



ACTUARIAL VALUATION OF  
STATE EMPLOYEE HEALTH BENEFIT FUND

*FISCAL YEAR ENDED JUNE 30, 2021*

OHIO DEPARTMENT OF  
ADMINISTRATIVE SERVICES

FEBRUARY 25, 2022

LEWIS & ELLIS

BONNIE S. ALBRITTON, FSA, MAAA



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February 25, 2022

Mr. Gregory Pawlack  
Administrator  
State of Ohio  
Department of Administrative Services  
30 East Broad Street, 40th Floor  
Columbus, OH 43215

Re: Actuarial Valuation of State of Ohio Employee Health Benefit Fund  
Fiscal Year Ended June 30, 2021

Dear Greg:

We are pleased to present our report that details our analysis of the State of Ohio Employee Health Benefit Fund.

We appreciate the opportunity to be of service. If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink that reads 'Bonnie Albritton'.

Bonnie S. Albritton, FSA, MAAA  
Vice President & Principal

Enclosures

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## EXECUTIVE SUMMARY

The Ohio Department of Administrative Services (“DAS”) provides self-insured medical and prescription drug, behavioral health, vision, dental, wellness, and COBRA coverage to its eligible employees and dependents through the State Employee Health Benefit Fund (“the Fund”).

DAS selected Lewis & Ellis, Inc. to perform an actuarial analysis of the State Employee Health Benefit Fund (Fund 8080) to establish the estimated liability for health claims that have been incurred but not paid (“claim reserve”) as of June 30, 2021.

The table below shows the reserve for claims incurred but unpaid as of June 30, 2021.

June 30, 2021	
Reserve for Claims Incurred but Unpaid	\$88,765,000

We note that our claim reserve estimate is a best estimate and does not include any margin for adverse deviation or provision for claim adjustment expenses (e.g., administrative costs associated with settling the claims).

We were also asked to review the Fund’s financial activities for the 2021 fiscal year and prepare a projection of the 2022 fiscal year results. The following table summarizes the actual results for fiscal year 2021 and projected results for 2022.

	Fiscal Year 2021	Projected Fiscal Year 2022
Income	\$940,380,758	\$928,500,000
Expenses	(863,129,570)	(934,163,000)
Change in Reserves	(10,767,000)	(5,352,000)
Net Gain/(Loss)	\$66,484,188	(\$11,015,000)

As part of our projections, we reviewed the adequacy of the current contributions rates. Based on our projections, the current contributions are expected to be insufficient to cover expected claims and expenses for the remainder of the current fiscal year. For fiscal year 2022, we have projected a net loss of approximately \$11.0 million.

## BACKGROUND

The State Employee Health Benefit Fund provides self-insured medical and prescription drug, behavioral health/substance use, vision, dental, wellness, and COBRA coverage to its eligible employees and dependents. The following is a summary of the current benefits.

**Ohio Med PPO Plan** – During the 2021 fiscal year, the plan was administered by one of two third party administrators (TPA), depending on the area of residence of each employee. The TPAs are Medical Mutual of Ohio and Anthem BlueCross BlueShield. This is a PPO plan with an annual deductible of \$400

in-network and \$800 out-of-network, office visit copays of \$30 in-network and \$50 out-of-network, and coinsurance for most other benefits of 20% in-network and 40% out-of-network. Employees are required to contribute a portion of the cost of the benefits, based on full-time or part-time status.

**Ohio Med HDHP Plan** – Effective July 1, 2019, DAS added a high-deductible health plan, also administered by Medical Mutual of Ohio and Anthem BlueCross BlueShield. The plan has an annual deductible of \$2,000 in-network and \$4,000 out-of-network with coinsurance for most benefits of 20% in-network and 40% out-of-network. Employees are required to contribute a portion of the cost of the benefits, based on full-time or part-time status. Effective July 1, 2019, the State contributes \$1,000 for single coverage and \$2,000 for family coverage into the employees' HSAs for those enrolled in the HDHP.

**Prescription Drug Benefits** – Prescription drug benefits are administered by OptumRx. Prescription costs are reported separately for each medical TPA. These benefits are part of the medical plan and are covered by the premiums received under the Ohio Med PPO plan.

**Behavioral Health Benefits** – Behavioral health benefits are administered by Optum Behavioral Solutions and are covered by the premiums received under the Ohio Med PPO plan.

**Vision Benefits** – Vision benefits are administered by EyeMed Vision. Exempt employees and their family members who choose to receive services outside of the network are subject to a substantial reduction in benefits. Employees are not required to contribute towards the cost of the benefits.

**Dental Benefits** – Dental benefits are administered by Delta Dental of Ohio. The plan is a PPO that provides exempt employees and their families access to two networks of dentists – the Delta Dental PPO network and the Delta Dental Premier network. Employees and their family members can go to any licensed dentist and receive benefits. However, they will generally pay less if they go to a dentist within one of the two networks. Employees are not required to contribute towards the cost of the benefits.

## INCURRED BUT NOT PAID CLAIM LIABILITY

The liability for claims incurred but not paid is an estimate of the amounts needed to cover future payments for claims which have been incurred, but which have not yet been paid. It varies throughout the year and is impacted by several factors, including claims processing delays, changes in plan benefits, large nonrecurring claims, and seasonality in claims.

### Methodology

The reserve was developed in accordance with accepted actuarial principles using claims incurred through June 30, 2021. For the medical, dental and vision benefits, we used the development method.

