Carpenters Local No. 491

Health and Welfare Plan

2020 Annual Report
June 19, 2020

Bolton

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Bolton

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Trustees
Carpenters Local No. 491
Health and Welfare Plan
911 Ridgebrook Road
Sparks, Maryland 21152

Dear Trustees:

This report sets forth our analysis of the Carpenters Local No. 491 Health and Welfare Plan (the Fund). The analysis includes reports on the current status, projections of future results, and possible courses of action. It is based on information provided to us by Associated Administrators (AA).

I. Background

The Fund has been in existence since 1980. It provides comprehensive health and welfare benefits to approximately 600 members (and their dependents) in the Baltimore/ Washington area. The Fund Balance has increased steadily every year since 2013 after experiencing its first loss in a number of years. The Fund rebounded with gains of $334,000 in 2013, $554,000 in 2014, $954,000 in 2015, $1,470,000 in 2016, $1,994,000 in 2017, $311,000 in 2018 and $849,000 in 2019. Current reserves are $10,837,000 (on a market basis), which represents 25.6 months of expenses, down from 29.2 months at the end of 2018 and from 32.6 months at the end of 2017. The reduction is due to a significant increase in the total expense base.

II. Purpose and Goals of the Annual Report

The primary purpose of this report is to provide a consistent framework for long term financial planning for the Fund. Specific goals include the following:

- Set financial targets at least two years into the future that represent adequate levels of Fund Balance.
- Analyze the current status of the Fund.
- Project future Fund results.
- Where appropriate, suggest actions that could be taken to achieve the financial targets referenced above.

III. Methodology

This section of the report briefly summarizes the methodology we use to establish targets for the Fund, analyze its current status, and make projections for future results.

- **Set a target Fund Balance in terms of number of months in reserve.** This measurement defines a level of Fund Balance that is necessary to meet the two ongoing outstanding obligations of the Fund: the extension of benefits based on hours worked; and the incurred but not reported (IBNR) claim reserve. Both of these obligations are expressed in terms of number of months of expected Fund expenses. The combination of these two numbers is the Fund's minimum target level for financial results. In addition, the target Fund Balance also includes a Claim Fluctuation Reserve. This provides a cushion for the Fund in years when claims exceed expectations. It is important for the Trustees to realize that, since the Fund is self-insured, it essentially becomes its own insurance company and virtually all health insurers carry minimum reserves to protect against unforeseen negative results. These three components of reserves guide the decision-making process for the Fund Trustees with regard to benefits and cents-per-hour contributions.
- **Determine the Fund's current status versus the target.** Looking at the most recent information available, we determine the current Fund Balance as a number of months in reserve and compare this to the target. This provides a starting point from which it is determined what actions need to be taken to achieve the targets.
- **Examine historical claim experience and project future experience for the current plan.** This is the key component to projecting future results. The best way to

estimate future claim costs is to analyze how the Fund's claim experience has performed in the past. For a fund of this size, we generally use three years of Fund claims data, on a per member (i.e., eligible plan participant, not counting dependents) per month basis, to determine baseline costs and the rate of cost increase. These years are combined to produce the cost basis used for projections; they also influence the rate of claim cost increase used.

- **Project Fund results on a status quo basis.** Assuming no changes are made to benefits and contributions, we estimate Fund results for the next two years. These results are compared to the established targets.
- **Determine cents-per-hour equivalents for required adjustments needed to achieve targets.** Any difference in Fund Balance relative to targets is expressed in cents-per-hour.
- **Recommend courses of action to attain targets.** The most obvious ways to influence results are to change the contribution rate or modify the current benefit plan.

IV. Fund Balance Minimum Target Levels

The Fund eligibility guidelines require participants to work a certain number of hours to establish benefit eligibility. Once the required number of hours is worked, the participant becomes benefit eligible for a future quarter of coverage. This time delay is crucial for the initial establishment and ongoing prudent operation of a self-insured health and welfare fund. It means, however, that at any point in time, participants have established eligibility for future coverage even if they cease working or if the Fund ceases to operate. Consequently, the Fund must at all times be fully funded for this outstanding liability. We have obtained historical hours for each Fund participant, and calculated the number of total population extended months as of the most recent plan year end. Based on this, we propose a course of action to maintain a 6.0-month reserve.

