

Sheet Metal Workers' National Pension Fund

Actuarial Certification of Plan Status under IRC Section 432

As of January 1, 2022





333 West 34th Street
New York, NY 10001-2402
segalco.com T: 212.251.5000

February 18, 2022

Board of Trustees
Sheet Metal Workers' National Pension Fund
3180 Fairview Park Drive, Suite 400
Falls Church, Virginia 22042

Dear Trustees:

As required by ERISA Section 305 and Internal Revenue Code (IRC) Section 432, we have completed the Plan's actuarial status certification as of January 1, 2022 in accordance with the Multiemployer Pension Reform Act of 2014 (MPRA). The attached exhibits outline the projections performed and the results of the various tests required by the statute. These projections have been prepared based on the Actuarial Valuation as of January 1, 2021 and in accordance with generally accepted actuarial principles and practices and a current understanding of the law. The actuarial calculations were completed under the supervision of Daniel V. Ciner, MAAA, Enrolled Actuary.

As of January 1, 2022, the Plan is in neither critical status nor endangered status. In addition, the Plan is not projected to be in critical status for any of the succeeding five plan years. This certification is being filed with the Internal Revenue Service, pursuant to ERISA section 305(b)(3) and IRC section 432(b)(3).

Segal does not practice law and, therefore, cannot and does not provide legal advice. Any statutory interpretation on which the certification is based reflects Segal's understanding as an actuarial firm. Due to the complexity of the statute and the significance of its ramifications, Segal recommends that the Board of Trustees consult with legal counsel when making any decisions regarding compliance with ERISA and the Internal Revenue Code.

A summary of the key results of this certification are as follows:

		2022
Certified Zone Status		Green
Funded Percentage:	<ul style="list-style-type: none"> Actuarial value of assets (AVA) Unit credit accrued liability Funded percentage 	\$6,844,707,740 8,392,779,582 81.5%
Funding Standard Account Projections (reflecting amortization extension):	<ul style="list-style-type: none"> Credit balance with extension as of the end of prior year Years to projected funding deficiency (15-year projection) 	\$865,102,465 No deficiency projected

We look forward to reviewing this certification with you at your next meeting and to answering any questions you may have. We are available to assist the Trustees in developing a plan management and funding policy to help guide future planning and oversight.

Sincerely,

Segal



By: Matthew C. Pavesi
 Senior Vice President and Benefits Consultant



Daniel V. Ciner, MAAA, EA
 Senior Vice President and Actuary



Jonathan P. Scarpa, FSA, MAAA, EA
 Vice President and Consulting Actuary

cc: Ms. Lori Wood
 Tearyn Loving, Esq.
 Ms. Debbie Elkins
 Mr. Tim Myers



101 North Wacker Drive, Suite 500
Chicago, IL 60606-1724
segalco.com T:312.984.8500

February 18, 2022

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

To Whom It May Concern:

As required by ERISA Section 305 and the Internal Revenue Code (IRC) Section 432, we have completed the actuarial status certification as of January 1, 2022 for the following plan:

Name of Plan: Sheet Metal Workers' National Pension Fund
Plan number: EIN 52-6112463 / PN 001
Plan sponsor: Board of Trustees, Sheet Metal Workers' National Pension Fund
Address: 3180 Fairview Park Drive, Suite 400, Falls Church, Virginia 22042
Phone number: 703.739.7000

As of January 1, 2022, the Plan is in neither critical status nor endangered status. In addition, the Plan is not projected to be in critical status for any of the succeeding five plan years.

If you have any questions on the attached certification, you may contact me at the following:

Segal
101 North Wacker Drive, Suite 500
Chicago, IL 60606-1724
Phone number: 312.984.8500

Sincerely,

A handwritten signature in black ink, appearing to read "DVC", written over a horizontal line.

Daniel V. Ciner, MAAA
Senior Vice President and Actuary
Enrolled Actuary No. 20-05773



Actuarial Status Certification as of January 1, 2022 under IRC Section 432 February 18, 2022

This is to certify that Segal has prepared an actuarial status certification under Internal Revenue Code Section 432 for the Sheet Metal Workers' National Pension Fund as of January 1, 2022 in accordance with generally accepted actuarial principles and practices. It has been prepared at the request of the Board of Trustees to assist in administering the Fund and meeting filing and compliance requirements under federal law. This certification may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety.

