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March 30, 2020

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
January 1, 2020 – Arizona Bricklayers' Pension Trust Fund**

In accordance with IRC Section 432(b)(3)(A), we have prepared and attached an actuarial certification for the plan year beginning January 1, 2020 for Arizona Bricklayers' Pension Trust Fund.

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 members of the American Academy of Actuaries (AAA) who meet the Qualification Standards of the AAA to render the actuarial opinion contained herein, we hereby certify that, to the best of our knowledge and belief, this letter is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial

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

Grant Camp, FSA, EA, MAAA
Principal and Consulting Actuary

cc: Board of Trustees
Ms. Julia DiBartolomeo
Mr. Benjamin Marmolejo
Mr. Craig Keller
Mr. Paul Catenacci
Mr. Paul Newcomer

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Arizona Bricklayers' Pension Trust Fund
PPA Actuarial Certification for Plan Year Beginning January 1, 2020

Funding Status Projection Results

<u>Plan Year Beginning</u>	<u>Funded Percentage</u>	<u>Contributions</u>	<u>Credit Balance at End of Year</u>
1/1/2019	90.9%	\$113,000	\$407,000
1/1/2020	92.2	85,680	(848,000)
1/1/2021	91.1	78,120	(2,015,000)
1/1/2022	90.4	70,560	(3,154,000)
1/1/2023	88.2	63,000	(4,341,000)
1/1/2024	88.5	63,000	(4,827,000)
1/1/2025	86.5	63,000	(5,741,000)
1/1/2026	84.2	63,000	(6,671,000)
1/1/2027	81.6	63,000	(7,554,000)
1/1/2028	78.7	63,000	(8,299,000)
1/1/2029	75.4	63,000	(8,995,000)

- An accumulated funding deficiency is projected to occur for the plan year ending December 31, 2020.
- The funded percentage as of January 1, 2020 is projected to be 92.2%.
- 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 January 1, 2039 and the ratio of inactive to active exceeds 2:1.

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 December 31, 2019, I hereby certify that the Arizona Bricklayers' Pension Trust fund is "critical and declining" for the plan year beginning January 1, 2020, as defined in the Pension Protection Act of 2006 as amended by the Multiemployer Pension Reform Act of 2014 ("MPRA").

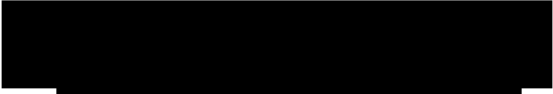
Further, I hereby certify that to the best of my knowledge and belief, the actuarial assumptions employed in preparing this certification are individually reasonable and represent my best estimate of future experience. Additionally, the "projected industry activity" assumption, as required under IRC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

Arizona Bricklayers' Pension Trust Fund
PPA Actuarial Certification for Plan Year Beginning January 1, 2020

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 Arizona Bricklayers' Pension Trust Fund reduced certain benefits and required increased contributions (Default Schedule only). 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 10-year Rehabilitation Period on December 31, 2026, which began on January 1, 2017.

As a result, the Trustees adopted a Rehabilitation Plan that, in their judgment, consisted of all reasonable measures to 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 and reflecting the Plan's experience through December 31, 2019, I hereby certify that the Plan is making scheduled progress as of January 1, 2020 as required under IRC Section 432(b)(3)(A)(ii).


Kevin M. Campe
Enrolled Actuary #17-5356

March 30, 2020
Date

Arizona Bricklayers' Pension Trust Fund
PPA Actuarial Certification for Plan Year Beginning January 1, 2019

Summary of Assumptions/Methods

1. Our forecast of future minimum funding requirements is based on:
 - January 1, 2019 participant data and January 1, 2019 actuarial valuation results.
 - Estimated December 31, 2019 asset value based on 18.9% preliminary rate of return (net of investment fees) for year ended December 31, 2019 provided by the Investment Consultant and cash flows for the year ended December 31, 2019 provided by the Fund Administrator.
 - The assumed annual rate of return on market assets (net of investment-related administrative expenses) after December 31, 2019 is 6.5%. No future asset gains or losses other than the gains or losses related to the asset smoothing method.
 - Mortality assumptions updated to PRI-2012 Blue Collar Mortality Tables with generational mortality improvement using Scale MP-2019 effective January 1, 2020.
 - Input from the Fund's Board of Trustees regarding future work hours as follows:
 - 68,000 hours for 2020 plan year
 - 62,000 hours for 2021 plan year
 - 56,000 hours for 2022 plan year
 - 50,000 hours for 2023 plan year and each year thereafter
 - \$0.90 per hour contribution rate.
 - 40% load on annual contributions for reciprocity contributions.
 - Assumed annual administrative expenses as follows:
 - \$525,000 for 2020 plan year
 - \$400,000 for 2021 plan year
 - \$285,000 for 2022 plan year, and 2% annual increases thereafter
 - Plan provisions identical to those used in the January 1, 2019 actuarial valuation.
 - All other actuarial assumptions and methods being the same as those used in the January 1, 2019 actuarial valuation.
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 March 27, 2020.

Arizona Bricklayers' Pension Trust Fund
PPA Actuarial Certification for Plan Year Beginning January 1, 2020

Plan Identification

Name: Arizona Bricklayers' Pension Trust Fund
EIN: 51-6119487
Plan Number: 001
Address: 2550 West Union Hills Drive, Suite 290
Phoenix, AZ 85027
Telephone Number: (602) 324-0545

Enrolled Actuary Identification

Name: Mr. Kevin M. Campe
Enrollment Number: 17-5356
Address: Milliman, Inc.
71 S. Wacker Drive
31st Floor
Chicago, IL 60606
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Arizona Bricklayers' Pension Trust Fund
PPA Actuarial Certification for Plan Year Beginning January 1, 2020

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 vested benefits (inactives), and present value of expected contributions for the plan year 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 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

Arizona Bricklayers' Pension Trust Fund

MPRA Application Checklist Item #5: Solvency Projection Supporting January 1, 2020 Critical and Declining PPA Status Certification

Plan Year	Market Value	Contributions	Benefit Payments by Status					Administrative Expenses	Investment Return (%)	Investment Return (\$)	Market Value	Available Resources
	Beginning of Year		Active	Retiree	Terminated Vested	Beneficiary	New Entrant				End of Year	
2019	26,730,380	113,000	0	0	0	0	2,128,450	334,535	18.90%	4,839,573	29,219,968	31,348,418
2020	29,219,968	85,680	28,412	1,815,230	240,665	308,201	1	525,000	6.50%	1,808,712	28,196,851	30,589,360
2021	28,196,851	78,120	41,859	1,764,867	307,256	291,186	2	400,000	6.50%	1,745,561	27,215,363	29,620,532
2022	27,215,363	70,560	49,544	1,711,844	372,082	274,233	2,584	285,000	6.50%	1,685,038	26,275,674	28,685,961
2023	26,275,674	63,000	61,663	1,656,291	454,921	257,446	3,436	290,700	6.50%	1,622,783	25,237,001	27,670,757
2024	25,237,001	63,000	69,619	1,598,358	520,881	240,919	4,011	296,514	6.50%	1,555,082	24,124,780	26,558,569
2025	24,124,780	63,000	77,965	1,538,208	586,686	224,742	4,571	302,444	6.50%	1,482,650	22,935,814	25,367,986
2026	22,935,814	63,000	87,729	1,476,016	647,879	209,000	5,320	308,492	6.50%	1,405,373	21,669,750	24,095,695
2027	21,669,750	63,000	94,265	1,411,992	690,512	193,769	8,266	314,663	6.50%	1,323,750	20,343,034	22,741,838
2028	20,343,034	63,000	98,989	1,346,375	737,419	179,118	9,903	320,956	6.50%	1,238,175	18,951,448	21,323,253
2029	18,951,448	63,000	105,347	1,279,430	788,764	165,104	11,401	327,375	6.50%	1,148,213	17,485,241	19,835,287
2030	17,485,241	63,000	111,939	1,211,435	827,671	151,769	13,051	333,923	6.50%	1,053,794	15,952,247	18,268,113
2031	15,952,247	63,000	114,109	1,142,697	867,127	139,143	15,098	340,601	6.50%	955,141	14,351,614	16,629,788
2032	14,351,614	63,000	114,459	1,073,553	904,005	127,244	19,084	347,413	6.50%	852,156	12,681,012	14,919,357
2033	12,681,012	63,000	116,047	1,004,349	932,646	116,068	21,801	354,361	6.50%	744,862	10,943,601	13,134,513
2034	10,943,601	63,000	118,840	935,433	946,852	105,593	24,425	361,449	6.50%	633,615	9,147,625	11,278,767
2035	9,147,625	63,000	120,198	867,154	969,448	95,794	27,075	368,678	6.50%	518,292	7,280,570	9,360,239
2036	7,280,570	63,000	122,792	799,870	971,476	86,652	29,867	376,051	6.50%	398,905	5,355,766	7,366,424
2037	5,355,766	63,000	121,936	733,963	983,902	78,147	33,149	383,573	6.50%	275,458	3,359,554	5,310,652
2038	3,359,554	63,000	120,732	669,839	987,964	70,253	36,117	391,244	6.50%	147,576	1,293,981	3,178,886
2039	1,293,981	63,000	123,122	607,902	998,579	62,946	39,098	399,069	6.50%	N/A	Insolvent	Insolvent

Comments/Notes

-Cash flow information for 2019 Plan Year based on December 31, 2019 unaudited financial statements. Total benefit payments for 2019 are shown under New Entrants column.

-Estimated 18.90% return for 2019 Plan Year provided by Investment Consultant.

-No future withdrawal liability payments are assumed.

-Plan is projected to become insolvent in plan year beginning January 1, 2039.



Arizona Bricklayers' Pension Trust Fund

Report of Required Actuarial Information -

Application for Proposed Benefit Suspensions as of January 1, 2022

Prepared by:

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Principal and Consulting Actuary

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Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of January 1, 2022 for the Arizona Bricklayers' Pension Trust Fund

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 Arizona Bricklayers' Pension Trust Fund (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 year beginning January 1, 2020. The Trustees have chosen to pursue benefit suspensions which are allowed to such plans under §432. In addition, the Trustees are applying for partition financial assistance from the Pension Benefit Guaranty Corporation.

We have completed our analysis of the Trustees' proposed benefit suspensions and partition and determined that the combined impact of both measures would likely enable the Plan to avoid insolvency (as defined in IRC §418E) assuming the suspensions and partition occur no later than January 1, 2022 and continue indefinitely.

This report also includes additional information required for the application to suspend benefits. Specifically, this report contains the materials required in checklist items 5, 6, 9, 11, 24, 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 Arizona Bricklayers' Pension Trust Fund (the "Plan Sponsor") 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 law.

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 January 1, 2019 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 January 1, 2019 Actuarial Valuation. Additional individual participant information was supplied by the Plan administrator subsequent to the January 1, 2019 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 retirement 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 reasonable (taking into account the experience of the Plan and reasonable expectations).

On the basis of the foregoing, we 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. We are members of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Respectfully submitted,

Kevin Campe, EA, MAAA
Principal and Consulting Actuary
Enrolled Actuary Number 20-05356

Grant Camp, FSA, EA, MAAA
Principal and Consulting Actuary
Enrolled Actuary Number 20-07456

September 25, 2020

Date

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A. Summary of Key Information and Results

The application filed on behalf of the Arizona Bricklayers' Pension Trust Fund sets forth the following proposed benefit suspension to be effective January 1, 2022. 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 110% of the participant's PBGC guaranteed benefit. 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).

An application for partition financial assistance from the PBGC has also been submitted and is reflected in this application.

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 January 1, 2035
b. Proposed effective date of suspension of benefits	January 1, 2022
c. End of extended period	December 31, 2052
d. Projected funded percentage under IRC §432(j)(2) at end of extended period	100.2%
e. Number of Plan active participants (based on January 1, 2019 actuarial valuation)	54
f. Is the proposed suspension in combination with a partition?	Yes
g. Proposed effective date of the partition	January 1, 2022

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.
 - ii. The Plan's projected funded percentage at the end of the extended period exceeds 100%.
- b. Because the proposed suspension is in combination with a partition a demonstration that the benefit suspension is reasonably estimated to not materially exceed the amount necessary to enable the plan to avoid insolvency is not required.