Regardless of eligibility considerations, self-insured health and welfare funds have an additional liability with respect to the claim reserve. The IBNR claim reserve accounts for claims that have been incurred (or serviced) but not yet paid. Between the time that providers take to submit the claim and when AA pays it (which includes time required for investigation), the delay is estimated at two and one-half months.

Finally, we recommend that the Fund maintain an additional reserve of, at a minimum, three months of expenses for claim fluctuations and other unexpected contingencies.

Exhibit 1 summarizes the minimum targets we have established. We recommend a minimum Fund Balance target equivalent to 11.5 months of expenses. This does not include reserves for retiree liabilities under SOP 92-6.

V. Current Status

Exhibit 2 summarizes the Fund's financial results for the twelve-month period ending December 31, 2019. During that year, receipts exceeded disbursements by $848,766 (on a market basis), a gain equivalent to 14.3% of receipts. Without the investment gain, the Fund would have experienced a loss of 9.9%. The Fund Balance as of December 31 was $10,837,077, which represents 25.6 months of expenses. We have also presented the most recent two years' results on a cents-per-hour basis in Exhibit 3. This shows that for the year ending December 31, 2018, there was a gain equivalent to $0.58 per hour; for the January 2019 through December 2019 period, the gain was equal to $0.99 per hour. The total cost for the most recent year was equivalent to $5.89 per hour, as compared to the current rates of $3.50 (shop) and $5.85 (exhibitor). The cost for the prior year was $4.69 per hour. The following sections of this report project future results and suggest the level of action that needs to be taken.

VI. Historical and Projected Future Claim Costs

Exhibits 4 and 5 show the benefit cost (claims paid) in total dollars and on a per member (i.e., participant employee) basis, for the most recent three years. We propose to use this base period as a starting point from which to project future costs. This data will also be useful in determining a rate of cost increase (inflation) to be applied to the base in order to project costs for 2020 and 2021.

Exhibit 4 shows the dollars paid by category (hospital, surgical, optical, drug, etc.) by for the one-year periods since January 2017. It also shows the total enrollment, which we have used as a base for each of these periods. You will note that it is, in each case, for a period two months earlier. The reasons for this has to do with the typical time delay in claim processing (previously discussed) between when services are incurred versus paid, of approximately two months. For instance, the group of people who generated the claims **paid** for the January 2017 through December 2017 period were most likely those who were participants in the November 2016 through October 2017 period.

Exhibit 5 uses the claims paid and enrollment from Exhibit 4 to calculate costs per member per month for the three annual periods since January 2017. Exhibit 6 shows the rates of change, on a per member per month basis, for each period as compared to the same period one year earlier.

As can be seen from Exhibit 5, costs per member per month have varied significantly over the last three years. They range from a low of $392 (CY17) to a high of $631 (CY19). Trends over the last few years have spiked up after several years of declines. Although the 2019 trend (compared to 2017) is high the five year trend (comparing 2019 to 2014) is a modest 3.9%.

In order to project future results, we use the three-year base shown in Exhibit 5. We feel that for a Fund the size of Carpenters Local 491, three years of claims experience is necessary to smooth out the fluctuations that typically occur. The three years ending December 31, 2019 become the base to project from.

Using this base period, we apply relative weights to each year and then apply annual inflation factors to project forward to future years. We also adjust for any benefit changes made, which, for this report, includes the improvement to the dental plan for 2018, and the improved prescription pricing effective in 2018. We also add the cost of the specific stop-loss reinsurance. Exhibit 8 shows the weight applied to each year of historical claim experience. The inflation factors used for this report are 8.0% for Medical/Rx and 3% for Dental/Vision, which are the same factors we used for last year’s report. These factors are consistent with what we use for other Taft-Hartley funds and are slightly lower than what insurance companies use when they do similar projections. The projected claims costs (taken from Exhibit 9), versus historical costs, are summarized in the following chart:

	Claim Cost Per Member Per Month
ACTUAL	
January – December 2017	$391.69
January – December 2018	$495.79
January – December 2019	$630.97
PROJECTED	
January – December 2020	$590.06
January – December 2021	$635.78

While the projected claims for 2020 are lower than the actual 2019 claims, they are significantly above the actual 2017 and 2018 claims. Our assumption is that costs will continue to fluctuate (sometimes significantly) on a year-to-year basis, but generally will increase at a moderate rate over time.