Development methods use analysis of the historical claim payment pattern to estimate ultimate paid claims for relatively recent incurral periods that are “incomplete,” or for which the claims payer has not paid all eventual claims. These methods rely on the basic assumption that historical payment patterns (i.e., the time lag between the date of a particular medical service and the date on which the claim is paid) are consistent and can be used to estimate future claims.

The analysis is typically based on claim “triangles” which categorize claims according to both the period in which they were incurred and the period in which they were paid. The result is a triangle of known

data that is used to develop multiple sets of known completion ratios and factors. These sets of ratios are analyzed to determine the best set of completion factors to be used to estimate the ultimate expected incurred claims. Claims paid-to-date are then subtracted from the ultimate incurred claims to calculate the incurred but not paid reserve. Other methods were used as a reasonableness check.

Aetna was one of the administrators for the medical benefits through 6/30/2019. We have assumed that there is no remaining liability as of 6/30/2021.

The prescription drug claims are assumed to have a lag time of 0.5 months. The behavioral health claims are assumed to have a lag time of 1 month.

Please note that we have not included an explicit margin for deviation in our liability estimate. In addition, we did not include a provision for claim adjustment expenses. The liability for claim adjustment expense is the amount needed to provide for the estimated ultimate cost required to investigate and settle claims for events that have occurred on or before June 30, 2021, regardless of whether they have been reported at that date.

**Liability as of 6/30/2021**

Based on our analysis of the claims experience, our best estimate of the claim reserve is \$88,765,000. The reserve was based on claims paid through December 31, 2021.

Incurred but Not Paid Claim Liability	Medical	Prescription Drug	Behavioral Health	Grand Total
Ohio Med PPO (MMO)	\$55,277,000	\$5,814,000	\$1,177,000	\$62,268,000
Ohio Med PPO (Anthem)	23,489,000	2,438,000	322,000	26,249,000
<b>Total Medical</b>	<b>\$78,766,000</b>	<b>\$8,252,000</b>	<b>\$1,499,000</b>	<b>\$88,517,000</b>
Vision	30,000	0	0	30,000
Dental	218,000	0	0	218,000
<b>Grand Total</b>	<b>\$79,014,000</b>	<b>\$8,252,000</b>	<b>\$1,499,000</b>	<b>\$88,765,000</b>

Appendix A includes a series of exhibits that details the historical liability for claims incurred but not paid by benefit plan.

We were asked to provide break-down of the reserve for claims incurred but not paid as of 6/30/2021 into three components. Each of the components is summarized by benefit type in the following table.

Reserve Category	Medical	Vision	Dental	Grand Total
Reported but Not Adjudicated	\$17,833,000	\$6,000	\$44,000	\$17,883,000
Adjudicated but Not Paid	13,446,000	6,000	33,000	13,485,000
Incurred but Not Reported	57,238,000	18,000	141,000	57,397,000
<b>Total</b>	<b>\$88,517,000</b>	<b>\$30,000</b>	<b>\$218,000</b>	<b>\$88,765,000</b>

We have also provided a breakdown of the reserves for each medical plan.

Reserve Category	MMO	Anthem	Total Medical
Reported but Not Adjudicated	\$8,181,000	\$9,652,000	\$17,833,000
Adjudicated but Not Paid	13,446,000	0	13,446,000
Incurred but Not Reported	40,641,000	16,597,000	57,238,000
<b>Total</b>	<b>\$62,268,000</b>	<b>\$26,249,000</b>	<b>\$88,517,000</b>

## FISCAL YEAR 2022 PROJECTION

The summary of our projections is as follows.

	Projected FY 2022
Income	\$928,500,000
Expenses	(934,163,000)
Change in Reserves	(5,352,000)
Net Gain/(Loss)	(\$11,015,000)

Appendix B includes more detailed projections, split by medical, dental and vision.

Enrollment from the census was used for the projection and is summarized as follows.

Plan	Single	Single with Spouse	Family No Spouse	Family with Spouse	Total
Ohio Med PPO (MMO)	10,845	N/A	3,661	15,133	29,639
Ohio Med HDHP (MMO)	213	50	43	74	380
Ohio Med PPO (Anthem)	3,894	N/A	1,583	7,551	13,028
Ohio Med HDHP (Anthem)	43	17	6	27	93
<b>Total Medical</b>	<b>14,995</b>	<b>67</b>	<b>5,293</b>	<b>22,785</b>	<b>43,140</b>
Dental	3,592	N/A	1,028	8,375	12,995
Vision	3,587	N/A	1,021	8,374	12,982

### Projected Income

The projected income includes expected employee and employer payroll contributions. The projected contributions were based on current enrollment. The fiscal year 2022 contribution rates are as follows (excluding the \$1 communication surcharge).

Monthly Contributions	Medical PPO	Medical HDHP	Vision	Dental
Single	\$771.95	\$774.47	\$10.04	\$34.23
Single with Spouse	N/A	\$1,741.30	N/A	N/A
Family without Spouse	\$2,118.15	\$1,354.56	\$27.61	\$99.19
Family with Spouse	\$2,138.15	\$2,321.39	\$27.61	\$99.19

The projected income also includes pharmacy rebates, other income, and interest on assets. Pharmacy rebates are projected to be \$48.0 million. We assumed that performance guarantees will be \$500,000. The projected interest rate is 1.5% per annum, which is based on recent experience and expected yields.