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

B. Supplemental Information for 2020 Critical & Declining Actuarial Certification

The following is a response to Sections 3.01 of Revenue Procedure 2017-43. Between this response, the January 1, 2019 Actuarial Valuation, and the January 1, 2020 PPA Actuarial Certification, all assumptions used in the January 1, 2020 PPA Actuarial Certification have been described.

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 January 1, 2020.

Plan Year Beginning January 1	Total Contribution Base Units (Hours)	Average Contribution Rate (Hourly)	Reciprocity Contribution Load
2020	68,000	\$0.90	40%
2021	62,000	0.90	40%
2022	56,000	0.90	40%
2023	50,000	0.90	40%
2024	50,000	0.90	40%
2025	50,000	0.90	40%
2026	50,000	0.90	40%
2027	50,000	0.90	40%
2028	50,000	0.90	40%
2029	50,000	0.90	40%
2030	50,000	0.90	40%
2031	50,000	0.90	40%
2032	50,000	0.90	40%
2033	50,000	0.90	40%
2034	50,000	0.90	40%
2035	50,000	0.90	40%
2036	50,000	0.90	40%
2037	50,000	0.90	40%
2038	50,000	0.90	40%
2039	50,000	0.90	40%

New Entrant Profile

- New entrant profile as follows:

% of New Entrants	Age at Entry	Benefit Service at Entry	Vesting Service at Entry
3.1%	22.5	0.00	0.00
6.3%	27.5	0.00	0.00
3.1%	32.5	0.00	0.00
25.0%	37.5	0.00	0.00
15.6%	42.5	0.00	0.00
6.3%	47.5	0.00	0.00
18.8%	52.5	0.00	0.00
9.4%	57.5	0.00	0.00
9.4%	62.5	0.00	0.00
3.1%	67.5	0.00	0.00

- New entrants are assumed to have \$0 accrued benefit upon entry. The assumed service at entry is used for determining eligibility.
- All new entrants are assumed to be male.

C. 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 January 1, 2019 Actuarial Valuation, and the January 1, 2020 PPA Actuarial Certification, all assumptions used in the projections required under 3.02, 4.02(1), 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 January 1	Investment Return
2019*	19.16%
2020**	1.39%
2021-2029	4.98%
2030+	5.88%

* Final investment return based on audited December 31, 2019 financial statements.

** Estimated investment return based on -1.1% return from January 1, 2020 through June 30, 2020 and assuming 2.61% return for July 1, 2020 through December 31, 2020. 2.61% is the partial year return derived from 4.98% for the entire year.

Liability Discount Rate

5.50%

Mortality Assumptions

- Active and Terminated Vested Participants: Pri-2012 Blue Collar Employee Mortality Table, projected forward using Scale MP-2019 on a generational basis.
- Current and Future Non-Disabled Retirees and Beneficiaries: Pri-2012 Blue Collar Retiree Mortality Table, projected forward using Scale MP-2019 on a generational basis.
- Current and Future Disabled Retirees: Pri-2012 Disabled Mortality Table, projected forward using Scale MP-2019 on a generational basis.

Other Demographic Assumptions

Retirement Rates

Age	Active Retirement Rates	Terminated Vested Retirement Rates*
55 – 59	6.0%	3.0%
60 – 61	13.0%	6.5%
62	50.0%	25.0%
63 – 64	30.0%	15.0%
65 & older	100.0%	100.0%

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

Termination and Disability Rates

Age	Termination Rate	Disability Rate
18 & under	79.28%	0.00%
19	40.46%	0.00%
20	35.98%	0.03%
21	44.76%	0.03%
22	48.14%	0.04%
23	47.70%	0.04%
24	45.40%	0.04%
25	43.48%	0.04%
26	41.90%	0.05%
27	40.82%	0.05%
28	38.84%	0.05%
29	37.46%	0.05%
30	37.22%	0.06%
31	37.66%	0.06%
32	36.64%	0.06%
33	34.78%	0.06%
34	33.88%	0.07%
35	33.56%	0.07%
36	33.38%	0.08%
37	32.58%	0.09%
38	32.00%	0.09%
39	30.72%	0.10%
40	31.82%	0.11%
41	31.88%	0.12%
42	32.10%	0.13%
43	31.96%	0.15%
44	31.76%	0.16%
45	30.96%	0.18%
46	31.22%	0.20%
47	30.60%	0.22%
48	30.30%	0.25%
49	31.06%	0.27%
50	31.20%	0.30%
51	30.70%	0.34%
52	28.70%	0.37%
53	28.68%	0.41%
54	28.34%	0.46%
55	27.04%	0.50%
56	25.68%	0.56%
57	25.32%	0.61%
58	25.48%	0.67%
59	27.00%	0.74%
60	0.00%	0.81%
61	0.00%	0.89%
62	0.00%	0.97%
63	0.00%	1.06%
64	0.00%	1.16%
65 & over	0.00%	0.00%

Projection of Future Service and Benefit Accruals

0.8333 Pension Credits per year.

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: 25% elect the single life annuity, 25% elect the 50% joint and survivor with pop-up, and 50% elect the 100% joint and 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.

Assumptions Regarding Missing or Incomplete Data

- Participants where date of birth is not reported are assumed to be the average age of participants with similar characteristics. Accordingly, actives and terminated vested participants missing date of birth in the data were assumed to be 44.9 and 54.9 years old, respectively, as of January 1, 2019.
- 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 two years younger than male spouses.
- 75% of active and terminated vested participants are assumed to be married.

New Entrant Profile

- New entrant profile as follows:

% of New Entrants	Age at Entry	Benefit Service at Entry	Vesting Service at Entry
3.2%	22.5	0.00	0.00
3.2%	27.5	0.00	0.00
6.5%	32.5	0.25	0.25
20.4%	37.5	1.75	1.25
11.8%	42.5	2.75	2.25
12.9%	47.5	4.00	2.75
15.1%	52.5	3.00	2.75
16.1%	57.5	5.25	5.00
9.7%	62.5	5.00	4.00
1.1%	67.5	0.00	0.00

- New entrants are assumed to have \$0 accrued benefit upon entry. The assumed service at entry is used for determining eligibility.
- All new entrants are assumed to be male.

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 January 1	Total Contribution Base Units (Hours)	Average Contribution Rate (Hourly)	Reciprocity Contribution Load
2020	51,000	\$0.90	35%
2021	56,000	0.90	40%
2022	56,000	0.90	40%
2023	50,000	0.90	40%
2024	50,000	0.90	40%
2025	50,000	0.90	40%
2026	50,000	0.90	40%
2027	50,000	0.90	40%
2028	50,000	0.90	40%
2029	50,000	0.90	40%
2030	50,000	0.90	40%
2031	50,000	0.90	40%
2032	50,000	0.90	40%
2033	50,000	0.90	40%
2034	50,000	0.90	40%
2035	50,000	0.90	40%
2036	50,000	0.90	40%
2037	50,000	0.90	40%
2038	50,000	0.90	40%
2039	50,000	0.90	40%
2040	50,000	0.90	40%
2041	50,000	0.90	40%
2042	50,000	0.90	40%
2043	50,000	0.90	40%
2044	50,000	0.90	40%
2045	50,000	0.90	40%
2046	50,000	0.90	40%
2047	50,000	0.90	40%
2048	50,000	0.90	40%
2049	50,000	0.90	40%
2050	50,000	0.90	40%
2051	50,000	0.90	40%

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)

- \$525,000 for 2020, \$400,000 for 2021, \$250,000 for 2022, and then 2% annual increases thereafter. Downward adjustments are made to reflect the Fund's projected decline in headcount. Upon insolvency, expenses are projected to decrease by 20% in addition to the elimination of PBGC premiums. Upon partition, expenses are projected to increase by 5% due to increased administrative complexity and projected to decrease after 10 years due to the elimination of PBGC Premium for the partitioned group. In addition, total expenses under a partition are allocated between the Original Plan and Successor Plan by projected headcount. Under all scenarios annual expenses are limited to the greater of \$100,000 or 30% of annual expected benefit payments.

- The unit credit accrued liability for purposes of calculating the funded percentage is loaded with the present value of administrative expenses over the next 30 years.

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 and Liability Discount Rate

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	21.00%
US Equity - Small Cap	5.00%
Non-US Equity – Developed	10.00%
Non-US Equity – Emerging	3.00%
US Fixed Income (Core)	32.00%
US Fixed Income (Short-Term)	5.00%
US TIPs	5.00%
Core Real Estate	5.00%
Non-Public (Risk-Parity)	13.00%
Cash	1.00%

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	24.51%
US Equity – Small/Mid Cap	5.00%
Non-US Equity – Developed	13.51%
Non-US Equity – Emerging	3.78%
US Corporate Bonds – Core	37.10%
Non-US Debt Developed	2.60%
US Treasuries (Cash Equivalents)	3.50%
TIPS (Inflation-Protected)	5.00%
Real Estate	5.00%

The 10 and 20-year expected investment returns (arithmetic returns) shown on Exhibit 15 of the 2020 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 (50th percentile) geometric return of 4.98% using the 10-year capital market assumptions and a median (50th percentile) geometric return of 5.88% using the 20-year capital market assumptions, which were then used to project future investment returns.

Based on the above, the liability discount rate was set to 5.50%, which is approximately the average of the 10 and 20-year median (50th percentile) geometric returns.

Demographic Experience

- Although it is our understanding that no formal experience study has been completed in the past ten years, based on prior actuarial valuation reports (2010-2019), assumption changes were made in 2014, 2016, 2017 and 2018. Below is a summary of the assumption changes made in those years. Please note that Milliman became the Fund actuary beginning in 2018.
 - 2014 – Mortality rates, retirement rates for terminated vested participants, turnover rates, exclusion of terminated vested participants over 70 (eliminated), and future benefit accruals.
 - 2016 – Net investment return, mortality improvement, disability incidence rates, and retirement rates for terminated vested participants.
 - 2017 – Form of payment election (in conjunction with implementation of Rehabilitation Plan).
 - 2018 – Timing of decrements.
- The historical actuarial gains and losses over the last ten years are shown below. The January 1, 2020 actuarial valuation has not been completed at the time of this filing; however, we've provided preliminary results for the plan year ending December 31, 2019.

Plan Year Ending December 31	Demographic and Administrative Expense (Gain)/Loss	Asset (Gain)/Loss	Total (Gain)/Loss
2019*	\$(45,280)	\$307,848	\$262,568
2018	98,560	747,184	845,744
2017	(63,508)	104,042	40,534
2016	(481,732)	639,190	157,458
2015	38,519	502,020	540,539
2014	(107,872)	(550,185)	(658,057)
2013	428,854	(1,619,574)	(1,190,720)
2012	543,796	1,331,773	1,875,569
2011	(281,124)	1,333,288	1,052,164
2010	(555,722)	894,310	338,588

*Preliminary and subject to change.

- The detailed demographic (gain)/loss for the 2019 plan year by changes in status is provided below. The January 1, 2020 actuarial valuation has not been completed at the time of this filing; as such, information reported in the table is preliminary. 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.

	January 1, 2020 Valuation Status*				
January 1, 2019 Valuation Status	Active	Deferred	In Pay	Non-Valued**	Total
Active	\$26,268	\$(665)	\$0	\$(14,134)	\$11,469
Deferred	6,495	55,714	(13,963)	(126,045)	(77,799)
In Pay	0	0	415,582	(540,881)	(125,299)
Not in Data	5,510	0	203,403	0	208,913
Total	38,273	55,049	605,022	(681,060)	17,284

*Preliminary and subject to change.

** Due to non-vested terminations, deaths, and data corrections

- The detailed demographic (gain)/loss for the 2018 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.

