54	\$35.83	\$74,520
Oklahoma City, OK	2,390	3.96	4.25	\$25.05	\$52,110
Seattle-Bellevue-Everett, WA Metropolitan Division	2,290	1.39	1.49	\$31.58	\$65,690
Denver-Aurora-Lakewood, CO	2,170	1.51	1.62	\$23.00	\$47,850
Atlanta-Sandy Springs-Roswell, GA	1,970	0.75	0.81	\$21.47	\$44,650

Location quotient of sheet metal workers, by area, May 2017

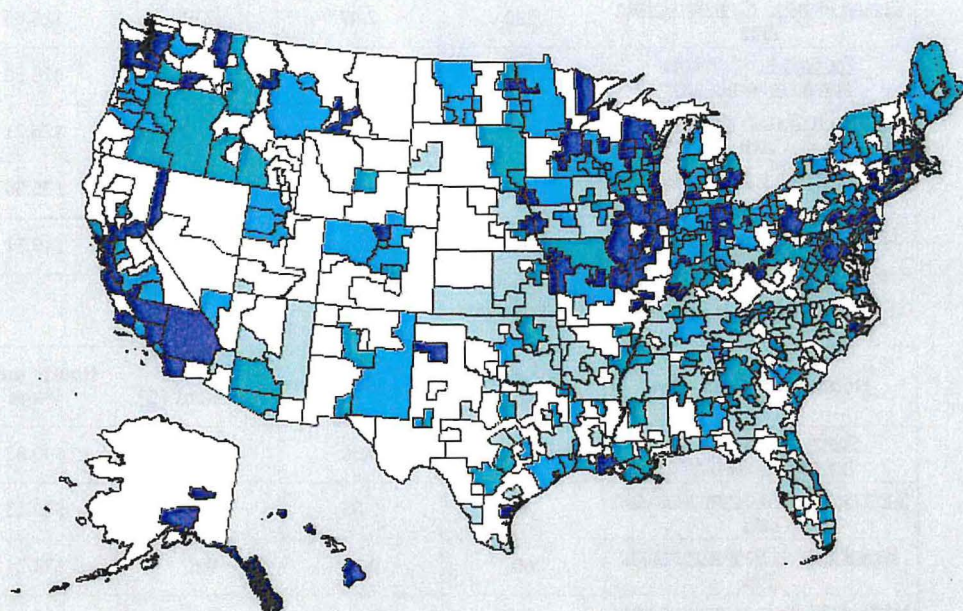


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Metropolitan areas with the highest concentration of jobs and location quotients in this occupation:

Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Warner Robins, GA	1,110	15.95	17.10	\$26.57	\$55,270
New Bern, NC	240	5.35	5.74	\$27.43	\$57,060
Hot Springs, AR	190	5.33	5.72	\$17.15	\$35,670
Bremerton-Silverdale, WA	360	4.12	4.42	\$29.33	\$61,000
Oklahoma City, OK	2,390	3.96	4.25	\$25.05	\$52,110
Ogden-Clearfield, UT	930	3.71	3.98	\$24.50	\$50,960
Fairbanks, AK	110	2.98	3.20	\$35.13	\$73,060
Gulfport-Biloxi-Pascagoula, MS	440	2.93	3.14	(8)	(8)
Harrisonburg, VA	180	2.85	3.06	\$20.66	\$42,970
Fond du Lac, WI	130	2.83	3.03	\$26.77	\$55,670

Annual mean wage of sheet metal workers, by area, May 2017



Annual mean wage

■ \$22,130 - \$39,240 ■ \$39,280 - \$46,300
■ \$46,350 - \$55,700 ■ \$55,810 - \$84,920

Blank areas indicate data not available.

Top paying metropolitan areas for this occupation:

Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Santa Cruz-Watsonville, CA	40	0.37	0.40	\$38.08	\$79,200
Champaign-Urbana, IL	110	1.11	1.19	\$38.00	\$79,030
Anchorage, AK	310	1.80	1.93	\$37.62	\$78,250
Urban Honolulu, HI	650	1.41	1.51	\$37.13	\$77,230
Chicago-Naperville-Arlington Heights, IL Metropolitan Division	2,800	0.76	0.82	\$36.46	\$75,830
Lake County-Kenosha County, IL-WI Metropolitan Division	110	0.28	0.30	\$36.12	\$75,120
Boston-Cambridge-Newton, MA NECTA Division	2,640	1.44	1.54	\$35.83	\$74,520
Camden, NJ Metropolitan Division	480	0.90	0.97	\$35.63	\$74,110
Framingham, MA NECTA Division	180	1.04	1.11	\$35.46	\$73,750
Cape Girardeau, MO-IL	(8)	(8)	(8)	\$35.22	\$73,270

Nonmetropolitan areas with the highest employment in this occupation:

Nonmetropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Central Missouri nonmetropolitan area	390	2.47	2.65	\$25.65	\$53,350
North Northeastern Ohio non-metropolitan area (non-contiguous)	340	1.02	1.09	\$19.27	\$40,090
Northern Indiana nonmetropolitan area	340	1.56	1.67	\$26.21	\$54,510
Northeast Mississippi nonmetropolitan area	290	1.25	1.34	\$16.56	\$34,450
Southwest Maine nonmetropolitan area	280	1.48	1.59	\$25.50	\$53,069.21

Nonmetropolitan areas with the highest concentration of jobs and location quotients in this occupation:

Nonmetropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Central Missouri nonmetropolitan area	390	2.47	2.65	\$25.65	\$53,350
Far East North Dakota nonmetropolitan area	40	1.76	1.89	\$20.50	\$42,650
Northern Indiana nonmetropolitan area	340	1.56	1.67	\$26.21	\$54,510
Southwest Maine nonmetropolitan area	280	1.48	1.59	\$25.50	\$53,050
Lower Savannah South Carolina nonmetropolitan area	80	1.42	1.53	\$19.51	\$40,580

Top paying nonmetropolitan areas for this occupation:

Nonmetropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Southwest Washington nonmetropolitan area	30	0.50	0.54	\$40.83	\$84,920
Southeast Alaska nonmetropolitan area	30	0.86	0.92	\$39.13	\$81,390
Hawaii / Kauai nonmetropolitan area	60	0.62	0.67	\$38.24	\$79,550
Northwest Illinois nonmetropolitan area	180	1.32	1.42	\$31.23	\$64,960
West Central Illinois nonmetropolitan area	(8)	(8)	(8)	\$29.21	\$60,770

[About May 2017 National, State, Metropolitan, and Nonmetropolitan Area Occupational Employment and Wage Estimates](#)

These estimates are calculated with data collected from employers in all industry sectors, all metropolitan and nonmetropolitan areas, and all states and the District of Columbia. The top employment and wage figures are provided above. The complete list is available in the [downloadable XLS files](#).

The percentile wage estimate is the value of a wage below which a certain percent of workers fall. The median wage is the 50th percentile wage estimate—50 percent of workers earn less than the median and 50 percent of workers earn more than the median. [More about percentile wages](#).

(1) Estimates for detailed occupations do not sum to the totals because the totals include occupations not shown separately. Estimates do not include self-employed workers.

(2) Annual wages have been calculated by multiplying the hourly mean wage by a "year-round, full-time" hours figure of 2,080 hours; for those occupations where there is not an hourly wage published, the annual wage has been directly calculated from the reported survey data.

(3) The relative standard error (RSE) is a measure of the reliability of a survey statistic. The smaller the relative standard error, the more precise the estimate.

(7) The value is less than .005 percent of industry employment.

(8) Estimate not released.

(9) The location quotient is the ratio of the area concentration of occupational employment to the national average concentration. A location quotient greater than one indicates the occupation has a higher share of employment than average, and a location quotient less than one indicates the occupation is less prevalent in the area than average.

Other OES estimates and related information:

[May 2017 National Occupational Employment and Wage Estimates](#)

[May 2017 State Occupational Employment and Wage Estimates](#)

[May 2017 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates](#)

[May 2017 National Industry-Specific Occupational Employment and Wage Estimates](#)

[May 2017 Occupation Profiles](#)

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Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Limitations on Individual Suspension are Satisfied

Example 1A - Group 1 individual currently receiving benefits below 110% PBGC Guarantee (including contingent beneficiary)**Participant Information**

(1) Date of birth	9/7/1949
(2) Age at end of month that includes proposed suspension date (May 31, 2020)	70 years 8 months
(3) Monthly benefit	\$51.90
(4) Years of service through accrual freeze date (July 31, 2013)	5.00
(5) Date of retirement	11/1/2008
(6) Form of payment	Pop-Up
(7) Joint and survivor percentage	50.00%

Calculation of PBGC Guarantee

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
(8) Monthly benefit	\$51.90	\$25.95	\$58.52
(9) Implied accrual rate = $[(8) \div (4)]$	\$10.38	\$5.19	\$11.70
(10) PBGC guaranteed accrual rate = [100% of first \$11 of (9) + 75% of (9) between \$11 and \$44]	\$10.38	\$5.19	\$11.53
(11) PBGC guaranteed benefit = $[(4) \times (10)]$	\$51.90	\$25.95	\$57.64
(12) 110% of PBGC guaranteed benefit = $[(11) \times 110\%]$	\$57.09	\$28.55	\$63.40

Calculation of Proposed Suspension

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
(13) Amount of monthly benefit not based on disability	\$51.90	\$25.95	\$58.52
(14) Amount of monthly benefit based on disability	\$0.00	\$0.00	\$0.00
(15) Initial proposed reduction percentage	35.00%	35.00%	35.00%
(16) Initial proposed reduction amount = $[(13) \times (15)]$	\$18.17	\$9.08	\$20.48
(17) Maximum reduction due to 110% PBGC guarantee restriction = $[(13) + (14) - (12), \text{ not less than } \$0]$	\$0.00	\$0.00	\$0.00
(18) Is 110% of PBGC guarantee restriction applicable?	Yes	Yes	Yes
(19) Reduction in benefit before age-based limitations = [lesser of (16) and (17)]	\$0.00	\$0.00	\$0.00
(20) Months from age 80 (as of May 31, 2020), not greater than 60	60	60	60
(21) Applicable percentage for age-based limitation = $[(20) \div 60]$	100.00%	100.00%	100.00%
(22) Final proposed reduction in benefit under suspension = $[(19) \times (21)]$	\$0.00	\$0.00	\$0.00
(23) Final Monthly Benefit under Proposed Suspension Effective May 1, 2020 = $[(13) + (14) - (22)]$	\$51.90	\$25.95	\$58.52

Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Limitations on Individual Suspension are Satisfied

Example 1B - Group 1 individual currently receiving benefits reduced to 110% PBGC Guarantee (including contingent beneficiary)**Participant Information**

(1) Date of birth	2/15/1953
(2) Age at end of month that includes proposed suspension date (May 31, 2020)	67 years 3 months
(3) Monthly benefit	\$1,379.01
(4) Years of service through accrual freeze date (July 31, 2013)	28.00
(5) Date of retirement	3/1/2008
(6) Form of payment	Pop-Up
(7) Joint and survivor percentage	50.00%

