



May 7, 2021

Mr. David Swindell  
Executive Director  
Wyoming Retirement System  
6101 Yellowstone Road, Suite 500  
Cheyenne, WY 82009

**Subject: Actuarial Projections for the Wyoming Retirement System**

Dear David:

We are providing 30-year projections for each plan in the Wyoming Retirement System (“WRS”) as of January 1, 2021 estimating the future Funded Ratio and Actuarially Determined Contribution (“ADC”) for each plan.

### **Analysis**

The 30-year baseline projections for each plan incorporate data as of January 1, 2021. Contributions based on the plan’s individual funding source, if applicable, are assumed to be made annually. Please note that these projections are estimates only and are based upon the new set of actuarial assumptions as adopted by the WRS Board of Trustees on August 23, 2017.

The results of these future projections are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ as actual future experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods.

### **Summary and Conclusions**

The 30<sup>th</sup>-year projected funded ratios increased for all plans except Fire A. All plans experienced gains from greater than expected investment returns in 2020 on both a market value and actuarial value basis.

- 1) The 30<sup>th</sup> year projected funded ratio for the Public Employee plan increased from 102.8% to 115.0%.
- 2) Fire A: With no funding source for the plan, trust assets are projected to be depleted in approximately 2027 (last year this was 2028).
- 3) Wardens: The plan is projected to be 116.3% funded in 30 years (last year the projection showed 103.4% in 30 years).
- 4) Fire B: This plan is projected to be 121.7% funded in 30 years (last year the projection showed 113.6% in 30 years).

- 5) Law Enforcement: The plan is projected to be 104.3% funded in 30 years (last year the projection showed 96.7% in 30 years).
- 6) The three plans of Judges, Guard Fire and the Vol Fire Plans are projected to be well above 100% funded in 30 years.

A summary of the results is as follows for each WRS plan:

Plan	Funded Ratio (Based on AVA)		Employer Actuarially Determined Contribution	
	2021	2051	2021	2051
Public Employee	74.8%	115.0%	11.39%	0.00%
Judges	97.6%	122.4%	14.60%	0.00%
Law Enforcement	85.9%	104.3%	10.75%	0.00%
Wardens	79.0%	116.3%	16.23%	0.00%
Guard Fire	86.3%	175.1%	0.88%	0.00%
Fire B	95.9%	121.7%	14.80%	0.00%
Fire A (depletion)	17.7%	N/A (2027)	\$41,596k	N/A
Vol Fire, EMT & SR	76.3%	219.4%	\$3,319k	\$0

### Assumptions and Methods

- All calculations incorporate data, provisions, and assumptions used in the January 1, 2021 actuarial valuations, including:
  - Future investment returns are assumed to equal the discount rate of 7.00% each year. For Fire A, the assumed investment return is 1.00%;
  - A second tier of benefits for participants who are hired after September 1, 2012 for the Public Employee plan;
  - No post-retirement cost-of-living adjustment (“COLA”) is reflected, with the exception of the Fire A plan;
- The Actuarially Determined Contribution “ADC” is based upon a layered amortization of the unfunded accrued liability as specified in the January 1, 2021 actuarial valuation, with the exception of Fire A, which uses an open amortization method. Future experience is assumed to match the assumptions in all cases and no new amortization bases are established for any of the projections.
- The Guard Fire plan faces an uncertain future regarding its funding from Federal sources which are assumed to continue in these projections.

The calculations are based upon assumptions regarding future events, which may or may not materialize. Please bear in mind that actual results could deviate significantly from our projections which will move the projected “fully funded” year up in time if actual future experience is favorable or back in time if actual future experience is not favorable. In addition, note that these results show projections based upon a limited set of assumptions and contribution scenarios and are to be viewed as rough estimates only.

### **Closing**

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

All of the work conforms with generally accepted actuarial principles and practices, and to the Actuarial Standards of Practice issued by the Actuarial Standards Board. The actuaries submitting this statement are members of the American Academy of Actuaries and meet all of the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. In addition, the undersigned are experienced in performing actuarial valuations for other large public retirement systems.

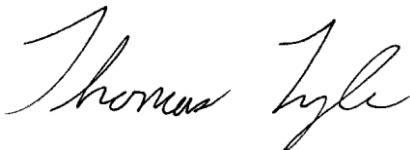
If you require any additional or clarifying information, please do not hesitate to contact the undersigned.

Respectfully submitted,

**Gabriel, Roeder, Smith & Company**



Paul Wood, ASA, FCA, MAAA  
Consultant



Thomas Lyle, FSA, FCA, EA, MAAA  
Consultant

**Wyoming Retirement System - Public Employees' Pension Plan ("Public Employees")**  
**Projection Results Based on January 1, 2021 Actuarial Valuation - Baseline**  
**Discount Rate: 7.00%**