	January 1, 2019 Valuation Status				
January 1, 2018 Valuation Status	Active	Deferred	In Pay	Non -Valued*	Total
Active	\$12,160	\$(6,219)	\$0	\$(14,555)	\$(8,613)
Deferred	608	47,182	(18,731)	0	29,059
In Pay	0	0	373,549	(460,689)	(87,139)
Not in Data	7,206	0	173,368	0	180,574
Total	19,974	40,963	528,187	(475,244)	113,881

* Due to non-vested terminations and deaths.

- The demographic (gain)/loss for the 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.

	January 1, 2018 Valuation Status				
January 1, 2017 Valuation Status	Active	Deferred	In Pay	Non-Valued*	Total
Active	\$19,306	\$(5,963)	\$0	\$(4,634)	\$8,709
Deferred	5,884	868	2,056	(116,540)	(107,732)
In Pay	0	0	416,467	(401,109)	15,357
Not in Data	16,209	0	98,387	0	114,596
Total	41,399	(5,095)	516,910	(522,283)	30,931

* Due to deaths, non-vested terminations, expiration of benefits, and data corrections.

- The details of the demographic (gain)/loss for years prior to 2017 are unavailable.
- Regarding the assumption that 75% 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 for the last five years (January 1, 2015 – December 31, 2019) is shown below. The analysis includes retirements from both active and terminated vested status.

Benefit Form	Percentage Electing
Single Life	26.7%
50% Joint and Survivor with Pop-up	20.0%
100% Joint and Survivor with Pop-up	53.3%

- The retirement rates by age for active participants for the last five years (January 1, 2015 – December 31, 2019) are shown below.

Age	Exposures	Number Retired	Retirement Rate
55	9	0	0.0%
56	5	0	0.0%
57	8	0	0.0%
58	7	0	0.0%
59	6	0	0.0%
60	6	0	0.0%
61	7	0	0.0%
62	5	0	0.0%
63	5	0	0.0%
64	5	1	20.0%
65 & over	2	1	50.0%

- The retirement rates by age for terminated participants for the last five years (January 1, 2015 – December 31, 2019) are shown below.

Age	Exposures	Number Retired	Retirement Rate
55	41	3	7.3%
56	49	1	2.0%
57	47	2	4.3%
58	48	0	0.0%
59	39	0	0.0%
60	32	0	0.0%
61	29	0	0.0%
62	29	1	3.4%
63	29	3	10.3%
64	28	2	7.1%
65 & over	95	16	16.8%

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 (Pri-2012) 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 Pri-2012 tables were used.
- With respect to future mortality improvement, the MP-2019 mortality improvement scale was used to project future improvement in mortality from 2012 on a generational basis.

New Entrant Profile

- The distribution of new entrants, including rehires, for the last five years (January 1, 2015 – December 31, 2019) and the average service at entry are shown below. New entrants with unknown date of birth are excluded.

Age Range	Percentage of New Entrants	Average Benefit Service	Average Vesting Service
Below 20	0.0%	N/A	N/A
20 - 24	3.2%	0.00	0.00
25 - 29	3.2%	0.00	0.00
30 - 34	6.5%	0.25	0.25
35 - 39	20.4%	1.75	1.25
40 - 44	11.8%	2.75	2.25
45 - 49	12.9%	4.00	2.75
50 - 54	15.1%	3.00	2.75
55 - 59	16.1%	5.25	5.00
60 - 64	9.7%	5.00	4.00
65 - 69	1.1%	0.00	0.00

- New entrants are assumed to be 100% male because there are only a couple of females in the Plan who are not surviving spouses/beneficiaries or alternate payees. Specifically, in the January 1, 2019 actuarial valuation, there was only one female participant who was not a surviving spouse/beneficiary or an alternate payee.

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. The information for the 2010 – 2018 plan years is from the Plan's Form 5500 Schedule R. The information for the 2019 plan year is based on unaudited information provided by the Plan administrator.

Plan Year Beginning January 1	Employer Name	Estimated Contribution Base Units*	Hourly Contribution Rate	Total Contributions
2019	HUFF AND SONS CONSTRUCTION	22,200	0.90	\$19,980
2019	JT THORPE & SONS INC	13,197	0.90	11,877
2019	M A G CONSTRUCTION	23,276	0.90	20,948
2019	RECON REFRACTORY CONSTRUCTION	5,431	0.90	4,888
2018	HUFF AND SONS CONSTRUCTION	23,483	0.90	21,135
2018	JT THORPE & SONS INC	5,692	0.90	5,123
2018	M A G CONSTRUCTION	27,267	0.90	24,540
2018	RECON REFRACTORY CONSTRUCTION	9,724	0.90	8,752
2017	HUFF AND SONS CONSTRUCTION	21,510	0.90	19,359
2017	JT THORPE & SONS INC	6,940	0.90	6,246
2017	M A G CONSTRUCTION	16,247	0.90	14,622
2016	HUFF AND SONS CONSTRUCTION	23,450	0.90	21,105
2016	JT THORPE & SONS INC	12,999	0.90	11,699
2016	M A G CONSTRUCTION	9,299	0.90	8,369
2015	HUFF AND SONS CONSTRUCTION	23,006	0.90	20,705
2015	JT THORPE & SONS INC	11,203	0.90	10,083
2015	M A G CONSTRUCTION	16,979	0.90	15,281
2014	HUFF AND SONS CONSTRUCTION	13,140	0.90	11,826
2014	JT THORPE & SONS INC	9,601	0.90	8,641

Plan Year Beginning January 1	Employer Name	Estimated Contribution Base Units*	Hourly Contribution Rate	Total Contributions
2014	M A G CONSTRUCTION	9,991	0.90	8,992
2013	HUFF AND SONS CONSTRUCTION	12,010	0.90	10,809
2013	JT THORPE & SONS INC	30,759	0.90	27,683
2013	M A G CONSTRUCTION	18,273	0.90	16,446
2012	HUFF AND SONS CONSTRUCTION	14,431	0.90	12,988
2012	JT THORPE & SONS INC	20,686	0.90	18,617
2012	M A G CONSTRUCTION	21,327	0.90	19,194
2012	VICKERS HARI CONTRACTING	10,648	0.90	9,583
2011	CAFFALL TILE	16,742	0.90	15,068
2011	HUFF AND SONS CONSTRUCTION	10,759	0.90	9,683
2011	JT THORPE & SONS INC	12,397	0.90	11,157
2011	M A G CONSTRUCTION	16,386	0.90	14,747
2011	VICKERS HARI CONTRACTING	22,032	0.90	19,829
2010	CAFFALL TILE	9,158	0.90	8,242
2010	HUFF AND SONS CONSTRUCTION	10,800	0.90	9,720
2010	JT THORPE & SONS INC	10,200	0.90	9,180
2010	M A G CONSTRUCTION	11,960	0.90	10,764
2010	SUN VALLEY MASONRY	71,970	0.90	64,773
2010	VICKERS HARI CONTRACTING	8,690	0.90	7,821

* Estimated by dividing total contributions 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	Total Employer Contributions*	Total Contribution Base Units (Hours)**	Annual Change in Hours	Average Hourly Contribution Rate**	Withdrawal Liability Payments***	Market Value Return on Assets
2019	\$115,394	76,540	0.9%	\$0.90	\$0	18.9%
2018	96,625	75,824	14.0%	0.90	0	-6.9%
2017	98,153	66,520	36.6%	0.90	2,062,095	15.8%
2016	80,007	48,712	-29.8%	0.90	497,716	6.4%
2015	98,340	69,342	56.0%	0.90	497,716	-1.2%
2014	81,965	44,446	-41.1%	0.90	497,716	3.7%
2013	87,778	75,446	0.3%	0.90	479,463	18.5%
2012	87,140	75,218	-27.5%	0.90	502,230	11.6%
2011	106,143	103,680	-35.0%	0.90	515,969	-1.6%
2010	153,973	159,561	N/A	0.90	0	13.6%
Compound Annual Growth Rate, 2010 to 2019			-7.9%			

*Reported in audited financial statements; including net reciprocity hours/contributions and excluding withdrawal liability payments.

**Excluding net reciprocity hours/contributions.

***Payments from four employers who withdrew in 2010.

Additional Contribution Base Unit and Contribution Rate Data*				
Plan Year	Non-Refractory Hours**	Refractory Hours**	Net Reciprocity Hours	Average Hourly Reciprocal Contribution Rate
2019	61,124	15,417	14,879	\$2.96
2018	59,161	16,664	6,122	5.39
2017	48,926	17,594	10,452	4.06
2016	33,733	14,979	11,892	3.22
2015	44,221	25,121	14,396	2.38
2014	24,426	20,020	14,385	3.25
2013	39,544	35,902	7,021	2.35
2012	50,668	24,550	9,700	1.58
2011	74,312	29,369	4,728	2.80
2010	141,430	18,131	6,607	2.20

*Based on unaudited information provided by the Plan administrator.

**Contribution rate for both non-refractory and refractory work was \$0.90 per hour for all years shown.

- 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.
- At their February 6, 2020 and August 6, 2020 meetings, the Trustees discussed the assumptions for contribution base units for the coming years. The Trustees' expectation is that future work levels will ultimately decline to approximately 50,000 hours per year. The decrease is primarily due to the expectation that refractory work may no longer be performed. In addition, year to date hours experience for 2020 showed that COVID-19 has had a negative impact on work. Recognizing this, the expected base units for 2020 and 2021 and the reciprocity load for 2020 have been lowered from that used in the 2020 PPA Certification.
- The average contribution rate for reciprocal contributions has been significantly higher than the Plan's contribution rate of \$0.90 per hour. The reciprocity load on contributions of 35% for 2020 and 40% for 2021 and later was developed based actual experience of the Plan.
- 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.

- **Asset information as of December 31, 2019** – For purposes of the projections included in Section 3.01, we used unaudited asset information as of December 31, 2019 provided by the Plan administrator and an estimated investment return of 18.9% provided by the investment manager. The projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06 were developed using the audited December 31, 2019 financial statements, which resulted in an investment return of 19.16% for the plan year ended December 31, 2019.
- **Investment returns after December 31, 2019** - For the purpose of the projections included in Section 3.01, we assumed 6.50% annual returns for plan years after December 31, 2020. 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 the estimated investment return of -1.1% for January 1, 2020 through June 30, 2020 provided by the investment manager, and the plan's target asset allocations and the expected returns (arithmetic) shown in Exhibit 15 of the 2020 edition of the Horizon Survey of Capital Market Assumptions.
- **Liability discount rate** - For the purpose of the projections included in Section 3.01, we assumed a 6.50% liability discount rate. The liability discount rate used to develop the projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06 was lowered to reflect the investment return assumption used to project future assets.
- **Form of benefit** - For the purpose of the projections included in Section 3.01, we assumed 25% elect the single life annuity and 75% elect the 100% joint and survivor with pop-up. The form of benefit assumption used to develop the projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06 was updated to closer match the actual experience of the Plan over the past five years.
- **New entrant profile** - For the purposes of the projections included in Section 3.01, we assumed that new entrants would have similar characteristics to those newly hired between January 1, 2016 and December 31, 2018. The new entrant profile assumption used to develop the projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06 were updated to reflect those newly hired and/or returned to work between January 1, 2015 and December 31, 2019, and also refined to include earned service at entry.
- **Contribution base units** – For the purposes of the projections included in Section 3.01, we assumed projected contribution base units of 68,000 hours for the plan year beginning January 1, 2020, 62,000 hours for the plan year beginning January 1, 2021, 56,000 hours for the plan year beginning January 1, 2022, and 50,000 hours for the plan year beginning January 1, 2023 and each year thereafter, including a 40% load on contributions for reciprocity. The contribution base units assumption used to develop the projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06 reflect the negative impact of COVID-19 on hours for the plan years beginning January 1, 2020 and January 1, 2021.
- **Administrative expenses** – For the purposes of the projections included in Section 3.01, we assumed that administrative expenses would be \$525,000 for the plan year beginning January 1, 2020, \$400,000 for the plan year beginning January 1, 2021, \$285,000 for the plan year beginning January 1, 2022, 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 better reflect expected expenses after 2021, to reflect lower expenses upon insolvency, to reflect an additional expense under a partition, and to reflect cost-sharing of expenses between the Original Plan and Successor Plan under a partition.
- **Administrative expenses load** - For the purposes of the projections included in Section 3.01, we did not include a load on the unit credit liability. For the projections described in Sections 3.02, 4.02(1), 4.03, 6.05 and 6.06, a load was added to recognize that over time expenses are projected to become a significant percentage of the Plan's cash outflow once benefit payments reach their peak and start to decline.

