

**Willamette Towers HOA**  
1313 Lincoln Street Eugene, Oregon 97401

October 15, 2019

PRELIMINARY

**WT 2020 standard 30 reserves Reserve Study Expense Item Listing**

Reserve Items	Unit Cost	No Units	Current Cost When New	Estimated Remaining Life	Expected Life When New	Calendar Year	Estimated Future Cost	Raw Annual Payment
<b>Architectural Exterior: Paint and Maintain</b>								
Maintain brick: point up, clean and seal	\$ 0.00 ea	1	\$ 0	11 Years	20 Years	2031	\$ 0	\$ 0.00
Paint Building Exterior	\$ 124,840 ea	1	\$ 124,840	11 Years	20 Years	2031	\$ 158,671	\$ 11,710.25
				20 Years		2051	\$ 236,631	\$ 9,632.28
Paint Garage	\$ 15,316 ea	1	\$ 15,316	11 Years	20 Years	2031	\$ 19,467	\$ 1,436.67
				20 Years		2051	\$ 29,031	\$ 1,181.74
Seal Aggregate Panels	\$ 0.00 ea	1	\$ 0	11 Years	20 Years	2031	\$ 0	\$ 0.00
Seal exterior seams and joints	\$ 0.00 ea	1	\$ 0	11 Years	20 Years	2031	\$ 0	\$ 0.00
Wash the Building	\$ 0.00 ea	1	\$ 0	25 Years	28 Years	2045	\$ 0	\$ 0.00
Wash the Garage	\$ 0.00 ea	1	\$ 0	25 Years	28 Years	2045	\$ 0	\$ 0.00
<b>Architectural Interior: Flooring</b>								
Flooring: Commercial Units	\$ 0.00 ea	1	\$ 0	10 Years	12 Years	2030	\$ 0	\$ 0.00
Flooring: Hallway Carpets-Replace	\$ 5.24 / ft <sup>2</sup>	7560 ft <sup>2</sup>	\$ 39,614	16 Years	20 Years	2036	\$ 55,640	\$ 2,750.73
				20 Years		2056	\$ 82,978	\$ 3,377.71
Flooring: Linoleum-North Hallway	\$ 8.82 / ft <sup>2</sup>	552 ft <sup>2</sup>	\$ 4,869	11 Years	14 Years	2031	\$ 6,188	\$ 456.69
				14 Years		2045	\$ 8,186	\$ 507.13
						2059	\$ 10,828	\$ 670.84
Flooring: Lobby and East Entry	\$ 25.00 / ft <sup>2</sup>	470 ft <sup>2</sup>	\$ 11,750	25 Years	35 Years	2045	\$ 19,755	\$ 579.93
				35 Years		2080	\$ 39,759	\$ 785.30
<b>Architectural Interior: Lighting</b>								
Lighting: Residence Floors- Renew	\$ 108 ea	116	\$ 12,528	32 Years	35 Years	2052	\$ 24,226	\$ 518.90
<b>Architectural Interior: Lobby &amp; Office Remodel</b>								
Lobby & Office Remodel	\$ 18,227 ea	1	\$ 18,227	11 Years	20 Years	2031	\$ 23,166	\$ 1,709.73
				20 Years		2051	\$ 34,549	\$ 1,406.34
<b>Architectural Interior: Paint and Seal</b>								
Paint 1st Floor Hallway	\$ 3,050 ea	1	\$ 3,050	2 Years	5 Years	2022	\$ 3,238	\$ 1,048.32
						2027	\$ 3,579	\$ 681.15
				5 Years		2032	\$ 3,955	\$ 752.73
						2037	\$ 4,370	\$ 831.82

WT 2020 standard 30 reserves Reserve Study Expense Item Listing - Continued

Reserve Items	Unit Cost	No Units	Current Cost When New	Estimated Remaining Life	Expected Life When New	Calendar Year	Estimated Future Cost	Raw Annual Payment
Paint 1st Floor Hallway	\$ 3,050 ea	1	\$ 3,050	5 Years	5 Years	2042	\$ 4,830	\$ 919.23
						2047	\$ 5,337	\$ 1,015.82
						2052	\$ 5,898	\$ 1,122.56
Paint Residential Floor Maintenance Doors: Elevators, Stairs, Janitor & Garbage	\$ 1,375 ea	12	\$ 16,500	12 Years	12 Years	2032	\$ 21,395	\$ 1,442.42
						2044	\$ 27,193	\$ 2,006.87
						2056	\$ 34,562	\$ 2,550.72
Paint Residential Hallways	\$ 3,937 ea	12	\$ 47,243	12 Years	25 Years	2032	\$ 61,257	\$ 4,129.95
				25 Years		2057	\$ 100,954	\$ 3,115.70
Paint Stairways	\$ 22,500 ea	2	\$ 45,000	13 Years	30 Years	2033	\$ 59,527	\$ 3,687.92
				30 Years		2063	\$ 108,411	\$ 2,640.28
<b>Boiler (Hot Water)</b>								
Boiler: Replace Key Parts	\$ 16,500 ea	2	\$ 33,000	5 Years	10 Years	2025	\$ 37,204	\$ 5,841.18
				10 Years		2035	\$ 45,433	\$ 4,107.89
						2045	\$ 55,483	\$ 5,016.55
						2055	\$ 67,756	\$ 6,126.21
<b>Doors</b>								
Door: East Entry ADA upgrade	\$ 2,500 ea	1	\$ 2,500	0 Years	10 Years	2020	\$ 2,550	\$ 2,527.17
Door: North Entry ADA Upgrade	\$ 3,651 ea	1	\$ 3,651	10 Years	10 Years	2030	\$ 4,549	\$ 370.03
Door: South Main Entry	\$ 9,483 ea	1	\$ 9,483	10 Years	10 Years	2030	\$ 11,814	\$ 961.11
						2040	\$ 14,428	\$ 1,304.50
						2050	\$ 17,619	\$ 1,593.05
Door: South Main Entry-Remedial Work	\$ 517 ea	1	\$ 517	2 Years	5 Years	2022	\$ 549	\$ 177.70
				5 Years		2027	\$ 607	\$ 115.46
						2032	\$ 670	\$ 127.59
						2037	\$ 741	\$ 141.00
						2042	\$ 819	\$ 155.82
						2047	\$ 905	\$ 172.19
						2052	\$ 1,000	\$ 190.28
<b>Electrical</b>								
Electrical: Maintain and	\$ 30,000 ea	1	\$ 30,000	3 Years	10 Years	2023	\$ 32,496	\$ 7,810.24
				10 Years		2033	\$ 39,685	\$ 3,588.13