The other assumptions used to project future Fund results are found in Exhibit 8. They include the total rate of return on Fund investments, the number of eligible participants, the projected hours worked, the current contribution rate, and the number of months in reserve used for the Fund Balance target. For the contribution rate, we have used the current rates for both years. Exhibit 7 shows historical hours worked. For this report, we have used an hours-worked assumption of 850,000 for both 2020 and 2021, which is slightly below the average of the hours for the last three years (or 854,000).

VII. Projected Fund Results

Exhibit 10 projects future Fund results, using the three-year claim experience base and the assumptions shown in Exhibit 8. Using the three-year base period, the results are summarized as follows:

	@ 12/31/20		@ 12/31/21	
	Fund Balance	Months in Reserve	Fund Balance	Months in Reserve
Exhibit 10 – Projection	$11,130,000	28.2	$11,082,000	26.2

Projected results for both years show the Fund above the minimum target level.

Exhibit 11 shows the proposed COBRA rates for 2020. These represent a 20% increase compared to the current rates.

Given the impact the Fund has already seen due to the Coronavirus, we have prepared an alternative scenario which incorporates the following changes from the "standard" assumptions discussed above:

- Hours for 2020: 350,000
- Hours for 2021: 500,000
- Margin added to claims projection (for 2020 only) due to waiving of deductibles and copayments
- Reduction in eligible members for 2021 commensurate with the reduction in hours (but no reduction in eligible members for 2020)

With these changes in assumptions, we project a loss in 2020 of $2,590,000 and a loss in 2021 of $515,000. These results are shown as Exhibit 10A and are summarized below:

	@ 12/31/20		@ 12/31/21	
	Fund Balance	Months in Reserve	Fund Balance	Months in Reserve
Exhibit 10A – Projection	$8,247,000	20.4	$7,732,000	17.9

VIII. Summary

The Fund's positive results in the last seven years have brought the reserves to historic highs (at least in terms of total assets). The reserve surplus (over the recommended minimum level) was at 14.2 months of expenses at the end of 2019. This margin is fortunate and will be needed to withstand the impact of the virus. Note that even with the dire projections, the Fund is still expected to have 6.3 months in reserves over the minimum level, which itself contains three months of margin over and above the Fund's liabilities.

We have enjoyed the opportunity to serve the Trustees in the preparation of this report. Should there be any questions or further information required, please contact us.

Sincerely,

BOLTON

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Exhibit 1

Minimum Financial Target

Minimum Target	Number of Months
Period of Extended Coverage	6.00
Incurred but Not Reported (IBNR) Claim Reserve	2.50
Claim Fluctuation Reserve	3.00
Total Target	***11.50***

Exhibit 2

Current Fund Status

	1/19 - 12/19
Receipts	
Contribution	$4,616,389
Investment Earnings	1,306,302
Total Receipts	**$5,922,691**
Disbursements	
Claims Paid	$4,379,458
Expenses	447,224
Stop Loss Reinsurance	247,243
Stop-Loss Reimbursement	0
Total Disbursements	**$5,073,925**
Surplus/(Deficit)	***$848,766***
Fund Balance	
Beginning Market Balance	$9,988,312
Increase/(Decrease)	848,766
Ending Market Balance	***$10,837,077***
Ending Market Balance as a Reserve in Months	25.63