D. Proposed Benefit Suspensions

The application filed on behalf of the Arizona Bricklayers' Pension Trust Fund sets forth the following proposed benefit suspension to be effective January 1, 2022. The suspension is expected to continue indefinitely.

The application proposes that there shall be a maximum reduction in monthly benefits such that the revised monthly amount is 110% of the PBGC guaranteed benefit. 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).

E. Proposed Partition

The Trustees of the Arizona Bricklayers' Pension Trust Fund have applied for a partition effective January 1, 2022. Under the proposed partition, the guaranteed amounts for 188 terminated vested participants would be partitioned to the Successor Plan and paid for through financial assistance provided by the Pension Benefit Guaranty Corporation. Our analysis indicates that the level of financial assistance requested reasonably allows for the Plan to avoid insolvency.

F. Projection Exhibits

Below are the following projection exhibits:

- Checklist Item #5: Solvency Projection Supporting January 1, 2020 Critical and Declining PPA Status Certification
- Checklist Item #6: Original Plan Projection without Suspension or Partition
- Checklist Items #6 and #28: Original Plan Projection with Suspension and Partition
- Checklist Item #24: Projection of Amount of Reduction in Benefit Payments Attributable to Partition
- Checklist Item #27: Original Plan Projection with Suspension and Partition Assuming 1% Lower Investment Returns
- Checklist Item #27: Original Plan Projection with Suspension and Partition Assuming 2% Lower Investment Returns
- Checklist Item #27: Original Plan Projection with Suspension and Partition Assuming 10-Year Contribution Base Unit Trend of -6% Per Year
- Checklist Item #27: Original Plan Projection with Suspension and Partition Assuming 10-Year Contribution Base Unit Trend Minus 1%, or -7% Per Year

MPRA Application Checklist Item #5: Solvency Projection Supporting January 1, 2020 Critical and Declining PPA Status Certification

Plan Year	Market Value	Contributions	Benefit Payments by Status					Administrative Expenses	Investment Return (%)	Investment Return (\$)	Market Value	Available Resources
	Beginning of Year		Active	Retiree	Terminated Vested	Beneficiary	New Entrant				End of Year	
2019	26,730,380	113,000	0	0	0	0	2,128,450	334,535	18.90%	4,839,573	29,219,968	31,348,418
2020	29,219,968	85,680	28,412	1,815,230	240,665	308,201	1	525,000	6.50%	1,808,712	28,196,851	30,589,360
2021	28,196,851	78,120	41,859	1,764,867	307,256	291,186	2	400,000	6.50%	1,745,561	27,215,363	29,620,532
2022	27,215,363	70,560	49,544	1,711,844	372,082	274,233	2,584	285,000	6.50%	1,685,038	26,275,674	28,685,961
2023	26,275,674	63,000	61,663	1,656,291	454,921	257,446	3,436	290,700	6.50%	1,622,783	25,237,001	27,670,757
2024	25,237,001	63,000	69,619	1,598,358	520,881	240,919	4,011	296,514	6.50%	1,555,082	24,124,780	26,558,569
2025	24,124,780	63,000	77,965	1,538,208	586,686	224,742	4,571	302,444	6.50%	1,482,650	22,935,814	25,367,986
2026	22,935,814	63,000	87,729	1,476,016	647,879	209,000	5,320	308,492	6.50%	1,405,373	21,669,750	24,095,695
2027	21,669,750	63,000	94,265	1,411,992	690,512	193,769	8,266	314,663	6.50%	1,323,750	20,343,034	22,741,838
2028	20,343,034	63,000	98,989	1,346,375	737,419	179,118	9,903	320,956	6.50%	1,238,175	18,951,448	21,323,253
2029	18,951,448	63,000	105,347	1,279,430	788,764	165,104	11,401	327,375	6.50%	1,148,213	17,485,241	19,835,287
2030	17,485,241	63,000	111,939	1,211,435	827,671	151,769	13,051	333,923	6.50%	1,053,794	15,952,247	18,268,113
2031	15,952,247	63,000	114,109	1,142,697	867,127	139,143	15,098	340,601	6.50%	955,141	14,351,614	16,629,788
2032	14,351,614	63,000	114,459	1,073,553	904,005	127,244	19,084	347,413	6.50%	852,156	12,681,012	14,919,357
2033	12,681,012	63,000	116,047	1,004,349	932,646	116,068	21,801	354,361	6.50%	744,862	10,943,601	13,134,513
2034	10,943,601	63,000	118,840	935,433	946,852	105,593	24,425	361,449	6.50%	633,615	9,147,625	11,278,767
2035	9,147,625	63,000	120,198	867,154	969,448	95,794	27,075	368,678	6.50%	518,292	7,280,570	9,360,239
2036	7,280,570	63,000	122,792	799,870	971,476	86,652	29,867	376,051	6.50%	398,905	5,355,766	7,366,424
2037	5,355,766	63,000	121,936	733,963	983,902	78,147	33,149	383,573	6.50%	275,458	3,359,554	5,310,652
2038	3,359,554	63,000	120,732	669,839	987,964	70,253	36,117	391,244	6.50%	147,576	1,293,981	3,178,886
2039	1,293,981	63,000	123,122	607,902	998,579	62,946	39,098	399,069	6.50%	N/A	Insolvent	Insolvent

Comments/Notes

-Cash flow information for 2019 Plan Year based on December 31, 2019 unaudited financial statements. Total benefit payments for 2019 are shown under New Entrants column.

-Estimated 18.90% return for 2019 Plan Year provided by Investment Consultant.

-No future withdrawal liability payments are assumed.

-Plan is projected to become insolvent in plan year beginning January 1, 2039.

MPRA Application Checklist Item #6: Original Plan Projection without Suspension or Partition

Plan Year	Market Value	Benefit Payments by Status							Administrative	Investment	Investment	Market Value	Available	Solvency	Accrued	Funded
	Beginning	Contributions	Active	Retiree	Terminated	Vested	Beneficiary	New Entrant	Expenses	Return (%)	Return (\$)	Ending	Resources	Ratio	Liability	Percentage
2019	26,730,380	115,394	0	0	0	0	0	2,128,450	303,790	19.16%	4,908,124	29,321,658	31,450,108	14.78	38,580,897	69.3%
1/1/2020-6/30/2020	29,321,658	33,567	0	0	0	0	0	1,061,586	168,286	-1.10%	-315,940	27,809,413	29,246,367	12.19	38,070,969	77.0%
7/1/2020-12/31/2020	27,809,413	28,398	0	0	0	0	0	1,338,121	356,714	2.61%	703,684	26,846,660	N/A	N/A	N/A	N/A
2021	26,846,660	70,560	42,708	1,764,303	313,345	294,236	11	400,000	4.98%	1,269,467	25,372,084	27,786,687	11.51	37,269,541	72.0%	
2022	25,372,084	70,560	50,449	1,711,721	378,805	278,255	635	250,000	4.98%	1,199,593	23,972,372	26,392,237	10.91	36,539,221	69.4%	
2023	23,972,372	63,000	62,714	1,656,944	462,578	262,287	1,630	254,713	4.98%	1,128,939	22,463,444	24,909,598	10.18	35,914,193	66.7%	
2024	22,463,444	63,000	70,698	1,600,070	528,921	246,444	2,195	259,515	4.98%	1,053,623	20,872,224	23,320,551	9.53	35,218,849	63.8%	
2025	20,872,224	63,000	79,079	1,541,201	595,006	230,831	2,964	264,341	4.98%	974,243	19,196,044	21,645,125	8.84	34,478,722	60.5%	
2026	19,196,044	63,000	88,898	1,480,458	656,282	215,539	3,976	269,290	4.98%	890,744	17,435,345	19,880,497	8.13	33,689,529	57.0%	
2027	17,435,345	63,000	95,395	1,417,991	698,485	200,653	6,525	274,332	4.98%	803,579	15,608,541	18,027,592	7.45	32,852,297	53.1%	
2028	15,608,541	63,000	100,038	1,353,983	745,054	186,251	9,884	279,467	4.98%	713,065	13,709,928	16,105,139	6.72	31,987,072	48.8%	
2029	13,709,928	63,000	106,361	1,288,634	796,154	172,399	12,322	284,698	4.98%	618,861	11,731,223	14,107,092	5.94	31,089,678	44.1%	
2030	11,731,223	63,000	112,924	1,222,166	834,501	159,146	15,365	289,989	5.88%	615,285	9,775,416	12,119,518	5.17	30,154,259	38.9%	
2031	9,775,416	63,000	114,952	1,154,836	873,434	146,523	18,551	295,379	5.88%	501,166	7,735,907	10,044,203	4.35	29,191,855	33.5%	
2032	7,735,907	63,000	115,121	1,086,939	909,750	134,551	22,477	300,868	5.88%	382,227	5,611,428	7,880,266	3.47	28,205,872	27.4%	
2033	5,611,428	63,000	116,571	1,018,790	937,677	123,233	27,036	306,419	5.88%	258,466	3,403,168	5,626,475	2.53	27,199,016	20.6%	
2034	3,403,168	63,000	119,272	950,721	950,880	112,560	31,053	312,112	5.88%	130,160	1,119,731	3,284,216	1.52	26,177,949	13.0%	
2035	1,119,731	63,000	53,221	389,976	429,591	45,274	15,645	254,684	5.88%	N/A	Insolvent	Insolvent	0.44	25,155,637	4.5%	

Comments/Notes

- Information for 2019 Plan Year based on December 31, 2019 audited financial statements. Total benefit payments for 2019 are shown under New Entrants column.
- Information for 2020 Plan Year bifurcated between January 1, 2020 to June 30, 2020 and July 1, 2020 to December 31, 2020. Non-investment cash flows for the first half of the year are based on information provided by the plan administrator and assuming - 1.1% rate of return. Non-investment cash flows for the second half of the year are estimated such that the full year's expectation is met. In addition, the investment return was solved for such that the full year's return would match the assumption of 1.39%. Total benefit payments for the two periods of 2020 are shown under New Entrants column.
- No future withdrawal liability payments are assumed.
- Accrued liability includes expense loading equal to present value of future expenses (30 years), calculated at 5.5% discount rate.
- Plan is projected to become insolvent in plan year beginning January 1, 2035.