WT 2020 standard 30 reserves Reserve Study Expense Item Listing - Continued

Reserve Items	Unit Cost	No Units	Current Cost When New	Estimated Remaining Life	Expected Life When New	Calendar Year	Estimated Future Cost	Raw Annual Payment
Electrical: Maintain and	\$ 30,000 ea	1	\$ 30,000	10 Years	10 Years	2043	\$ 48,463	\$ 4,381.83
						2053	\$ 59,183	\$ 5,351.08
Electrical: Replace hallway sub-panels	\$ 4,000 ea	13	\$ 52,000	1 Year	35 Years	2021	\$ 54,120	\$ 26,545.12
Electrical: Replace sub-panel in ECC Room	\$ 4,000 ea	1	\$ 4,000	1 Year	35 Years	2021	\$ 4,163	\$ 2,041.93
<b>Elevator</b>								
Elevator A: Replace Mechanical	\$ 0.00 ea	1	\$ 0	30 Years	30 Years	2050	\$ 0	\$ 0.00
Elevator B: Replace Mechanical	\$ 0.00 ea	1	\$ 0	30 Years	30 Years	2050	\$ 0	\$ 0.00
Elevator Consultants	\$ 0.00 ea	1	\$ 0	30 Years	30 Years	2050	\$ 0	\$ 0.00
Elevator: Refurbish- new interiors	\$ 4,500 ea	2	\$ 9,000	12 Years	18 Years	2032	\$ 11,670	\$ 786.78
				18 Years		2050	\$ 16,722	\$ 772.54
Elevator: Replace Flooring	\$ 1,500 ea	2	\$ 3,000	1 Year	7 Years	2021	\$ 3,122	\$ 1,531.45
				7 Year		2028	\$ 3,591	\$ 478.37
						2035	\$ 4,130	\$ 550.19
						2042	\$ 4,750	\$ 632.80
						2049	\$ 5,464	\$ 727.81
Elevator: Replace Heat Pump	\$ 9,000 ea	1	\$ 9,000	4 Years	10 Years	2024	\$ 9,946	\$ 1,893.00
				10 Years		2034	\$ 12,146	\$ 1,098.17
						2044	\$ 14,832	\$ 1,341.08
						2054	\$ 18,113	\$ 1,637.73
Elevator: Work by Others	\$ 0.00 ea	1	\$ 0	30 Years	30 Years	2050	\$ 0	\$ 0.00
<b>Garage</b>								
Garage: General Upkeep	\$ 10,000 ea	1	\$ 10,000	9 Years	10 Years	2029	\$ 12,212	\$ 1,104.16
				10 Years		2039	\$ 14,913	\$ 1,348.40
						2049	\$ 18,212	\$ 1,646.67
Re-surface lower ramps	\$ 3,500 ea	2	\$ 7,000	0 Years	10 Years	2020	\$ 7,141	\$ 7,076.06
				10 Years		2030	\$ 8,721	\$ 788.51
						2040	\$ 10,650	\$ 962.93
						2050	\$ 13,006	\$ 1,175.93
Re-surface upper ramps	\$ 3,500 ea	2	\$ 7,000	10 Years	10 Years	2030	\$ 8,721	\$ 709.46
						2040	\$ 10,650	\$ 962.93