Valuation as of January 1, (1)	Market Return for FY Beginning on Valuation Date (2)	Contribution Rate for Fiscal Year Following Valuation Date		Projected Payroll (in Millions) (5)	Employer Contributions (in Millions) (6)	Actuarial Accrued Liability (AAL, in Millions) (7)	Actuarial Value of Assets (AVA, in Millions) (8)	Unfunded Actuarial Accrued Liability (UAAL, in Millions) (9)	Funded Ratio (10)	Funding Shortfall/(Surplus) (11)	Employer ADC (12)	Employer Normal Cost (NC) (13)	Layered Amortization Payment (14)	Assumed Expenses (15)
		Employee (3)	Employer (4)											
2021	7.00%	9.125%	9.245%	\$1,865	\$172	\$10,470	\$7,828	\$2,642	74.8%	2.14%	11.39%	1.73%	9.28%	0.38%
2022	7.00%	9.250%	9.370%	1,916	180	10,726	8,213	2,513	76.6%	1.22%	10.59%	1.48%	8.73%	0.38%
2023	7.00%	9.250%	9.370%	1,966	184	10,982	8,525	2,458	77.6%	0.88%	10.25%	1.38%	8.49%	0.38%
2024	7.00%	9.250%	9.370%	2,016	189	11,239	8,995	2,245	80.0%	-0.01%	9.36%	1.28%	7.70%	0.38%
2025	7.00%	9.250%	9.370%	2,067	194	11,497	9,315	2,182	81.0%	-0.32%	9.05%	1.19%	7.48%	0.38%
2026	7.00%	9.250%	9.370%	2,118	198	11,754	9,587	2,167	81.6%	-0.43%	8.94%	1.11%	7.45%	0.38%
2027	7.00%	9.250%	9.370%	2,169	203	12,009	9,863	2,145	82.1%	-0.53%	8.84%	1.03%	7.42%	0.38%
2028	7.00%	9.250%	9.370%	2,222	208	12,262	10,146	2,116	82.7%	-0.65%	8.72%	0.96%	7.38%	0.38%
2029	7.00%	9.250%	9.370%	2,276	213	12,515	10,436	2,079	83.4%	-0.76%	8.61%	0.89%	7.34%	0.38%
2030	7.00%	9.250%	9.370%	2,331	218	12,766	10,733	2,033	84.1%	-0.89%	8.48%	0.82%	7.28%	0.38%
2031	7.00%	9.250%	9.370%	2,387	224	13,016	11,039	1,977	84.8%	-1.01%	8.36%	0.76%	7.22%	0.38%
2032	7.00%	9.250%	9.370%	2,443	229	13,275	11,363	1,912	85.6%	-1.15%	8.22%	0.69%	7.15%	0.38%
2033	7.00%	9.250%	9.370%	2,501	234	13,534	11,699	1,835	86.4%	-1.28%	8.09%	0.64%	7.07%	0.38%
2034	7.00%	9.250%	9.370%	2,559	240	13,793	12,047	1,746	87.3%	-1.43%	7.94%	0.58%	6.98%	0.38%
2035	7.00%	9.250%	9.370%	2,619	245	14,053	12,407	1,645	88.3%	-1.58%	7.79%	0.53%	6.88%	0.38%
2036	7.00%	9.250%	9.370%	2,679	251	14,311	12,781	1,530	89.3%	-1.74%	7.63%	0.48%	6.77%	0.38%
2037	7.00%	9.250%	9.370%	2,741	257	14,570	13,169	1,401	90.4%	-1.90%	7.47%	0.44%	6.65%	0.38%
2038	7.00%	9.250%	9.370%	2,804	263	14,828	13,573	1,255	91.5%	-2.08%	7.29%	0.39%	6.51%	0.38%
2039	7.00%	9.250%	9.370%	2,870	269	15,086	13,993	1,093	92.8%	-3.39%	5.98%	0.36%	5.25%	0.38%
2040	7.00%	9.250%	9.370%	2,937	275	15,345	14,433	912	94.1%	-4.39%	4.98%	0.32%	4.27%	0.38%
2041	7.00%	9.250%	9.370%	3,006	282	15,606	14,894	712	95.4%	-4.33%	5.04%	0.29%	4.37%	0.38%
2042	7.00%	9.250%	9.370%	3,077	288	15,868	15,378	491	96.9%	-4.15%	5.22%	0.26%	4.58%	0.38%
2043	7.00%	9.250%	9.370%	3,149	295	16,134	15,887	246	98.5%	-4.25%	5.12%	0.24%	4.50%	0.38%
2044	7.00%	9.250%	9.370%	3,224	302	16,403	16,425	(23)	100.1%	-3.78%	5.59%	0.22%	4.99%	0.38%
2045	7.00%	9.250%	9.370%	3,302	309	16,677	16,995	(318)	101.9%	-3.86%	5.51%	0.20%	4.93%	0.38%
2046	7.00%	9.250%	9.370%	3,382	317	16,958	17,599	(642)	103.8%	-4.14%	5.23%	0.19%	4.66%	0.38%
2047	7.00%	9.250%	9.370%	3,465	325	17,246	18,243	(996)	105.8%	-4.44%	4.93%	0.17%	4.38%	0.38%
2048	7.00%	9.250%	9.370%	3,550	333	17,545	18,929	(1,384)	107.9%	-12.81%	-3.44%	0.16%	-3.98%	0.38%
2049	7.00%	9.250%	9.370%	3,638	341	17,855	19,661	(1,806)	110.1%	-13.75%	-4.38%	0.15%	-4.91%	0.38%
2050	7.00%	9.250%	9.370%	3,729	349	18,178	20,445	(2,267)	112.5%	-14.75%	-5.38%	0.14%	-5.90%	0.38%
2051	7.00%	9.250%	9.370%	3,822	358	18,514	21,283	(2,769)	115.0%	-15.81%	-6.44%	0.13%	-6.95%	0.38%



**Wyoming Retirement System - Judicial Retirement System ("Judges")**  
**Projection Results Based on January 1, 2021 Actuarial Valuation - Baseline**  
**Discount Rate: 7.00%**