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

This certification is based on the January 1, 2021 actuarial valuation, dated September 29, 2021. This certification reflects the changes in the law made by the Multiemployer Pension Reform Act of 2014 (MPRA). Additional assumptions required for the projections (including those under MPRA), and sources of financial information used are summarized in Exhibit 6.

Segal does not practice law and, therefore, cannot and does not provide legal advice. Any statutory interpretation on which this certification is based reflects Segal's understanding as an actuarial firm.

This certification was based on the assumption that the Plan was qualified as a multiemployer plan for the year.

I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in this actuarial certification is complete and accurate. As required by IRC Section 432(b)(3)(B)(iii), the projected industry activity is based on information provided by the plan sponsor. In my opinion, the projections are based on reasonable actuarial estimates, assumptions and methods that (other than projected industry activity) offer my best estimate of anticipated experience under the Plan.



Daniel V. Ciner, MAAA

EA# 20-05773

Title Senior Vice President and Actuary

Email dciner@segalco.com

Certificate Contents

Exhibit 1	Status Determination as of January 1, 2022
Exhibit 2	Summary of Actuarial Valuation Projections
Exhibit 3	Funding Standard Account Projections
Exhibit 4	Funding Standard Account — Projected Bases Assumed Established After January 1, 2021
Exhibit 5	Solvency Projection
Exhibit 6	Actuarial Assumptions and Methodology

Actuarial Status Certification under IRC Section 432

Exhibit 1: Status Determination as of January 1, 2022

Status	Condition	Component Result	Final Result
Critical Status:			
1. Initial critical status tests:			
C1.	A funding deficiency is projected in four years (ignoring any amortization extensions)?	No	No
C2. a.	A funding deficiency is projected in five years (ignoring any amortization extensions),	No	
b.	and the present value of vested benefits for non-actives is more than present value of vested benefits for actives,	N/A	
c.	and the normal cost plus interest on unfunded actuarial accrued liability (unit credit basis) is greater than contributions for current year?	N/A	No
C3. a.	A funding deficiency is projected in five years (ignoring any amortization extensions),	No	
b.	and the funded percentage is less than 65%?	N/A	No
C4. a.	The funded percentage is less than 65%,	No	
b.	and the present value of assets plus contributions is less than the present value of benefit payments and administrative expenses over seven years	N/A	No
C5.	The present value of assets plus contributions is less than the present value of benefit payments and administrative expenses over five years?	No	No
2. Test special emergence rules into critical status:			
C6	Override condition: If satisfies (C6.a.) and (C6.b.), then ignore tests (C1) – (C5) and only apply test (C6.c.)		
a.	Had elected an amortization extension under the provisions of IRC Section 431(d)(1),	Yes	Yes

Status	Condition	Component Result	Final Result
	b. Previously emerged from critical status because:		
	(i) there was not projected to be an accumulated funding deficiency for the plan year or any of the nine succeeding plan years, without regard to the use of the shortfall method but taking into account any automatic extension of amortization periods up to five years under IRC Section 431(d)(1),	Yes	
	(ii) AND was not projected to become insolvent for the current year or any of the 30 succeeding plan years,	Yes	Yes
	c. HOWEVER		
	(i) EITHER there is a projected funding deficiency for the plan year or any of the nine succeeding plan years, without regard to the use of the shortfall method but taking into account any extension of amortization periods under IRC Section 431(d),	No	
	(ii) OR the Plan is projected to become insolvent for the current or any of the 30 succeeding plan years?	No	No
	In Critical Status? (If any of (C1) through (C5) is Yes then Yes, unless (C6.a.) and (C6.b.) are Yes, then only if (C6.c.) is Yes)		No
	3. Determination whether plan is projected to be in critical status in any of the succeeding five plan years:		
	C7. a. Is not in critical status,	Yes	
	b. and is projected to be in critical status in any of the next five years?	No	No
	4. In Critical Status in any of the five succeeding plan years?		No
	Endangered Status:		
	E1. a. Is not in critical status,	Yes	
	b. and the funded percentage is less than 80%?	No	No
	E2. a. Is not in critical status,	Yes	
	c. and a funding deficiency is projected in seven years?	No	No
	In Endangered Status? (Yes when either (E1) or (E2) is Yes)		No
	In Seriously Endangered Status? (Yes when BOTH (E1) and (E2) are Yes)		No
	Neither Critical Status Nor Endangered Status:		
	Neither Critical nor Endangered Status?		Yes