MPRA Application Checklist Item #6 and #28: Original Plan Projection with Suspension and Partition

	Market Value		Benefit Payments by Status						Administrative	Investment	Investment	Market Value	Available	Solvency	Accrued	Funded
Plan Year	Beginning	Contributions	Active	Retiree	Terminated Vested	Beneficiary	New Entrant	Expenses	Return (%)	Return (\$)	Ending	Resources	Ratio	Liability	Percentage	
2019	26,730,380	115,394	0	0	0	0	2,128,450	303,790	19.16%	4,908,124	29,321,658	31,450,108	14.78	37,804,523	70.7%	
1/1/2020-6/30/2020	29,321,658	33,567	0	0	0	0	1,061,586	168,286	-1.10%	-315,940	27,809,413	29,246,367	12.19	37,240,689	78.7%	
7/1/2020-12/31/2020	27,809,413	28,398	0	0	0	0	1,338,121	356,714	2.61%	703,684	26,846,660	N/A	N/A	N/A	N/A	
2021	26,846,660	70,560	42,708	1,764,303	313,345	294,236	11	400,000	4.98%	1,269,467	25,372,084	27,786,687	11.51	36,384,101	73.8%	
2022	25,372,084	70,560	47,289	1,605,959	31,466	265,247	635	187,769	4.98%	1,212,667	24,516,947	26,467,542	13.57	24,703,185	102.7%	
2023	24,516,947	63,000	58,832	1,551,980	38,854	249,563	1,630	190,608	4.98%	1,171,049	23,659,528	25,560,388	13.45	23,967,484	102.3%	
2024	23,659,528	63,000	66,388	1,496,056	45,168	234,025	2,194	193,477	4.98%	1,129,681	22,814,900	24,658,732	13.37	23,237,060	101.8%	
2025	22,814,900	63,000	74,243	1,438,313	51,733	218,736	2,964	196,076	4.98%	1,088,978	21,984,812	23,770,802	13.31	22,524,354	101.3%	
2026	21,984,812	63,000	83,501	1,378,891	58,068	203,790	3,975	198,853	4.98%	1,048,992	21,169,725	22,897,951	13.25	21,828,111	100.7%	
2027	21,169,725	63,000	89,715	1,317,967	63,336	189,272	6,525	201,665	4.98%	1,009,842	20,374,087	22,040,902	13.22	21,147,926	100.1%	
2028	20,374,087	63,000	94,123	1,255,746	69,680	175,261	9,884	204,519	4.98%	971,677	19,599,551	21,204,244	13.21	20,488,251	99.4%	
2029	19,599,551	63,000	100,110	1,192,454	81,332	161,822	12,321	207,424	4.98%	934,427	18,841,515	20,389,554	13.17	19,850,577	98.7%	
2030	18,841,515	63,000	106,248	1,128,337	91,111	149,006	15,365	210,198	5.88%	1,060,433	18,264,683	19,754,750	13.26	19,231,015	98.0%	
2031	18,264,683	63,000	108,163	1,063,673	105,262	136,843	18,550	213,027	5.88%	1,028,102	17,710,267	19,142,759	13.36	18,632,338	98.0%	
2032	17,710,267	63,000	108,355	998,772	145,642	125,352	22,477	211,397	5.88%	996,474	17,157,746	18,558,344	13.25	18,055,966	98.1%	
2033	17,157,746	63,000	109,755	933,958	179,554	114,536	27,035	214,164	5.88%	964,942	16,606,687	17,971,524	13.17	17,481,477	98.1%	
2034	16,606,687	63,000	112,285	869,562	201,253	104,382	31,053	217,263	5.88%	933,791	16,067,682	17,386,215	13.19	16,908,141	98.2%	
2035	16,067,682	63,000	113,452	805,911	231,687	94,874	35,427	220,516	5.88%	903,081	15,531,897	16,813,247	13.12	16,346,599	98.3%	
2036	15,531,897	63,000	115,836	743,339	244,281	85,993	39,887	223,708	5.88%	872,992	15,014,846	16,244,181	13.21	15,787,947	98.4%	
2037	15,014,846	63,000	114,931	682,199	267,953	77,721	45,008	227,096	5.88%	843,695	14,506,632	15,694,444	13.21	15,247,691	98.5%	
2038	14,506,632	63,000	113,702	622,862	285,127	70,036	50,617	230,989	5.88%	815,016	14,011,315	15,153,659	13.27	14,715,848	98.6%	
2039	14,011,315	63,000	116,033	565,684	309,838	62,916	55,646	234,903	5.88%	786,712	13,516,006	14,626,124	13.18	14,197,474	98.7%	
2040	13,516,006	63,000	114,541	510,995	330,081	56,335	60,894	239,147	5.88%	758,545	13,025,558	14,098,405	13.14	13,680,026	98.8%	
2041	13,025,558	63,000	112,887	459,064	341,951	50,268	66,165	243,774	5.88%	730,805	12,545,254	13,575,589	13.18	13,168,453	98.9%	
2042	12,545,254	63,000	113,750	410,102	354,132	44,684	71,840	248,846	5.88%	703,454	12,068,355	13,062,862	13.14	12,668,035	99.0%	
2043	12,068,355	63,000	111,258	364,274	367,330	39,552	77,810	254,427	5.88%	676,244	11,592,948	12,553,171	13.07	12,172,019	99.1%	
2044	11,592,948	63,000	108,327	321,701	364,523	34,838	83,328	260,584	5.88%	649,489	11,132,135	12,044,853	13.20	11,678,534	99.3%	
2045	11,132,135	63,000	112,046	282,465	366,879	30,520	88,947	267,383	5.88%	623,119	10,670,014	11,550,871	13.11	11,200,732	99.4%	
2046	10,670,014	63,000	108,215	246,597	364,628	26,577	94,517	263,429	5.88%	597,230	10,226,281	11,066,816	13.17	10,722,693	99.5%	
2047	10,226,281	63,000	106,410	214,070	358,282	22,994	100,698	252,969	5.88%	572,545	9,806,403	10,608,857	13.22	10,264,170	99.6%	
2048	9,806,403	63,000	102,413	184,790	355,133	19,755	107,246	243,534	5.88%	549,089	9,405,621	10,174,958	13.23	9,830,603	99.8%	
2049	9,405,621	63,000	97,816	158,627	347,729	16,847	113,083	233,344	5.88%	526,840	9,028,016	9,762,117	13.30	9,417,203	99.9%	
2050	9,028,016	63,000	94,272	135,423	339,769	14,255	119,013	224,201	5.88%	505,810	8,669,893	9,372,625	13.34	9,028,040	100.0%	
2051	8,669,893	63,000	89,317	114,993	331,233	11,962	124,845	215,183	5.88%	485,895	8,331,256	9,003,605	13.39	8,659,389	100.1%	
2052	8,331,256	63,000	84,252	97,137	322,102	9,949	130,577	206,510	5.88%	467,055	8,010,783	8,654,800	13.44	8,311,233	100.2%	

Comments/Notes

-Information for 2019 Plan Year based on December 31, 2019 audited financial statements. Total benefit payments for 2019 are shown under New Entrants column.

-Information for 2020 Plan Year bifurcated between January 1, 2020 to June 30, 2020 and July 1, 2020 to December 31, 2020. Non-investment cash flows for the first half of the year are based on information provided by the plan administrator and assuming - 1.1% rate of return. Non-investment cash flows for the second half of the year are estimated such that the full year's expectation is met. In addition, the investment return was solved such that the full year's return would match the assumption of 1.39%. Total benefit payments for the two periods of 2020 are shown under New Entrants column.

-No future withdrawal liability payments are assumed.

-Maximum suspension and partition effective January 1, 2022.

-Administrative expenses expected to increase by 5% due to partition and are pro-rated between Original Plan and Successor Plan based on projected headcounts.

-Original Plan is projected to remain solvent with suspension and partition and become 100% funded at the end of the extended period.

-Accrued liability includes expense loading equal to present value of future expenses (30 years), calculated at 5.5% discount rate.

Report of Required Actuarial Information – Application for Proposed Benefit Suspensions

MPRA Application Checklist Item #24: Projection of Amount of Reduction in Benefit Payments Attributable to Partition

Year	Benefit Payments by Status				
	<u>Active</u>	<u>Retiree</u>	<u>Terminated Vested</u>	<u>Beneficiary</u>	<u>New Entrant</u>
2022	0	0	293,844	0	0
2023	0	0	362,724	0	0
2024	0	0	416,882	0	0
2025	0	0	470,368	0	0
2026	0	0	519,356	0	0
2027	0	0	553,153	0	0
2028	0	0	589,599	0	0
2029	0	0	624,365	0	0
2030	0	0	650,086	0	0
2031	0	0	671,856	0	0
2032	0	0	664,687	0	0
2033	0	0	656,734	0	0
2034	0	0	647,915	0	0
2035	0	0	638,145	0	0
2036	0	0	627,336	0	0
2037	0	0	615,399	0	0
2038	0	0	602,246	0	0
2039	0	0	587,792	0	0
2040	0	0	571,956	0	0
2041	0	0	554,672	0	0
2042	0	0	535,887	0	0
2043	0	0	515,576	0	0
2044	0	0	493,745	0	0
2045	0	0	470,448	0	0
2046	0	0	445,785	0	0
2047	0	0	419,900	0	0
2048	0	0	392,984	0	0
2049	0	0	365,262	0	0
2050	0	0	336,998	0	0
2051	0	0	308,484	0	0
2052	0	0	280,031	0	0

MPRA Application Checklist Item #27: Original Plan Projection with Suspension and Partition Assuming 1% Lower Investment Returns

	Market Value		Benefit Payments by Status						Administrative	Investment	Investment	Market Value	Available	Solvency	Accrued	Funded
Plan Year	Beginning	Contributions	Active	Retiree	Terminated	Vested	Beneficiary	New Entrant	Expenses	Return (%)	Return (\$)	Ending	Resources	Ratio	Liability	Percentage
2019	26,730,380	115,394	0	0	0	0	0	2,128,450	303,790	19.16%	4,908,124	29,321,658	31,450,108	14.78	37,804,523	70.7%
1/1/2020-6/30/2020	29,321,658	33,567	0	0	0	0	0	1,061,586	168,286	-1.10%	-315,940	27,809,413	28,967,401	12.19	37,240,689	78.7%
7/1/2020-12/31/2020	27,809,413	28,398	0	0	0	0	0	1,338,121	356,714	1.57%	424,718	26,567,694	N/A	N/A	N/A	N/A
2021	26,567,694	70,560	42,708	1,764,303	313,345	294,236	11	400,000	3.98%	1,003,321	24,826,972	27,241,575	11.28	36,384,101	73.0%	
2022	24,826,972	70,560	47,289	1,605,959	31,466	265,247	635	187,769	3.98%	947,366	23,706,534	25,657,129	13.15	24,703,185	100.5%	
2023	23,706,534	63,000	58,832	1,551,980	38,854	249,563	1,630	190,608	3.98%	903,547	22,581,613	24,482,473	12.88	23,967,484	98.9%	
2024	22,581,613	63,000	66,388	1,496,056	45,168	234,025	2,194	193,477	3.98%	859,843	21,467,147	23,310,979	12.64	23,237,060	97.2%	
2025	21,467,147	63,000	74,243	1,438,313	51,733	218,736	2,964	196,076	3.98%	816,576	20,364,657	22,150,647	12.40	22,524,354	95.3%	
2026	20,364,657	63,000	83,501	1,378,891	58,068	203,790	3,975	198,853	3.98%	773,780	19,274,358	21,002,584	12.15	21,828,111	93.3%	
2027	19,274,358	63,000	89,715	1,317,967	63,336	189,272	6,525	201,665	3.98%	731,541	18,200,419	19,867,234	11.92	21,147,926	91.1%	
2028	18,200,419	63,000	94,123	1,255,746	69,680	175,261	9,884	204,519	3.98%	689,966	17,144,172	18,748,865	11.68	20,488,251	88.8%	
2029	17,144,172	63,000	100,110	1,192,454	81,332	161,822	12,321	207,424	3.98%	648,987	16,100,696	17,648,735	11.40	19,850,577	86.4%	
2030	16,100,696	63,000	106,248	1,128,337	91,111	149,006	15,365	210,198	4.88%	746,241	15,209,672	16,699,739	11.21	19,231,015	83.7%	
2031	15,209,672	63,000	108,163	1,063,673	105,262	136,843	18,550	213,027	4.88%	704,078	14,331,232	15,763,724	11.00	18,632,338	81.6%	
2032	14,331,232	63,000	108,355	998,772	145,642	125,352	22,477	211,397	4.88%	662,019	13,444,256	14,844,854	10.60	18,055,966	79.4%	
2033	13,444,256	63,000	109,755	933,958	179,554	114,536	27,035	214,164	4.88%	619,530	12,547,785	13,912,622	10.19	17,481,477	76.9%	
2034	12,547,785	63,000	112,285	869,562	201,253	104,382	31,053	217,263	4.88%	576,824	11,651,813	12,970,346	9.84	16,908,141	74.2%	
2035	11,651,813	63,000	113,452	805,911	231,687	94,874	35,427	220,516	4.88%	533,918	10,746,865	12,028,215	9.39	16,346,599	71.3%	
2036	10,746,865	63,000	115,836	743,339	244,281	85,993	39,887	223,708	4.88%	490,934	9,847,756	11,077,091	9.01	15,787,947	68.1%	
2037	9,847,756	63,000	114,931	682,199	267,953	77,721	45,008	227,096	4.88%	447,977	8,943,824	10,131,636	8.53	15,247,691	64.6%	
2038	8,943,824	63,000	113,702	622,862	285,127	70,036	50,617	230,989	4.88%	404,867	8,038,358	9,180,702	8.04	14,715,848	60.8%	
2039	8,038,358	63,000	116,033	565,684	309,838	62,916	55,646	234,903	4.88%	361,363	7,117,700	8,227,818	7.41	14,197,474	56.6%	
2040	7,117,700	63,000	114,541	510,995	330,081	56,335	60,894	239,147	4.88%	317,231	6,185,938	7,258,785	6.77	13,680,026	52.0%	
2041	6,185,938	63,000	112,887	459,064	341,951	50,268	66,165	243,774	4.88%	272,675	5,247,504	6,277,839	6.09	13,168,453	47.0%	
2042	5,247,504	63,000	113,750	410,102	354,132	44,684	71,840	248,846	4.88%	227,621	4,294,772	5,289,279	5.32	12,668,035	41.4%	
2043	4,294,772	63,000	111,258	364,274	367,330	39,552	77,810	254,427	4.88%	181,819	3,324,940	4,285,163	4.46	12,172,019	35.3%	
2044	3,324,940	63,000	108,327	321,701	364,523	34,838	83,328	260,584	4.88%	135,488	2,350,126	3,262,844	3.57	11,678,534	28.5%	
2045	2,350,126	63,000	112,046	282,465	366,879	30,520	88,947	267,383	4.88%	88,522	1,353,408	2,234,265	2.54	11,200,732	21.0%	
2046	1,353,408	63,000	108,215	246,597	364,628	26,577	94,517	263,429	4.88%	40,949	353,394	1,193,929	1.42	10,722,693	12.6%	
2047	353,394	63,000	106,410	214,070	358,282	22,994	100,698	252,969	4.88%	N/A	Insolvent	Insolvent	0.20	10,264,170	3.4%	