**Projected Expenses**

Projected expenses include claims, administrative fees, consulting and professional fees, and wellness incentive payments to plan participants. The net average claims PEPM were adjusted for net annual medical trend of 6.0%, dental trend of 2.0% and vision trend of 2.5% per annum.

Administrative fees were based on the following fees per employee per month.

MMO	\$27.96
Anthem PPO	\$32.78
Anthem HDHP	\$33.19
Delta Dental	\$3.34
EyeMed Vision	\$0.14

COBRA administrative fees are assumed to be \$0.245 per employee per month in the medical plan.

Professional fees and miscellaneous expenses were assumed to be \$1,000,000 and consulting, auditing, data aggregation and internal procurement charges were assumed to be \$1,200,000, based on recent experience. We assumed \$3 million for wellness incentive payments and administrative expenses.

DAS paid \$3,040,000 in COVID-19 vaccination incentives in the first months of FY2022. This program has ended, and there will be no further expense



## ACTUARIAL CERTIFICATION

We have completed our analysis of the Ohio Department of Administrative Services (“DAS”) State Employee Health Benefit Fund’s (“the Fund”) incurred but not paid (“IBNP”) claims, which includes both claims that have been incurred but not reported and claims that have been reported but not paid. Our analysis of the liability is based on claims incurred through June 30, 2021.

The estimate includes the liability for the medical benefits, prescription drug, behavioral health, dental and vision benefits. We have not included a margin for deviation or a provision of loss adjustment expenses.

The IBNP liabilities were developed in accordance with accepted actuarial principles, using claims incurred through June 30, 2021 and paid through December 31, 2021, adjusted by expected completion factors, and then subtracting the paid claims from the incurred claim estimate. The expected completion factors were derived from the Fund’s claim experience.

In my opinion, this reserve is sound for the Plan.

I certify that I am a Fellow of the Society of Actuaries, a Member of the American Academy of Actuaries, and that I am qualified under the guidelines of the Actuarial Standards Board to render the opinions herein.



Bonnie S. Albritton, FSA, MAAA  
Vice President & Principal  
Lewis & Ellis, Inc.

# APPENDIX A

## HISTORICAL CLAIM RESERVE AND CLAIM ANALYSIS PER EMPLOYEE

APPENDIX A.1

OHIO MED PPO (MMO) - MEDICAL, PRESCRIPTION DRUG AND BEHAVIORAL HEALTH  
 HISTORICAL CLAIM RESERVE AND CLAIM ANALYSIS PER EMPLOYEE  
 FOR CLAIMS INCURRED THROUGH JUNE 30, 2021 AND PAID THROUGH DECEMBER 31, 2021