Exhibit 2: Summary of Actuarial Valuation Projections

The actuarial factors as of January 1, 2022 (based on projections from the January 1, 2021 valuation certificate):

1. Financial Information			
a.	Market value of assets*		\$7,448,414,282
b.	Actuarial value of assets*		6,844,707,740
c.	Reasonably anticipated contributions		
1)	Upcoming year		481,862,024
2)	Present value for the next five years		2,022,666,724
3)	Present value for the next seven years		2,647,939,697
d.	Projected benefit payments		579,482,044
e.	Projected administrative expenses (beginning of year)		14,715,415
2. Liabilities			
a.	Present value of vested benefits for active participants		2,187,736,173
b.	Present value of vested benefits for non-active participants		5,837,013,025
c.	Total unit credit accrued liability		8,392,779,582
d.	Present value of payments	Benefit Payments	Administrative Expenses
1)	Next five years	\$2,584,544,869	\$66,423,697
2)	Next seven years	3,471,770,752	88,478,673
e.	Unit credit normal cost plus expenses		120,820,179
3.	Funded Percentage (1.b)/(2.c)		81.5%
4. Funding Standard Account		Without Amortization Extension	With Amortization Extension
a.	Credit Balance as of the end of prior year	\$259,566,595	\$865,102,465
b.	Years to projected funding deficiency	N/A	N/A
5.	Years to Projected Insolvency		N/A
6.	Year Projected to be in Critical Status if within next five years		N/A

* Excluding receivable withdrawal liability payments of \$17,867,074.

Exhibit 3: Funding Standard Account Projections

The table below presents the Funding Standard Account Projections for the Plan Years beginning January 1.

With Amortization Extension under IRC Section 431(d)

	Year Beginning January 1,							
	2021	2022	2023	2024	2025	2026	2027	2028
1. Credit balance beginning of year	\$756,313,218	\$865,102,465	\$1,009,266,308	\$1,113,321,407	\$1,313,805,609	\$1,546,896,436	\$1,785,271,544	\$2,084,281,912
2. Interest on (1)	56,723,491	64,882,685	75,694,973	83,499,106	98,535,421	116,017,233	133,895,366	156,321,143
3. Normal cost	167,903,842	106,104,764	176,851,742	117,386,683	116,986,477	116,773,562	116,425,016	115,996,805
4. Administrative expenses	14,426,877	14,715,415	15,009,723	15,309,917	15,616,115	15,928,437	16,247,006	16,571,946
5. Net amortization charges	311,443,389	270,482,790	246,809,906	223,532,938	207,282,472	218,529,605	178,785,511	168,708,718
6. Interest on (3), (4) and (5)	37,033,058	29,347,723	32,900,353	26,717,215	25,491,380	26,342,370	23,359,315	22,595,810
7. Expected contributions	561,805,225	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024
8. Interest on (7)	21,067,696	18,069,826	18,069,826	18,069,826	18,069,826	18,069,826	18,069,826	18,069,826
9. Credit balance end of year: (1) + (2) - (3) - (4) - (5) - (6) + (7) + (8)	\$865,102,465	\$1,009,266,308	\$1,113,321,407	\$1,313,805,609	\$1,546,896,436	\$1,785,271,544	\$2,084,281,912	\$2,416,661,626