WT 2020 standard 30 reserves Reserve Study Expense Item Listing - Continued

Reserve Items	Unit Cost	No Units	Current Cost When New	Estimated Remaining Life	Expected Life When New	Calendar Year	Estimated Future Cost	Raw Annual Payment
Re-surface	\$ 3,500 ea	2	\$ 7,000	10 Years	10 Years	2050	\$ 13,006	\$ 1,175.93
Upper Deck Remediation-re-butyl & re-set drains	\$ 10,550 ea	1	\$ 10,550	10 Years	10 Years	2030	\$ 13,144	\$ 1,069.25
						2040	\$ 16,051	\$ 1,451.28
						2050	\$ 19,602	\$ 1,772.30
<b>HVAC: Heating, Ventilation, and AC</b>								
Ventilation: Clean North Side Vents	\$ 25,000 ea	1	\$ 25,000	7 Years	25 Years	2027	\$ 29,334	\$ 3,384.26
Ventilation: Clean South Side	\$ 15,000 ea	1	\$ 15,000	7 Years	25 Years	2027	\$ 17,600	\$ 2,030.56
Ventilation: Control air flow along 1st floor lobby	\$ 9,000 ea	1	\$ 9,000	0 Years	15 Years	2020	\$ 9,182	\$ 9,097.80
<b>Miscellaneous: Major Items</b>								
Parking Lot Repairs	\$ 8,848 ea	1	\$ 8,848	10 Years	12 Years	2030	\$ 11,023	\$ 896.70
				12 Years		2042	\$ 14,010	\$ 1,033.95
				2054		\$ 17,806	\$ 1,314.14	
<b>Miscellaneous: Repair and Renew</b>								
Architectural Exterior: Landscape-Prune Trees	\$ 2,000 ea	1	\$ 2,000	10 Years	50 Years	2030	\$ 2,492	\$ 202.70
				50 Years		2080	\$ 6,767	\$ 78.87
Architectural Exterior: Landscape-Repair Sprinkler Lines	\$ 500 ea	1	\$ 500	10 Years	10 Years	2030	\$ 623	\$ 50.68
Architectural Exterior: Replace Glass: Commercial, etc.	\$ 1,000 ea	1	\$ 1,000	10 Years	50 Years	2030	\$ 1,246	\$ 101.35
Architectural Interior: Ceilings 1st Floor- Repair and Renew	\$ 0.00 ea	1	\$ 0	10 Years	30 Years	2030	\$ 0	\$ 0.00
				30 Years		2060	\$ 0	\$ 0.00
Architectural Interior: Ceilings: Repair and Renew	\$ 3,000 ea	1	\$ 3,000	10 Years	50 Years	2030	\$ 3,738	\$ 304.05

WT 2020 standard 30 reserves Reserve Study Expense Item Listing - Continued

Reserve Items	Unit Cost	No Units	Current Cost When New	Estimated Remaining Life	Expected Life When New	Calendar Year	Estimated Future Cost	Raw Annual Payment
Architectural Interior: Flooring: Commercial Spaces	\$ 1,500 ea	3	\$ 4,500	10 Years	50 Years	2030	\$ 5,606	\$ 456.08
Architectural Interior: Metal Handrails	\$ 1,750 ea	1	\$ 1,750	10 Years	50 Years	2030	\$ 2,180	\$ 177.36
Doors: Commercial	\$ 3,000 ea	1	\$ 3,000	10 Years	50 Years	2030	\$ 3,738	\$ 304.05
Doors: Exterior-Replace	\$ 3,000 ea	1	\$ 3,000	10 Years	50 Years	2030	\$ 3,738	\$ 304.05
Doors: Interior	\$ 1,990 ea	3	\$ 5,970	10 Years	50 Years	2030	\$ 7,438	\$ 605.07
Miscellaneous: Paving: Repair Sidewalks	\$ 7.60 / ft <sup>2</sup>	405 ft <sup>2</sup>	\$ 3,078	10 Years	50 Years	2030	\$ 3,835	\$ 311.96
Miscellaneous: Office-Equipment and Furniture	\$ 3,000 ea	1	\$ 3,000	10 Years	50 Years	2030	\$ 3,738	\$ 304.05
Miscellaneous: Parking- Bicycle Racks	\$ 210 ea	5	\$ 1,050	10 Years	50 Years	2030	\$ 1,308	\$ 106.42
Roof: Awning Replace	\$ 9,500 ea	1	\$ 9,500	10 Years	50 Years	2030	\$ 11,836	\$ 962.83
Roof: Awning- Repair Mounting	\$ 2,500 ea	1	\$ 2,500	10 Years	50 Years	2030	\$ 3,115	\$ 253.38
Roof: Seal Patios (Roofs) and North Porches	\$ 0.00 ea	12	\$ 0	10 Years	10 Years	2030	\$ 0	\$ 0.00
Security: Cameras	\$ 5,000 ea	1	\$ 5,000	2 Years	8 Years	2022	\$ 5,309	\$ 1,718.55
Security: Key / Fob / Entry Guard System	\$ 8,000 ea	1	\$ 8,000	2 Years	5 Years	2022	\$ 8,494	\$ 2,749.69
Security: Lighting- Exterior	\$ 8,000 ea	1	\$ 8,000	2 Years	10 Years	2022	\$ 8,494	\$ 2,749.69
<b>Plumbing</b>								
Add 11th of 11 unit risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Add piping for to commercial space for continuous service	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04