Valuation as of January 1,	Market Return for FY Beginning on Valuation Date	Contribution Rate for Fiscal Year Following Valuation Date		Projected Payroll (in Thousands)	Employer Contributions (in Thousands)	Actuarial Accrued Liability (AAL, in Thousands)	Actuarial Value of Assets (AVA, in Thousands)	Unfunded Actuarial Accrued Liability (UAAL, in Thousands)	Funded Ratio	Funding Shortfall/(Surplus)	Employer ADC	Employer Normal Cost (NC)	Layered Amortization Payment	Assumed Expenses
		Employee	Employer											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
2021	7.00%	9.22%	14.50%	\$8,202	\$1,189	\$36,352	\$35,464	\$888	97.6%	0.10%	14.60%	13.17%	1.05%	0.38%
2022	7.00%	9.22%	14.50%	8,505	1,233	38,693	38,563	130	99.7%	-0.67%	13.83%	13.12%	0.34%	0.38%
2023	7.00%	9.22%	14.50%	8,816	1,278	41,148	41,483	(335)	100.8%	-1.16%	13.34%	13.05%	-0.09%	0.38%
2024	7.00%	9.22%	14.50%	9,143	1,326	43,716	45,157	(1,442)	103.3%	-2.31%	12.19%	12.89%	-1.08%	0.38%
2025	7.00%	9.22%	14.50%	9,448	1,370	46,255	48,204	(1,949)	104.2%	-2.92%	11.58%	12.74%	-1.54%	0.38%
2026	7.00%	9.22%	14.50%	9,791	1,420	48,777	51,011	(2,233)	104.6%	-3.21%	11.29%	12.71%	-1.80%	0.38%
2027	7.00%	9.22%	14.50%	10,122	1,468	51,326	53,879	(2,553)	105.0%	-3.56%	10.94%	12.66%	-2.09%	0.38%
2028	7.00%	9.22%	14.50%	10,479	1,519	53,832	56,737	(2,905)	105.4%	-4.00%	10.50%	12.54%	-2.42%	0.38%
2029	7.00%	9.22%	14.50%	10,870	1,576	56,370	59,663	(3,293)	105.8%	-4.49%	10.01%	12.39%	-2.77%	0.38%
2030	7.00%	9.22%	14.50%	11,277	1,635	59,019	62,749	(3,730)	106.3%	-5.00%	9.50%	12.27%	-3.16%	0.38%
2031	7.00%	9.22%	14.50%	11,702	1,697	61,773	65,993	(4,220)	106.8%	-5.55%	8.95%	12.16%	-3.59%	0.38%
2032	7.00%	9.22%	14.50%	12,132	1,759	64,570	69,340	(4,770)	107.4%	-6.20%	8.30%	11.99%	-4.08%	0.38%
2033	7.00%	9.22%	14.50%	12,564	1,822	67,427	72,813	(5,386)	108.0%	-6.87%	7.63%	11.90%	-4.65%	0.38%
2034	7.00%	9.22%	14.50%	13,046	1,892	70,449	76,511	(6,062)	108.6%	-8.31%	6.19%	11.86%	-6.04%	0.38%
2035	7.00%	9.22%	14.50%	13,534	1,963	73,631	80,438	(6,806)	109.2%	-10.15%	4.35%	11.81%	-7.84%	0.38%
2036	7.00%	9.22%	14.50%	14,041	2,036	76,955	84,575	(7,620)	109.9%	-10.24%	4.26%	11.77%	-7.89%	0.38%
2037	7.00%	9.22%	14.50%	14,575	2,113	80,474	88,981	(8,507)	110.6%	-10.38%	4.12%	11.75%	-8.01%	0.38%
2038	7.00%	9.22%	14.50%	15,114	2,192	84,128	93,606	(9,478)	111.3%	-10.84%	3.66%	11.75%	-8.47%	0.38%
2039	7.00%	9.22%	14.50%	15,692	2,275	87,934	98,459	(10,525)	112.0%	-10.74%	3.76%	11.72%	-8.34%	0.38%
2040	7.00%	9.22%	14.50%	16,290	2,362	91,933	103,599	(11,667)	112.7%	-11.19%	3.31%	11.72%	-8.79%	0.38%
2041	7.00%	9.22%	14.50%	16,905	2,451	96,030	108,937	(12,907)	113.4%	-11.87%	2.63%	11.73%	-9.49%	0.38%
2042	7.00%	9.22%	14.50%	17,534	2,542	100,136	114,387	(14,251)	114.2%	-12.58%	1.92%	11.75%	-10.22%	0.38%
2043	7.00%	9.22%	14.50%	18,203	2,639	104,321	120,016	(15,696)	115.0%	-13.32%	1.18%	11.76%	-10.97%	0.38%
2044	7.00%	9.22%	14.50%	18,905	2,741	108,672	125,929	(17,256)	115.9%	-14.07%	0.43%	11.79%	-11.74%	0.38%
2045	7.00%	9.22%	14.50%	19,639	2,848	113,167	132,107	(18,940)	116.7%	-14.85%	-0.35%	11.81%	-12.54%	0.38%
2046	7.00%	9.22%	14.50%	20,413	2,960	117,857	138,609	(20,752)	117.6%	-15.64%	-1.14%	11.83%	-13.35%	0.38%
2047	7.00%	9.22%	14.50%	21,200	3,074	122,646	145,361	(22,715)	118.5%	-16.42%	-1.92%	11.88%	-14.19%	0.38%
2048	7.00%	9.22%	14.50%	22,042	3,196	127,550	152,363	(24,813)	119.5%	-17.25%	-2.75%	11.89%	-15.02%	0.38%
2049	7.00%	9.22%	14.50%	22,896	3,320	132,629	159,712	(27,083)	120.4%	-18.08%	-3.58%	11.92%	-15.89%	0.38%
2050	7.00%	9.22%	14.50%	23,802	3,451	137,852	167,372	(29,521)	121.4%	-18.87%	-4.37%	11.94%	-16.69%	0.38%
2051	7.00%	9.22%	14.50%	24,758	3,590	143,270	175,415	(32,145)	122.4%	-19.57%	-5.07%	11.94%	-17.39%	0.38%



**Wyoming Retirement System - Law Enforcement Retirement Fund ("Law Enforcement")**  
**Projection Results Based on January 1, 2021 Actuarial Valuation - Baseline**  
**Discount Rate: 7.00%**

Valuation as of January 1,	Market Return for FY Beginning on Valuation Date	Contribution Rate for Fiscal Year Following Valuation Date		Projected Payroll (in Thousands)	Employer Contributions (in Thousands)	Actuarial Accrued Liability (AAL, in Thousands)	Actuarial Value of Assets (AVA, in Thousands)	Unfunded Actuarial Accrued Liability (UAAL, in Thousands)	Funded Ratio	Funding Shortfall/ (Surplus)	Employer ADC	Employer Normal Cost (NC)	Layered Amortization Payment	Assumed Expenses
		Employee	Employer											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
2021	7.00%	8.60%	8.60%	\$170,285	\$14,644	\$840,813	\$722,309	\$118,504	85.9%	2.15%	10.75%	5.60%	4.74%	0.41%
2022	7.00%	8.60%	8.60%	175,960	15,133	879,125	772,577	106,549	87.9%	1.63%	10.23%	5.51%	4.31%	0.41%
2023	7.00%	8.60%	8.60%	181,592	15,617	918,633	817,326	101,307	89.0%	1.43%	10.03%	5.44%	4.18%	0.41%
2024	7.00%	8.60%	8.60%	187,170	16,097	959,391	876,779	82,612	91.4%	0.70%	9.30%	5.38%	3.51%	0.41%
2025	7.00%	8.60%	8.60%	192,714	16,573	1,001,303	923,818	77,485	92.3%	0.51%	9.11%	5.33%	3.37%	0.41%
2026	7.00%	8.60%	8.60%	198,312	17,055	1,044,101	966,852	77,249	92.6%	0.47%	9.07%	5.29%	3.37%	0.41%
2027	7.00%	8.60%	8.60%	203,937	17,539	1,087,722	1,010,990	76,732	92.9%	0.32%	8.92%	5.24%	3.27%	0.41%
2028	7.00%	8.60%	8.60%	209,644	18,029	1,132,096	1,056,172	75,924	93.3%	0.15%	8.75%	5.21%	3.13%	0.41%
2029	7.00%	8.60%	8.60%	215,410	18,525	1,176,963	1,102,166	74,797	93.6%	0.00%	8.60%	5.17%	3.02%	0.41%
2030	7.00%	8.60%	8.60%	221,223	19,025	1,222,297	1,148,965	73,331	94.0%	-0.05%	8.55%	5.14%	3.00%	0.41%
2031	7.00%	8.60%	8.60%	227,203	19,539	1,268,003	1,196,486	71,516	94.4%	0.04%	8.64%	5.11%	3.12%	0.41%
2032	7.00%	8.60%	8.60%	233,328	20,066	1,314,804	1,245,479	69,325	94.7%	0.26%	8.86%	5.09%	3.36%	0.41%
2033	7.00%	8.60%	8.60%	239,613	20,607	1,362,073	1,295,342	66,730	95.1%	0.50%	9.10%	5.07%	3.62%	0.41%
2034	7.00%	8.60%	8.60%	246,026	21,158	1,409,851	1,346,150	63,701	95.5%	0.63%	9.23%	5.05%	3.77%	0.41%
2035	7.00%	8.60%	8.60%	252,572	21,721	1,458,188	1,397,986	60,203	95.9%	0.54%	9.14%	5.03%	3.70%	0.41%
2036	7.00%	8.60%	8.60%	259,223	22,293	1,507,121	1,450,925	56,196	96.3%	0.22%	8.82%	5.01%	3.40%	0.41%
2037	7.00%	8.60%	8.60%	266,060	22,881	1,556,600	1,504,951	51,649	96.7%	-0.21%	8.39%	4.99%	2.99%	0.41%
2038	7.00%	8.60%	8.60%	273,059	23,483	1,606,645	1,560,128	46,517	97.1%	-0.55%	8.05%	4.98%	2.66%	0.41%
2039	7.00%	8.60%	8.60%	280,217	24,099	1,657,382	1,616,631	40,751	97.5%	-2.73%	5.87%	4.96%	0.50%	0.41%
2040	7.00%	8.60%	8.60%	287,547	24,729	1,708,857	1,674,554	34,303	98.0%	-3.17%	5.43%	4.95%	0.07%	0.41%
2041	7.00%	8.60%	8.60%	295,139	25,382	1,761,148	1,734,023	27,125	98.5%	-3.36%	5.24%	4.94%	-0.11%	0.41%
2042	7.00%	8.60%	8.60%	302,893	26,049	1,814,442	1,795,291	19,151	98.9%	-2.98%	5.62%	4.92%	0.29%	0.41%
2043	7.00%	8.60%	8.60%	310,811	26,730	1,868,725	1,858,404	10,321	99.4%	-2.76%	5.84%	4.91%	0.52%	0.41%
2044	7.00%	8.60%	8.60%	318,898	27,425	1,924,092	1,923,518	573	100.0%	-1.79%	6.81%	4.90%	1.50%	0.41%
2045	7.00%	8.60%	8.60%	327,147	28,135	1,980,598	1,990,761	(10,163)	100.5%	-0.66%	7.94%	4.90%	2.63%	0.41%
2046	7.00%	8.60%	8.60%	335,573	28,859	2,038,222	2,060,179	(21,957)	101.1%	0.74%	9.34%	4.89%	4.04%	0.41%
2047	7.00%	8.60%	8.60%	344,186	29,600	2,097,012	2,131,901	(34,890)	101.7%	1.26%	9.86%	4.88%	4.57%	0.41%
2048	7.00%	8.60%	8.60%	352,984	30,357	2,156,991	2,206,033	(49,043)	102.3%	-2.37%	6.23%	4.88%	0.94%	0.41%
2049	7.00%	8.60%	8.60%	361,986	31,131	2,218,203	2,282,708	(64,505)	102.9%	-4.66%	3.94%	4.87%	-1.34%	0.41%
2050	7.00%	8.60%	8.60%	371,191	31,922	2,280,688	2,362,064	(81,375)	103.6%	-7.51%	1.09%	4.87%	-4.19%	0.41%
2051	7.00%	8.60%	8.60%	380,600	32,732	2,344,593	2,444,350	(99,758)	104.3%	-9.81%	-1.21%	4.86%	-6.48%	0.41%