Calculation of PBGC Guarantee

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
(8) Monthly benefit	\$1,379.01	\$689.51	\$1,498.45
(9) Implied accrual rate = [(8) ÷ (4)]	\$49.25	\$24.63	\$53.52
(10) PBGC guaranteed accrual rate = [100% of first \$11 of (9) + 75% of (9) between \$11 and \$44]	\$35.75	\$21.22	\$35.75
(11) PBGC guaranteed benefit = [(4) x (10)]	\$1,001.00	\$594.13	\$1,001.00
(12) 110% of PBGC guaranteed benefit = [(11) x 110%]	\$1,101.10	\$653.54	\$1,101.10

Calculation of Proposed Suspension

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
(13) Amount of monthly benefit not based on disability	\$1,379.01	\$689.51	\$1,498.45
(14) Amount of monthly benefit based on disability	\$0.00	\$0.00	\$0.00
(15) Initial proposed reduction percentage	35.00%	35.00%	35.00%
(16) Initial proposed reduction amount = [(13) x (15)]	\$482.65	\$241.33	\$524.46
(17) Maximum reduction due to 110% PBGC guarantee restriction = [(13) + (14) - (12), not less than \$0]	\$277.91	\$35.96	\$397.35
(18) Is 110% of PBGC guarantee restriction applicable?	Yes	Yes	Yes
(19) Reduction in benefit before age-based limitations = [lesser of (16) and (17)]	\$277.91	\$35.96	\$397.35
(20) Months from age 80 (as of May 31, 2020), not greater than 60	60	60	60
(21) Applicable percentage for age-based limitation = [(20) ÷ 60]	100.00%	100.00%	100.00%
(22) Final proposed reduction in benefit under suspension = [(19) x (21)]	\$277.91	\$35.96	\$397.35
(23) Final Monthly Benefit under Proposed Suspension Effective May 1, 2020 = [(13) + (14) - (22)]	\$1,101.10	\$653.54	\$1,101.10

Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Limitations on Individual Suspension are Satisfied

Example 1C - Group 1 individual currently receiving benefits between age 75 and 80 (including contingent beneficiary)**Participant Information**

(1) Date of birth	3/8/1944
(2) Age at end of month that includes proposed suspension date (May 31, 2020)	76 years 2 months
(3) Monthly benefit	\$238.03
(4) Years of service through accrual freeze date (July 31, 2013)	13.00
(5) Date of retirement	4/1/2006
(6) Form of payment	Pop-Up
(7) Joint and survivor percentage	50.00%

Calculation of PBGC Guarantee

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
(8) Monthly benefit	\$238.03	\$119.02	\$261.57
(9) Implied accrual rate = [(8) ÷ (4)]	\$18.31	\$9.16	\$20.12
(10) PBGC guaranteed accrual rate = [100% of first \$11 of (9) + 75% of (9) between \$11 and \$44]	\$16.48	\$9.16	\$17.84
(11) PBGC guaranteed benefit = [(4) x (10)]	\$214.27	\$119.02	\$231.93
(12) 110% of PBGC guaranteed benefit = [(11) x 110%]	\$235.70	\$130.92	\$255.12

Calculation of Proposed Suspension

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
(13) Amount of monthly benefit not based on disability	\$238.03	\$119.02	\$261.57
(14) Amount of monthly benefit based on disability	\$0.00	\$0.00	\$0.00
(15) Initial proposed reduction percentage	35.00%	35.00%	35.00%
(16) Initial proposed reduction amount = [(13) x (15)]	\$83.31	\$41.66	\$91.55
(17) Maximum reduction due to 110% PBGC guarantee restriction = [(13) + (14) - (12), not less than \$0]	\$2.33	\$0.00	\$6.45
(18) Is 110% of PBGC guarantee restriction applicable?	Yes	Yes	Yes
(19) Reduction in benefit before age-based limitations = [lesser of (16) and (17)]	\$2.33	\$0.00	\$6.45
(20) Months from age 80 (as of May 31, 2020), not greater than 60	46	46	46
(21) Applicable percentage for age-based limitation = [(20) ÷ 60]	76.67%	76.67%	76.67%
(22) Final proposed reduction in benefit under suspension = [(19) x (21)]	\$1.79	\$0.00	\$4.94
(23) Final Monthly Benefit under Proposed Suspension Effective May 1, 2020 = [(13) + (14) - (22)]	\$236.24	\$119.02	\$256.63

Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Limitations on Individual Suspension are Satisfied

Example 1D - Group 1 individual currently receiving benefits based on disability (pre-5/1/1995 disability award) (including contingent beneficiary)**Participant Information**

(1) Date of birth	5/23/1945
(2) Age at end of month that includes proposed suspension date (May 31, 2020)	75 years 0 months
(3) Monthly benefit	\$312.60
(4) Years of service through accrual freeze date (July 31, 2013)	14.00
(5) Date of retirement	6/1/2007
(6) Form of payment	Pop-Up
(7) Joint and survivor percentage	50.00%

Calculation of PBGC Guarantee

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
(8) Monthly benefit	\$312.60	\$156.30	\$348.50
(9) Implied accrual rate = $[(8) \div (4)]$	\$22.33	\$11.16	\$24.89
(10) PBGC guaranteed accrual rate = [100% of first \$11 of (9) + 75% of (9) between \$11 and \$44]	\$19.50	\$11.12	\$21.42
(11) PBGC guaranteed benefit = $[(4) \times (10)]$	\$272.95	\$155.73	\$299.88
(12) 110% of PBGC guaranteed benefit = $[(11) \times 110\%]$	\$300.25	\$171.30	\$329.86

Calculation of Proposed Suspension

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
(13) Amount of monthly benefit not based on disability	\$0.00	\$156.30	\$0.00
(14) Amount of monthly benefit based on disability	\$312.60	\$0.00	\$348.50
(15) Initial proposed reduction percentage	35.00%	35.00%	35.00%
(16) Initial proposed reduction amount = $[(13) \times (15)]$	\$0.00	\$54.71	\$0.00
(17) Maximum reduction due to 110% PBGC guarantee restriction = $[(13) + (14) - (12), \text{ not less than } \$0]$	\$12.36	\$0.00	\$18.64
(18) Is 110% of PBGC guarantee restriction applicable?	No	Yes	No
(19) Reduction in benefit before age-based limitations = [lesser of (16) and (17)]	\$0.00	\$0.00	\$0.00
(20) Months from age 80 (as of May 31, 2020), not greater than 60	60	60	60
(21) Applicable percentage for age-based limitation = $[(20) \div 60]$	100.00%	100.00%	100.00%
(22) Final proposed reduction in benefit under suspension = $[(19) \times (21)]$	\$0.00	\$0.00	\$0.00
(23) Final Monthly Benefit under Proposed Suspension Effective May 1, 2020 = $[(13) + (14) - (22)]$	\$312.60	\$156.30	\$348.50

Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Limitations on Individual Suspension are Satisfied

Example 1E - Group 1 future retiree below 110% PBGC Guarantee**Participant Information**

(1) Date of birth	1/17/1963
(2) Age at end of month that includes proposed suspension date (May 31, 2020)	57 years 4 months
(3) Accrued monthly benefit payable at Normal Retirement Date (NRD)	\$155.35
(4) Years of service through accrual freeze date (July 31, 2013)	9.00
(5) Actuarial increase factor for delayed retirement	1.0000
(6) Adjusted monthly benefit payable as single life annuity on proposed suspension date (May 1, 2020) = [(3) x (5)]	\$155.35

Calculation of PBGC Guarantee

(7) Implied accrual rate = [(3) ÷ (4)]	\$17.26
(8) PBGC guaranteed accrual rate = [100% of first \$11 of (7) + 75% of (7) between \$11 and \$44]	\$15.70
(9) PBGC guaranteed benefit = [(4) x (8)]	\$141.26
(10) 110% of PBGC guaranteed benefit = [(9) x 110%]	\$155.39

Calculation of Proposed Suspension

(11) Amount of monthly benefit not based on disability	\$155.35
(12) Amount of monthly benefit based on disability	\$0.00
(13) Initial proposed reduction percentage	35.00%
(14) Initial proposed reduction amount = [(11) x (13)]	\$54.37
(15) Maximum reduction due to 110% PBGC guarantee restriction = [(11) + (12) - (10), not less than \$0]	\$0.00
(16) Is 110% of PBGC guarantee restriction applicable?	Yes
(17) Reduction in benefit before age-based limitations = [lesser of (14) and (15)]	\$0.00
(18) Months from age 80 (as of May 31, 2020), not greater than 60	60
(19) Applicable percentage for age-based limitation = [(18) ÷ 60]	100.00%
(20) Final proposed reduction in benefit under suspension = [(17) x (19)]	\$0.00

(21) Final Monthly Benefit under Proposed Suspension Effective May 1, 2020 = [(11) + (12) - (20)]	\$155.35
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Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Limitations on Individual Suspension are Satisfied

Example 1F - Group 1 future retiree reduced to 110% PBGC Guarantee**Participant Information**

(1) Date of birth	3/9/1971
(2) Age at end of month that includes proposed suspension date (May 31, 2020)	49 years 2 months
(3) Accrued monthly benefit payable at Normal Retirement Date (NRD)	\$701.01
(4) Years of service through accrual freeze date (July 31, 2013)	15.00
(5) Actuarial increase factor for delayed retirement	1.0000
(6) Adjusted monthly benefit payable as single life annuity on proposed suspension date (May 1, 2020) = [(3) x (5)]	\$701.01

Calculation of PBGC Guarantee

(7) Implied accrual rate = [(3) ÷ (4)]	\$46.73
(8) PBGC guaranteed accrual rate = [100% of first \$11 of (7) + 75% of (7) between \$11 and \$44]	\$35.75
(9) PBGC guaranteed benefit = [(4) x (8)]	\$536.25
(10) 110% of PBGC guaranteed benefit = [(9) x 110%]	\$589.88

Calculation of Proposed Suspension

(11) Amount of monthly benefit not based on disability	\$701.01
(12) Amount of monthly benefit based on disability	\$0.00
(13) Initial proposed reduction percentage	35.00%
(14) Initial proposed reduction amount = [(11) x (13)]	\$245.35
(15) Maximum reduction due to 110% PBGC guarantee restriction = [(11) + (12) - (10), not less than \$0]	\$111.14
(16) Is 110% of PBGC guarantee restriction applicable?	Yes
(17) Reduction in benefit before age-based limitations = [lesser of (14) and (15)]	\$111.14
(18) Months from age 80 (as of May 31, 2020), not greater than 60	60
(19) Applicable percentage for age-based limitation = [(18) ÷ 60]	100.00%
(20) Final proposed reduction in benefit under suspension = [(17) x (19)]	\$111.14
(21) Final Monthly Benefit under Proposed Suspension Effective May 1, 2020 = [(11) + (12) - (20)]	\$589.88

Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Limitations on Individual Suspension are Satisfied

Example 1G - Group 1 future retiree between age 75 and 80**Participant Information**

(1) Date of birth	5/23/1942
(2) Age at end of month that includes proposed suspension date (May 31, 2020)	78 years 0 months
(3) Accrued monthly benefit payable at Normal Retirement Date (NRD)	\$309.45
(4) Years of service through accrual freeze date (July 31, 2013)	17.00
(5) Actuarial increase factor for delayed retirement	2.2650
(6) Adjusted monthly benefit payable as single life annuity on proposed suspension date (May 1, 2020) = [(3) x (5)]	\$700.90

Calculation of PBGC Guarantee

(7) Implied accrual rate = [(3) ÷ (4)]	\$18.20
(8) PBGC guaranteed accrual rate = [100% of first \$11 of (7) + 75% of (7) between \$11 and \$44]	\$16.40
(9) PBGC guaranteed benefit = [(4) x (8)]	\$278.84
(10) 110% of PBGC guaranteed benefit = [(9) x 110%]	\$306.72

Calculation of Proposed Suspension

(11) Amount of monthly benefit not based on disability	\$700.90
(12) Amount of monthly benefit based on disability	\$0.00
(13) Initial proposed reduction percentage	35.00%
(14) Initial proposed reduction amount = [(11) x (13)]	\$245.32
(15) Maximum reduction due to 110% PBGC guarantee restriction = [(11) + (12) - (10), not less than \$0]	\$394.18
(16) Is 110% of PBGC guarantee restriction applicable?	No
(17) Reduction in benefit before age-based limitations = [lesser of (14) and (15)]	\$245.32
(18) Months from age 80 (as of May 31, 2020), not greater than 60	24
(19) Applicable percentage for age-based limitation = [(18) ÷ 60]	40.00%
(20) Final proposed reduction in benefit under suspension = [(17) x (19)]	\$98.13

(21) Final Monthly Benefit under Proposed Suspension Effective May 1, 2020 = [(11) + (12) - (20)]	\$602.77
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Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Limitations on Individual Suspension are Satisfied

Example 1H - Group 1 future retiree with benefits based on disability (post 5/1/1995 disability award)**Participant Information**

(1) Date of birth	12/31/1959
(2) Age at end of month that includes proposed suspension date (May 31, 2020)	60 years 5 months
(3) Accrued monthly benefit payable at Normal Retirement Date (NRD)	\$2,463.98
(4) Years of service through accrual freeze date (July 31, 2013)	29.00
(5) Actuarial increase factor for delayed retirement	1.0000
(6) Adjusted monthly benefit payable as single life annuity on proposed suspension date (May 1, 2020) = [(3) x (5)]	\$2,463.98

Calculation of PBGC Guarantee

(7) Implied accrual rate = [(3) ÷ (4)]	\$84.96
(8) PBGC guaranteed accrual rate = [100% of first \$11 of (7) + 75% of (7) between \$11 and \$44]	\$35.75
(9) PBGC guaranteed benefit = [(4) x (8)]	\$1,036.75
(10) 110% of PBGC guaranteed benefit = [(9) x 110%]	\$1,140.43

Calculation of Proposed Suspension

(11) Amount of monthly benefit not based on disability	\$492.80
(12) Amount of monthly benefit based on disability	\$1,971.18
(13) Initial proposed reduction percentage	35.00%
(14) Initial proposed reduction amount = [(11) x (13)]	\$172.48
(15) Maximum reduction due to 110% PBGC guarantee restriction = [(11) + (12) - (10), not less than \$0]	\$1,323.56
(16) Is 110% of PBGC guarantee restriction applicable?	No
(17) Reduction in benefit before age-based limitations = [lesser of (14) and (15)]	\$172.48
(18) Months from age 80 (as of May 31, 2020), not greater than 60	60
(19) Applicable percentage for age-based limitation = [(18) ÷ 60]	100.00%
(20) Final proposed reduction in benefit under suspension = [(17) x (19)]	\$172.48

(21) Final Monthly Benefit under Proposed Suspension Effective May 1, 2020 = [(11) + (12) - (20)]	\$2,291.50
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Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Limitations on Individual Suspension are Satisfied

Example 2A - Group 2 individual currently receiving benefits between age 75 and 80 (including contingent beneficiary)**Participant Information**

(1) Date of birth	1/29/1945
(2) Age at end of month that includes proposed suspension date (May 31, 2020)	75 years 4 months
(3) Monthly benefit	\$585.26
(4) Years of service through accrual freeze date (July 31, 2013)	9.00
(5) Date of retirement	4/1/2012
(6) Form of payment	Joint Life
(7) Joint and survivor percentage	75.00%

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
(8) Monthly benefit	\$585.26	\$438.95	N/A
(9) Implied accrual rate = [(8) ÷ (4)]	\$65.03	\$48.77	N/A
(10) PBGC guaranteed accrual rate = [100% of first \$11 of (9) + 75% of (9) between \$11 and \$44]	\$35.75	\$35.75	N/A
(11) PBGC guaranteed benefit = [(4) x (10)]	\$321.75	\$321.75	N/A
(12) 110% of PBGC guaranteed benefit = [(11) x 110%]	\$353.93	\$353.93	N/A

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
Calculation of Proposed Suspension			
(13) Amount of monthly benefit not based on disability	\$585.26	\$438.95	N/A
(14) Amount of monthly benefit based on disability	\$0.00	\$0.00	N/A
(15) Initial proposed reduction percentage	30.00%	30.00%	N/A
(16) Initial proposed reduction amount = [(13) x (15)]	\$175.58	\$131.68	N/A
(17) Maximum reduction due to 110% PBGC guarantee restriction = [(13) + (14) - (12), not less than \$0]	\$231.34	\$85.02	N/A
(18) Is 110% of PBGC guarantee restriction applicable?	No	Yes	N/A
(19) Reduction in benefit before age-based limitations = [lesser of (16) and (17)]	\$175.58	\$85.02	N/A
(20) Months from age 80 (as of May 31, 2020), not greater than 60	56	56	N/A
(21) Applicable percentage for age-based limitation = [(20) ÷ 60]	93.33%	93.33%	N/A
(22) Final proposed reduction in benefit under suspension = [(19) x (21)]	\$163.87	\$79.35	N/A
(23) Final Monthly Benefit under Proposed Suspension Effective May 1, 2020 = [(13) + (14) - (22)]	\$421.39	\$359.59	N/A

Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Limitations on Individual Suspension are Satisfied

Example 2B - Group 2 individual currently receiving benefits between age 75 and 80 and limited by 110% PBGC Guarantee**Participant Information**

(1) Date of birth	9/7/1942
(2) Age at end of month that includes proposed suspension date (May 31, 2020)	77 years 8 months
(3) Monthly benefit	\$258.49
(4) Years of service through accrual freeze date (July 31, 2013)	6.46
(5) Date of retirement	4/1/2015
(6) Form of payment	Single Life
(7) Joint and survivor percentage	0.00%

Calculation of PBGC Guarantee

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
(8) Monthly benefit	\$258.49	N/A	N/A
(9) Implied accrual rate = $[(8) \div (4)]$	\$40.02	N/A	N/A
(10) PBGC guaranteed accrual rate = [100% of first \$11 of (9) + 75% of (9) between \$11 and \$44]	\$32.77	N/A	N/A
(11) PBGC guaranteed benefit = $[(4) \times (10)]$	\$211.63	N/A	N/A
(12) 110% of PBGC guaranteed benefit = $[(11) \times 110\%]$	\$232.79	N/A	N/A

Calculation of Proposed Suspension

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
(13) Amount of monthly benefit not based on disability	\$258.49	N/A	N/A
(14) Amount of monthly benefit based on disability	\$0.00	N/A	N/A
(15) Initial proposed reduction percentage	30.00%	N/A	N/A
(16) Initial proposed reduction amount = $[(13) \times (15)]$	\$77.55	N/A	N/A
(17) Maximum reduction due to 110% PBGC guarantee restriction = $[(13) + (14) - (12), \text{ not less than } \$0]$	\$25.70	N/A	N/A
(18) Is 110% of PBGC guarantee restriction applicable?	Yes	N/A	N/A
(19) Reduction in benefit before age-based limitations = [lesser of (16) and (17)]	\$25.70	N/A	N/A
(20) Months from age 80 (as of May 31, 2020), not greater than 60	28	N/A	N/A
(21) Applicable percentage for age-based limitation = $[(20) \div 60]$	46.67%	N/A	N/A
(22) Final proposed reduction in benefit under suspension = $[(19) \times (21)]$	\$11.99	N/A	N/A
(23) Final Monthly Benefit under Proposed Suspension Effective May 1, 2020 = $[(13) + (14) - (22)]$	\$246.50	N/A	N/A

Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Limitations on Individual Suspension are Satisfied

Example 2C - Group 2 individual currently receiving benefits based on disability (post 5/1/1995 disability award) (including contingent beneficiary)**Participant Information**

(1) Date of birth	8/27/1961
(2) Age at end of month that includes proposed suspension date (May 31, 2020)	58 years 9 months
(3) Monthly benefit	\$1,003.74
(4) Years of service through accrual freeze date (July 31, 2013)	16.00
(5) Date of retirement	9/1/2016
(6) Form of payment	Pop-Up
(7) Joint and survivor percentage	75.00%

Calculation of PBGC Guarantee

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
(8) Monthly benefit	\$1,003.74	\$752.81	\$1,173.96
(9) Implied accrual rate = $[(8) \div (4)]$	\$62.73	\$47.05	\$73.37
(10) PBGC guaranteed accrual rate = [100% of first \$11 of (9) + 75% of (9) between \$11 and \$44]	\$35.75	\$35.75	\$35.75
(11) PBGC guaranteed benefit = $[(4) \times (10)]$	\$572.00	\$572.00	\$572.00
(12) 110% of PBGC guaranteed benefit = $[(11) \times 110\%]$	\$629.20	\$629.20	\$629.20

Calculation of Proposed Suspension

	<u>Participant</u>	<u>Contingent Beneficiary</u>	<u>Pop-Up</u>
(13) Amount of monthly benefit not based on disability	\$0.00	\$752.81	\$0.00
(14) Amount of monthly benefit based on disability	\$1,003.74	\$0.00	\$1,173.96
(15) Initial proposed reduction percentage	30.00%	30.00%	30.00%
(16) Initial proposed reduction amount = $[(13) \times (15)]$	\$0.00	\$225.84	\$0.00
(17) Maximum reduction due to 110% PBGC guarantee restriction = $[(13) + (14) - (12), \text{ not less than } \$0]$	\$374.54	\$123.61	\$544.76
(18) Is 110% of PBGC guarantee restriction applicable?	No	Yes	No
(19) Reduction in benefit before age-based limitations = [lesser of (16) and (17)]	\$0.00	\$123.61	\$0.00
(20) Months from age 80 (as of May 31, 2020), not greater than 60	60	60	60
(21) Applicable percentage for age-based limitation = $[(20) \div 60]$	100.00%	100.00%	100.00%
(22) Final proposed reduction in benefit under suspension = $[(19) \times (21)]$	\$0.00	\$123.61	\$0.00
(23) Final Monthly Benefit under Proposed Suspension Effective May 1, 2020 = $[(13) + (14) - (22)]$	\$1,003.74	\$629.20	\$1,173.96

Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Limitations on Individual Suspension are Satisfied

Example 3A - Group 3 future retiree below 110% PBGC Guarantee**Participant Information**

(1) Date of birth	10/16/1968
(2) Age at end of month that includes proposed suspension date (May 31, 2020)	51 years 7 months
(3) Accrued monthly benefit payable at Normal Retirement Date (NRD)	\$108.99
(4) Years of service through accrual freeze date (July 31, 2013)	11.25
(5) Actuarial increase factor for delayed retirement	1.0000
(6) Adjusted monthly benefit payable as single life annuity on proposed suspension date (May 1, 2020) = [(3) x (5)]	\$108.99

Calculation of PBGC Guarantee

(7) Implied accrual rate = [(3) ÷ (4)]	\$9.69
(8) PBGC guaranteed accrual rate = [100% of first \$11 of (7) + 75% of (7) between \$11 and \$44]	\$9.69
(9) PBGC guaranteed benefit = [(4) x (8)]	\$108.99
(10) 110% of PBGC guaranteed benefit = [(9) x 110%]	\$119.89

Calculation of Proposed Suspension

(11) Amount of monthly benefit not based on disability	\$108.99
(12) Amount of monthly benefit based on disability	\$0.00
(13) Initial proposed reduction percentage	25.00%
(14) Initial proposed reduction amount = [(11) x (13)]	\$27.25
(15) Maximum reduction due to 110% PBGC guarantee restriction = [(11) + (12) - (10), not less than \$0]	\$0.00
(16) Is 110% of PBGC guarantee restriction applicable?	Yes
(17) Reduction in benefit before age-based limitations = [lesser of (14) and (15)]	\$0.00
(18) Months from age 80 (as of May 31, 2020), not greater than 60	60
(19) Applicable percentage for age-based limitation = [(18) ÷ 60]	100.00%
(20) Final proposed reduction in benefit under suspension = [(17) x (19)]	\$0.00

(21) Final Monthly Benefit under Proposed Suspension Effective May 1, 2020 = [(11) + (12) - (20)]	\$108.99
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Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Limitations on Individual Suspension are Satisfied

Example 3B - Group 3 future retiree reduced to 110% PBGC Guarantee**Participant Information**

(1) Date of birth	9/19/1974
(2) Age at end of month that includes proposed suspension date (May 31, 2020)	45 years 8 months
(3) Accrued monthly benefit payable at Normal Retirement Date (NRD)	\$443.22
(4) Years of service through accrual freeze date (July 31, 2013)	14.25
(5) Actuarial increase factor for delayed retirement	1.0000
(6) Adjusted monthly benefit payable as single life annuity on proposed suspension date (May 1, 2020) = [(3) x (5)]	\$443.22

Calculation of PBGC Guarantee

(7) Implied accrual rate = [(3) ÷ (4)]	\$31.10
(8) PBGC guaranteed accrual rate = [100% of first \$11 of (7) + 75% of (7) between \$11 and \$44]	\$26.08
(9) PBGC guaranteed benefit = [(4) x (8)]	\$371.60
(10) 110% of PBGC guaranteed benefit = [(9) x 110%]	\$408.76

Calculation of Proposed Suspension

(11) Amount of monthly benefit not based on disability	\$443.22
(12) Amount of monthly benefit based on disability	\$0.00
(13) Initial proposed reduction percentage	25.00%
(14) Initial proposed reduction amount = [(11) x (13)]	\$110.81
(15) Maximum reduction due to 110% PBGC guarantee restriction = [(11) + (12) - (10), not less than \$0]	\$34.46
(16) Is 110% of PBGC guarantee restriction applicable?	Yes
(17) Reduction in benefit before age-based limitations = [lesser of (14) and (15)]	\$34.46
(18) Months from age 80 (as of May 31, 2020), not greater than 60	60
(19) Applicable percentage for age-based limitation = [(18) ÷ 60]	100.00%
(20) Final proposed reduction in benefit under suspension = [(17) x (19)]	\$34.46

(21) Final Monthly Benefit under Proposed Suspension Effective May 1, 2020 = [(11) + (12) - (20)]	\$408.76
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Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Proposed Suspension is Equitably Distributed

Rev. Proc. 2017-73, Section 4.04(1) - Information for the Plan in Aggregate
Part a

	<u>Actives</u>	Terminated <u>Vested</u> ¹	<u>Retirees</u>	<u>Disabled</u> ²	<u>Beneficiaries</u>	Alternate <u>Payees</u> ³	<u>Total</u>
Valuation Counts as of May 1, 2017	655	379	408	16	89	17	1,564
Average Monthly Benefit Before Proposed Suspension ⁴	\$615	\$571	\$992	\$518	\$367	\$473	\$686
Average Monthly Benefit After Proposed Suspension ^{4, 5}	475	419	809	518	346	402	541
Percentage Change in Average Monthly Benefit	-22.8%	-26.6%	-18.4%	0.0%	-5.7%	-15.0%	-21.2%
Present Value of Benefits Before Proposed Suspension ⁶	\$31,552,375	\$17,705,890	\$48,742,905	\$1,018,332	\$3,475,147	\$1,097,866	\$103,592,515
Present Value of Benefits After Proposed Suspension ⁶	24,413,645	12,519,268	39,201,376	1,015,368	3,248,424	924,762	81,322,843
Reduction in Present Value of Benefits Due to Proposed Suspension ⁶	-7,138,730	-5,186,622	-9,541,529	-2,964	-226,723	-173,104	-22,269,672

¹ Includes two participants with deferred benefits based on disability. Also includes one terminated vested participant over age 70 that was excluded from the valuation as of May 1, 2017.

² Includes 13 pensioners that converted disability benefits to normal/early retirement benefits. The decrease in liability under the proposed suspension reflects the reduction to the contingent beneficiary's benefit.

³ Excludes alternate payees not in payment status. The average benefits and present value of benefits for deferred alternate payees are included with applicable active and terminated vested participants.

⁴ Accrued benefit payable at normal retirement age (or immediately if over NRA) as single life annuity for actives and terminated vested participants; current monthly benefit for those in payment status.

⁵ Determined taking into account individual limitations, as applicable.

⁶ Estimated as of May 1, 2020 based on a 6.5% valuation interest rate and assumptions described in Exhibit K of the report titled "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of May 1, 2020".

Part b

<u>Percentage reduction in benefits</u>	<u>Actives</u>	<u>Trm. Vested</u>	<u>Retirees</u>	<u>Disabled</u>	<u>Beneficiaries</u>	<u>Alt. Payees</u>	<u>Total Counts</u>	<u>% of Total</u>
No reduction	359	92	143	16	63	4	677	43%
Greater than 0% but less than 5%	33	36	40	0	10	5	124	8%
At least 5% but less than 10%	36	68	56	0	8	3	171	11%
At least 10% but less than 15%	14	23	26	0	3	0	66	4%
At least 15% but less than 20%	3	13	16	0	2	2	36	2%
At least 20% but less than 25%	8	13	21	0	1	0	43	3%
At least 25% but less than 30%	202	16	24	0	1	0	243	16%
At least 30% but less than 35%	0	7	36	0	1	3	47	3%
35%	<u>0</u>	<u>111</u>	<u>46</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>157</u>	<u>10%</u>
Total number of participants impacted by proposed suspension	296	287	265	0	26	13	887	57%
Percentage of participants impacted by suspension (within status)	45%	76%	65%	0%	29%	76%	57%	
Average reduction % per member (among those impacted)	19.6%	20.7%	18.7%	0.0%	8.8%	12.5%	19.3%	

Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Proposed Suspension is Equitably Distributed

Rev. Proc. 2017-73, Section 4.04(2) - Information for Group 1 Participants (Non-Active Participants with Date of Retirement Before August 1, 2009 and All Terminated Vested Participants)
Part a

	<u>Actives</u>	Terminated <u>Vested</u> ¹	<u>Retirees</u>	<u>Disabled</u> ²	<u>Beneficiaries</u>	Alternate <u>Payees</u> ³	<u>Total</u>
Valuation Counts as of May 1, 2017	0	379	288	12	80	10	769
Average Monthly Benefit Before Proposed Suspension ⁴	N/A	\$571	\$1,022	\$408	\$335	\$402	\$711
Average Monthly Benefit After Proposed Suspension ^{4, 5}	N/A	419	838	408	325	370	565
Percentage Change in Average Monthly Benefit	N/A	-26.6%	-18.0%	0.0%	-3.0%	-8.0%	-20.4%
Present Value of Benefits Before Proposed Suspension ⁶	N/A	\$17,705,890	\$33,170,881	\$503,813	\$2,783,466	\$519,849	\$54,683,899
Present Value of Benefits After Proposed Suspension ⁶	N/A	12,519,268	26,644,202	503,813	2,669,344	476,648	42,813,275
Reduction in Present Value of Benefits Due to Proposed Suspension ⁶	N/A	-5,186,622	-6,526,679	0	-114,122	-43,201	-11,870,624

¹ Includes two participants with deferred benefits based on disability. Also includes one terminated vested participant over age 70 that was excluded from the valuation as of May 1, 2017.

² Includes 9 pensioners that converted disability benefits to normal/early retirement benefits.

³ Excludes alternate payees not in payment status. The average benefits and present value of benefits for deferred alternate payees are included with applicable active and terminated vested participants.

⁴ Accrued benefit payable at normal retirement age (or immediately if over NRA) as single life annuity for actives and terminated vested participants; current monthly benefit for those in payment status.

⁵ Determined taking into account individual limitations, as applicable.

⁶ Estimated as of May 1, 2020 based on a 6.5% valuation interest rate and assumptions described in Exhibit K of the report titled "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of May 1, 2020".