WT 2020 standard 30 reserves Reserve Study Expense Item Listing - Continued

Reserve Items	Unit Cost	No Units	Current Cost When New	Estimated Remaining Life	Expected Life When New	Calendar Year	Estimated Future Cost	Raw Annual Payment
Replace 10th of 11 unit risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 1st of 11 unit risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 1st of 5 hallway risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 2nd of 11 unit risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 2nd of 5 hallway risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 3rd of 11 unit risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 3rd of 5 hallway risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 4th of 11 unit risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 4th of 5 hallway risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 5th of 11 unit risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 5th of 5 hallway risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 6th of 11 unit risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 7th of 11 unit risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 8th of 11 unit risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace 9th of 11 unit risers	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Replace Ball Valves- 12th Floor	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
Supplemental Plumbing	\$ 100,000 ea	1	\$ 100,000	15 Years	15 Years	2035	\$ 137,676	\$ 7,308.41
Update (replace) Manifold Line (1st floor lateral supply)	\$ 1.00 ea	1	\$ 1	32 Years	50 Years	2052	\$ 2	\$ 0.04
<b>Roof</b>								
Add Anchor System and Walkway	\$ 40,000 ea	1	\$ 40,000	30 Years	30 Years	2050	\$ 74,319	\$ 1,732.44
North Porches- Remediate 2,3,4	\$ 1,500 ea	3	\$ 4,500	0 Years	30 Years	2020	\$ 4,591	\$ 4,548.90

WT 2020 standard 30 reserves Reserve Study Expense Item Listing - Continued

Reserve Items	Unit Cost	No Units	Current Cost When New	Estimated Remaining Life	Expected Life When New	Calendar Year	Estimated Future Cost	Raw Annual Payment
North Porches-Remediate 5 thru 12	\$ 1,500 ea	8	\$ 12,000	9 Years	31 Years	2029	\$ 14,654	\$ 1,324.99
North Porches-Remediate 13	\$ 3,000 ea	1	\$ 3,000	0 Years	30 Years	2020	\$ 3,061	\$ 3,032.60
Roof anchor 2-year certification testing	\$ 5,000 ea	1	\$ 5,000	2 Years	2 Years	2022	\$ 5,309	\$ 1,718.55
						2024	\$ 5,525	\$ 2,710.11
						2026	\$ 5,751	\$ 2,820.62
						2028	\$ 5,985	\$ 2,935.63
						2030	\$ 6,229	\$ 3,055.34
						2032	\$ 6,483	\$ 3,179.92
						2034	\$ 6,748	\$ 3,309.59
						2036	\$ 7,023	\$ 3,444.54
						2038	\$ 7,309	\$ 3,585.00
						2040	\$ 7,607	\$ 3,731.18
						2042	\$ 7,917	\$ 3,883.32
						2044	\$ 8,240	\$ 4,041.67
2046	\$ 8,576	\$ 4,206.47						
2048	\$ 8,926	\$ 4,377.99						
2050	\$ 9,290	\$ 4,556.51						
Roof: Building Roof and Flat Roofs (4)	\$ 165,000 ea	1	\$ 165,000	6 Years	21 Years	2026	\$ 189,773	\$ 25,279.52
				21 Years		2047	\$ 288,726	\$ 11,074.41
						2068	\$ 439,277	\$ 16,848.94
Roof: East Portico-Rebuild & Re-Roof	\$ 5,364 ea	1	\$ 5,364	10 Years	20 Years	2030	\$ 6,683	\$ 543.65
				20 Years		2050	\$ 9,966	\$ 405.68
Roof: Maintain caps, patios, seams and drains	\$ 15,000 ea	1	\$ 15,000	10 Years	10 Years	2030	\$ 18,688	\$ 1,520.26
Roof: Re-Roof 2nd Floor Patio	\$ 28,393 ea	1	\$ 28,393	11 Years	20 Years	2031	\$ 36,087	\$ 2,663.32
				20 Years		2051	\$ 53,818	\$ 2,190.72
Walking pads at re-roofing	\$ 10,000 ea	1	\$ 10,000	6 Years	21 Years	2026	\$ 11,501	\$ 1,532.09
<b>Security</b>								
Replace hallway fire alarm and electrical hookup	\$ 835 ea	12	\$ 10,020	0 Years	20 Years	2020	\$ 10,222	\$ 10,128.88
				20 Years		2040	\$ 15,245	\$ 620.55
						2060	\$ 22,735	\$ 925.45
Security: Fencing	\$ 1.00 ea	1	\$ 1	40 Years	50 Years	2060	\$ 2	\$ 0.00
Security:	\$ 15,000 ea	2	\$ 30,000	2 Years	18 Years	2022	\$ 31,854	\$ 10,311.33



WT 2020 standard 30 reserves Reserve Study Expense Item Listing - Continued

Reserve Items	Unit Cost	No Units	Current Cost When New	Estimated Remaining Life	Expected Life When New	Calendar Year	Estimated Future Cost	Raw Annual Payment
Security: Garage Roll-up	\$ 15,000 ea	2	\$ 30,000	18 Years	18 Years	2040	\$ 45,643	\$ 2,108.70
						2058	\$ 65,402	\$ 3,021.56

*Raw Annual Payments do not include earned interest, tax adjustments or payments made with initial reserves.*

*Months Remaining in Calendar Year 2020: 12*

*Expected annual inflation: 2.00% Interest earned on reserve funds: 2.00% Initial Reserve: \$ 50,000*