Exhibit 3

Illustration of Benefit Cost

	CENTS PER HOUR	
	Based on 839,378 Hours	Based on 861,402 Hours
	1/18 - 12/18	**1/19 - 12/19**
Hospital	$ 175.37	$ 199.18
Surgical	24.63	20.68
Medical	115.58	116.82
Weekly Disability	2.88	3.31
Emergency	18.53	23.69
Major Medical	31.84	38.67
FICA	0.22	0.25
Sub-Total Medical	**369.05**	**402.61**
Optical	1.58	1.23
Dental	3.41	13.21
Drugs	40.00	91.36
Death Claims	2.08	0.00
Total Claim Cost	**416.13**	**508.41**
Expenses	45.84	51.92
Stop Loss Reinsurance	27.54	28.70
Stop-Loss Reimbursement	(20.63)	0.00
Total Disbursements	**468.88**	**589.03**
Receipts		
Contributions	549.89	535.92
Investment Income	(23.37)	151.65
Total Receipts	**526.52**	**687.56**
Surplus/(Deficit)	***57.64***	***98.53***

Exhibit 4

Claim Payment/Enrollment History

	1/17 - 12/17	1/18 - 12/18	1/19 - 12/19
Hospital	$ 1,014,044	$ 1,472,012	$ 1,715,741
Surgical	120,491	206,766	178,118
Medical	831,614	970,135	1,006,285
Weekly Disability	27,900	24,172	28,500
Emergency	185,529	155,554	204,106
Major Medical	194,336	267,246	333,143
FICA	2,134	1,849	2,180
Sub-Total Medical	*$2,376,048*	*$3,097,733*	*$3,468,073*
Optical	$ 10,121	$ 13,248	10,609
Dental	71,513	28,653	113,763
Drugs	447,983	335,754	787,012
Sub-Total Health	*$2,905,665*	*$3,475,388*	*$4,379,458*
Death Claims	10,000	17,500	-
Total All	**$2,915,665**	**$3,492,888**	**$4,379,458**

	11/16 - 10/17	11/17 - 10/18	11/18 - 10/19
Total Members	**7,444**	**7,045**	**6,941**

Exhibit 5

Claim Payment History

	1/17 - 12/17	1/18 - 12/18	1/19 - 12/19
Hospital	$136.22	$208.94	$247.19
Surgical	16.19	29.35	25.66
Medical	111.72	137.71	144.98
Weekly Disability	3.75	3.43	4.11
Emergency	24.92	22.08	29.41
Major Medical	26.11	37.93	48.00
FICA	0.29	0.26	0.31
Sub-Total Medical	**$319.20**	**$439.70**	**$499.66**
Optical	1.36	1.88	1.53
Dental	9.61	4.07	16.39
Drugs	60.18	47.66	113.39
Sub Total Health	**$390.35**	**$493.31**	**$630.97**
Death Claims	1.34	2.48	-
Total All	***$391.69***	***$495.79***	***$630.97***

Exhibit 6

Claim Payment History - Trend Analysis

	MONTH PERIODS		
	1/17 - 12/17	**1/18 - 12/18**	**1/19 - 12/19**
Hospital	18.5%	53.4%	18.3%
Surgical	13.6%	81.3%	-12.6%
Medical	8.6%	23.3%	5.3%
Weekly Disability	-29.5%	-8.5%	19.8%
Emergency	44.8%	-11.4%	33.2%
Major Medical	13.8%	45.3%	26.5%
FICA	141.7%	-10.3%	19.2%
Sub-Total Medical	**14.9%**	**37.8%**	**13.6%**
Optical	-12.3%	38.2%	-18.6%
Dental	-1.5%	-57.6%	302.7%
Drugs	-50.8%	-20.8%	137.9%
Sub-Total Health	**-5.1%**	**26.4%**	**27.9%**
Death Claims	-5.0%	85.1%	-100.0%
Total All	***3.4%***	***26.6%***	***27.3%***