	2029	2030	2031	2032	2033	2034	2035	2036
1. Credit balance beginning of year	\$2,416,661,626	\$2,763,722,895	\$3,165,298,577	\$3,633,133,615	\$4,160,226,900	\$4,731,433,233	\$5,336,908,484	\$6,012,514,987
2. Interest on (1)	181,249,622	207,279,217	237,397,393	272,485,021	312,017,017	354,857,492	400,268,136	450,938,624
3. Normal cost	115,693,091	115,423,561	115,320,649	115,116,566	114,935,534	114,847,700	114,860,770	115,000,647
4. Administrative expenses	16,903,385	17,241,453	18,965,598	19,344,910	19,731,808	20,126,444	20,528,973	20,939,552
5. Net amortization charges	178,213,015	151,646,972	116,406,037	93,746,511	89,279,202	96,945,941	73,534,427	86,802,680
6. Interest on (3), (4) and (5)	23,310,712	21,323,399	18,801,921	17,115,599	16,795,991	17,394,006	15,669,313	16,705,716
7. Expected contributions	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024
8. Interest on (7)	18,069,826	18,069,826	18,069,826	18,069,826	18,069,826	18,069,826	18,069,826	18,069,826
9. Credit balance end of year: (1) + (2) - (3) - (4) - (5) - (6) + (7) + (8)	\$2,763,722,895	\$3,165,298,577	\$3,633,133,615	\$4,160,226,900	\$4,731,433,233	\$5,336,908,484	\$6,012,514,987	\$6,723,936,867

Without Amortization Extension under IRC Section 431(d)

	Year Beginning January 1,					
	2021	2022	2023	2024	2025	2026
1. Credit balance beginning of year	\$66,215,869	\$259,566,595	\$482,101,070	\$617,547,202	\$841,457,504	\$1,088,227,776
2. Interest on (1)	4,966,190	19,467,495	36,157,580	46,316,040	63,109,313	81,617,083
3. Normal cost	167,903,842	106,104,764	176,851,742	117,386,683	116,986,477	116,773,562
4. Administrative expenses	14,426,877	14,715,415	15,009,723	15,309,917	15,616,115	15,928,437
5. Net amortization charges	184,635,220	155,333,188	180,829,976	167,152,319	161,602,888	162,690,749
6. Interest on (3), (4) and (5)	27,522,445	20,711,503	27,951,858	22,488,669	22,065,411	22,154,456
7. Expected contributions	561,805,225	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024
8. Interest on (7)	21,067,696	18,069,826	18,069,826	18,069,826	18,069,826	18,069,826
9. Credit balance end of year: (1) + (2) - (3) - (4) - (5) - (6) + (7) + (8)	\$259,566,595	\$482,101,070	\$617,547,202	\$841,457,504	\$1,088,227,776	\$1,352,229,505

Exhibit 4: Funding Standard Account — Projected Bases Assumed Established after January 1, 2021
Schedule of Funding Standard Account Bases

Type of Base	Date Established	Base Established	Amortization Period	Amortization Payment
Experience gain	01/01/2022	(\$208,098,927)	15	(\$21,930,188)
Experience gain	01/01/2023	(167,918,682)	15	(17,695,854)
Experience gain	01/01/2024	(275,485,525)	15	(29,031,622)
Experience gain	01/01/2025	(162,674,050)	15	(17,143,157)
Experience gain	01/01/2026	(104,394,038)	15	(11,001,407)

Exhibit 5: Solvency Projection

The table below presents the projected Market Value of Assets for the Plan Years beginning January 1, 2021 through 2057.