PRELIMINARY

**WT 2020 standard 30 reserves Funding Study Modified Cash Flow Analysis**

Calendar Year	Annual Dues	Annual Interest	Salvage	Annual Expenses	Annual Income Tax	Net Reserve Funds	% Funded
2020	\$ 80,000	\$ 1,747		\$ 36,747	\$ 262	\$ 94,738	16.5%
2021	\$ 83,200	\$ 2,681		\$ 61,406	\$ 402	\$ 118,811	19.5%
2022	\$ 86,528	\$ 3,198		\$ 63,247	\$ 480	\$ 144,810	23.4%
2023	\$ 89,989	\$ 3,755		\$ 32,496	\$ 563	\$ 205,494	32.9%
2024	\$ 93,589	\$ 5,014		\$ 15,471	\$ 752	\$ 287,873	43.3%
2025	\$ 97,332	\$ 6,712		\$ 37,204	\$ 1,007	\$ 353,707	48.9%
2026	\$ 101,226	\$ 8,078		\$ 207,025	\$ 1,212	\$ 254,774	33.4%
2027	\$ 105,275	\$ 6,117		\$ 51,120	\$ 918	\$ 314,128	49.7%
2028	\$ 109,486	\$ 7,355		\$ 9,576	\$ 1,103	\$ 420,289	64.1%
2029	\$ 113,865	\$ 9,539		\$ 26,866	\$ 1,431	\$ 515,396	71.1%
2030	\$ 118,420	\$ 11,503		\$ 144,199	\$ 1,725	\$ 499,393	64.2%
2031	\$ 123,156	\$ 11,223		\$ 243,579	\$ 1,683	\$ 388,510	54.7%
2032	\$ 68,250	\$ 8,477		\$ 105,430	\$ 1,272	\$ 358,535	66.1%
2033	\$ 68,250	\$ 7,872		\$ 99,212	\$ 1,181	\$ 334,264	65.0%
2034	\$ 68,250	\$ 7,381		\$ 18,893	\$ 1,107	\$ 389,895	79.2%
2035	\$ 68,250	\$ 8,505		\$ 187,239	\$ 1,276	\$ 278,135	50.2%
2036	\$ 68,250	\$ 6,247		\$ 62,663	\$ 937	\$ 289,032	66.1%
2037	\$ 68,250	\$ 6,468		\$ 5,111	\$ 970	\$ 357,668	80.0%
2038	\$ 68,250	\$ 7,854		\$ 7,309	\$ 1,178	\$ 425,285	82.3%
2039	\$ 68,250	\$ 9,220		\$ 14,913	\$ 1,383	\$ 486,459	82.8%
2040	\$ 68,250	\$ 10,456		\$ 120,274	\$ 1,568	\$ 443,322	67.9%
2041	\$ 68,250	\$ 9,584			\$ 1,438	\$ 519,719	84.7%
2042	\$ 68,250	\$ 11,127		\$ 32,326	\$ 1,669	\$ 565,101	81.0%
2043	\$ 68,250	\$ 12,044		\$ 48,463	\$ 1,807	\$ 595,126	79.2%
2044	\$ 68,250	\$ 12,651		\$ 50,265	\$ 1,898	\$ 623,864	78.8%
2045	\$ 68,250	\$ 13,231		\$ 83,424	\$ 1,985	\$ 619,937	74.5%
2046	\$ 68,250	\$ 13,152		\$ 8,576	\$ 1,973	\$ 690,790	82.1%
2047	\$ 68,250	\$ 14,583		\$ 294,968	\$ 2,187	\$ 476,467	51.3%
2048	\$ 68,250	\$ 10,254		\$ 8,926	\$ 1,538	\$ 544,507	74.8%
2049	\$ 68,250	\$ 11,628		\$ 23,676	\$ 1,744	\$ 598,965	73.4%
2050	\$ 68,250	\$ 12,728		\$ 173,529	\$ 1,909	\$ 504,505	56.7%
<b>Totals :</b>	<b>\$ 2,498,814</b>	<b>\$ 270,382</b>	<b>\$ 0</b>	<b>\$ 2,274,134</b>	<b>\$ 40,557</b>		

<sup>1</sup> Cash Reserves minus Fully Funded Value

The cash distribution shown in this table applies to repair and replacement cash reserves only.

Basis of Funding Study - Modified Cash Flow

Cash reserves have been set to a minimum of \$ 0

Cash Flow has been modified with the forced Fixed Payments.

Months Remaining in Calendar Year 2020: 12      Inflation = 2.00 %      Interest = 2.00 %

Study Life = 30 years      Initial Reserve Funds = \$ 50,000.00      Final Reserve Value = \$ 504,505.47