Comments/Notes

-Information for 2019 Plan Year based on December 31, 2019 audited financial statements. Total benefit payments for 2019 are shown under New Entrants column.

-Information for 2020 Plan Year bifurcated between January 1, 2020 to June 30, 2020 and July 1, 2020 to December 31, 2020. Non-investment cash flows for the first half of the year are based on information provided by the plan administrator and assuming - 1.1% rate of return. Non-investment cash flows for the second half of the year are estimated such that the full year's expectation is met. In addition, the investment return was solved such that the full year's return would match the assumption of 0.39%. Total benefit payments for the two periods of 2020 are shown under New Entrants column.

-No future withdrawal liability payments are assumed.

-Maximum suspension and partition effective January 1, 2022.

-Administrative expenses expected to increase by 5% due to partition and are pro-rated between Original Plan and Successor Plan based on projected headcounts.

-Accrued liability includes expense loading equal to present value of future expenses (30 years), calculated at 5.5% discount rate.

-Original Plan is projected to become insolvent in the plan year beginning January 1, 2047 if returns are 1% lower than the baseline scenario.

Report of Required Actuarial Information – Application for Proposed Benefit Suspensions

Arizona Bricklayers' Pension Trust Fund

MPRA Application Checklist Item #27: Original Plan Projection with Suspension and Partition Assuming 2% Lower Investment Returns

	Market Value		Benefit Payments by Status						Administrative	Investment	Investment	Market Value	Available	Solvency	Accrued	Funded
Plan Year	Beginning	Contributions	Active	Retiree	Terminated	Vested	Beneficiary	New Entrant	Expenses	Return (%)	Return (\$)	Ending	Resources	Ratio	Liability	Percentage
2019	26,730,380	115,394	0	0		0	0	2,128,450	303,790	19.16%	4,908,124	29,321,658	31,450,108	14.78	37,804,523	70.7%
1/1/2020-6/30/2020	29,321,658	33,567	0	0		0	0	1,061,586	168,286	-1.10%	-315,940	27,809,413	28,688,506	12.19	37,240,689	78.7%
7/1/2020-12/31/2020	27,809,413	28,398	0	0		0	0	1,338,121	356,714	0.54%	145,823	26,288,799	N/A	N/A	N/A	N/A
2021	26,288,799	70,560	42,708	1,764,303		313,345	294,236	11	400,000	2.98%	742,820	24,287,576	26,702,179	11.06	36,384,101	72.3%
2022	24,287,576	70,560	47,289	1,605,959		31,466	265,247	635	187,769	2.98%	693,186	22,912,958	24,863,553	12.75	24,703,185	98.3%
2023	22,912,958	63,000	58,832	1,551,980		38,854	249,563	1,630	190,608	2.98%	652,804	21,537,294	23,438,154	12.33	23,967,484	95.6%
2024	21,537,294	63,000	66,388	1,496,056		45,168	234,025	2,194	193,477	2.98%	612,610	20,175,595	22,019,427	11.94	23,237,060	92.7%
2025	20,175,595	63,000	74,243	1,438,313		51,733	218,736	2,964	196,076	2.98%	572,849	18,829,378	20,615,368	11.54	22,524,354	89.6%
2026	18,829,378	63,000	83,501	1,378,891		58,068	203,790	3,975	198,853	2.98%	533,545	17,498,844	19,227,070	11.13	21,828,111	86.3%
2027	17,498,844	63,000	89,715	1,317,967		63,336	189,272	6,525	201,665	2.98%	494,761	16,188,125	17,854,940	10.71	21,147,926	82.7%
2028	16,188,125	63,000	94,123	1,255,746		69,680	175,261	9,884	204,519	2.98%	456,579	14,898,491	16,503,184	10.28	20,488,251	79.0%
2029	14,898,491	63,000	100,110	1,192,454		81,332	161,822	12,321	207,424	2.98%	418,942	13,624,970	15,173,009	9.80	19,850,577	75.1%
2030	13,624,970	63,000	106,248	1,128,337		91,111	149,006	15,365	210,198	3.88%	497,188	12,484,893	13,974,960	9.38	19,231,015	70.8%
2031	12,484,893	63,000	108,163	1,063,673		105,262	136,843	18,550	213,027	3.88%	454,005	11,356,380	12,788,872	8.93	18,632,338	67.0%
2032	11,356,380	63,000	108,355	998,772		145,642	125,352	22,477	211,397	3.88%	410,863	10,218,248	11,618,846	8.30	18,055,966	62.9%
2033	10,218,248	63,000	109,755	933,958		179,554	114,536	27,035	214,164	3.88%	367,337	9,069,584	10,434,421	7.65	17,481,477	58.5%
2034	9,069,584	63,000	112,285	869,562		201,253	104,382	31,053	217,263	3.88%	323,600	7,920,388	9,238,921	7.01	16,908,141	53.6%
2035	7,920,388	63,000	113,452	805,911		231,687	94,874	35,427	220,516	3.88%	279,663	6,761,185	8,042,535	6.28	16,346,599	48.5%
2036	6,761,185	63,000	115,836	743,339		244,281	85,993	39,887	223,708	3.88%	235,624	5,606,766	6,836,101	5.56	15,787,947	42.8%
2037	5,606,766	63,000	114,931	682,199		267,953	77,721	45,008	227,096	3.88%	191,565	4,446,422	5,634,234	4.74	15,247,691	36.8%
2038	4,446,422	63,000	113,702	622,862		285,127	70,036	50,617	230,989	3.88%	147,343	3,283,432	4,425,776	3.87	14,715,848	30.2%
2039	3,283,432	63,000	116,033	565,684		309,838	62,916	55,646	234,903	3.88%	102,763	2,104,174	3,214,292	2.90	14,197,474	23.1%
2040	2,104,174	63,000	114,541	510,995		330,081	56,335	60,894	239,147	3.88%	57,642	912,823	1,985,670	1.85	13,680,026	15.4%
2041	912,823	63,000	112,887	459,064		341,951	50,268	66,165	243,774	3.88%	N/A	Insolvent	Insolvent	0.72	13,168,453	6.9%

Comments/Notes

-Information for 2019 Plan Year based on December 31, 2019 audited financial statements. Total benefit payments for 2019 are shown under New Entrants column.

-Information for 2020 Plan Year bifurcated between January 1, 2020 to June 30, 2020 and July 1, 2020 to December 31, 2020. Non-investment cash flows for the first half of the year are based on information provided by the plan administrator and assuming - 1.1% rate of return. Non-investment cash flows for the second half of the year are estimated such that the full year's expectation is met. In addition, the investment return was solved such that the full year's return would match the assumption of -0.61%. Total benefit payments for the two periods of 2020 are shown under New Entrants column.

-No future withdrawal liability payments are assumed.

-Maximum suspension and partition effective January 1, 2022.

-Administrative expenses expected to increase by 5% due to partition and are pro-rated between Original Plan and Successor Plan based on projected headcounts.

-Accrued liability includes expense loading equal to present value of future expenses (30 years), calculated at 5.5% discount rate.

-Original Plan is projected to become insolvent in the plan year beginning January 1, 2041 if returns are 2% lower than the baseline scenario.

MPRA Application Checklist Item #27: Original Plan Projection with Suspension and Partition Assuming 10-Year Contribution Base Unit Trend of -7.9% Per Year