Part b

<u>Percentage reduction in benefits</u>	<u>Actives</u>	<u>Trm. Vested</u>	<u>Retirees</u>	<u>Disabled</u>	<u>Beneficiaries</u>	<u>Alt. Payees</u>	<u>Total Counts</u>	<u>% of Total</u>
No reduction	N/A	92	128	12	59	2	293	38%
Greater than 0% but less than 5%	N/A	36	31	0	9	4	80	10%
At least 5% but less than 10%	N/A	68	24	0	8	3	103	13%
At least 10% but less than 15%	N/A	23	11	0	2	0	36	5%
At least 15% but less than 20%	N/A	13	7	0	1	1	22	3%
At least 20% but less than 25%	N/A	13	16	0	1	0	30	4%
At least 25% but less than 30%	N/A	16	15	0	0	0	31	4%
At least 30% but less than 35%	N/A	7	10	0	0	0	17	2%
35%	<u>N/A</u>	<u>111</u>	<u>46</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>157</u>	<u>20%</u>
Total number of participants impacted by proposed suspension	N/A	287	160	0	21	8	476	62%
Percentage of participants impacted by suspension (within status)	N/A	76%	56%	0%	26%	80%	62%	
Average reduction % per member (among those impacted)	N/A	20.7%	20.0%	0.0%	6.7%	6.1%	19.6%	

Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Proposed Suspension is Equitably Distributed

Rev. Proc. 2017-73, Section 4.04(2) - Information for Group 2 Participants (Non-Active Participants with Date of Retirement On or After August 1, 2009)
Part a

	<u>Actives</u>	<u>Terminated Vested</u>	<u>Retirees</u>	<u>Disabled</u> ¹	<u>Beneficiaries</u>	<u>Alternate Payees</u> ²	<u>Total</u>
Valuation Counts as of May 1, 2017	0	0	120	4	9	7	140
Average Monthly Benefit Before Proposed Suspension ³	N/A	N/A	\$919	\$851	\$645	\$574	\$882
Average Monthly Benefit After Proposed Suspension ^{3, 4}	N/A	N/A	739	851	527	447	714
Percentage Change in Average Monthly Benefit	N/A	N/A	-19.5%	0.0%	-18.2%	-22.1%	-19.0%
Present Value of Benefits Before Proposed Suspension ⁵	N/A	N/A	\$15,572,024	\$514,519	\$691,681	\$578,017	\$17,356,241
Present Value of Benefits After Proposed Suspension ⁵	N/A	N/A	12,557,174	511,555	579,080	448,114	14,095,923
Reduction in Present Value of Benefits Due to Proposed Suspension ⁵	N/A	N/A	-3,014,850	-2,964	-112,601	-129,903	-3,260,318

¹ Includes 4 pensioners that converted disability benefits to normal/early retirement benefits. The decrease in liability under the proposed suspension reflects the reduction to the contingent beneficiary's benefit.

² Excludes alternate payees not in payment status. The average benefits and present value of benefits for deferred alternate payees are included with applicable active and terminated vested participants.

³ Current monthly benefit for those in payment status.

⁴ Determined taking into account individual limitations, as applicable.

⁵ Estimated as of May 1, 2020 based on a 6.5% valuation interest rate and assumptions described in Exhibit K of the report titled "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of May 1, 2020".

Part b

<u>Percentage reduction in benefits</u>	<u>Actives</u>	<u>Trm. Vested</u>	<u>Retirees</u>	<u>Disabled</u>	<u>Beneficiaries</u>	<u>Alt. Payees</u>	<u>Total Counts</u>	<u>% of Total</u>
No reduction	N/A	N/A	15	4	4	2	25	18%
Greater than 0% but less than 5%	N/A	N/A	9	0	1	1	11	8%
At least 5% but less than 10%	N/A	N/A	32	0	0	0	32	23%
At least 10% but less than 15%	N/A	N/A	15	0	1	0	16	11%
At least 15% but less than 20%	N/A	N/A	9	0	1	1	11	8%
At least 20% but less than 25%	N/A	N/A	5	0	0	0	5	4%
At least 25% but less than 30%	N/A	N/A	9	0	1	0	10	7%
At least 30% but less than 35%	N/A	N/A	26	0	1	3	30	21%
35%	<u>N/A</u>	<u>N/A</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0%</u>
Total number of participants impacted by proposed suspension	N/A	N/A	105	0	5	5	115	82%
Percentage of participants impacted by suspension (within status)	N/A	N/A	88%	0%	56%	71%	82%	
Average reduction % per member (among those impacted)	N/A	N/A	16.6%	0.0%	17.5%	22.9%	16.9%	

Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Proposed Suspension is Equitably Distributed

Rev. Proc. 2017-73, Section 4.04(2) - Information for Group 3 Participants (Active Participants Hired Before May 1, 2006)
Part a

	<u>Actives</u>	Terminated <u>Vested</u>	<u>Retirees</u>	<u>Disabled</u>	<u>Beneficiaries</u>	Alternate <u>Payees</u>	<u>Total</u>
Valuation Counts as of May 1, 2017	353	0	0	0	0	0	353
Average Monthly Benefit Before Proposed Suspension ¹	\$1,124	N/A	N/A	N/A	N/A	N/A	\$1,124
Average Monthly Benefit After Proposed Suspension ^{1, 2}	865	N/A	N/A	N/A	N/A	N/A	865
Percentage Change in Average Monthly Benefit	-23.1%	N/A	N/A	N/A	N/A	N/A	-23.1%
Present Value of Benefits Before Proposed Suspension ³	\$31,291,937	N/A	N/A	N/A	N/A	N/A	\$31,291,937
Present Value of Benefits After Proposed Suspension ³	24,153,207	N/A	N/A	N/A	N/A	N/A	24,153,207
Reduction in Present Value of Benefits Due to Proposed Suspension ³	-7,138,730	N/A	N/A	N/A	N/A	N/A	-7,138,730

¹ Accrued benefit payable at normal retirement age (or immediately if over NRA) as single life annuity.

² Determined taking into account individual limitations, as applicable.

³ Estimated as of May 1, 2020 based on a 6.5% valuation interest rate and assumptions described in Exhibit K of the report titled "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of May 1, 2020".

Part b

<u>Percentage reduction in benefits</u>	<u>Actives</u>	<u>Trm. Vested</u>	<u>Retirees</u>	<u>Disabled</u>	<u>Beneficiaries</u>	<u>Alt. Payees</u>	<u>Total Counts</u>	<u>% of Total</u>
No reduction	57	N/A	N/A	N/A	N/A	N/A	57	16%
Greater than 0% but less than 5%	33	N/A	N/A	N/A	N/A	N/A	33	9%
At least 5% but less than 10%	36	N/A	N/A	N/A	N/A	N/A	36	10%
At least 10% but less than 15%	14	N/A	N/A	N/A	N/A	N/A	14	4%
At least 15% but less than 20%	3	N/A	N/A	N/A	N/A	N/A	3	1%
At least 20% but less than 25%	8	N/A	N/A	N/A	N/A	N/A	8	2%
At least 25% but less than 30%	202	N/A	N/A	N/A	N/A	N/A	202	57%
At least 30% but less than 35%	0	N/A	N/A	N/A	N/A	N/A	0	0%
35%	<u>0</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>0</u>	<u>0%</u>
Total number of participants impacted by proposed suspension	296	N/A	N/A	N/A	N/A	N/A	296	84%
Percentage of participants impacted by suspension (within status)	84%	N/A	N/A	N/A	N/A	N/A	84%	
Average reduction % per member (among those impacted)	19.6%	N/A	N/A	N/A	N/A	N/A	19.6%	

Sheet Metal Workers Local Pension Plan

Application for Proposed Benefit Suspension as of May 1, 2020

Demonstration that Proposed Suspension is Equitably Distributed

Rev. Proc. 2017-73, Section 4.04(2) - Information for Group 4 Participants (Active Participants Hired On or After May 1, 2006)
Part a

	<u>Actives</u>	Terminated <u>Vested</u>	<u>Retirees</u>	<u>Disabled</u>	<u>Beneficiaries</u>	Alternate <u>Payees</u>	<u>Total</u>
Valuation Counts as of May 1, 2017	302	0	0	0	0	0	302
Average Monthly Benefit Before Proposed Suspension ¹	\$19	N/A	N/A	N/A	N/A	N/A	\$19
Average Monthly Benefit After Proposed Suspension ^{1, 2}	19	N/A	N/A	N/A	N/A	N/A	19
Percentage Change in Average Monthly Benefit	0.0%	N/A	N/A	N/A	N/A	N/A	0.0%
Present Value of Benefits Before Proposed Suspension ³	\$260,438	N/A	N/A	N/A	N/A	N/A	\$260,438
Present Value of Benefits After Proposed Suspension ³	260,438	N/A	N/A	N/A	N/A	N/A	260,438
Reduction in Present Value of Benefits Due to Proposed Suspension ³	0	N/A	N/A	N/A	N/A	N/A	0

¹ Accrued benefit payable at normal retirement age (or immediately if over NRA) as single life annuity.

² Determined taking into account individual limitations, as applicable.

³ Estimated as of May 1, 2020 based on a 6.5% valuation interest rate and assumptions described in Exhibit K of the report titled "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of May 1, 2020".

Part b

<u>Percentage reduction in benefits</u>	<u>Actives</u>	<u>Trm. Vested</u>	<u>Retirees</u>	<u>Disabled</u>	<u>Beneficiaries</u>	<u>Alt. Payees</u>	<u>Total Counts</u>	<u>% of Total</u>
No reduction	302	N/A	N/A	N/A	N/A	N/A	302	100%
Greater than 0% but less than 5%	0	N/A	N/A	N/A	N/A	N/A	0	0%
At least 5% but less than 10%	0	N/A	N/A	N/A	N/A	N/A	0	0%
At least 10% but less than 15%	0	N/A	N/A	N/A	N/A	N/A	0	0%
At least 15% but less than 20%	0	N/A	N/A	N/A	N/A	N/A	0	0%
At least 20% but less than 25%	0	N/A	N/A	N/A	N/A	N/A	0	0%
At least 25% but less than 30%	0	N/A	N/A	N/A	N/A	N/A	0	0%
At least 30% but less than 35%	0	N/A	N/A	N/A	N/A	N/A	0	0%
35%	<u>0</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>0</u>	<u>0%</u>
Total number of participants impacted by proposed suspension	0	N/A	N/A	N/A	N/A	N/A	0	0%
Percentage of participants impacted by suspension (within status)	0%	N/A	N/A	N/A	N/A	N/A	0%	
Average reduction % per member (among those impacted)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