Incurred Month	Employee Count	Restated Claim Liability	Estimated Incurred Claims				Rolling Estimated Incurred Claims per Employee			Annual Trends in Claims per Employee		
			Medical Claims	Rx Drugs Claims	Behavioral Claims	Total Claims	1-Month	3-Month	12-Month	1-Month	3-Month	12-Month
Jul-18	6,065	6,525,078	4,622,741	1,735,828	115,647	6,474,216	1,067.47	1,247.94	1,212.14	-0.4%		
Aug-18	6,040	6,811,704	5,430,205	2,088,843	212,146	7,731,195	1,280.00	1,213.65	1,219.12	7.0%		
Sep-18	6,040	6,587,417	5,030,150	1,784,348	80,252	6,894,750	1,141.51	1,162.86	1,210.05	-8.7%	-0.8%	
Oct-18	6,070	6,673,398	5,871,945	1,819,851	233,472	7,925,267	1,305.65	1,242.49	1,227.19	18.6%	5.1%	
Nov-18	6,054	6,174,361	5,178,916	1,841,910	268,043	7,288,869	1,203.98	1,217.18	1,233.70	6.9%	5.0%	
Dec-18	6,051	6,092,099	5,434,874	1,720,079	176,598	7,331,550	1,211.63	1,240.48	1,245.28	12.9%	12.7%	
Jan-19	6,042	6,628,444	7,237,206	1,798,225	140,087	9,175,518	1,518.62	1,311.29	1,270.66	25.1%	15.2%	
Feb-19	6,041	7,283,111	6,565,408	2,106,122	159,025	8,830,554	1,461.77	1,397.24	1,288.32	17.0%	18.5%	
Mar-19	6,055	6,871,850	5,987,171	1,889,543	143,114	8,019,828	1,324.50	1,434.88	1,291.35	2.8%	14.7%	
Apr-19	6,031	6,893,349	6,747,870	1,845,844	146,349	8,740,063	1,449.19	1,411.73	1,303.32	11.0%	10.2%	
May-19	6,041	7,197,173	6,920,508	1,824,850	126,517	8,871,875	1,468.61	1,414.01	1,310.43	6.2%	6.7%	
Jun-19	5,569	7,220,063	5,840,759	1,872,187	142,295	7,855,242	1,410.53	1,443.64	1,319.56	9.0%	8.8%	8.8%
Jul-19	30,971	25,572,820	30,107,163	5,710,509	342,758	36,160,430	1,167.56	1,242.05	1,286.79	9.4%	-0.5%	6.2%
Aug-19	30,888	34,373,076	33,079,184	10,223,872	376,809	43,679,866	1,414.14	1,300.58	1,319.41	10.5%	7.2%	8.2%
Sep-19	30,861	38,616,950	32,613,556	9,287,028	906,645	42,807,229	1,387.10	1,322.77	1,340.98	21.5%	13.8%	10.8%
Oct-19	30,906	45,355,454	36,342,244	10,246,422	834,198	47,422,864	1,534.42	1,445.25	1,377.09	17.5%	16.3%	12.2%
Nov-19	30,948	47,296,983	32,122,701	10,792,962	973,717	43,889,381	1,418.17	1,446.58	1,388.89	17.8%	18.8%	12.6%
Dec-19	30,931	46,364,951	34,133,424	9,509,553	985,330	44,628,307	1,442.83	1,465.11	1,401.28	19.1%	18.1%	12.5%
Jan-20	30,841	49,742,566	38,679,228	10,152,788	874,567	49,706,583	1,611.70	1,490.77	1,424.77	6.1%	13.7%	12.1%
Feb-20	30,787	53,337,788	37,390,540	10,867,092	726,536	48,984,168	1,591.07	1,548.41	1,442.85	8.8%	10.8%	12.0%
Mar-20	30,795	43,882,571	29,181,105	10,323,585	1,530,938	41,035,628	1,332.54	1,511.81	1,433.78	0.6%	5.4%	11.0%
Apr-20	30,818	40,397,598	24,462,157	12,110,584	722,382	37,295,124	1,210.17	1,377.87	1,411.98	-16.5%	-2.4%	8.3%
May-20	30,805	41,903,210	30,236,265	11,609,972	0	41,846,237	1,358.42	1,300.36	1,406.21	-7.5%	-8.0%	7.3%
Jun-20	30,809	45,909,367	40,619,596	10,014,099	1,472,014	52,105,709	1,691.25	1,419.93	1,429.86	19.9%	-1.6%	8.4%
Jul-20	30,539	42,548,144	34,488,078	10,298,553	1,598,516	46,385,147	1,518.88	1,522.87	1,459.17	30.1%	22.6%	13.4%
Aug-20	30,341	39,712,311	32,818,594	10,495,783	1,132,725	44,447,103	1,464.92	1,558.94	1,463.40	3.6%	19.9%	10.9%
Sep-20	30,281	41,516,281	36,076,881	11,082,949	1,256,223	48,416,052	1,598.89	1,527.50	1,480.91	15.3%	15.5%	10.4%
Oct-20	30,184	40,756,595	36,583,020	10,871,696	943,955	48,398,670	1,603.45	1,555.64	1,486.47	4.5%	7.6%	7.9%
Nov-20	30,060	43,350,005	36,943,697	11,095,972	857,432	48,897,101	1,626.65	1,609.63	1,503.70	14.7%	11.3%	8.3%
Dec-20	29,985	43,387,841	36,352,890	16,566,411	1,442,400	54,361,701	1,812.96	1,680.81	1,534.16	25.7%	14.7%	9.5%
Jan-21	29,890	49,719,121	37,812,655	11,503,767	859,092	50,175,514	1,678.67	1,706.06	1,539.44	4.2%	14.4%	8.0%
Feb-21	29,761	51,493,374	36,365,982	11,266,915	529,745	48,162,642	1,618.31	1,703.56	1,541.52	1.7%	10.0%	6.8%
Mar-21	29,677	50,984,540	38,806,812	10,939,759	2,015,580	51,762,151	1,744.18	1,680.33	1,575.80	30.9%	11.1%	9.9%
Apr-21	29,625	49,692,809	39,296,026	12,418,708	1,171,524	52,886,258	1,785.19	1,715.76	1,624.07	47.5%	24.5%	15.0%
May-21	29,555	49,457,132	36,283,565	5,415,472	0	41,699,037	1,410.90	1,647.00	1,629.29	3.9%	26.7%	15.9%
Jun-21	29,875	55,276,709	44,570,922	17,890,720	2,451,937	64,913,580	2,172.84	1,791.02	1,669.12	28.5%	26.1%	16.7%

Development of Total Claim Liability

Medical Claims Incurred but Not Paid	55,277,000
Prescription Drug Claims Incurred but Not Paid	5,814,000
Behavioral Health Claims Incurred but Not Paid	1,177,000
<b>Total Claim Liability</b>	<b>62,268,000</b>

Summary by Year

Incurred Year	Total Employee Months	Incurred Claims	Claims per Employee per Month
FY 2019	72,099	95,138,926	1,319.56
FY 2020	370,360	529,561,524	1,429.86
FY 2021	359,773	600,504,958	1,669.12

\*On June 30, 2019, the contract with Aetna ended and all membership was moved to MMO effective July 1, 2019.

APPENDIX A.2

OHIO MED PPO (ANTHEM) - MEDICAL, PRESCRIPTION DRUG AND BEHAVIORAL HEALTH  
 HISTORICAL CLAIM RESERVE AND CLAIM ANALYSIS PER EMPLOYEE  
 FOR CLAIMS INCURRED THROUGH JUNE 30, 2021 AND PAID THROUGH DECEMBER 31, 2021