**Wyoming Retirement System - State Highway Patrol, Game & Fish Warden and Criminal Investigator Retirement Fund ("Wardens")**  
**Projection Results Based on January 1, 2021 Actuarial Valuation - Baseline**  
**Discount Rate: 7.00%**

Valuation as of January 1,	Market Return for FY Beginning on Valuation Date	Contribution Rate for Fiscal Year Following Valuation Date			Projected Payroll (in Thousands)	Employer Contributions (in Thousands)	Actuarial Accrued Liability (AAL, in Thousands)	Actuarial Value of Assets (AVA, in Thousands)	Unfunded Actuarial Accrued Liability (UAAL, in Thousands)	Funded Ratio	Funding Shortfall/ (Surplus)	Employer ADC	Employer Normal Cost (NC)	Layered Amortization Payment	Assumed Expenses
		Employee	Employer	HP Game & Fish Commission											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
2021	7.00%	14.56%	14.88%	0.14%	\$24,806	\$3,726	\$198,662	\$156,997	\$41,665	79.0%	1.35%	16.23%	4.81%	10.79%	0.63%
2022	7.00%	14.56%	14.88%	0.12%	25,418	3,813	205,175	166,606	38,569	81.2%	0.43%	15.31%	4.73%	9.95%	0.63%
2023	7.00%	14.56%	14.88%	0.10%	26,113	3,912	211,784	174,825	36,960	82.5%	-0.08%	14.80%	4.67%	9.50%	0.63%
2024	7.00%	14.56%	14.88%	0.09%	26,780	4,009	218,479	186,189	32,289	85.2%	-1.52%	13.36%	4.59%	8.14%	0.63%
2025	7.00%	14.56%	14.88%	0.07%	27,453	4,104	225,184	194,639	30,545	86.4%	-2.13%	12.75%	4.53%	7.59%	0.63%
2026	7.00%	14.56%	14.88%	0.06%	28,192	4,212	231,927	202,156	29,771	87.2%	-2.45%	12.43%	4.48%	7.32%	0.63%
2027	7.00%	14.56%	14.88%	0.05%	28,969	4,325	238,993	209,979	29,014	87.9%	-2.70%	12.18%	4.43%	7.12%	0.63%
2028	7.00%	14.56%	14.88%	0.04%	29,749	4,439	246,212	218,103	28,109	88.6%	-2.91%	11.97%	4.39%	6.95%	0.63%
2029	7.00%	14.56%	14.88%	0.03%	30,534	4,553	253,474	226,429	27,045	89.3%	-3.13%	11.75%	4.35%	6.77%	0.63%
2030	7.00%	14.56%	14.88%	0.03%	31,346	4,674	260,753	234,938	25,815	90.1%	-3.44%	11.44%	4.29%	6.52%	0.63%
2031	7.00%	14.56%	14.88%	0.02%	32,205	4,799	268,156	243,751	24,404	90.9%	-3.79%	11.09%	4.25%	6.21%	0.63%
2032	7.00%	14.56%	14.88%	0.02%	33,050	4,924	275,675	252,888	22,787	91.7%	-4.18%	10.70%	4.20%	5.87%	0.63%
2033	7.00%	14.56%	14.88%	0.01%	33,948	5,055	283,307	262,350	20,956	92.6%	-4.54%	10.34%	4.17%	5.54%	0.63%
2034	7.00%	14.56%	14.88%	0.01%	34,840	5,188	291,098	272,207	18,891	93.5%	-4.88%	10.00%	4.14%	5.23%	0.63%
2035	7.00%	14.56%	14.88%	0.01%	35,778	5,327	299,054	282,471	16,583	94.5%	-5.23%	9.65%	4.12%	4.90%	0.63%
2036	7.00%	14.56%	14.88%	0.01%	36,711	5,466	307,152	293,149	14,003	95.4%	-5.65%	9.23%	4.10%	4.50%	0.63%
2037	7.00%	14.56%	14.88%	0.01%	37,690	5,612	315,399	304,258	11,141	96.5%	-6.14%	8.74%	4.09%	4.02%	0.63%
2038	7.00%	14.56%	14.88%	0.00%	38,705	5,759	323,877	315,906	7,971	97.5%	-6.65%	8.23%	4.08%	3.52%	0.63%
2039	7.00%	14.56%	14.88%	0.00%	39,738	5,913	332,651	328,183	4,468	98.7%	-8.29%	6.59%	4.06%	1.90%	0.63%
2040	7.00%	14.56%	14.88%	0.00%	40,776	6,067	341,670	341,069	601	99.8%	-10.74%	4.14%	4.04%	-0.53%	0.63%
2041	7.00%	14.56%	14.88%	0.00%	41,860	6,229	350,910	354,558	(3,648)	101.0%	-11.53%	3.35%	4.03%	-1.31%	0.63%
2042	7.00%	14.56%	14.88%	0.00%	42,971	6,394	360,500	368,814	(8,314)	102.3%	-10.80%	4.08%	4.02%	-0.57%	0.63%
2043	7.00%	14.56%	14.88%	0.00%	44,106	6,563	370,421	383,852	(13,431)	103.6%	-8.36%	6.52%	4.01%	1.88%	0.63%
2044	7.00%	14.56%	14.88%	0.00%	45,255	6,734	380,666	399,699	(19,033)	105.0%	-6.92%	7.96%	3.99%	3.34%	0.63%
2045	7.00%	14.56%	14.88%	0.00%	46,429	6,909	391,231	416,386	(25,155)	106.4%	-7.25%	7.63%	3.98%	3.02%	0.63%
2046	7.00%	14.56%	14.88%	0.00%	47,626	7,087	402,097	433,934	(31,837)	107.9%	-9.15%	5.73%	3.97%	1.13%	0.63%
2047	7.00%	14.56%	14.88%	0.00%	48,843	7,268	413,258	452,377	(39,119)	109.5%	-11.15%	3.73%	3.96%	-0.86%	0.63%
2048	7.00%	14.56%	14.88%	0.00%	50,084	7,452	424,710	471,755	(47,045)	111.1%	-21.83%	-6.95%	3.96%	-11.54%	0.63%
2049	7.00%	14.56%	14.88%	0.00%	51,364	7,643	436,503	492,164	(55,660)	112.8%	-21.90%	-7.02%	3.95%	-11.60%	0.63%
2050	7.00%	14.56%	14.88%	0.00%	52,666	7,837	448,655	513,675	(65,020)	114.5%	-21.97%	-7.09%	3.94%	-11.66%	0.63%
2051	7.00%	14.56%	14.88%	0.00%	53,997	8,035	461,159	536,336	(75,176)	116.3%	-23.37%	-8.49%	3.94%	-13.06%	0.63%