	Market Value			Benefit Payments by Status					Administrative	Investment	Investment	Market Value	Available	Solvency	Accrued	Funded
	Plan Year	Beginning	Contributions	Active	Retiree	Terminated Vested	Beneficiary	New Entrant	Expenses	Return (%)	Return (\$)	Ending	Resources	Ratio	Liability	Percentage
	2019	26,730,380	115,394	0	0	0	0	2,128,450	303,790	19.16%	4,908,124	29,321,658	31,450,108	14.78	37,804,523	70.7%
1/1/2020-6/30/2020		29,321,658	33,567	0	0	0	0	1,061,586	168,286	-1.10%	-315,940	27,809,413	29,290,986	12.21	37,240,689	78.7%
7/1/2020-12/31/2020		27,809,413	72,711	0	0	0	0	1,338,121	356,714	2.61%	703,991	26,891,280	N/A	N/A	N/A	N/A
	2021	26,891,280	97,882	42,708	1,764,303	313,345	294,236	11	400,000	4.98%	1,272,361	25,446,920	27,861,523	11.54	36,384,101	73.9%
	2022	25,446,920	90,149	47,289	1,605,959	31,466	265,247	635	187,769	4.98%	1,216,876	24,615,581	26,566,176	13.62	24,703,185	103.0%
	2023	24,615,581	83,027	58,832	1,551,980	38,854	249,563	1,630	190,608	4.98%	1,176,453	23,783,594	25,684,453	13.51	23,967,484	102.7%
	2024	23,783,594	76,468	66,388	1,496,056	45,168	234,025	2,194	193,477	4.98%	1,136,191	22,958,944	24,802,776	13.45	23,237,060	102.4%
	2025	22,958,944	70,427	74,243	1,438,313	51,733	218,736	2,964	196,076	4.98%	1,096,334	22,143,639	23,929,629	13.40	22,524,354	101.9%
	2026	22,143,639	64,864	83,501	1,378,891	58,068	203,790	3,975	198,853	4.98%	1,056,947	21,338,370	23,066,597	13.35	21,828,111	101.4%
	2027	21,338,370	59,739	89,715	1,317,967	63,336	189,272	6,525	201,665	4.98%	1,018,160	20,547,790	22,214,605	13.33	21,147,926	100.9%
	2028	20,547,790	55,020	94,123	1,255,746	69,680	175,261	9,884	204,519	4.98%	980,131	19,773,728	21,378,421	13.32	20,488,251	100.3%
	2029	19,773,728	50,673	100,110	1,192,454	81,332	161,822	12,321	207,424	4.98%	942,798	19,011,736	20,559,775	13.28	19,850,577	99.6%
	2030	19,011,736	46,670	106,248	1,128,337	91,111	149,006	15,365	210,198	5.88%	1,069,969	18,428,111	19,918,178	13.37	19,231,015	98.9%
	2031	18,428,111	42,983	108,163	1,063,673	105,262	136,843	18,550	213,027	5.88%	1,037,131	17,862,707	19,295,198	13.47	18,632,338	98.9%
	2032	17,862,707	39,588	108,355	998,772	145,642	125,352	22,477	211,397	5.88%	1,004,759	17,295,058	18,695,656	13.35	18,055,966	98.9%
	2033	17,295,058	36,460	109,755	933,958	179,554	114,536	27,035	214,164	5.88%	972,246	16,724,763	18,089,600	13.25	17,481,477	98.9%
	2034	16,724,763	33,580	112,285	869,562	201,253	104,382	31,053	217,263	5.88%	939,882	16,162,429	17,480,962	13.26	16,908,141	98.9%
	2035	16,162,429	30,927	113,452	805,911	231,687	94,874	35,427	220,516	5.88%	907,723	15,599,213	16,880,563	13.17	16,346,599	98.9%
	2036	15,599,213	28,484	115,836	743,339	244,281	85,993	39,887	223,708	5.88%	875,950	15,050,604	16,279,939	13.24	15,787,947	98.8%
	2037	15,050,604	26,234	114,931	682,199	267,953	77,721	45,008	227,096	5.88%	844,732	14,506,660	15,694,473	13.21	15,247,691	98.7%
	2038	14,506,660	24,161	113,702	622,862	285,127	70,036	50,617	230,989	5.88%	813,893	13,971,382	15,113,725	13.23	14,715,848	98.6%
	2039	13,971,382	22,252	116,033	565,684	309,838	62,916	55,646	234,903	5.88%	783,183	13,431,796	14,541,914	13.10	14,197,474	98.4%
	2040	13,431,796	20,494	114,541	510,995	330,081	56,335	60,894	239,147	5.88%	752,362	12,892,659	13,965,506	13.02	13,680,026	98.2%
	2041	12,892,659	18,875	112,887	459,064	341,951	50,268	66,165	243,774	5.88%	721,712	12,359,138	13,389,472	13.00	13,168,453	97.9%
	2042	12,359,138	17,384	113,750	410,102	354,132	44,684	71,840	248,846	5.88%	691,189	11,824,357	12,818,865	12.89	12,668,035	97.6%
	2043	11,824,357	16,011	111,258	364,274	367,330	39,552	77,810	254,427	5.88%	660,536	11,286,254	12,246,477	12.75	12,172,019	97.1%
	2044	11,286,254	14,746	108,327	321,701	364,523	34,838	83,328	260,584	5.88%	630,057	10,757,754	11,670,472	12.79	11,678,534	96.6%
	2045	10,757,754	13,581	112,046	282,465	366,879	30,520	88,947	267,383	5.88%	599,673	10,222,769	11,103,625	12.61	11,200,732	96.0%
	2046	10,222,769	12,508	108,215	246,597	364,628	26,577	94,517	263,429	5.88%	569,468	9,700,782	10,541,316	12.54	10,722,693	95.3%
	2047	9,700,782	11,520	106,410	214,070	358,282	22,994	100,698	252,969	5.88%	540,154	9,197,033	9,999,487	12.46	10,264,170	94.5%
	2048	9,197,033	10,610	102,413	184,790	355,133	19,755	107,246	243,534	5.88%	511,740	8,706,512	9,475,848	12.32	9,830,603	93.6%
	2049	8,706,512	9,772	97,816	158,627	347,729	16,847	113,083	233,344	5.88%	484,189	8,233,027	8,967,128	12.22	9,417,203	92.5%
	2050	8,233,027	9,000	94,272	135,423	339,769	14,255	119,013	224,201	5.88%	457,500	7,772,594	8,475,326	12.06	9,028,040	91.2%
	2051	7,772,594	8,289	89,317	114,993	331,233	11,962	124,845	215,183	5.88%	431,548	7,324,898	7,997,248	11.89	8,659,389	89.8%
	2052	7,324,898	7,634	84,252	97,137	322,102	9,949	130,577	206,510	5.88%	406,277	6,888,282	7,532,299	11.70	8,311,233	88.1%

Comments/Notes

- Information for 2019 Plan Year based on December 31, 2019 audited financial statements. Total benefit payments for 2019 are shown under New Entrants column.
- Information for 2020 Plan Year bifurcated between January 1, 2020 to June 30, 2020 and July 1, 2020 to December 31, 2020. Non-investment cash flows for the first half of the year are based on information provided by the plan administrator and assuming - 1.1% rate of return. Non-investment cash flows for the second half of the year are estimated such that the full year's expectation is met. In addition, the investment return was solved such that the full year's return would match the assumption of 1.39%. Total benefit payments for the two periods of 2020 are shown under New Entrants column.
- No future withdrawal liability payments are assumed.
- Maximum suspension and partition effective January 1, 2022.
- Administrative expenses expected to increase by 5% due to partition and are pro-rated between Original Plan and Successor Plan based on projected headcounts.
- Original Plan is projected to remain solvent with suspension and partition but not projected to be 100% funded at the end of the extended period.
- Accrued liability includes expense loading equal to present value of future expenses (30 years), calculated at 5.5% discount rate.

MPRA Application Checklist Item #27: Original Plan Projection with Suspension and Partition Assuming 10-Year Contribution Base Unit Trend Minus 1%, or -8.9% Per Year

	Market Value			Benefit Payments by Status					Administrative	Investment	Investment	Market Value	Available	Solvency	Accrued	Funded
	Plan Year	Beginning	Contributions	Active	Retiree	Terminated Vested	Beneficiary	New Entrant	Expenses	Return (%)	Return (\$)	Ending	Resources	Ratio	Liability	Percentage
	2019	26,730,380	115,394	0	0	0	0	2,128,450	303,790	19.16%	4,908,124	29,321,658	31,450,108	14.78	37,804,523	70.7%
1/1/2020-6/30/2020		29,321,658	33,567	0	0	0	0	1,061,586	168,286	-1.10%	-315,940	27,809,413	29,289,825	12.21	37,240,689	78.7%
7/1/2020-12/31/2020		27,809,413	71,557	0	0	0	0	1,338,121	356,714	2.61%	703,983	26,890,118	N/A	N/A	N/A	N/A
	2021	26,890,118	95,768	42,708	1,764,303	313,345	294,236	11	400,000	4.98%	1,272,251	25,443,534	27,858,137	11.54	36,384,101	73.9%
	2022	25,443,534	87,245	47,289	1,605,959	31,466	265,247	635	187,769	4.98%	1,216,636	24,609,050	26,559,646	13.62	24,703,185	103.0%
	2023	24,609,050	79,480	58,832	1,551,980	38,854	249,563	1,630	190,608	4.98%	1,176,041	23,773,103	25,673,963	13.51	23,967,484	102.7%
	2024	23,773,103	72,406	66,388	1,496,056	45,168	234,025	2,194	193,477	4.98%	1,135,569	22,943,769	24,787,601	13.44	23,237,060	102.3%
	2025	22,943,769	65,962	74,243	1,438,313	51,733	218,736	2,964	196,076	4.98%	1,095,468	22,123,133	23,909,123	13.39	22,524,354	101.9%
	2026	22,123,133	60,091	83,501	1,378,891	58,068	203,790	3,975	198,853	4.98%	1,055,809	21,311,954	23,040,181	13.33	21,828,111	101.4%
	2027	21,311,954	54,743	89,715	1,317,967	63,336	189,272	6,525	201,665	4.98%	1,016,722	20,514,940	22,181,755	13.31	21,147,926	100.8%
	2028	20,514,940	49,871	94,123	1,255,746	69,680	175,261	9,884	204,519	4.98%	978,369	19,733,967	21,338,660	13.30	20,488,251	100.1%
	2029	19,733,967	45,433	100,110	1,192,454	81,332	161,822	12,321	207,424	4.98%	940,689	18,964,625	20,512,664	13.25	19,850,577	99.4%
	2030	18,964,625	41,389	106,248	1,128,337	91,111	149,006	15,365	210,198	5.88%	1,067,046	18,372,796	19,862,863	13.33	19,231,015	98.6%
	2031	18,372,796	37,705	108,163	1,063,673	105,262	136,843	18,550	213,027	5.88%	1,033,726	17,798,709	19,231,200	13.43	18,632,338	98.6%
	2032	17,798,709	34,350	108,355	998,772	145,642	125,352	22,477	211,397	5.88%	1,000,844	17,221,907	18,622,506	13.30	18,055,966	98.6%
	2033	17,221,907	31,293	109,755	933,958	179,554	114,536	27,035	214,164	5.88%	967,795	16,641,994	18,006,831	13.19	17,481,477	98.5%
	2034	16,641,994	28,507	112,285	869,562	201,253	104,382	31,053	217,263	5.88%	934,868	16,069,573	17,388,107	13.19	16,908,141	98.4%
	2035	16,069,573	25,970	113,452	805,911	231,687	94,874	35,427	220,516	5.88%	902,119	15,495,797	16,777,147	13.09	16,346,599	98.3%
	2036	15,495,797	23,659	115,836	743,339	244,281	85,993	39,887	223,708	5.88%	869,729	14,936,142	16,165,477	13.15	15,787,947	98.1%
	2037	14,936,142	21,553	114,931	682,199	267,953	77,721	45,008	227,096	5.88%	837,866	14,380,652	15,568,464	13.11	15,247,691	98.0%
	2038	14,380,652	19,635	113,702	622,862	285,127	70,036	50,617	230,989	5.88%	806,352	13,833,306	14,975,650	13.11	14,715,848	97.7%
	2039	13,833,306	17,888	116,033	565,684	309,838	62,916	55,646	234,903	5.88%	774,938	13,281,111	14,391,229	12.96	14,197,474	97.4%
	2040	13,281,111	16,296	114,541	510,995	330,081	56,335	60,894	239,147	5.88%	743,380	12,728,793	13,801,640	12.86	13,680,026	97.1%
	2041	12,728,793	14,845	112,887	459,064	341,951	50,268	66,165	243,774	5.88%	711,959	12,181,489	13,211,824	12.82	13,168,453	96.7%
	2042	12,181,489	13,524	113,750	410,102	354,132	44,684	71,840	248,846	5.88%	680,631	11,632,290	12,626,798	12.70	12,668,035	96.2%
	2043	11,632,290	12,320	111,258	364,274	367,330	39,552	77,810	254,427	5.88%	649,135	11,079,095	12,039,318	12.54	12,172,019	95.6%
	2044	11,079,095	11,224	108,327	321,701	364,523	34,838	83,328	260,584	5.88%	617,774	10,534,790	11,447,509	12.54	11,678,534	94.9%
	2045	10,534,790	10,225	112,046	282,465	366,879	30,520	88,947	267,383	5.88%	586,466	9,983,242	10,864,099	12.33	11,200,732	94.1%
	2046	9,983,242	9,315	108,215	246,597	364,628	26,577	94,517	263,429	5.88%	555,292	9,443,886	10,284,420	12.24	10,722,693	93.1%
	2047	9,443,886	8,486	106,410	214,070	358,282	22,994	100,698	252,969	5.88%	524,960	8,921,909	9,724,363	12.12	10,264,170	92.0%
	2048	8,921,909	7,731	102,413	184,790	355,133	19,755	107,246	243,534	5.88%	495,479	8,412,247	9,181,584	11.93	9,830,603	90.8%
	2049	8,412,247	7,043	97,816	158,627	347,729	16,847	113,083	233,344	5.88%	466,808	7,918,653	8,652,753	11.79	9,417,203	89.3%
	2050	7,918,653	6,416	94,272	135,423	339,769	14,255	119,013	224,201	5.88%	438,940	7,437,076	8,139,808	11.58	9,028,040	87.7%
	2051	7,437,076	5,845	89,317	114,993	331,233	11,962	124,845	215,183	5.88%	411,749	6,967,137	7,639,487	11.36	8,659,389	85.9%
	2052	6,967,137	5,325	84,252	97,137	322,102	9,949	130,577	206,510	5.88%	385,174	6,507,109	7,151,125	11.10	8,311,233	83.8%

Comments/Notes

- Information for 2019 Plan Year based on December 31, 2019 audited financial statements. Total benefit payments for 2019 are shown under New Entrants column.
- Information for 2020 Plan Year bifurcated between January 1, 2020 to June 30, 2020 and July 1, 2020 to December 31, 2020. Non-investment cash flows for the first half of the year are based on information provided by the plan administrator and assuming - 1.1% rate of return. Non-investment cash flows for the second half of the year are estimated such that the full year's expectation is met. In addition, the investment return was solved such that the full year's return would match the assumption of 1.39%. Total benefit payments for the two periods of 2020 are shown under New Entrants column.
- No future withdrawal liability payments are assumed.
- Maximum suspension and partition effective January 1, 2022.
- Administrative expenses expected to increase by 5% due to partition and are pro-rated between Original Plan and Successor Plan based on projected headcounts.
- Original Plan is projected to remain solvent with suspension and partition but not projected to be 100% funded at the end of the extended period.
- Accrued liability includes expense loading equal to present value of future expenses (30 years), calculated at 5.5% discount rate.