CACONTR	CALOCAL	CNNAME	CNADDR1
012152	01	AIR COMFORT INC	225 BLUFF STREET
012863	01	ALL COMFORT HTG & A/C	1748 BROWNLEE AVE NE
013241	01	newcom	120 N LIME ST
018369	01	ALPHA INDOOR ENVIRONMENTAL &	REFRIGERATION, LLC
020727	01	BRUST SHEET METAL	5020 S PROSPECT ST
020732	01	BREINING MECHANICAL SYS INC	833 ADDISON ROAD
021321	01	BEST COMM ENERGY SERVICE	1340 E ARCHWOOD AVE
029044	01	BUILDING INTEGRATED SERVICES	7777 FIRST PLACE
030797	01	CROWN HEATING & COOLING INC	P O BOX 1030
030798	01	CRAMERS INC	4944 SOUTHWAY S W
032356	01	COMFORT SYSTEMS USA	7401 FIRST PLACE
032377	01	CRS METAL WORKS	1059 EAGON ST
032723	01	COMPLETE INSTALLATION SERV INC	14670 LIBERTY CHURCH ST
032773	01	CHUTE SOURCE LLC	525 KENEDY RD
037652	01	CREWS HEATING & COOLING	2350 13TH ST NE
041177	01	DJS MAINT & CONST CO INC	ATTN: LINDA BROTHERS
043136	01	DOVER PHILA HEATING AND	
050703	01	EAST COAST METAL SYSTEMS INC	PO BOX 6372
061065	01	FALLS METAL FAB & IND SERVICES	760 HOME AVENUE
061132	01	FULTON & ASSOCIATES BALANCE CO	1410 LLOYD RD
070340	01	GEOPFERT COMPANY	1024 HOME AVENUE
070341	01	GREER HEATING & A/C	1349 W MAIN STREET
078382	01	GIANGELO SHEET METAL	14 CAYUSE TRAIL
080448	01	HUDSON HEATING CO	137-C OWEN BROWN STREET
081327	01	HYBRID HEATING & COOLING LLC	1509 MASSILLON RD
087046	01	HAYBNER SHEET METAL, INC	7153 HARPS MILL DR
090646	01	IMPERIAL HTG & CLG INC	30685 SOLON IND PARKWAY
100201	01	JOHNSONS PLUMBING & HEATING CO	1840 OTSEGO AVENUE
110325	01	K COMPANY INC THE	2234 S ARLINGTON ROAD
110441	01	C R KURTZ	802 NAVARRE ROAD SW
110958	01	KEBCO PRECISION FAB INC	P O BOX 20057
111005	01	K M T METAL SYSTEMS INC	P.O. BOX 30187
119220	01	KC METALWORKS LLC	
120881	01	SMW LU# 033 NORTHERN OHIO	12515 CORPORATE DRIVE
121122	01	SMW LU# 033 APP ED & PROMO FUN	1890 VENTURE CIR SE
130833	01	N F MANSUETTO & SONS	2ND & WOOD ST.
131354	01	T H MARTIN INC	8500 BROOKPARK ROAD
131767	01	METAL MASTERS INC	125 WILLIAMS DR NW
132083	01	MICHAEL FABRICATORS	4003 STATE RT 44
140069	01	NORTHERN OHIO ROOFING	880 INFIRMARY ROAD
140265	01	NIMEN SHEET METAL INC	1277 DUEBER AVE SW
150141	01	OHIO FABRICATORS INC	833 ADDISON ROAD
150516	01	ONTARIO MECHANICAL LLC	P.O. BOX 134
151600	01	OOO ENTERPRISES	PO BOX 68
160341	01	PROFESSIONAL BALANCE	37903 EUCLID AVENUE
161483	01	PRECISION AIR BALANCE CO INC	15500 BROOKPARK ROAD

180045	01	ROTH BROS INC	PO BOX 4209
180597	01	R & D HEATING & SHEET METAL	P O BOX 142
181245	01	RAY ROOFING & SUPPLY	34-0664464
182014	01	RGT SERVICES	26185 BROADWAY AVE
190202	01	JULIAN SPEER COMPANY	5255 SINCLAIR
190247	01	R G SMITH OF MANSFIELD INC	34-1867455
191362	01	SHEET METAL CRAFTERS	PO BOX 20648
192274	01	SAFCO HEATING & AIR CONDITIONI	262 CACKLER ROAD
192329	01	SCHMID MECHANICAL CO	5255 SINCLAIR
192459	01	R G SMITH OF DOVER	34-1867108
192460	01	R G SMITH CO INC	34-0678463
192682	01	SMITH & OBY COMPANY	7676 NORTHFIELD RD
201449	01	TEMA ROOFING SERVICES LLC	1596 MOTOR INN DR
230382	01	WRIGHT HEATING CO	418 N WATER STREET
231356	01	WAINO SHEET METAL, INC.	P.O. BOX 2677

CNADDR2	CNCITY	CNSTATE	CNZIP
P.O. BOX 1268 10322 PORR RD	AKRON	OH	44304
	CANTON	OH	44705
	LANCASTER	PA	17608-1268
	MARSHALLVILLE	OH	44645
	RAVENNA	OH	44266
11197 CLEVELAND AVENUE NW	CLEVELAND	OH	44103
	AKRON	OH	44306
	OAKWOOD VILLAGE	OH	44146
	UNIONTOWN	OH	44685-9401
	CANTON	OH	44706
SE	OAKWOOD VILLAGE	OH	44146
	BARBERTON	OH	44203
	MINERVA	OH	44657-8812
	AKRON	OH	44305-4425
	CANTON	OH	44705
9921 DOLPHIN ST SW	BEACH CITY	OH	44608
	WHEELING	WV	26003-0923
	AKRON	OH	44310
	WICKLIFFE	OH	44092
	AKRON	OH	44310
	KENT	OH	44240
	MALVERN	OH	44644
	HUDSON	OH	44236
	AKRON	OH	44306
	WADSWORTH	OH	44281-8194
	SOLOM	OH	44139
	COSHOCOTON	OH	43812
	AKRON	OH	44319-1929
	CANTON	OH	44707
	CANTON	OH	44701
	EAST CANTON	OH	44730
	PARMA	OH	44130
	MASSILLON	OH	44646-8629
	MARTINS FERRY	OH	43935
	CLEVELAND	OH	44129
	DOVER	OH	44622
	ROOTSTOWN	OH	44272
	ELYRIA	OH	44035
	CANTON	OH	44706
	CLEVELAND	OH	44103
	ONTARIO	OH	44862
	BERLIN CENTER	OH	44401
	WILLOUGHBY	OH	44094
	CLEVELAND	OH	44135

3847 CRUM ROAD	YOUNGSTOWN	OH	44515
3200 BLACKMORE ROAD	PERRY	OH	44081
1249 DUEBER AVENUE SW	CANTON	OH	44706
	OAKWOOD VILLAGE	OH	44146
	COLUMBUS	OH	43229
1249 DUEBER AVENUE SW	CANTON	OH	44706
	CANTON	OH	44701
	STREETSBORO	OH	44241
	COLUMBUS	OH	43229
1249 DUEBER AVENUE SW	CANTON	OH	44706
1249 DUEBER AVENUE SW	CANTON	OH	44706
	WALTON HILLS	OH	44146
	GIRARD	OH	44420
	KENT	OH	44240
	STOW	OH	44224

CACONTR	CALOCAL	CNNAME	CNADDR1
020724	06	BURNHAM INDUSTRIAL CONTR INC	3229 BABCOCK BLVD
021850	06	BUCKEYE MECHANICAL CONTRACTORS	2325 TOWNSHIP ROAD #370
022267	06	BRAND ENERGY SERVICES L	
030414	06	CHAPMAN CORPORATION	331 S MAIN STREET
030876	06	CATTRELL COMPANIES	906 FRANKLIN STREET
050703	06	EAST COAST METAL SYSTEMS INC	PO BOX 6372
071032	06	G V H ENVIRONMENTAL INC	2 RIVER ROAD
071089	06	GREG GANTZER INC	DBA: A E PELLEY PLMB & HT
081111	06	GEORGE V HAMILTON INC	2 RIVER ROAD
110959	06	KUCERA PLUMBING & CLG LLC	4150 CENTRAL AVENUE
120881	06	SMW LU# 033 NORTHERN OHIO	12515 CORPORATE DRIVE
130388	06	MCKAMISH INC	50 55TH STREET
130833	06	N F MANSUETTO & SONS	2ND & WOOD ST.
132218	06	MOUNTAIN AIRE SERVICE AMERICA	700 MARKET STREET
132811	06	MURPHY CONSOLIDATED IND INC	DBA MURPHY CONST EQUIP
140255	06	H E NEUMANN COMPANY	PO BOX 6208
150517	06	OHIO-WEST VA EXCAVATING CO	P.O. BOX 128
180045	06	ROTH BROS INC	PO BOX 4209
190739	06	SCHENERLEIN & SLIGAR	619 NORTH 6TH STREET
250059	06	YORK MAHONING CO	PO BOX 3077

CNADDR2	CNCITY	CNSTATE	CNZIP
	PITTSBURGH	PA	15237
	TORONTO	OH	43964
	WASHINGTON	PA	15301
	TORONTO	OH	43964
	WHEELING	WV	26003-0923
	MCKEES ROCK	PA	15136
176-17TH STREET	WHEELING	WV	26003
	MCKEES ROCK	PA	15136
	SHADYSIDE	OH	43947
	PARMA	OH	44130
	PITTSBURGH	PA	15201
	MARTINS FERRY	OH	43935
	WHEELING	WV	26003
575 VETERANS DR	FOLLANSBEE	WV	26037
	WHEELING	WV	26003
	POWHATAN POINT	OH	43942
3847 CRUM ROAD	YOUNGSTOWN	OH	44515
	STEUBENVILLE	OH	43952
724 CANFIELD ROAD	YOUNGSTOWN	OH	44511

CACONTR	CALOCAL	CNNAME	CNADDR1
012152	01	AIR COMFORT INC	225 BLUFF STREET
012863	01	ALL COMFORT HTG & A/C	1748 BROWNLEE AVE NE
013241	01	ADVANCED INDUSTRIAL SERVICES	120 N LIME ST
018369	01	ALPHA INDOOR ENVIRONMENTAL &	REFRIGERATION, LLC
020727	01	BRUST SHEET METAL	5020 S PROSPECT ST
020732	01	BREINING MECHANICAL SYS INC	833 ADDISON ROAD
021321	01	BEST COMM ENERGY SERVICE	1340 E ARCHWOOD AVE
029044	01	BUILDING INTEGRATED SERVICES	7777 FIRST PLACE
030797	01	CROWN HEATING & COOLING INC	P O BOX 1030
030798	01	CRAMERS INC	4944 SOUTHWAY S W
032356	01	COMFORT SYSTEMS USA	7401 FIRST PLACE
032377	01	CRS METAL WORKS	1059 EAGON ST
032723	01	COMPLETE INSTALLATION SERV INC	14670 LIBERTY CHURCH ST
032773	01	CHUTE SOURCE LLC	525 KENEDY RD
037652	01	CREWS HEATING & COOLING	2350 13TH ST NE
041177	01	DJS MAINT & CONST CO INC	ATTN: LINDA BROTHERS
043136	01	DOVER PHILA HEATING AND	
050703	01	EAST COAST METAL SYSTEMS INC	PO BOX 6372
061065	01	FALLS METAL FAB & IND SERVICES	760 HOME AVENUE
061132	01	FULTON & ASSOCIATES BALANCE CO	1410 LLOYD RD
070340	01	GEOFFERT COMPANY	1024 HOME AVENUE
070341	01	GREER HEATING & A/C	1349 W MAIN STREET
078382	01	GIANGELO SHEET METAL	14 CAYUSE TRAIL
080448	01	HUDSON HEATING CO	137-C OWEN BROWN STREET
081327	01	HYBRID HEATING & COOLING LLC	1509 MASSILLON RD
087046	01	HAYBNER SHEET METAL, INC	7153 HARPS MILL DR
090646	01	IMPERIAL HTG & CLG INC	30685 SOLON IND PARKWAY
100201	01	JOHNSONS PLUMBING & HEATING CO	1840 OTSEGO AVENUE
110325	01	K COMPANY INC THE	2234 S ARLINGTON ROAD
110441	01	C R KURTZ	802 NAVARRE ROAD SW
110958	01	KEBCO PRECISION FAB INC	P O BOX 20057
111005	01	K M T METAL SYSTEMS INC	P.O. BOX 30187
119220	01	KC METALWORKS LLC	
120881	01	SMW LU# 033 NORTHERN OHIO	12515 CORPORATE DRIVE
121122	01	SMW LU# 033 APP ED & PROMO FUN	1890 VENTURE CIR SE
130833	01	N F MANSUETTO & SONS	2ND & WOOD ST.
131354	01	T H MARTIN INC	8500 BROOKPARK ROAD
131767	01	METAL MASTERS INC	125 WILLIAMS DR NW
132083	01	MICHAEL FABRICATORS	4003 STATE RT 44
140069	01	NORTHERN OHIO ROOFING	880 INFIRMARY ROAD
140265	01	NIMEN SHEET METAL INC	1277 DUEBER AVE SW
150141	01	OHIO FABRICATORS INC	833 ADDISON ROAD
150516	01	ONTARIO MECHANICAL LLC	P.O. BOX 134
151600	01	OOO ENTERPRISES	PO BOX 68
160341	01	PROFESSIONAL BALANCE	37903 EUCLID AVENUE
161483	01	PRECISION AIR BALANCE CO INC	15500 BROOKPARK ROAD