**Wyoming Air Guard Firefighters Retirement System ("Guard Fire")**  
**Projection Results Based on January 1, 2021 Actuarial Valuation - Baseline**  
**Discount Rate: 7.00%**

Valuation as of January 1,	Market Return for FY Beginning on Valuation Date	Contribution Rate for Fiscal Year Following Valuation Date		Projected Payroll (in Thousands)	Employer Contributions (in Thousands)	Actuarial Accrued Liability (AAL, in Thousands)	Actuarial Value of Assets (AVA, in Thousands)	Unfunded Actuarial Accrued Liability (UAAL, in Thousands)	Funded Ratio	Funding Shortfall/(Surplus)	Employer ADC	Employer Normal Cost (NC)	Layered Amortization Payment	Assumed Expenses
		Employee	Employer											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
2021	7.00%	16.65%	7.12%	\$2,212	\$157	\$10,301	\$8,886	\$1,415	86.3%	-6.24%	0.88%	7.3	-3.58%	4.11%
2022	7.00%	16.65%	7.12%	2,279	162	10,712	9,629	1,083	89.9%	-7.53%	-0.41%	5.1	-3.73%	2.97%
2023	7.00%	16.65%	7.12%	2,345	167	11,159	10,352	806	92.8%	-8.58%	-1.46%	3.5	-3.86%	2.05%
2024	7.00%	16.65%	7.12%	2,414	172	11,640	11,290	350	97.0%	-10.14%	-3.02%	1.4	-3.97%	0.60%
2025	7.00%	16.65%	7.12%	2,486	177	12,164	12,139	25	99.8%	-11.23%	-4.11%	0.1	-4.04%	-0.42%
2026	7.00%	16.65%	7.12%	2,553	182	12,716	12,983	(267)	102.1%	-12.20%	-5.08%	(1.0)	-4.11%	-1.32%
2027	7.00%	16.65%	7.12%	2,620	187	13,301	13,874	(573)	104.3%	-13.18%	-6.06%	(1.9)	-4.17%	-2.25%
2028	7.00%	16.65%	7.12%	2,691	192	13,892	14,801	(909)	106.5%	-14.23%	-7.11%	(2.9)	-4.22%	-3.24%
2029	7.00%	16.65%	7.12%	2,764	197	14,491	15,770	(1,279)	108.8%	-15.35%	-8.23%	(3.9)	-4.26%	-4.32%
2030	7.00%	16.65%	7.12%	2,841	202	15,117	16,800	(1,683)	111.1%	-16.55%	-9.43%	(4.9)	-4.31%	-5.47%
2031	7.00%	16.65%	7.12%	2,914	207	15,772	17,898	(2,126)	113.5%	-17.87%	-10.75%	(5.8)	-4.37%	-6.72%
2032	7.00%	16.65%	7.12%	2,991	213	16,458	19,069	(2,611)	115.9%	-19.27%	-12.15%	(6.8)	-4.43%	-8.08%
2033	7.00%	16.65%	7.12%	3,066	218	17,178	20,318	(3,140)	118.3%	-20.79%	-13.67%	(7.8)	-4.48%	-9.54%
2034	7.00%	16.65%	7.12%	3,145	224	17,933	21,649	(3,716)	120.7%	-22.41%	-15.29%	(8.7)	-4.52%	-11.12%
2035	7.00%	16.65%	7.12%	3,221	229	18,722	23,065	(4,344)	123.2%	-24.17%	-17.05%	(9.7)	-4.57%	-12.83%
2036	7.00%	16.65%	7.12%	3,299	235	19,544	24,570	(5,026)	125.7%	-26.08%	-18.96%	(10.7)	-4.62%	-14.68%
2037	7.00%	16.65%	7.12%	3,375	240	20,399	26,166	(5,767)	128.3%	-28.16%	-21.04%	(11.6)	-4.68%	-16.71%
2038	7.00%	16.65%	7.12%	3,449	246	21,286	27,857	(6,571)	130.9%	-30.42%	-23.30%	(12.6)	-4.75%	-18.90%
2039	7.00%	16.65%	7.12%	3,530	251	22,199	29,641	(7,442)	133.5%	-32.78%	-25.66%	(13.6)	-4.80%	-21.21%
2040	7.00%	16.65%	7.12%	3,613	257	23,125	31,511	(8,386)	136.3%	-35.78%	-28.66%	(14.6)	-4.85%	-24.16%
2041	7.00%	16.65%	7.12%	3,697	263	24,079	33,486	(9,408)	139.1%	-38.52%	-31.40%	(15.5)	-4.90%	-26.85%
2042	7.00%	16.65%	7.12%	3,782	269	25,048	35,560	(10,513)	142.0%	-40.45%	-33.33%	(16.5)	-4.95%	-28.73%
2043	7.00%	16.65%	7.12%	3,870	276	26,018	37,726	(11,708)	145.0%	-42.73%	-35.61%	(17.5)	-5.00%	-30.96%
2044	7.00%	16.65%	7.12%	3,960	282	27,002	40,001	(12,999)	148.1%	-44.64%	-37.52%	(18.4)	-5.04%	-32.83%
2045	7.00%	16.65%	7.12%	4,048	288	27,996	42,390	(14,393)	151.4%	-47.17%	-40.05%	(19.4)	-5.08%	-35.32%
2046	7.00%	16.65%	7.12%	4,136	294	28,990	44,888	(15,898)	154.8%	-50.01%	-42.89%	(20.4)	-5.11%	-38.12%
2047	7.00%	16.65%	7.12%	4,230	301	29,961	47,482	(17,521)	158.5%	-53.00%	-45.88%	(21.4)	-5.15%	-41.08%
2048	7.00%	16.65%	7.12%	4,331	308	30,919	50,188	(19,269)	162.3%	-59.88%	-52.76%	(22.4)	-5.17%	-47.94%
2049	7.00%	16.65%	7.12%	4,435	316	31,874	53,028	(21,154)	166.4%	-63.42%	-56.30%	(23.4)	-5.20%	-51.45%
2050	7.00%	16.65%	7.12%	4,543	323	32,830	56,015	(23,185)	170.6%	-67.11%	-59.99%	(24.4)	-5.22%	-55.13%
2051	7.00%	16.65%	7.12%	4,653	331	33,783	59,155	(25,373)	175.1%	-71.00%	-63.88%	(25.4)	-5.23%	-59.00%