Incurred Month	Employee Count	Restated Claim Liability	Estimated Incurred Claims				Estimated Incurred Claims per Employee			Annual Trends in Claims per Employee				
			Medical Claims	Rx Drugs Claims	Behavioral Claims	Total Claims	1-Month	3-Month	12-Month	1-Month	3-Month	12-Month		
Jul-18	13,648	14,873,367	11,142,286	3,674,744	273,152	15,090,183	1,105.67							
Aug-18	13,638	13,577,214	13,430,590	4,216,694	435,048	18,082,333	1,325.88							
Sep-18	13,590	13,221,049	12,122,585	4,142,417	37,371	16,302,374	1,199.59	1,210.37						
Oct-18	13,617	16,578,837	15,531,839	3,891,563	425,360	19,848,762	1,457.65	1,327.79						
Nov-18	13,601	15,373,619	15,655,222	4,248,709	447,886	20,351,818	1,496.35	1,384.60						
Dec-18	13,611	15,325,118	14,612,162	3,888,620	361,259	18,862,041	1,385.79	1,446.59						
Jan-19	13,590	18,055,317	16,044,157	4,099,868	309,998	20,454,023	1,505.08	1,462.38						
Feb-19	13,603	18,598,747	15,998,395	4,273,401	261,940	20,533,736	1,509.50	1,466.76						
Mar-19	13,601	17,219,558	15,362,363	4,102,898	337,168	19,802,429	1,455.95	1,490.17						
Apr-19	13,552	17,736,914	15,596,341	4,179,186	664,101	20,439,628	1,508.24	1,491.21						
May-19	13,618	19,018,413	16,655,172	4,019,119	394,188	21,068,479	1,547.11	1,503.78						
Jun-19	13,691	19,280,785	15,509,928	4,418,277	336,796	20,265,001	1,480.17	1,511.79	1,414.67					
Jul-19	13,682	20,504,292	13,848,071	4,140,795	450,613	18,439,479	1,347.72	1,458.20	1,434.88	21.9%				
Aug-19	13,646	19,079,564	14,818,791	4,281,132	242,311	19,342,233	1,417.43	1,415.12	1,442.52	6.9%				
Sep-19	13,633	21,173,959	14,579,056	3,926,736	339,448	18,845,240	1,382.33	1,382.46	1,457.69	15.2%	14.2%			
Oct-19	13,640	22,102,235	14,708,295	4,620,876	327,455	19,656,626	1,441.10	1,413.62	1,456.31	-1.1%	6.5%			
Nov-19	13,640	17,761,276	13,905,659	4,365,297	543,283	18,814,240	1,379.34	1,400.93	1,446.56	-7.8%	1.2%			
Dec-19	13,655	18,563,975	14,519,088	3,797,244	337,132	18,653,463	1,366.05	1,395.49	1,444.90	-1.4%	-3.5%			
Jan-20	13,570	19,263,138	17,162,386	4,267,189	444,313	21,873,888	1,611.93	1,452.14	1,453.76	7.1%	-0.7%			
Feb-20	13,531	17,756,733	15,891,113	4,615,760	337,851	20,844,724	1,540.52	1,505.84	1,456.30	2.1%	2.7%			
Mar-20	13,530	16,764,502	14,384,938	4,425,427	547,296	19,357,661	1,430.72	1,527.81	1,454.21	-1.7%	2.5%			
Apr-20	13,540	15,038,708	8,525,777	5,318,240	284,381	14,128,399	1,043.46	1,338.16	1,415.69	-30.8%	-10.3%			
May-20	13,544	16,346,752	14,626,030	4,556,569	225,969	19,408,568	1,433.00	1,302.37	1,406.16	-7.4%	-13.4%			
Jun-20	13,543	17,415,181	17,225,777	4,342,671	544,348	22,112,796	1,632.78	1,369.77	1,418.77	10.3%	-9.4%	0.3%		
Jul-20	13,417	12,842,860	13,466,637	4,488,127	566,900	18,521,664	1,380.46	1,482.40	1,421.58	2.4%	1.7%	-0.9%		
Aug-20	13,344	14,342,929	13,836,378	4,321,311	330,039	18,487,728	1,385.47	1,466.91	1,418.96	-2.3%	3.7%	-1.6%		
Sep-20	13,307	15,856,164	13,825,804	4,633,816	281,189	18,740,809	1,408.34	1,391.39	1,421.17	1.9%	0.6%	-2.5%		
Oct-20	13,242	14,806,417	15,334,634	4,389,355	36,643	19,760,631	1,492.27	1,428.55	1,425.31	3.6%	1.1%	-2.1%		
Nov-20	13,209	20,601,271	15,667,103	4,660,159	267,583	20,594,845	1,559.15	1,486.40	1,440.14	13.0%	6.1%	-0.4%		
Dec-20	13,142	20,250,281	15,133,923	6,806,004	510,616	22,450,542	1,708.30	1,586.29	1,468.33	25.1%	13.7%	1.6%		
Jan-21	13,110	19,695,238	14,364,532	4,832,968	0	19,197,500	1,464.34	1,577.33	1,455.86	-9.2%	8.6%	0.1%		
Feb-21	13,054	18,529,662	13,174,339	4,608,495	173,264	17,956,098	1,375.52	1,516.41	1,442.15	-10.7%	0.7%	-1.0%		
Mar-21	13,010	21,045,504	16,079,109	4,285,416	635,326	20,999,852	1,614.13	1,484.49	1,457.15	12.8%	-2.8%	0.2%		
Apr-21	12,970	19,423,272	14,685,037	5,317,009	441,566	20,443,612	1,576.22	1,521.74	1,502.12	51.1%	13.7%	6.1%		
May-21	12,920	21,904,169	15,268,320	2,356,789	0	17,625,109	1,364.17	1,518.47	1,496.77	-4.8%	16.6%	6.4%		
Jun-21	12,999	23,489,082	16,463,689	7,875,375	683,490	25,022,554	1,924.96	1,622.34	1,520.38	17.9%	18.4%	7.2%		