Arizona Bricklayers' Pension Trust Fund
MPRA Application Checklist Item #6: Original Plan Projection without Suspension or Partition

	Market Value		Benefit Payments by Status						Administrative	Investment	Investment	Market Value	Available	Solvency	Accrued	Funded
Plan Year	Beginning	Contributions	Active	Retiree	Terminated	Vested	Beneficiary	New Entrant	Expenses	Return (%)	Return (\$)	Ending	Resources	Ratio	Liability	Percentage
2019	26,730,380	115,394	0	0		0	0	2,128,450	303,790	19.16%	4,908,124	29,321,658	31,450,108	14.78	38,580,897	69.3%
1/1/2020-6/30/2020	29,321,658	33,567	0	0		0	0	1,061,586	168,286	-1.10%	-315,940	27,809,413	29,246,367	12.19	38,070,969	77.0%
7/1/2020-12/31/2020	27,809,413	28,398	0	0		0	0	1,338,121	356,714	2.61%	703,684	26,846,660	N/A	N/A	N/A	N/A
2021	26,846,660	70,560	42,708	1,764,303	313,345	294,236	11	400,000	4.98%	1,269,467	25,372,084	27,786,687	11.51	37,269,541	72.0%	
2022	25,372,084	70,560	50,449	1,711,721	378,805	278,255	635	250,000	4.98%	1,199,593	23,972,372	26,392,237	10.91	36,539,221	69.4%	
2023	23,972,372	63,000	62,714	1,656,944	462,578	262,287	1,630	254,713	4.98%	1,128,939	22,463,444	24,909,598	10.18	35,914,193	66.7%	
2024	22,463,444	63,000	70,698	1,600,070	528,921	246,444	2,195	259,515	4.98%	1,053,623	20,872,224	23,320,551	9.53	35,218,849	63.8%	
2025	20,872,224	63,000	79,079	1,541,201	595,006	230,831	2,964	264,341	4.98%	974,243	19,196,044	21,645,125	8.84	34,478,722	60.5%	
2026	19,196,044	63,000	88,898	1,480,458	656,282	215,539	3,976	269,290	4.98%	890,744	17,435,345	19,880,497	8.13	33,689,529	57.0%	
2027	17,435,345	63,000	95,395	1,417,991	698,485	200,653	6,525	274,332	4.98%	803,579	15,608,541	18,027,592	7.45	32,852,297	53.1%	
2028	15,608,541	63,000	100,038	1,353,983	745,054	186,251	9,884	279,467	4.98%	713,065	13,709,928	16,105,139	6.72	31,987,072	48.8%	
2029	13,709,928	63,000	106,361	1,288,634	796,154	172,399	12,322	284,698	4.98%	618,861	11,731,223	14,107,092	5.94	31,089,678	44.1%	
2030	11,731,223	63,000	112,924	1,222,166	834,501	159,146	15,365	289,989	5.88%	615,285	9,775,416	12,119,518	5.17	30,154,259	38.9%	
2031	9,775,416	63,000	114,952	1,154,836	873,434	146,523	18,551	295,379	5.88%	501,166	7,735,907	10,044,203	4.35	29,191,855	33.5%	
2032	7,735,907	63,000	115,121	1,086,939	909,750	134,551	22,477	300,868	5.88%	382,227	5,611,428	7,880,266	3.47	28,205,872	27.4%	
2033	5,611,428	63,000	116,571	1,018,790	937,677	123,233	27,036	306,419	5.88%	258,466	3,403,168	5,626,475	2.53	27,199,016	20.6%	
2034	3,403,168	63,000	119,272	950,721	950,880	112,560	31,053	312,112	5.88%	130,160	1,119,731	3,284,216	1.52	26,177,949	13.0%	
2035	1,119,731	63,000	53,221	389,976	429,591	45,274	15,645	254,684	5.88%	N/A	Insolvent	Insolvent	0.44	25,155,637	4.5%	

Comments/Notes

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- No future withdrawal liability payments are assumed.
- Accrued liability includes expense loading equal to present value of future expenses (30 years), calculated at 5.5% discount rate.
- Plan is projected to become insolvent in plan year beginning January 1, 2035.

Arizona Bricklayers' Pension Trust Fund
MPRA Application Checklist Item #6 and #28: Original Plan Projection with Suspension and Partition

	Market Value		Benefit Payments by Status						Administrative	Investment	Investment	Market Value	Available	Solvency	Accrued	Funded
Plan Year	Beginning	Contributions	Active	Retiree	Terminated Vested	Beneficiary	New Entrant	Expenses	Return (%)	Return (\$)	Ending	Resources	Ratio	Liability	Percentage	
2019	26,730,380	115,394	0	0	0	0	2,128,450	303,790	19.16%	4,908,124	29,321,658	31,450,108	14.78	37,804,523	70.7%	
1/1/2020-6/30/2020	29,321,658	33,567	0	0	0	0	1,061,586	168,286	-1.10%	-315,940	27,809,413	29,246,367	12.19	37,240,689	78.7%	
7/1/2020-12/31/2020	27,809,413	28,398	0	0	0	0	1,338,121	356,714	2.61%	703,684	26,846,660	N/A	N/A	N/A	N/A	
2021	26,846,660	70,560	42,708	1,764,303	313,345	294,236	11	400,000	4.98%	1,269,467	25,372,084	27,786,687	11.51	36,384,101	73.8%	
2022	25,372,084	70,560	47,289	1,605,959	31,466	265,247	635	187,769	4.98%	1,212,667	24,516,947	26,467,542	13.57	24,703,185	102.7%	
2023	24,516,947	63,000	58,832	1,551,980	38,854	249,563	1,630	190,608	4.98%	1,171,049	23,659,528	25,560,388	13.45	23,967,484	102.3%	
2024	23,659,528	63,000	66,388	1,496,056	45,168	234,025	2,194	193,477	4.98%	1,129,681	22,814,900	24,658,732	13.37	23,237,060	101.8%	
2025	22,814,900	63,000	74,243	1,438,313	51,733	218,736	2,964	196,076	4.98%	1,088,978	21,984,812	23,770,802	13.31	22,524,354	101.3%	
2026	21,984,812	63,000	83,501	1,378,891	58,068	203,790	3,975	198,853	4.98%	1,048,992	21,169,725	22,897,951	13.25	21,828,111	100.7%	
2027	21,169,725	63,000	89,715	1,317,967	63,336	189,272	6,525	201,665	4.98%	1,009,842	20,374,087	22,040,902	13.22	21,147,926	100.1%	
2028	20,374,087	63,000	94,123	1,255,746	69,680	175,261	9,884	204,519	4.98%	971,677	19,599,551	21,204,244	13.21	20,488,251	99.4%	
2029	19,599,551	63,000	100,110	1,192,454	81,332	161,822	12,321	207,424	4.98%	934,427	18,841,515	20,389,554	13.17	19,850,577	98.7%	
2030	18,841,515	63,000	106,248	1,128,337	91,111	149,006	15,365	210,198	5.88%	1,060,433	18,264,683	19,754,750	13.26	19,231,015	98.0%	
2031	18,264,683	63,000	108,163	1,063,673	105,262	136,843	18,550	213,027	5.88%	1,028,102	17,710,267	19,142,759	13.36	18,632,338	98.0%	
2032	17,710,267	63,000	108,355	998,772	145,642	125,352	22,477	211,397	5.88%	996,474	17,157,746	18,558,344	13.25	18,055,966	98.1%	
2033	17,157,746	63,000	109,755	933,958	179,554	114,536	27,035	214,164	5.88%	964,942	16,606,687	17,971,524	13.17	17,481,477	98.1%	
2034	16,606,687	63,000	112,285	869,562	201,253	104,382	31,053	217,263	5.88%	933,791	16,067,682	17,386,215	13.19	16,908,141	98.2%	
2035	16,067,682	63,000	113,452	805,911	231,687	94,874	35,427	220,516	5.88%	903,081	15,531,897	16,813,247	13.12	16,346,599	98.3%	
2036	15,531,897	63,000	115,836	743,339	244,281	85,993	39,887	223,708	5.88%	872,992	15,014,846	16,244,181	13.21	15,787,947	98.4%	
2037	15,014,846	63,000	114,931	682,199	267,953	77,721	45,008	227,096	5.88%	843,695	14,506,632	15,694,444	13.21	15,247,691	98.5%	
2038	14,506,632	63,000	113,702	622,862	285,127	70,036	50,617	230,989	5.88%	815,016	14,011,315	15,153,659	13.27	14,715,848	98.6%	
2039	14,011,315	63,000	116,033	565,684	309,838	62,916	55,646	234,903	5.88%	786,712	13,516,006	14,626,124	13.18	14,197,474	98.7%	
2040	13,516,006	63,000	114,541	510,995	330,081	56,335	60,894	239,147	5.88%	758,545	13,025,558	14,098,405	13.14	13,680,026	98.8%	
2041	13,025,558	63,000	112,887	459,064	341,951	50,268	66,165	243,774	5.88%	730,805	12,545,254	13,575,589	13.18	13,168,453	98.9%	
2042	12,545,254	63,000	113,750	410,102	354,132	44,684	71,840	248,846	5.88%	703,454	12,068,355	13,062,862	13.14	12,668,035	99.0%	
2043	12,068,355	63,000	111,258	364,274	367,330	39,552	77,810	254,427	5.88%	676,244	11,592,948	12,553,171	13.07	12,172,019	99.1%	
2044	11,592,948	63,000	108,327	321,701	364,523	34,838	83,328	260,584	5.88%	649,489	11,132,135	12,044,853	13.20	11,678,534	99.3%	
2045	11,132,135	63,000	112,046	282,465	366,879	30,520	88,947	267,383	5.88%	623,119	10,670,014	11,550,871	13.11	11,200,732	99.4%	
2046	10,670,014	63,000	108,215	246,597	364,628	26,577	94,517	263,429	5.88%	597,230	10,226,281	11,066,816	13.17	10,722,693	99.5%	
2047	10,226,281	63,000	106,410	214,070	358,282	22,994	100,698	252,969	5.88%	572,545	9,806,403	10,608,857	13.22	10,264,170	99.6%	
2048	9,806,403	63,000	102,413	184,790	355,133	19,755	107,246	243,534	5.88%	549,089	9,405,621	10,174,958	13.23	9,830,603	99.8%	
2049	9,405,621	63,000	97,816	158,627	347,729	16,847	113,083	233,344	5.88%	526,840	9,028,016	9,762,117	13.30	9,417,203	99.9%	
2050	9,028,016	63,000	94,272	135,423	339,769	14,255	119,013	224,201	5.88%	505,810	8,669,893	9,372,625	13.34	9,028,040	100.0%	
2051	8,669,893	63,000	89,317	114,993	331,233	11,962	124,845	215,183	5.88%	485,895	8,331,256	9,003,605	13.39	8,659,389	100.1%	
2052	8,331,256	63,000	84,252	97,137	322,102	9,949	130,577	206,510	5.88%	467,055	8,010,783	8,654,800	13.44	8,311,233	100.2%	

Comments/Notes

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