		Year Beginning January 1,							
		2021	2022	2023	2024	2025	2026	2027	2028
1.	Market Value at beginning of year	\$6,470,960,172	\$7,448,414,282	\$7,889,945,512	\$8,343,822,550	\$8,811,139,744	\$9,292,747,044	\$9,791,153,424	\$10,307,505,681
2.	Contributions	561,805,225	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024
3.	Benefit payments	541,505,657	579,482,044	599,195,444	618,740,420	638,431,524	656,731,014	675,133,077	692,980,220
4.	Administrative expenses	13,958,915	15,300,000	15,606,000	15,918,120	16,236,482	16,561,212	16,892,436	17,230,285
5.	Interest earnings	971,113,457	554,451,250	586,816,458	620,113,710	654,413,282	689,836,582	726,515,746	764,561,436
6.	Market Value at end of year: (1)+(2)-(3)-(4)+(5)	\$7,448,414,282	\$7,889,945,512	\$8,343,822,550	\$8,811,139,744	\$9,292,747,044	\$9,791,153,424	\$10,307,505,681	\$10,843,718,636
		2029	2030	2031	2032	2033	2034	2035	2036
1.	Market Value at beginning of year	\$10,843,718,636	\$11,402,763,179	\$11,987,305,941	\$12,598,735,231	\$13,241,439,939	\$13,918,575,496	\$14,633,829,349	\$15,390,906,569
2.	Contributions	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024
3.	Benefit payments	709,392,833	724,878,808	739,433,722	753,095,426	765,968,764	777,768,896	788,745,237	799,003,105
4.	Administrative expenses	17,574,891	17,926,389	19,719,027	20,113,408	20,515,676	20,925,990	21,344,509	21,771,400
5.	Interest earnings	804,150,243	845,485,935	888,720,015	934,051,518	981,757,973	1,032,086,715	1,085,304,942	1,141,686,581
6.	Market Value at end of year: (1)+(2)-(3)-(4)+(5)	\$11,402,763,179	\$11,987,305,941	\$12,598,735,231	\$13,241,439,939	\$13,918,575,496	\$14,633,829,349	\$15,390,906,569	\$16,193,680,669

Year Beginning January 1,

	2037	2038	2039	2040	2041	2042	2043	2044
1. Market Value at beginning of year	\$16,193,680,669	\$17,045,910,158	\$17,952,045,607	\$18,916,505,822	\$19,944,178,061	\$21,040,526,143	\$22,211,170,959	\$23,461,911,884
2. Contributions	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024
3. Benefit payments	808,933,195	818,139,987	826,975,653	835,307,929	842,934,207	850,097,883	857,033,067	863,463,986
4. Administrative expenses	22,206,828	22,650,964	24,916,061	25,414,382	25,922,669	26,441,123	26,969,945	27,509,344
5. Interest earnings	1,201,507,488	1,265,064,376	1,334,489,905	1,406,532,526	1,483,342,934	1,565,321,798	1,652,881,913	1,746,468,583
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	\$17,045,910,158	\$17,952,045,607	\$18,916,505,822	\$19,944,178,061	\$21,040,526,143	\$22,211,170,959	\$23,461,911,884	\$24,799,269,161

	2045	2046	2047	2048	2049	2050	2051	2052
1. Market Value at beginning of year	\$24,799,269,161	\$26,230,613,779	\$27,763,762,023	\$29,406,590,090	\$31,168,059,799	\$33,057,455,840	\$35,085,089,946	\$37,262,561,219
2. Contributions	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024
3. Benefit payments	869,041,791	873,869,926	878,455,471	882,321,202	885,803,547	888,583,553	890,165,587	891,750,438
4. Administrative expenses	28,059,531	28,620,722	29,193,136	29,776,999	30,372,539	30,979,990	31,599,589	32,231,581
5. Interest earnings	1,846,583,916	1,953,776,868	2,068,614,650	2,191,705,886	2,323,710,103	2,465,335,625	2,617,374,425	2,780,651,421
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	\$26,230,613,779	\$27,763,762,023	\$29,406,590,090	\$31,168,059,799	\$33,057,455,840	\$35,085,089,946	\$37,262,561,219	\$39,601,092,645

Year Beginning January 1,

	2053	2054	2055	2056	2057
1. Market Value at beginning of year	\$39,601,092,645	\$42,112,748,689	\$44,810,498,405	\$47,708,283,272	\$50,821,090,123
2. Contributions	481,862,024	481,862,024	481,862,024	481,862,024	481,862,024
3. Benefit payments	893,338,110	894,928,609	896,521,940	898,118,108	899,717,117
4. Administrative expenses	32,876,213	33,533,737	34,204,412	34,888,500	35,586,270
5. Interest earnings	2,956,008,343	3,144,350,038	3,346,649,195	3,563,951,435	3,797,380,782
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	\$42,112,748,689	\$44,810,498,405	\$47,708,283,272	\$50,821,090,123	\$54,165,029,542

Exhibit 6: Actuarial Assumptions and Methodology

The actuarial assumptions and plan of benefits are as used in the January 1, 2021 actuarial valuation certificate, dated September 29, 2021, except as specifically described below. We also assumed that experience would emerge as projected, except as described below. The calculations are based on a current understanding of the requirements of ERISA Section 305 and IRC Section 432.