**Wyoming Paid Firemen's Retirement Fund Plan B ("Fire B")**  
**Projection Results Based on January 1, 2021 Actuarial Valuation - Baseline**  
**Discount Rate: 7.00%**

Valuation as of January 1, (1)	Market Return for FY Beginning on Valuation Date (2)	Contribution Rate for Fiscal Year Following Valuation Date (3) (4)		Projected Payroll (in Thousands) (5)	Employer Contributions (in Thousands) (6)	Actuarial Accrued Liability (AAL, in Thousands) (7)	Actuarial Value of Assets (AVA, in Thousands) (8)	Unfunded Actuarial Accrued Liability (UAAL, in Thousands) (9)	Funded Ratio (10)	Funding Shortfall/(Surplus) (11)	Employer ADC (12)	Employer Normal Cost (NC) (13)	Layered Amortization Payment (14)	Assumed Expenses (15)
		Employee	Employer											
2021	7.00%	10.495%	14.50%	\$30,723	\$4,455	\$183,464	\$175,946	\$7,518	95.9%	0.30%	14.80%	12.60%	1.68%	0.52%
2022	7.00%	10.995%	15.50%	31,742	4,920	196,347	192,320	4,027	97.9%	-2.14%	13.36%	12.00%	0.84%	0.52%
2023	7.00%	11.245%	16.00%	32,852	5,256	209,629	208,066	1,563	99.3%	-3.53%	12.47%	11.68%	0.26%	0.52%
2024	7.00%	11.245%	16.00%	34,012	5,442	223,397	227,764	(4,368)	102.0%	-4.89%	11.11%	11.65%	-1.06%	0.52%
2025	7.00%	11.245%	16.00%	35,239	5,638	237,610	244,815	(7,205)	103.0%	-5.52%	10.48%	11.63%	-1.67%	0.52%
2026	7.00%	11.245%	16.00%	36,418	5,827	252,312	261,272	(8,960)	103.6%	-5.90%	10.10%	11.62%	-2.04%	0.52%
2027	7.00%	11.245%	16.00%	37,639	6,022	267,545	278,428	(10,883)	104.1%	-6.30%	9.70%	11.62%	-2.44%	0.52%
2028	7.00%	11.245%	16.00%	38,878	6,220	283,271	296,258	(12,987)	104.6%	-6.71%	9.29%	11.63%	-2.86%	0.52%
2029	7.00%	11.245%	16.00%	40,087	6,414	299,342	314,630	(15,288)	105.1%	-7.16%	8.84%	11.64%	-3.32%	0.52%
2030	7.00%	11.245%	16.00%	41,233	6,597	315,636	333,436	(17,801)	105.6%	-7.65%	8.35%	11.66%	-3.83%	0.52%
2031	7.00%	11.245%	16.00%	42,375	6,780	332,061	352,587	(20,526)	106.2%	-8.17%	7.83%	11.68%	-4.37%	0.52%
2032	7.00%	11.245%	16.00%	43,537	6,966	348,635	372,112	(23,477)	106.7%	-8.74%	7.26%	11.70%	-4.96%	0.52%
2033	7.00%	11.245%	16.00%	44,756	7,161	365,398	392,063	(26,665)	107.3%	-9.34%	6.66%	11.72%	-5.58%	0.52%
2034	7.00%	11.245%	16.00%	45,982	7,357	382,408	412,517	(30,109)	107.9%	-9.97%	6.03%	11.76%	-6.25%	0.52%
2035	7.00%	11.245%	16.00%	47,225	7,556	399,652	433,472	(33,820)	108.5%	-10.65%	5.35%	11.80%	-6.97%	0.52%
2036	7.00%	11.245%	16.00%	48,403	7,745	417,041	454,869	(37,828)	109.1%	-11.40%	4.60%	11.84%	-7.76%	0.52%
2037	7.00%	11.245%	16.00%	49,606	7,937	434,496	476,636	(42,140)	109.7%	-12.21%	3.79%	11.87%	-8.60%	0.52%
2038	7.00%	11.245%	16.00%	50,854	8,137	452,010	498,787	(46,777)	110.3%	-13.09%	2.91%	11.89%	-9.50%	0.52%
2039	7.00%	11.245%	16.00%	52,237	8,358	469,734	521,490	(51,757)	111.0%	-15.27%	0.73%	11.91%	-11.70%	0.52%
2040	7.00%	11.245%	16.00%	53,548	8,568	487,661	544,793	(57,132)	111.7%	-16.17%	-0.17%	11.95%	-12.63%	0.52%
2041	7.00%	11.245%	16.00%	54,882	8,781	505,698	568,609	(62,911)	112.4%	-16.66%	-0.66%	11.97%	-13.15%	0.52%
2042	7.00%	11.245%	16.00%	56,241	8,999	523,869	592,993	(69,125)	113.2%	-17.12%	-1.12%	11.99%	-13.63%	0.52%
2043	7.00%	11.245%	16.00%	57,642	9,223	542,169	617,975	(75,806)	114.0%	-17.86%	-1.86%	12.00%	-14.38%	0.52%
2044	7.00%	11.245%	16.00%	59,121	9,459	560,620	643,611	(82,991)	114.8%	-17.94%	-1.94%	12.01%	-14.46%	0.52%
2045	7.00%	11.245%	16.00%	60,655	9,705	579,274	669,995	(90,721)	115.7%	-18.66%	-2.66%	12.01%	-15.20%	0.52%
2046	7.00%	11.245%	16.00%	62,247	9,959	598,220	697,255	(99,036)	116.6%	-19.66%	-3.66%	12.02%	-16.20%	0.52%
2047	7.00%	11.245%	16.00%	63,820	10,211	617,431	725,417	(107,987)	117.5%	-20.72%	-4.72%	12.03%	-17.27%	0.52%
2048	7.00%	11.245%	16.00%	65,428	10,468	636,838	754,449	(117,610)	118.5%	-23.02%	-7.02%	12.03%	-19.57%	0.52%
2049	7.00%	11.245%	16.00%	67,112	10,738	656,508	784,460	(127,953)	119.5%	-24.26%	-8.26%	12.03%	-20.82%	0.52%
2050	7.00%	11.245%	16.00%	68,851	11,016	676,502	815,573	(139,071)	120.6%	-25.56%	-9.56%	12.03%	-22.11%	0.52%
2051	7.00%	11.245%	16.00%	70,647	11,303	696,843	847,866	(151,023)	121.7%	-26.91%	-10.91%	12.03%	-23.46%	0.52%