180045	01	ROTH BROS INC	PO BOX 4209
180597	01	R & D HEATING & SHEET METAL	P O BOX 142
181245	01	RAY ROOFING & SUPPLY	34-0664464
182014	01	RGT SERVICES	26185 BROADWAY AVE
190202	01	JULIAN SPEER COMPANY	5255 SINCLAIR
190247	01	R G SMITH OF MANSFIELD INC	34-1867455
191362	01	SHEET METAL CRAFTERS	PO BOX 20648
192274	01	SAFCO HEATING & AIR CONDITIONI	262 CACKLER ROAD
192329	01	SCHMID MECHANICAL CO	5255 SINCLAIR
192459	01	R G SMITH OF DOVER	34-1867108
192460	01	R G SMITH CO INC	34-0678463
192682	01	SMITH & OBY COMPANY	7676 NORTHFIELD RD
201449	01	TEMA ROOFING SERVICES LLC	1596 MOTOR INN DR
230382	01	WRIGHT HEATING CO	418 N WATER STREET
231356	01	WAINO SHEET METAL, INC.	P.O. BOX 2677
020724	06	BURNHAM INDUSTRIAL CONTR INC	3229 BABCOCK BLVD
021850	06	BUCKEYE MECHANICAL CONTRACTORS	2325 TOWNSHIP ROAD #370
022267	06	BRAND ENERGY SERVICES L	
030414	06	CHAPMAN CORPORATION	331 S MAIN STREET
030876	06	CATTRELL COMPANIES	906 FRANKLIN STREET
071032	06	G V H ENVIRONMENTAL INC	2 RIVER ROAD
071089	06	GREG GANTZER INC	DBA: A E PELLEY PLMB & HT
081111	06	GEORGE V HAMILTON INC	2 RIVER ROAD
110959	06	KUCERA PLUMBING & CLG LLC	4150 CENTRAL AVENUE
130388	06	MCKAMISH INC	50 55TH STREET
132218	06	MOUNTAIN AIRE SERVICE AMERICA	700 MARKET STREET
132811	06	MURPHY CONSOLIDATED IND INC	DBA MURPHY CONST EQUIP
140255	06	H E NEUMANN COMPANY	PO BOX 6208
150517	06	OHIO-WEST VA EXCAVATING CO	P.O. BOX 128
190739	06	SCHENERLEIN & SLIGAR	619 NORTH 6TH STREET
250059	06	YORK MAHONING CO	PO BOX 3077

CNADDR2	CNCITY	CNSTATE	CNZIP
P.O. BOX 1268 10322 PORR RD	AKRON	OH	44304
	CANTON	OH	44705
	LANCASTER	PA	17608-1268
	MARSHALLVILLE	OH	44645
	RAVENNA	OH	44266
11197 CLEVELAND AVENUE NW	CLEVELAND	OH	44103
	AKRON	OH	44306
	OAKWOOD VILLAGE	OH	44146
	UNIONTOWN	OH	44685-9401
	CANTON	OH	44706
SE	OAKWOOD VILLAGE	OH	44146
	BARBERTON	OH	44203
	MINERVA	OH	44657-8812
	AKRON	OH	44305-4425
	CANTON	OH	44705
9921 DOLPHIN ST SW	BEACH CITY	OH	44608
	WHEELING	WV	26003-0923
	AKRON	OH	44310
	WICKLIFFE	OH	44092
	AKRON	OH	44310
	KENT	OH	44240
	MALVERN	OH	44644
	HUDSON	OH	44236
	AKRON	OH	44306
	WADSWORTH	OH	44281-8194
	SOLOM	OH	44139
	COSHOCTON	OH	43812
	AKRON	OH	44319-1929
	CANTON	OH	44707
	CANTON	OH	44701
	EAST CANTON	OH	44730
	PARMA	OH	44130
	MASSILLON	OH	44646-8629
	MARTINS FERRY	OH	43935
	CLEVELAND	OH	44129
	DOVER	OH	44622
	ROOTSTOWN	OH	44272
	ELYRIA	OH	44035
	CANTON	OH	44706
	CLEVELAND	OH	44103
	ONTARIO	OH	44862
	BERLIN CENTER	OH	44401
	WILLOUGHBY	OH	44094
	CLEVELAND	OH	44135

3847 CRUM ROAD	YOUNGSTOWN	OH	44515
3200 BLACKMORE ROAD	PERRY	OH	44081
1249 DUEBER AVENUE SW	CANTON	OH	44706
	OAKWOOD VILLAGE	OH	44146
	COLUMBUS	OH	43229
1249 DUEBER AVENUE SW	CANTON	OH	44706
	CANTON	OH	44701
	STREETSBORO	OH	44241
	COLUMBUS	OH	43229
1249 DUEBER AVENUE SW	CANTON	OH	44706
1249 DUEBER AVENUE SW	CANTON	OH	44706
	WALTON HILLS	OH	44146
	GIRARD	OH	44420
	KENT	OH	44240
	STOW	OH	44224
	PITTSBURGH	PA	15237
	TORONTO	OH	43964
	WASHINGTON	PA	15301
	TORONTO	OH	43964
	MCKEES ROCK	PA	15136
176-17TH STREET	WHEELING	WV	26003
	MCKEES ROCK	PA	15136
	SHADYSIDE	OH	43947
	PITTSBURGH	PA	15201
	WHEELING	WV	26003
575 VETERANS DR	FOLLANSBEE	WV	26037
	WHEELING	WV	26003
	POWHATAN POINT	OH	43942
	STEUBENVILLE	OH	43952
724 CANFIELD ROAD	YOUNGSTOWN	OH	44511



**SHEET METAL WORKERS LOCAL
PENSION FUND
P.O. BOX 368
TROY, MICHIGAN 48099-0368
(248) 641-4902 or Toll Free (866) 599-3176**

SHEET METAL WORKERS LOCAL PENSION FUND

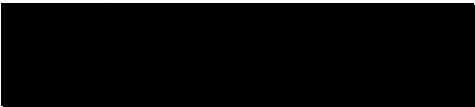
PLAN SPONSOR CERTIFICATION RELATING TO PLAN AMENDMENTS

Pursuant to Section 6.07 of IRS Revenue Procedure 2017-43, the undersigned Trustee, who has been designated by the Board of Trustees as its Authorized Representative Trustee for the purpose of executing all documents necessary for the Plan's application for approval of suspension of benefits, hereby certifies that if upon final authorization to implement the proposed suspension as described in Internal Revenue Code Section 432(e)(9)(H)(vi) the Board of Trustees determines to implement the suspension, the following plan amendments will be timely adopted and not modified at any time thereafter before the suspension of benefits expires:

(1) A plan amendment providing that in accordance with Internal Revenue Code Section 432(e)(9)(C)(ii) the benefit suspension will cease as of the first day of the first plan year following the plan year in which the plan sponsor fails to maintain a written record of its determination that both:

- a. All reasonable measures to avoid insolvency continue to be taken during the period of benefit suspension; and
- b. the plan is projected to become insolvent unless benefits continue to be suspended.

(2) A plan amendment providing that any future benefit improvements must satisfy the requirements of Internal Revenue Code Section 432(e)(9)(E).


Tom Wiant, Chairman

Signed: March 25, 2019

EXHIBIT 10
SHEET METAL WORKERS LOCAL PENSION PLAN

SECTION 6.09 NARRATIVE STATEMENT OF THE REASONS THE PLAN IS IN CRITICAL AND DECLINING STATUS

A. INTRODUCTION.

Contribution and investment income simply have not been adequate, when measured against the Plan's vested benefit obligations, to avoid the Plan's descent to insolvency. Significantly reduced work hours stemming from the 2008 financial crisis and prior plan design changes providing past service benefit improvements have also played a role in the Plan's financial decline. Also, the maturity of the Plan is a major contributing factor. Specifically, the ratio of active to non-active participants is imbalanced and unsustainable. Contributions tied to the hours worked by active participants are not adequate to pay for the unfunded benefits of the Plan resulting in a large negative cash flow that is unsustainable. In combination, these historical factors are the key reasons why the Plan is currently in the critical and declining zone status. Consequently, the Trustees have decided to move forward with an application for suspension of benefits.

B. HISTORICAL CONTEXT.

From the mid-1980s through 1999 the Plan experienced generally good and positive investment returns. The bursting of the dot-com bubble in the early 2000s hurt the Plan's funding but likely not mortally. In 2005, for example, the Plan's funded ratio was 67% based on the market value of its assets and a funding deficiency (negative credit balance) was forecast by the end of Plan Year 2008. In response, the Trustees reduced the percentage of contribution accrual rate for future benefits to .36% from 2.2%. As a result, the Plan's funded ratio in 2006 remained at 67%, but the date of the projected funding deficiency was pushed out to 2016. Also in 2006 the Plan experienced a 6.3% drop in the size of the active participant population, reducing the stream of contribution income available to pay down prior unfunded benefits. It is conceivable that with the reduced accrual rate and good investment returns the Plan may have improved its funding levels, but this did not account for the financial crisis of 2008 and the resulting "Great Recession" which damaged the Plan irreparably.