Development of Total Claim Liability

Medical Claims Incurred but Not Paid	23,489,000
Prescription Drug Claims Incurred but Not Paid	2,438,000
Behavioral Health Claims Incurred but Not Paid	322,000
<b>Total Claim Liability</b>	<b>26,249,000</b>

Summary by Year

Incurred Year	Total Employee Months	Incurred Claims	Claims per Employee per Month
FY 2019	163,360	231,100,804	1,414.67
FY 2020	163,154	231,477,318	1,418.77
FY 2021	157,724	239,800,945	1,520.38

## APPENDIX A.3

## VISION PLANS

## HISTORICAL CLAIM RESERVE AND CLAIM ANALYSIS PER EMPLOYEE

## FOR CLAIMS INCURRED THROUGH JUNE 30, 2021 AND PAID THROUGH DECEMBER 31, 2021

Incurred Month	Employee Count	Restated Claim Liability	Estimated Incurred Claims	Estimated Incurred Claims per Employee			Annual Trends in Claims per Employee		
				1-Month	3-Month	12-Month	1-Month	3-Month	12-Month
Jul-18	13,031	47,368	199,963	15.35	17.50	16.93	-0.2%		
Aug-18	13,033	43,852	229,901	17.64	17.63	16.87	-3.6%		
Sep-18	13,041	33,734	163,354	12.53	15.17	16.71	-13.2%	-5.4%	
Oct-18	13,047	40,173	195,078	14.95	15.04	16.66	-4.2%	-6.7%	
Nov-18	13,052	38,915	211,380	16.20	14.56	16.70	3.3%	-4.5%	
Dec-18	13,058	63,264	227,134	17.39	16.18	16.78	5.4%	1.6%	
Jan-19	13,053	33,055	237,448	18.19	17.26	16.81	1.9%	3.5%	
Feb-19	13,040	42,071	212,409	16.29	17.29	16.81	0.5%	2.6%	
Mar-19	13,026	32,034	227,863	17.49	17.32	16.74	-4.9%	-0.9%	
Apr-19	13,012	26,307	226,214	17.39	17.06	16.71	-1.8%	-2.2%	
May-19	13,000	24,884	209,842	16.14	17.01	16.62	-6.4%	-4.4%	
Jun-19	13,009	34,298	239,083	18.38	17.30	16.49	-7.7%	-5.4%	-2.6%
Jul-19	13,066	11,513	223,944	17.14	17.22	16.64	11.7%	-1.6%	-1.7%
Aug-19	13,062	35,585	244,926	18.75	18.09	16.74	6.3%	2.6%	-0.8%
Sep-19	13,051	22,602	184,814	14.16	16.68	16.87	13.1%	10.0%	0.9%
Oct-19	13,046	-2,115	195,462	14.98	15.97	16.88	0.2%	6.2%	1.3%
Nov-19	13,048	-273	209,762	16.08	15.07	16.87	-0.7%	3.5%	1.0%
Dec-19	13,053	13,926	204,396	15.66	15.57	16.72	-10.0%	-3.8%	-0.4%
Jan-20	13,055	15,709	243,870	18.68	16.81	16.76	2.7%	-2.6%	-0.3%
Feb-20	13,065	12,125	238,274	18.24	17.53	16.92	12.0%	1.4%	0.6%
Mar-20	13,075	-29,352	128,725	9.85	15.59	16.29	-43.7%	-10.0%	-2.7%
Apr-20	13,083	-26,337	25,130	1.92	10.00	14.99	-89.0%	-41.4%	-10.3%
May-20	13,091	214	157,850	12.06	7.94	14.65	-25.3%	-53.3%	-11.8%
Jun-20	13,099	36,799	249,181	19.02	11.00	14.71	3.5%	-36.4%	-10.8%
Jul-20	13,237	18,084	224,155	16.93	16.01	14.69	-1.2%	-7.0%	-11.7%
Aug-20	13,216	31,412	234,779	17.76	17.90	14.62	-5.3%	-1.0%	-12.7%
Sep-20	13,190	24,230	220,409	16.71	17.14	14.83	18.0%	2.7%	-12.1%
Oct-20	13,180	11,080	230,108	17.46	17.31	15.04	16.5%	8.4%	-10.9%
Nov-20	13,172	10,874	214,956	16.32	16.83	15.06	1.5%	11.7%	-10.7%
Dec-20	13,184	23,534	221,686	16.81	16.86	15.15	7.4%	8.3%	-9.4%
Jan-21	13,172	10,500	203,720	15.47	16.20	14.89	-17.2%	-3.6%	-11.2%
Feb-21	13,163	13,196	217,657	16.54	16.27	14.75	-9.3%	-7.2%	-12.8%
Mar-21	13,156	25,288	230,988	17.56	16.52	15.39	78.3%	6.0%	-5.5%
Apr-21	13,149	3,940	207,273	15.76	16.62	16.54	720.7%	66.2%	10.3%
May-21	13,143	16,366	188,732	14.36	15.89	16.73	19.1%	100.1%	14.1%
Jun-21	13,136	29,846	225,704	17.18	15.77	16.57	-9.7%	43.3%	12.7%

## Development of Total Claim Liability

Total Claim Liability	30,000
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## Summary by Year

Incurred Year	Total Employee Months	Incurred Claims	Claims per Employee per Month
FY 2019	156,402	2,579,669	16.49
FY 2020	156,794	2,306,333	14.71
FY 2021	158,098	2,620,165	16.57