**Wyoming Paid Firemen's Retirement Fund Plan A ("Fire A")**  
**Projection Results Based on January 1, 2021 Actuarial Valuation - Baseline**  
**Discount Rate: 1.00%**

Valuation as of January 1,	Market Return for FY Beginning on Valuation Date	Contribution Rate for Fiscal Year Following Valuation Date		Projected Payroll (in Thousands)	Actuarial Accrued Liability (AAL, in Thousands)	Actuarial Value of Assets (AVA, in Thousands)	Unfunded Actuarial Accrued Liability (UAAL, in Thousands)	Funded Ratio	Funding Shortfall/ (Surplus)	10-Year Employer ADC (in Thousands)	Employer Normal Cost (NC, in Thousands)	10-Year Amortization Payment (in Thousands)	Assumed Expenses (in Thousands)	Benefit Payments (in Thousands)
		Employee	Employer											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
2021	1.00%	-	-	\$66	\$478,775	\$84,969	\$393,806	17.7%	\$41,596	\$41,596	\$128	\$41,372	\$96	\$16,296
2022	1.00%	-	-	-	467,313	71,121	396,192	15.2%	41,719	41,719	-	41,623	96	16,647
2023	1.00%	-	-	-	455,256	55,387	399,868	12.2%	42,105	42,105	-	42,009	96	16,935
2024	1.00%	-	-	-	442,788	41,444	401,344	9.4%	42,260	42,260	-	42,164	96	17,193
2025	1.00%	-	-	-	429,937	24,941	404,995	5.8%	42,644	42,644	-	42,548	96	17,420
2026	1.00%	-	-	-	416,729	7,588	409,141	1.8%	43,079	43,079	-	42,984	96	17,617
2027	1.00%	-	-	-	403,191	(8,110)	411,301	-2.0%	43,306	43,306	-	43,210	96	17,782
2028	1.00%	-	-	-	389,352	(22,564)	411,917	-5.8%	43,371	43,371	-	43,275	96	17,916
2029	1.00%	-	-	-	375,241	(37,270)	412,512	-9.9%	43,433	43,433	-	43,338	96	18,016
2030	1.00%	-	-	-	360,887	(52,205)	413,092	-14.5%	43,494	43,494	-	43,399	96	18,083
2031	1.00%	-	-	-	346,323	(67,342)	413,665	-19.4%	43,554	43,554	-	43,459	96	18,114
2032	1.00%	-	-	-	331,581	(82,656)	414,238	-24.9%	43,615	43,615	-	43,519	96	18,109
2033	1.00%	-	-	-	316,698	(98,119)	414,817	-31.0%	43,675	43,675	-	43,580	96	18,064
2034	1.00%	-	-	-	301,711	(113,701)	415,411	-37.7%	43,738	43,738	-	43,642	96	17,979
2035	1.00%	-	-	-	286,659	(129,369)	416,028	-45.1%	43,803	43,803	-	43,707	96	17,850
2036	1.00%	-	-	-	271,586	(145,091)	416,678	-53.4%	43,871	43,871	-	43,775	96	17,677
2037	1.00%	-	-	-	256,537	(160,831)	417,368	-62.7%	43,943	43,943	-	43,848	96	17,457
2038	1.00%	-	-	-	241,558	(176,552)	418,110	-73.1%	44,021	44,021	-	43,926	96	17,189
2039	1.00%	-	-	-	226,699	(192,214)	418,913	-84.8%	44,106	44,106	-	44,010	96	16,870
2040	1.00%	-	-	-	212,011	(207,776)	419,788	-98.0%	44,198	44,198	-	44,102	96	16,501
2041	1.00%	-	-	-	197,548	(223,197)	420,746	-113.0%	44,298	44,298	-	44,203	96	16,080
2042	1.00%	-	-	-	183,364	(238,434)	421,798	-130.0%	44,409	44,409	-	44,313	96	15,608
2043	1.00%	-	-	-	169,512	(253,443)	422,956	-149.5%	44,530	44,530	-	44,435	96	15,085
2044	1.00%	-	-	-	156,047	(268,183)	424,230	-171.9%	44,664	44,664	-	44,569	96	14,513
2045	1.00%	-	-	-	143,023	(282,609)	425,632	-197.6%	44,812	44,812	-	44,716	96	13,893
2046	1.00%	-	-	-	130,490	(296,682)	427,173	-227.4%	44,973	44,973	-	44,878	96	13,230
2047	1.00%	-	-	-	118,499	(310,362)	428,862	-261.9%	45,151	45,151	-	45,055	96	12,527
2048	1.00%	-	-	-	107,095	(323,614)	430,709	-302.2%	45,345	45,345	-	45,250	96	11,789
2049	1.00%	-	-	-	96,318	(336,405)	432,724	-349.3%	45,557	45,557	-	45,461	96	11,023
2050	1.00%	-	-	-	86,203	(348,709)	434,912	-404.5%	45,787	45,787	-	45,691	96	10,237
2051	1.00%	-	-	-	76,777	(360,503)	437,280	-469.5%	46,035	46,035	-	45,940	96	9,440