Plan of Benefits:	The Applicable Percentage under the Plan's benefit formula is 0.75% for 2022, and is projected to be 1.25% for 2023, based on the preliminary investment return for the 2021 Plan Year.
Contribution Rates:	Employers that adopted an Alternative Option under the prior Funding Improvement Plan are assumed to have had contribution rate increases in 2021 (2% for the First Alternative, 1% for the Second Alternative), based on the required increases in contribution rates under the Funding Improvement Plan.
Asset Information:	<p>The financial information as of December 31, 2021, including contribution income, benefit payments and administrative expenses for the Plan Year ended December 31, 2021, was based on an unaudited financial statement provided by the Fund Office on February 11, 2022.</p> <p>For projections after that date, the assumed administrative expenses were increased by 2.0% per year thereafter from the assumption used for the January 1, 2021 actuarial valuation, with the exception of a one-time increase of 10.0% for anticipated increase to PBGC premium expenses in 2031. The benefit payments were projected based on the January 1, 2021 actuarial valuation. The projected net investment return was assumed to be 7.50% of the average market value of assets for future years. Any resulting investment gains or losses due to the operation of the asset valuation method are amortized over 15 years in the Funding Standard Account.</p>
Projected Industry Activity:	As required by Internal Revenue Code Section 432, assumptions with respect to projected industry activity are based on information provided by the Plan Sponsor. Based on this information, for 2022 and all future years, total contribution hours of 90 million are assumed (approximately the number of active participants as of December 31 2013, 54,282, and 1,650 hours per active participant per year).
Future Normal Costs:	Based on the assumed industry activity, we have determined the Normal Cost based on an open group forecast assuming new entrants have a similar demographic mix to recent entrants to the Plan. The Normal Cost for the 2022 Plan Year recognizes an Applicable Percentage (benefit accrual multiplier) of 0.75%. The Normal Cost for the 2023 Plan Year recognizes an Applicable Percentage (benefit accrual multiplier) of 1.25%, based on the preliminary rate of return for the 2021 Plan Year. Normal Costs for 2024 and thereafter were adjusted to reflect the long-term average expected Applicable Percentage of 0.83%. This average is based on the assumed probability of three-year average market investment returns corresponding to the ranges in the Plan's variable benefit accrual formula. For this purpose, market investment returns after 2021 were based upon stochastic projections using the Plan's target investment allocation and capital market assumptions provided by the Plan's Investment Manager in 2021.

Elections under the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010:	This status certification reflects the elections made by the Board of Trustees as permitted under the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010. The Plan Actuary certified to the Plan Sponsor that the Plan was projected to have sufficient assets to timely pay expected benefits and anticipated expenditures over the amortization period, taking into account the changes in the funding standard account elected.
Amortization Extension:	This status certification recognizes an extension of the amortization charge bases as of January 1, 2009, as permitted under Internal Revenue Code Section 431(d)(1).
Demographic Gain:	A demographic gain was created to account for less than expected benefit accruals in 2021 due to the less than expected employer contributions received, as compared to the contributions assumed for purposes of calculating normal cost for the 2021 valuation.

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Technical issues

Segal does not practice law and, therefore, cannot and does not provide legal advice. Any statutory interpretation on which the certification is based reflects Segal’s understanding as an actuarial firm. Due to the complexity of the statute and the significance of its ramifications, Segal recommends that the Board of Trustees consult with legal counsel when making any decisions regarding compliance with ERISA and the Internal Revenue Code.

6119123v1/04287.001