Exhibit 7

Historical Hours

January 2005 - December 2005	981,301
January 2006 - December 2006	968,265
January 2007 - December 2007	952,774
January 2008 - December 2008	1,005,868
January 2009 - December 2009	749,973
January 2010 - December 2010	745,151
January 2011 - December 2011	865,832
January 2012 - December 2012	788,650
January 2013 - December 2013	796,901
January 2014 - December 2014	814,638
January 2015 - December 2015	814,275
January 2016 - December 2016	869,404
January 2017 - December 2017	862,094
January 2018 - December 2018	839,378
January 2019 - December 2019	861,402

Exhibit 8

Two Year Projections

1.	**Claim experience base (weighting of time periods):**		
	Most recent year	33%	
	Prior year	33%	
	Two years prior	33%	
2.	**Hourly contribution rate**		
		3.50	Shop, Current
		5.85	Exhibitors, Current
		3.50	Shop, Assumed
		5.85	Exhibitors, Assumed
3.	**Investments - annual yield**	**4.00%**	
4.	**Total eligible members**	**565**	

	Medical/Drug Annual Inflation	Dental/Vision Annual Inflation	Expenses Annual Inflation	Annual Hours Worked
Assumptions				
Year 1	8.0%	3.0%	3.0%	854,000
Year 2	8.0%	3.0%	3.0%	854,000

Minimum Funding	11.50

Exhibit 9

Summary of Actual and Projected Claims

	Claims Paid per Member per Month
Actual	
1/17 - 12/17	$391.69
1/18 - 12/18	495.79
1/19 - 12/19	630.97
Projected	
1/20 - 12/20	
Projected Claims	$590.06
1/21 - 12/21	
Projected Claims	$635.78

Exhibit 10

	Actual 1/19 - 12/19	Projected Current Rate 1/20 - 12/20	Projected Current Rate 1/21 - 12/21
Receipts			
Contributions	$4,616,389	$4,594,520	$4,594,520
Investment Earnings	1,306,302	436,149	441,379
Total Receipts	**$5,922,691**	**$5,030,669**	**$5,035,899**
Disbursements			
Claims Paid	$4,379,458	$4,000,607	$4,310,588
Expenses	447,224	460,641	474,460
Stop Loss Reinsurance	247,243	276,760	298,900
Total Disbursements	**$5,073,925**	**$4,738,007**	**$5,083,949**
Surplus/(Deficit)	***$848,766***	***$292,662***	***($48,050)***
Fund Balance			
Beginning Market Balance	$9,988,312	$10,837,077	$11,129,739
Increase/(Decrease)	848,766	292,662	(48,050)
Ending Market Balance	**$10,837,077**	**$11,129,739**	**$11,081,689**
Ending Market Balance as a Reserve in Months	25.63	28.19	26.16
Reserve Surplus/(Deficit) in Months		16.69	14.66
Assumed Hourly Rate		$5.380	$5.380

Exhibit 10A

	Actual 1/19 - 12/19	Projected Current Rate 1/20 - 12/20	Projected Current Rate 1/21 - 12/21
Receipts			
Contributions	$4,616,389	$1,883,000	$2,690,000
Investment Earnings	1,306,302	379,626	317,098
Total Receipts	**$5,922,691**	**$2,262,626**	**$3,007,098**
Disbursements			
Claims Paid	$4,379,458	$4,115,189	$2,854,855
Expenses	447,224	460,641	474,460
Stop Loss Reinsurance	247,243	276,760	192,435
Total Disbursements	**$5,073,925**	**$4,852,589**	**$3,521,750**
Surplus/(Deficit)	***$848,766***	***($2,589,963)***	***($514,652)***
Fund Balance			
Beginning Market Balance	$9,988,312	$10,837,077	$8,247,114
Increase/(Decrease)	848,766	(2,589,963)	(514,652)
Ending Market Balance	**$10,837,077**	**$8,247,114**	**$7,732,462**
Ending Market Balance as a Reserve in Months	25.63	20.39	17.87
Reserve Surplus/(Deficit) in Months		8.89	6.37
Assumed Hourly Rate		$5.380	$5.380

Exhibit 11

COBRA Rates for 2020

	Monthly	Quarterly
Single	$394.00	$1,182.00
Two-Party	827.00	2,481.00
Family	1,103.00	3,309.00