**Wyoming Retirement System - Volunteer Firefighte, EMT, and Search and Rescue Pension Fund ("Vol Plans")**  
**Projection Results Based on January 1, 2021 Actuarial Valuation - Baseline**  
**Discount Rate: 7.00%**

Valuation as of January 1, (1)	Market Return for FY Beginning on Valuation Date (2)	Contribution Rate for Fiscal Year Following Valuation Date		COLA (Only granted when Funded Ratio would remain above 107%) (5)	Actuarial Accrued Liability (AAL, in Thousands) (6)	Actuarial Value of Assets (AVA, in Thousands) (7)	Unfunded Actuarial Accrued Liability (UAAL, in Thousands) (6) - (7) (8)	Funded Ratio (7)/(6) (9)	30-Year Closed Amortization Payment (in Thousands) (10)	Employer ADC (11)	Employer Normal Cost (NC, in Thousands) (12)	Layered Amortization Payment (13)	Funding Shortfall/ (Surplus) (in Thousands) (13) - (4) (14)	Benefit Payments & Refunds for Fiscal Year (in Thousands) (15)
		Employee (3)	Employer (4)											
2021	7.00%	\$557,100	\$5,042,000	0.0%	\$117,988	\$90,066	\$27,922	76.3%	\$2,279	\$95	\$945	\$3,319	(\$1,723)	(\$7,330)
2022	7.00%	\$557,100	5,155,445	0.0%	120,054	96,265	23,789	80.2%	1,938	96	917	2,951	(2,204)	(7,638)
2023	7.00%	\$557,100	5,271,443	0.0%	121,920	101,719	20,201	83.4%	1,642	97	900	2,639	(2,633)	(7,954)
2024	7.00%	\$557,100	5,390,050	0.0%	123,572	108,990	14,582	88.2%	1,155	98	884	2,137	(3,253)	(8,252)
2025	7.00%	\$557,100	5,511,326	0.0%	125,016	114,732	10,284	91.8%	779	99	871	1,749	(3,762)	(8,553)
2026	7.00%	\$557,100	5,635,331	0.0%	126,385	120,091	6,294	95.0%	423	100	864	1,387	(4,248)	(8,803)
2027	7.00%	\$557,100	5,762,126	0.0%	127,586	125,694	1,892	98.5%	21	101	859	981	(4,781)	(8,986)
2028	7.00%	\$557,100	5,891,774	0.0%	128,675	131,629	(2,954)	102.3%	(432)	103	854	525	(5,367)	(9,151)
2029	7.00%	\$557,100	6,024,339	0.0%	129,666	137,942	(8,276)	106.4%	(939)	104	849	13	(6,011)	(9,317)
2030	7.00%	\$557,100	3,695,932	0.0%	130,549	144,661	(14,112)	110.8%	(1,508)	105	846	(557)	(4,253)	(9,464)
2031	7.00%	\$557,100	3,779,090	0.0%	131,339	149,288	(17,949)	113.7%	(1,910)	106	844	(960)	(4,739)	(9,603)
2032	7.00%	\$557,100	3,864,120	0.0%	132,040	154,181	(22,141)	116.8%	(2,358)	107	843	(1,408)	(5,272)	(9,733)
2033	7.00%	\$557,100	3,951,062	0.0%	132,653	159,368	(26,715)	120.1%	(2,857)	108	841	(1,907)	(5,858)	(9,838)
2034	7.00%	\$557,100	4,039,961	0.0%	133,199	164,898	(31,699)	123.8%	(3,410)	110	839	(2,462)	(6,502)	(9,937)
2035	7.00%	\$557,100	4,130,860	3.0%	133,678	170,804	(37,125)	127.8%	(4,025)	111	837	(3,077)	(7,208)	(9,999)
2036	7.00%	\$557,100	4,223,805	3.0%	134,126	177,151	(43,025)	132.1%	(4,706)	112	835	(3,759)	(7,983)	(10,349)
2037	7.00%	\$557,100	4,318,840	3.0%	134,548	183,676	(49,128)	136.5%	(5,433)	113	834	(4,485)	(8,804)	(10,748)
2038	7.00%	\$557,100	4,416,014	3.0%	134,902	190,342	(55,440)	141.1%	(6,207)	115	834	(5,259)	(9,675)	(11,153)
2039	7.00%	\$557,100	4,515,375	3.0%	135,184	197,155	(61,971)	145.8%	(7,296)	116	833	(6,347)	(10,863)	(11,540)
2040	7.00%	\$557,100	4,616,971	3.0%	135,418	204,146	(68,728)	150.8%	(8,355)	117	833	(7,405)	(12,022)	(11,923)
2041	7.00%	\$557,100	4,720,852	3.0%	135,613	211,334	(75,721)	155.8%	(9,036)	119	832	(8,086)	(12,807)	(12,319)
2042	7.00%	\$557,100	4,827,072	3.0%	135,759	218,722	(82,963)	161.1%	(9,726)	120	831	(8,775)	(13,602)	(12,737)
2043	7.00%	\$557,100	4,935,681	3.0%	135,836	226,302	(90,466)	166.6%	(10,502)	121	831	(9,549)	(14,485)	(13,164)
2044	7.00%	\$557,100	5,046,734	3.0%	135,838	234,083	(98,245)	172.3%	(11,138)	123	831	(10,185)	(15,231)	(13,559)
2045	7.00%	\$557,100	5,160,285	3.0%	135,801	242,113	(106,312)	178.3%	(11,922)	124	830	(10,968)	(16,128)	(13,932)
2046	7.00%	\$557,100	5,276,391	3.0%	135,749	250,435	(114,686)	184.5%	(12,776)	125	830	(11,821)	(17,097)	(14,312)
2047	7.00%	\$557,100	5,395,110	3.0%	135,680	259,066	(123,386)	190.9%	(13,641)	127	830	(12,685)	(18,080)	(14,666)
2048	7.00%	\$557,100	5,516,500	3.0%	135,623	268,056	(132,433)	197.6%	(16,690)	128	829	(15,733)	(21,249)	(15,014)
2049	7.00%	\$557,100	5,640,622	3.0%	135,587	277,439	(141,852)	204.6%	(17,771)	130	828	(16,813)	(22,454)	(15,383)
2050	7.00%	\$557,100	5,767,535	3.0%	135,555	287,224	(151,670)	211.9%	(18,870)	131	828	(17,911)	(23,678)	(15,728)
2051	7.00%	\$557,100	5,897,305	3.0%	135,552	297,467	(161,915)	219.4%	(20,215)	133	827	(19,256)	(25,153)	(16,059)