**WT 2020 standard 30 reserves Funding Study - Expenses by Item and by Calendar Year**

Item Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
<b>Reserve Category : Architectural Exterior: Paint and Maintain</b>																					
Maintain brick: point up, clean and seal																					
Paint Building Exterior												\$ 158,671									
Paint Garage												\$ 19,467									
Seal Aggregate Panels																					
Seal exterior seams and joints																					
Wash the Building																					
Wash the Garage																					
Category Subtotal :												\$ 178,138									
<b>Reserve Category : Architectural Interior: Flooring</b>																					
Flooring: Commercial Units																					
Flooring: Hallway Carpets-Replace																	\$ 55,640				
Flooring: Linoleum- North Hallway												\$ 6,188									
Flooring: Lobby and East Entry																					
Category Subtotal :												\$ 6,188					\$ 55,640				
<b>Reserve Category : Architectural Interior: Lighting</b>																					
Lighting: Residence Floors-Renew																					
<b>Reserve Category : Architectural Interior: Lobby &amp; Office Remodel</b>																					
Lobby & Office Remodel												\$ 23,166									
<b>Reserve Category : Architectural Interior: Paint and Seal</b>																					
Paint 1st Floor Hallway			\$ 3,238					\$ 3,579					\$ 3,955						\$ 4,370		
Paint Residential Floor Maintenance Doors: Elevators, Stairs, Janitor & Garbage													\$ 21,395								
Paint Residential Hallways													\$ 61,257								
Paint Stairways														\$ 59,527							
Category Subtotal :			\$ 3,238					\$ 3,579					\$ 86,607	\$ 59,527					\$ 4,370		
<b>Reserve Category : Boiler (Hot Water)</b>																					
Boiler: Replace Key Parts						\$ 37,204										\$ 45,433					
<b>Reserve Category : Doors</b>																					
Door: East Entry ADA upgrade	\$ 2,550																				
Door: North Entry ADA Upgrade											\$ 4,549										
Door: South Main Entry											\$ 11,814										\$ 14,428
Door: South Main Entry-Remedial Work			\$ 549					\$ 607					\$ 670					\$ 741			
Category Subtotal :	\$ 2,550		\$ 549					\$ 607			\$ 16,363		\$ 670					\$ 741			\$ 14,428

**WT 2020 standard 30 reserves Funding Study Expenses by Calendar Year - Continued**

Item Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
<b>Reserve Category : Electrical</b>																					
Electrical: Maintain and Repair				\$ 32,496										\$ 39,685							
Electrical: Replace hallway sub-panels		\$ 54,120																			
Electrical: Replace sub-panel in ECC Room		\$ 4,163																			
Category Subtotal :		\$ 58,283		\$ 32,496										\$ 39,685							
<b>Reserve Category : Elevator</b>																					
Elevator A: Replace Mechanical																					
Elevator B: Replace Mechanical																					
Elevator Consultants																					
Elevator: Refurbish- new interiors													\$ 11,670								
Elevator: Replace Flooring		\$ 3,122							\$ 3,591							\$ 4,130					
Elevator: Replace Heat Pump					\$ 9,946										\$ 12,146						
Elevator: Work by Others																					
Category Subtotal :		\$ 3,122			\$ 9,946				\$ 3,591				\$ 11,670		\$ 12,146	\$ 4,130					
<b>Reserve Category : Garage</b>																					
Garage: General Upkeep									\$ 12,212											\$ 14,913	
Re-surface lower ramps	\$ 7,141										\$ 8,721										\$ 10,650
Re-surface upper ramps											\$ 8,721										\$ 10,650
Upper Deck Remediation- re-butyl & re-set drains											\$ 13,144										\$ 16,051
Category Subtotal :	\$ 7,141								\$ 12,212	\$ 30,586										\$ 14,913	\$ 37,351
<b>Reserve Category : HVAC: Heating, Ventilation, and AC</b>																					
Ventilation: Clean North Side Vents								\$ 29,334													
Ventilation: Clean South Side								\$ 17,600													
Ventilation: Control air flow along 1st floor lobby	\$ 9,182																				
Category Subtotal :	\$ 9,182							\$ 46,934													
<b>Reserve Category : Miscellaneous: Major Items</b>																					
Parking Lot Repairs											\$ 11,023										
<b>Reserve Category : Miscellaneous: Repair and Renew</b>																					
Architectural Exterior: Landscape- Prune Trees											\$ 2,492										
Architectural Exterior: Landscape- Repair Sprinkler Lines											\$ 623										
Architectural Exterior: Replace Glass: Commercial, etc.											\$ 1,246										
Architectural Interior: Ceilings 1st Floor- Repair and Renew																					

**WT 2020 standard 30 reserves Funding Study Expenses by Calendar Year - Continued**

Item Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Architectural Interior: Ceilings: Repair and Renew											\$ 3,738										
Architectural Interior: Flooring: Commercial Spaces											\$ 5,606										
Architectural Interior: Metal Handrails											\$ 2,180										
Doors: Commercial											\$ 3,738										
Doors: Exterior- Replace											\$ 3,738										
Doors: Interior											\$ 7,438										
Miscellaneous: Paving: Repair Sidewalks											\$ 3,835										
Miscellaneous: Office-Equipment and Furniture											\$ 3,738										
Miscellaneous: Parking- Bicycle Racks											\$ 1,308										
Roof: Awning Replace											\$ 11,836										
Roof: Awning- Repair Mounting											\$ 3,115										
Roof: Seal Patios (Roofs) and North Porches																					
Security: Cameras			\$ 5,309																		
Security: Key / Fob / Entry Guard System			\$ 8,494																		
Security: Lighting- Exterior			\$ 8,494																		
Category Subtotal :			\$ 22,297								\$ 54,631										