APPENDIX A.4  
DENTAL PLANS  
HISTORICAL CLAIM RESERVE AND CLAIM ANALYSIS PER EMPLOYEE  
FOR CLAIMS INCURRED THROUGH JUNE 30, 2021 AND PAID THROUGH DECEMBER 31, 2021

Incurred Month	Employee Count	Restated Claim Liability	Estimated Incurred Claims	Estimated Incurred Claims per Employee			Annual Trends in Claims per Employee		
				1-Month	3-Month	12-Month	1-Month	3-Month	12-Month
Jul-18	13,063	252,881	1,104,109	84.52	70.22	68.16	11.4%		
Aug-18	13,079	268,863	1,008,645	77.12	74.73	69.34	22.4%		
Sep-18	13,077	271,966	771,227	58.98	73.54	68.59	-13.2%	6.7%	
Oct-18	13,057	216,970	992,104	75.98	70.69	69.92	26.6%	11.1%	
Nov-18	13,108	274,956	848,578	64.74	66.56	70.17	4.9%	5.3%	
Dec-18	13,113	285,787	826,956	63.06	67.92	69.65	-9.1%	6.6%	
Jan-19	13,039	264,509	1,058,698	81.19	69.64	70.16	8.2%	1.4%	
Feb-19	12,968	262,259	799,400	61.64	68.64	68.51	-24.4%	-8.9%	
Mar-19	12,958	280,964	841,765	64.96	69.29	69.13	12.9%	-2.9%	
Apr-19	12,920	230,085	930,608	72.03	66.20	69.20	1.2%	-5.5%	
May-19	13,025	257,042	822,166	63.12	66.69	69.16	-0.7%	4.0%	
Jun-19	13,044	293,081	822,845	63.08	66.06	69.20	0.8%	0.4%	2.6%
Jul-19	13,092	284,791	1,108,747	84.69	70.32	69.22	0.2%	0.1%	1.5%
Aug-19	13,081	275,099	1,002,867	76.67	74.83	69.18	-0.6%	0.1%	-0.2%
Sep-19	13,051	237,599	758,468	58.12	73.17	69.11	-1.5%	-0.5%	0.8%
Oct-19	13,055	217,638	933,155	71.48	68.76	68.74	-5.9%	-2.7%	-1.7%
Nov-19	13,081	224,877	784,293	59.96	63.18	68.34	-7.4%	-5.1%	-2.6%
Dec-19	13,098	222,513	813,465	62.11	64.51	68.26	-1.5%	-5.0%	-2.0%
Jan-20	13,088	287,212	1,051,816	80.36	67.48	68.19	-1.0%	-3.1%	-2.8%
Feb-20	13,147	281,517	853,108	64.89	69.11	68.46	5.3%	0.7%	-0.1%
Mar-20	13,175	122,427	469,049	35.60	60.24	65.99	-45.2%	-13.1%	-4.5%
Apr-20	13,190	101,718	149,648	11.35	37.25	60.90	-84.2%	-43.7%	-12.0%
May-20	13,193	196,305	595,819	45.16	30.70	59.40	-28.5%	-54.0%	-14.1%
Jun-20	13,202	217,170	947,548	71.77	42.77	60.13	13.8%	-35.3%	-13.1%
Jul-20	13,258	300,318	1,100,393	83.00	66.67	60.02	-2.0%	-5.2%	-13.3%
Aug-20	13,210	257,783	964,244	72.99	75.93	59.72	-4.8%	1.5%	-13.7%
Sep-20	13,148	221,868	850,024	64.65	73.57	60.27	11.2%	0.5%	-12.8%
Oct-20	13,167	240,740	840,157	63.81	67.16	59.63	-10.7%	-2.3%	-13.2%
Nov-20	13,164	210,337	724,501	55.04	61.16	59.22	-8.2%	-3.2%	-13.3%
Dec-20	13,155	238,928	821,043	62.41	60.42	59.25	0.5%	-6.3%	-13.2%
Jan-21	13,119	253,462	952,369	72.59	63.34	58.61	-9.7%	-6.1%	-14.1%
Feb-21	13,123	247,725	818,872	62.40	65.80	58.40	-3.8%	-4.8%	-14.7%
Mar-21	13,119	210,066	918,849	70.04	68.34	61.27	96.7%	13.5%	-7.2%
Apr-21	13,108	230,411	938,070	71.56	68.00	66.29	530.8%	82.6%	8.8%
May-21	13,100	179,979	757,523	57.83	66.48	67.36	28.0%	116.5%	13.4%
Jun-21	13,077	217,742	888,442	67.94	65.78	67.03	-5.3%	53.8%	11.5%

## Development of Total Claim Liability

Total Claim Liability	218,000
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## Summary by Year

Incurred Year	Total Employee Months	Incurred Claims	Claims per Employee per Month
FY 2019	156,451	10,827,099	69.20
FY 2020	157,453	9,467,983	60.13
FY 2021	157,748	10,574,488	67.03