On the investment side of the equation during plan years 2000-2016 the Plan's minimum funding valuation interest assumption net of investment-related expenses was 8.0% per annum (it is now 6.50%). Unfortunately, the Plan's investment performance for 2008 and 2011 was dramatically below the assumption -30.8% and -7.9%, respectively. While in other post-2008 years the Fund had positive rates of return, as of 2018 the Fund has only recovered approximately \$1.5 million of the \$18 million investment loss from the plan year ended April 30, 2009. To put it bluntly, the 2008 crisis set the Plan into a financial hole out of which only unprecedented positive future returns would save it. This cannot reasonably be predicted to occur, nor can the existing contribution base make up

the shortfall in investment performance. As a result of the historic losses of 2008 the Plan's market value funded percentage in 2009 was only 40%. While this ratio fluctuated in the years since 2009 (reaching a high water mark of 52% in 2011), the Plan has been certified to be in critical status or critical and declining status in every year since 2009. The Plan's market value funded percentage, as of May 1, 2017, is 40%, unimproved since 2009.

Additionally, the Plan's work hours have fallen from their historic highs as foreshadowed in 2006 and are not reasonably projected to return to those levels. Although the Trustees expect hours to stabilize in the future, those hours are inadequate to fund prior unfunded benefit obligations. From 2001 to 2005, the Plan experienced work hours that averaged approximately 1.4 – 1.5 million hours total. From 2008 through 2016 the Plan's reported work hours were a low (2010) of 922,328 and a high (2017) of 1,180,488. It is also notable that in some years in which the Plan experienced better work hour totals, its investment returns were poor. For example, in 2011 the Plan experienced a total of 1,034,107 hours but, as referenced above, its investments returned -7.9%. In 2015 the Plan experienced 1,087,575 total work hours, but its investments experienced an essentially flat return of 0.1%. The loss of half a million hours coupled with volatile investment returns has made it impossible for the Plan to recover to date. Based on expected future hours and expected future long-term investment returns (in turn based upon the most 2018 Horizon Survey of Capital Market Assumptions) used in the solvency analysis presented in the application, it is projected that there cannot be a recovery without the suspension of benefits.

Finally, the "mature" nature of the Plan exacerbates the current funding crisis and, most ominously, bodes very ill for the future of the Plan. In 2003 the Plan's demographics were 940 active to 567 inactive participants showing a ratio of 1.6 active for every inactive. In 2007, that ratio had moved decisively in the wrong direction, with 698 active to 776 inactive participants. As of the most recent actuarial valuation, there are 655 active and 908 inactive participants/beneficiaries. In terms of cash flow, the plan had a negative cash flow equal to -5% during the 2017-2018 plan year. The negative cash flow is anticipated to grow over time to over -10% in the next 4-5 years based on current actuarial projections assuming no changes to the current benefit structure.

The history of the Plan as spelled out in these three data points – investment experience, hour loss/contribution reduction, and an increasingly mature demographic structure – were observed by the Trustees of the Plan who took many steps, indeed all reasonable measures, in an effort to stem the tide of financial decline. Unfortunately, these steps have not succeeded. Upon the certification of the Plan as "critical and declining" after the amendments to the Code and ERISA in 2014 (Kline-Miller Multiemployer Pension Reform Act) the Trustees, who are committed to seeing the Plan survive and pay promised benefits, directed their actuary and attorney to file this application for suspension of benefits.

C. DISCUSSION.

Upon its initial “critical” certification under the Pension Protection Act of 2006, the Trustees adopted a Rehabilitation Plan (July 1, 2009) which amended and was incorporated into the Plan document. As noted, the Plan continued in critical status until 2016 at which time it was certified as “critical and declining” (and was so certified again in 2017 and 2018). Since the initial Rehabilitation Plan adoption the Trustees have eliminated *all* adjustable benefits under the Plan, excepting an increase to the Plan’s normal retirement age.

The **benefit changes** under the Rehabilitation Plan demonstrate the consistent effort of the Trustees to arrest the financial decline of the Plan while maintaining an adequate benefit structure and economically realistic contribution rates, as follows:

Effective August 1, 2009 –

- Changed the normal form of benefit payment from a 5-year certain and life annuity to life-only annuity. Amounts payable under optional payment forms were thereafter to be actuarially adjusted to reflect their value relative to a life-only annuity.
- Increased the early retirement reduction factors from 3% per year prior to normal retirement age to actuarially equivalent reductions for the number of years prior normal retirement age.
- Eliminated the fully subsidized pop-up feature on joint & survivor payment forms. Participants who wished to elect a pop-up feature as part of a joint & survivor payment form were to pay for the feature with an actuarial reduction to their benefit.
- Eliminated the single lump-sum and 60-payment pre-retirement death benefits. The only pre-retirement death benefit to be offered would be the 50% survivor annuity payable to a surviving spouse of a deceased vested participant (payable beginning when the participant would have reached retirement age).

Effective August 1, 2013 –

- Benefit accruals for contributions made on or after August 1, 2013, were suspended (0% accruals) subject to annual review by the Trustees.

Effective September 1, 2013 –

- Temporary disability benefits were eliminated for applications received on or after September 1, 2013.

The Rehabilitation Plan also made significant **funding changes**:

- There were cumulative annual contribution rate increases of 10% in 2009, 2010, and 2011.
- There was a 14% contribution rate increase in 2012

The Trustees have further concluded that it is not economically feasible to increase contribution rates any further. Contribution rates have increased by at least 50% from the pre-2009 levels due to the Rehabilitation Plan. These contribution rate increases resulted in significant wage deferments to the Plan by its active participants and have made it very difficult for signatory contractors to remain competitive in the sheet metal construction market. The Trustees believe that additional contribution rate increases will result in a loss of members in the Union and will make it extremely difficult for the Union to attract new members. This will result in a *decrease* in future contributions to the Plan and would inevitably cause a net decrease in future funding of the Plan. Further contribution rate increases are therefore counterproductive to the goal of avoiding insolvency.

At present, any would-be contributing employer is faced with participation in a Plan that is projected to become insolvent and that requires a high contribution rate, and for which new participants will accrue a 0% future benefit notwithstanding the deferral of wages into the Plan as contributions. Additionally, new employers who commence participation in the Plan could face withdrawal liability. Under these circumstances, it is the belief of the Trustees that rational employers face a difficult decision in determining whether to sign a CBA that requires contributions to the Plan. The financial position of the Plan makes it challenging but not impossible to attract new long-term participating employers. New employers have joined the Plan since the accrual rate was reduced to 0.0% and, four new employers have joined in the past year (since March 1, 2018). The addition of new employers is an encouraging indication that others may follow, and objectively supports the future contribution base units assumption reflected in the application.

The Trustees seek to retain the contribution base that the Plan has and to encourage new employer participation. This is reflected in the determination not to seek additional contribution rate increases from the existing employers, which would foreseeably lead to employer bankruptcies, likely uncollectible employer withdrawal liability, and chill new employer participation.

Despite the Trustees' efforts and utilization of all reasonable measures, the market value funded percentage of the Plan (as discussed above) has not recovered. It is effectively the same as it was at the time of the adoption of the Rehabilitation Plan (approximately 40%).

D. CONCLUSION.

The economic history of the plan is not a unique one. The “perfect storm” of maturing plan populations, reduced work hours and poor investment performance is well known. Based upon their careful and thorough analysis of the history recited here and actuarial projections of the Plan’s future, and after taking all reasonable measures to avoid insolvency, it is the Trustees’ prudent determination under Code §432(e)(9)(C)(ii) that the Plan is projected to become insolvent unless benefits are suspended as proposed in the application.

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INTERNAL REVENUE SERVICE
P. O. BOX 2508
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

Date: **DEC 15 2015**

BOARD OF TRUSTEES SHEET METAL
WORKERS LOCAL PENSION PLAN
C/O NOVARA TESIJA PLLC
EDWARD PASTARNAK
2000 TOWN CENTER, STE 2370
SOUTHFIELD, MI 48075

Employer Identification Number:
34-6666753
DLN:
17007023052015
Person to Contact:
CATHERINE BROOKS-ALDRETE ID# 75813
Contact Telephone Number:
(214) 413-5528
Plan Name:
SHEET METAL WORKERS LOCAL PENSION
PLAN
Plan Number: 001

Dear Applicant:

Based on the information you provided, we are issuing this favorable determination letter for your plan listed above. However, our favorable determination only applies to the status of your plan under the Internal Revenue Code and is not a determination on the effect of other federal or local statutes. To use this letter as proof of the plan's status, you must keep this letter, the application forms, and all correspondence with us about your application.

Your determination letter does not apply to any qualification changes that become effective, any guidance issued, or any statutes enacted after the dates specified in the Cumulative List of Changes in Plan Requirements (the Cumulative List) for the cycle you submitted your application under, unless the new item was identified in the Cumulative List.

Your plan's continued qualification in its present form will depend on its effect in operation (Section 1.401-1(b)(3) of the Income Tax Regulations). We may review the status of the plan in operation periodically.

You can find more information on favorable determination letters in Publication 794, Favorable Determination Letter, including:

- The significance and scope of reliance on this letter,
- The effect of any elective determination request in your application materials,
- The reporting requirements for qualified plans, and
- Examples of the effect of a plan's operation on its qualified status.

You can get a copy of Publication 794 by visiting our website at www.irs.gov/formspubs or by calling 1-800-TAX-FORM (1-800-829-3676) to request a copy.

This determination letter applies to the amendments dated on 1/8/15 & 7/28/14.

This determination letter also applies to the amendments dated on

Letter 5274

BOARD OF TRUSTEES SHEET METAL

10/30/13 & 9/23/13.

We made this determination on the condition that you adopt the proposed amendments you submitted in your letter dated 11/11/15, on or before the date the Income Tax Regulations provide under Section 401(b) of the Internal Revenue Code.

You can't rely on this letter after the end of the plan's first five-year remedial amendment cycle that ends more than 12 months after we received the application. This letter expires on January 31, 2020. This letter considered the 2013 Cumulative List of Changes in Plan Qualification Requirements.

The information on the enclosed addendum is an integral part of this determination. Please be sure to read it and keep it with this letter.

If you submitted a Form 2848, Power of Attorney and Declaration of Representative, or Form 8821, Tax Information Authorization, with your application and asked us to send your authorized representative or appointee copies of written communications, we will send a copy of this letter to him or her.

If you have any questions, you can contact the person listed at the top of this letter.

Sincerely,



Karen D. Truss
Director, EP Rulings & Agreements

Addendum

Letter 5274

BOARD OF TRUSTEES SHEET METAL

This determination letter does not apply to any portions of the document that incorporate the terms of an auxiliary agreement (collective bargaining, reciprocity, or participation agreement), unless you append to the plan document the exact language of the sections that you incorporated by reference.

This determination letter is also applicable for the amendments adopted on 4/18/13, 4/14/11 and 1/6/11.

Letter 5274