**Reserve Category : Plumbing**

Add 11th of 11 unit risers																					
Add piping for to commercial space for continuous service																					
Replace 10th of 11 unit risers																					
Replace 1st of 11 unit risers																					
Replace 1st of 5 hallway risers																					
Replace 2nd of 11 unit risers																					
Replace 2nd of 5 hallway risers																					
Replace 3rd of 11 unit risers																					
Replace 3rd of 5 hallway risers																					
Replace 4th of 11 unit risers																					
Replace 4th of 5 hallway risers																					
Replace 5th of 11 unit risers																					
Replace 5th of 5 hallway risers																					
Replace 6th of 11 unit risers																					
Replace 7th of 11 unit risers																					
Replace 8th of 11 unit risers																					
Replace 9th of 11 unit risers																					
Replace Ball Valves- 12th Floor																					
Supplemental Plumbing																					\$ 137,676

**WT 2020 standard 30 reserves Funding Study Expenses by Calendar Year - Continued**

Item Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Update (replace) Manifold Line (1st floor lateral supply)																					
Category Subtotal :																\$ 137,676					
<b>Reserve Category : Roof</b>																					
Add Anchor System and Walkway																					
North Porches- Remediate 2,3,4	\$ 4,591																				
North Porches- Remediate 5 thru 12										\$ 14,654											
North Porches- Remediate 13	\$ 3,061																				
Roof anchor 2-year certification testing			\$ 5,309		\$ 5,525		\$ 5,751		\$ 5,985		\$ 6,229		\$ 6,483		\$ 6,748		\$ 7,023		\$ 7,309		\$ 7,607
Roof: Building Roof and Flat Roofs (4)							\$ 189,773														
Roof: East Portico-Rebuild & Re-Roof											\$ 6,683										
Roof: Maintain caps, patios, seams and drains											\$ 18,688										
Roof: Re-Roof 2nd Floor Patio												\$ 36,087									
Walking pads at re-roofing							\$ 11,501														
Category Subtotal :	\$ 7,652		\$ 5,309		\$ 5,525		\$ 207,025		\$ 5,985	\$ 14,654	\$ 31,600	\$ 36,087	\$ 6,483		\$ 6,748		\$ 7,023		\$ 7,309		\$ 7,607
<b>Reserve Category : Security</b>																					
Replace hallway fire alarm and electrical hookup	\$ 10,222																				\$ 15,245
Security: Fencing																					
Security: Garage Roll-up Gates			\$ 31,854																		\$ 45,643
Category Subtotal :	\$ 10,222		\$ 31,854																		\$ 60,888
<b>Expense Totals :</b>	<b>\$ 36,747</b>	<b>\$ 61,406</b>	<b>\$ 63,247</b>	<b>\$ 32,496</b>	<b>\$ 15,471</b>	<b>\$ 37,204</b>	<b>\$ 207,025</b>	<b>\$ 51,120</b>	<b>\$ 9,576</b>	<b>\$ 26,866</b>	<b>\$ 144,199</b>	<b>\$ 243,579</b>	<b>\$ 105,430</b>	<b>\$ 99,212</b>	<b>\$ 18,893</b>	<b>\$ 187,239</b>	<b>\$ 62,663</b>	<b>\$ 5,111</b>	<b>\$ 7,309</b>	<b>\$ 14,913</b>	<b>\$ 120,274</b>

**WT 2020 standard 30 reserves Funding Study Expenses by Calendar Year - Continued**

Item Description	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
<b>Reserve Category : Architectural Exterior: Paint and Maintain</b>										
Maintain brick: point up, clean and seal										
Paint Building Exterior										
Paint Garage										
Seal Aggregate Panels										
Seal exterior seams and joints										
Wash the Building										
Wash the Garage										
Category Subtotal :										
<b>Reserve Category : Architectural Interior: Flooring</b>										
Flooring: Commercial Units										
Flooring: Hallway Carpets- Replace										
Flooring: Linoleum- North Hallway					\$ 8,186					
Flooring: Lobby and East Entry					\$ 19,755					
Category Subtotal :					\$ 27,941					
<b>Reserve Category : Architectural Interior: Lighting</b>										
Lighting: Residence Floors- Renew										
<b>Reserve Category : Architectural Interior: Lobby &amp; Office Remodel</b>										
Lobby & Office Remodel										
<b>Reserve Category : Architectural Interior: Paint and Seal</b>										
Paint 1st Floor Hallway		\$ 4,830					\$ 5,337			
Paint Residential Floor Maintenance Doors: Elevators, Stairs, Janitor & Garbage				\$ 27,193						
Paint Residential Hallways										
Paint Stairways										
Category Subtotal :		\$ 4,830		\$ 27,193			\$ 5,337			
<b>Reserve Category : Boiler (Hot Water)</b>										
Boiler: Replace Key Parts					\$ 55,483					
<b>Reserve Category : Doors</b>										
Door: East Entry ADA upgrade										
Door: North Entry ADA Upgrade										
Door: South Main Entry										\$ 17,619
Door: South Main Entry- Remedial Work		\$ 819					\$ 905			
Category Subtotal :		\$ 819					\$ 905			\$ 17,619