# APPENDIX B

## PROJECTED INCOME AND EXPENSES FOR FISCAL YEAR 2022

APPENDIX B  
 PROJECTED INCOME AND EXPENSES FOR FISCAL YEAR 2022  
 ALL HEALTH PLANS

	Medical	Dental	Vision	Total FY 2022	Total FY 2021	Change
Fund Income						
Payroll and State Contributions	859,235,000	12,668,000	3,545,000	875,448,000	867,777,027	7,670,973
Pharmacy Rebates	48,000,000	0	0	48,000,000	55,052,959	(7,052,959)
Other Income/Refunds	500,000	0	0	500,000	15,416,766	(14,916,766)
Interest Income	4,127,000	303,000	122,000	4,552,000	2,134,006	2,417,994
<b>Total Fund Income</b>	<u>911,862,000</u>	<u>12,971,000</u>	<u>3,667,000</u>	<u>928,500,000</u>	<u>940,380,758</u>	<u>(11,880,758)</u>
Fund Expenses						
Benefits Paid	(889,113,000)	(10,744,000)	(2,681,000)	(902,538,000)	(843,011,575)	(59,526,425)
Third-Party Administrator Fees	(22,842,000)	(521,000)	(22,000)	(23,385,000)	(16,845,858)	(6,539,142)
Healthy Living Admin & Incentives	(3,000,000)	0	0	(3,000,000)	(6,775,761)	3,775,761
COVID-19 Vaccine Incentive	(3,040,000)	0	0	(3,040,000)	0	(3,040,000)
Other Expenses	(1,552,000)	(258,000)	(390,000)	(2,200,000)	3,503,624	(5,703,624)
<b>Total Fund Expenses</b>	<u>(919,547,000)</u>	<u>(11,523,000)</u>	<u>(3,093,000)</u>	<u>(934,163,000)</u>	<u>(863,129,570)</u>	<u>(71,033,430)</u>
<b>Change in IBNP</b>	<u>(5,347,000)</u>	<u>(4,000)</u>	<u>(1,000)</u>	<u>(5,352,000)</u>	<u>(10,767,000)</u>	<u>5,415,000</u>
<b>Gain/(Loss)</b>	<u>(13,032,000)</u>	<u>1,444,000</u>	<u>573,000</u>	<u>(11,015,000)</u>	<u>66,484,188</u>	<u>(77,499,188)</u>



# APPENDIX C

## ASOP 41 DISCLOSURES

## APPENDIX C ASOP 41 DISCLOSURES

The Actuarial Standards Board (ASB), vested by the U.S.-based actuarial organizations<sup>1</sup>, promulgates actuarial standards of practice (ASOPs) for use by actuaries when providing professional services in the United States. Each of these organizations requires its members, through its Code of Professional Conduct<sup>2</sup>, to observe the ASOPs of the ASB when practicing in the United States.

The ASOPs are not narrowly prescriptive and neither dictate a single approach nor mandate a particular outcome. ASOPs are intended to provide actuaries with a framework for performing professional assignments and to offer guidance on relevant issues, recommended practices, documentation, and disclosure. Each ASOP articulates a process of analysis, documentation, and disclosure that, in the ASB's judgment, constitutes appropriate practice within the scope and purpose of the ASOP.

ASOP 41 provides guidance to actuaries with respect to actuarial communications and requires certain disclosures which are contained in this Appendix.

### **Identification of the Responsible Actuary**

The responsible actuary is Bonnie S. Albritton, FSA, MAAA, Vice President and Principal of Lewis & Ellis, Inc. This actuary is available to provide supplementary information and explanation.

### **Identification of Actuarial Documents**

The date of this document is February 25, 2022, its subject is the reserve for claims incurred but not yet paid as of June 30, 2021 for the State Employee Health Benefit Fund. The document version identification is Version #4 (2/25/2022 4:46 PM).

### **Disclosures in Actuarial Reports**

- The contents of this report are intended for Ohio Department of Administrative Services and its auditors.
- The purpose of this engagement is to provide Ohio Department of Administrative Services with an estimate of the liability for claims incurred but not yet paid.
- The responsible actuary identified above is qualified as specified in the *Qualification Standards* of the American Academy of Actuaries.
- Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events into the future. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. The results are not to be used for any purpose other than to estimate the claims incurred, but not paid. These communications should not be relied upon for any other purpose.

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<sup>1</sup> The American Academy of Actuaries (Academy), the American Society of Pension Professionals and Actuaries, the Casualty Actuarial Society, the Conference of Consulting Actuaries, and the Society of Actuaries.

<sup>2</sup> These organizations adopted identical Codes of Professional Conduct effective January 1, 2001.

## APPENDIX C (CONT.) ASOP 41 DISCLOSURES

- Ohio Department of Administrative Services has agreed to pay Lewis & Ellis, Inc. a fee for preparing this report. Other than regarding that contract, we are financially and organizationally independent from Ohio Department of Administrative Services. There is nothing in our relationship with DAS that would impair or seem to impair the objectivity of our work.
- Ohio Department of Administrative Services provided the claims data, enrollment and other information used to prepare our report. We have reviewed the data for reasonableness but have not audited it. To the extent that there are material inaccuracies in the data, our results may be accordingly affected.
- The date through which data or other information has been considered in developing the findings included in this report is December 31, 2021.
- We are not aware of any subsequent events that may have a material effect on the actuarial findings.
- The various documents comprising this actuarial report are contained within the document to which these disclosures are attached.

### **Actuarial Findings**

The actuarial findings of the report can be found in this report.

### **Methods, Procedures, Assumptions, and Data**

The methods, procedures, assumptions, and data used by the actuary can be found in this report.

### **Assumptions or Methods Prescribed by Law**

This actuarial report was prepared in accordance with generally accepted actuarial principles.

### **Responsibility for Assumptions and Methods**

The actuary does not disclaim responsibility for material assumptions or methods.

### **Deviation from the Guidance of an ASOP**

The actuary has not deviated materially from the guidance set forth in an applicable ASOP.