**WT 2020 standard 30 reserves Funding Study Expenses by Calendar Year - Continued**

Item Description	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
<b>Reserve Category : Electrical</b>										
Electrical: Maintain and Repair			\$ 48,463							
Electrical: Replace hallway sub-panels										
Electrical: Replace sub-panel in ECC Room										
Category Subtotal :			\$ 48,463							
<b>Reserve Category : Elevator</b>										
Elevator A: Replace Mechanical										
Elevator B: Replace Mechanical										
Elevator Consultants										
Elevator: Refurbish- new interiors										\$ 16,722
Elevator: Replace Flooring		\$ 4,750							\$ 5,464	
Elevator: Replace Heat Pump				\$ 14,832						
Elevator: Work by Others										
Category Subtotal :		\$ 4,750		\$ 14,832					\$ 5,464	\$ 16,722
<b>Reserve Category : Garage</b>										
Garage: General Upkeep									\$ 18,212	
Re-surface lower ramps										\$ 13,006
Re-surface upper ramps										\$ 13,006
Upper Deck Remediation- re-butyl & re-set drains										\$ 19,602
Category Subtotal :									\$ 18,212	\$ 45,614
<b>Reserve Category : HVAC: Heating, Ventilation, and AC</b>										
Ventilation: Clean North Side Vents										
Ventilation: Clean South Side										
Ventilation: Control air flow along 1st floor lobby										
Category Subtotal :										
<b>Reserve Category : Miscellaneous: Major Items</b>										
Parking Lot Repairs		\$ 14,010								
<b>Reserve Category : Miscellaneous: Repair and Renew</b>										
Architectural Exterior: Landscape- Prune Trees										
Architectural Exterior: Landscape- Repair Sprinkler Lines										
Architectural Exterior: Replace Glass: Commercial, etc.										
Architectural Interior: Ceilings 1st Floor- Repair and Renew										



**WT 2020 standard 30 reserves Funding Study Expenses by Calendar Year - Continued**

Item Description	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Architectural Interior: Ceilings: Repair and Renew										
Architectural Interior: Flooring: Commercial Spaces										
Architectural Interior: Metal Handrails										
Doors: Commercial										
Doors: Exterior- Replace										
Doors: Interior										
Miscellaneous: Paving: Repair Sidewalks										
Miscellaneous: Office-Equipment and Furniture										
Miscellaneous: Parking- Bicycle Racks										
Roof: Awning Replace										
Roof: Awning- Repair Mounting										
Roof: Seal Patios (Roofs) and North Porches										
Security: Cameras										
Security: Key / Fob / Entry Guard System										
Security: Lighting- Exterior										
Category Subtotal :										
<b>Reserve Category : Plumbing</b>										
Add 11th of 11 unit risers										
Add piping for to commercial space for continuous service										
Replace 10th of 11 unit risers										
Replace 1st of 11 unit risers										
Replace 1st of 5 hallway risers										
Replace 2nd of 11 unit risers										
Replace 2nd of 5 hallway risers										
Replace 3rd of 11 unit risers										
Replace 3rd of 5 hallway risers										
Replace 4th of 11 unit risers										
Replace 4th of 5 hallway risers										
Replace 5th of 11 unit risers										
Replace 5th of 5 hallway risers										
Replace 6th of 11 unit risers										
Replace 7th of 11 unit risers										
Replace 8th of 11 unit risers										
Replace 9th of 11 unit risers										
Replace Ball Valves- 12th Floor										
Supplemental Plumbing										

**WT 2020 standard 30 reserves Funding Study Expenses by Calendar Year - Continued**

Item Description	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Update (replace) Manifold Line (1st floor lateral supply)										
Category Subtotal :										
<b>Reserve Category : Roof</b>										
Add Anchor System and Walkway										\$ 74,319
North Porches- Remediate 2,3,4										
North Porches- Remediate 5 thru 12										
North Porches- Remediate 13										
Roof anchor 2-year certification testing		\$ 7,917		\$ 8,240		\$ 8,576		\$ 8,926		\$ 9,290
Roof: Building Roof and Flat Roofs (4)							\$ 288,726			
Roof: East Portico-Rebuild & Re-Roof										\$ 9,966
Roof: Maintain caps, patios, seams and drains										
Roof: Re-Roof 2nd Floor Patio										
Walking pads at re-roofing										
Category Subtotal :		\$ 7,917		\$ 8,240		\$ 8,576	\$ 288,726	\$ 8,926		\$ 93,575
<b>Reserve Category : Security</b>										
Replace hallway fire alarm and electrical hookup										
Security: Fencing										
Security: Garage Roll-up Gates										
Category Subtotal :										
<b>Expense Totals :</b>		<b>\$ 32,326</b>	<b>\$ 48,463</b>	<b>\$ 50,265</b>	<b>\$ 83,424</b>	<b>\$ 8,576</b>	<b>\$ 294,968</b>	<b>\$ 8,926</b>	<b>\$ 23,676</b>	<b>\$ 173,529</b>

# Willamette Towers HOA

1313 Lincoln Street Eugene, Oregon 97401

October 15, 2019

## 2020 Expense Summary

Year	Category	Item Name	Expense
2020	Doors	Door: East Entry ADA upgrade	\$ 2,550
	Garage	Re-surface lower ramps	\$ 7,141
	HVAC: Heating, Ventilation, and AC	Ventilation: Control air flow along 1st floor lobby	\$ 9,182
	Roof	North Porches- Remediate 2,3,4	\$ 4,591
		North Porches- Remediate 13	\$ 3,061
Security	Replace hallway fire alarm and electrical hookup	\$ 10,222	
<b>2020 Annual Expense Total = \$ 36,747</b>			