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Update "No-Site-Visit" Reserve Study



98 Union Seattle, WA

Report #: 19791-4
For Period Beginning: January 1, 2019
Expires: December 31, 2019

Date Prepared: October 31, 2018



Hello, and welcome to your Reserve Study!

This Report is a valuable budget planning tool, for with it you control the future of your association. It contains all the fundamental information needed to understand your current and future Reserve obligations, the most significant expenditures your association will face.

With respect to Reserves, this Report will tell you "where you are," and "where to go from here."

In this Report, you will find...

- 1) A List of What you're Reserving For**
- 2) An Evaluation of your Reserve Fund Size and Strength**
- 3) A Recommended Multi-Year Reserve Funding Plan**

More Questions?

Visit our website at www.ReserveStudy.com or call us at:

253-661-5437

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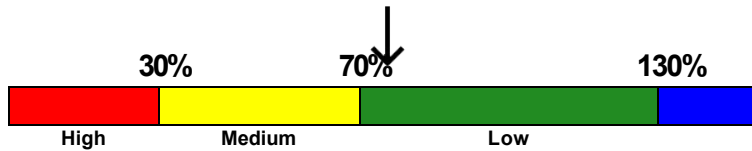
3- Minute Executive Summary

Association: 98 Union **Assoc. #: 19791-4**
Location: Seattle, WA **# of Units:75**
Report Period: January 1, 2019 through December 31, 2019

Findings/Recommendations as-of: January 1, 2019

Starting Reserve Balance	\$1,143,500
Current Fully Funded Reserve Balance	\$1,491,857
Percent Funded	76.6 %
Average Reserve Deficit or (Surplus) Per Unit	\$4,645
Recommended 2019 100% Monthly "Full Funding" Contributions	\$15,000
Recommended 2019 70% Monthly "Threshold Funding" Contributions	\$13,700
2019 "Baseline Funding" minimum contributions to keep Reserves above \$0	\$11,400
2018 Approved Monthly Contributions	\$15,000

Reserves % Funded: 76.6%



Special Assessment Risk:

Economic Assumptions:

Net Annual "After Tax" Interest Earnings Accruing to Reserves 1.00 %
 Annual Inflation Rate 3.00 %

- This is a Update "No-Site-Visit" Reserve Study, meeting or exceeding all requirements of the RCW. This study was prepared by, or under the supervision of a credentialed Reserve Specialist (RS™).
- Your Reserve Fund is currently 76.6 % Funded. This means the association’s special assessment & deferred maintenance risk is currently Low. The objective of your multi-year Funding Plan is to fund your Reserves to a level where you will enjoy a low risk of such Reserve cash flow problems.
- Congratulations! Your Reserve Funded status (above 70% funded) places your association among the top 20% in the state of Washington
- Based on this starting point and your anticipated future expenses, our recommendation is to budget Reserve Contributions to within the 70% to 100% range as noted above. The 100% “Full” and 70% contribution rates are designed to gradually achieve these funding objectives by the end of our 30-year report scope.
- No assets appropriate for Reserve designation known to be excluded. See appendix for component information and the basis of our assumptions.

Executive Summary

19791-4

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
Site / Grounds				
602	Garage Doors and Openers - Replace	10	2	\$11,500
98 UNION: Building Interior				
701	Int Floor c: - Repair/Replace		0	\$79,000
701	Int Floor d: - Repair/Replace		2	\$79,000
701	Int Floor e: - Repair/Replace		4	\$39,500
710	Int Walls and Ceilings a - Repaint	12	3	\$26,000
710	Int Walls and Ceilings b - Repaint	12	13	\$53,000
711	Interior Lobby - Repaint	12	5	\$10,350
713	Garage Lobbies - Carpet & Paint	12	7	\$20,500
716	Int Fire Doors - Replace	1	0	\$4,350
730	Mailboxes - Replace	40	4	\$7,950
750	Lobby - Remodel	12	5	\$23,000
760	Furniture - Replace	12	5	\$22,500
98 UNION: Systems				
915	HVAC Fans: - Repair/Replace	7	0	\$14,000
926	HVAC Boiler: - Repair/Replace	20	17	\$115,000
930	HVAC: Dom Water Boost - Replace	20	0	\$40,500
931	HVAC Assorted: - Repair/Replace	20	0	\$37,000
932	HVAC Heat Recovery - Repair/Replace	20	13	\$71,500
950	Entry Access System - Replace	12	11	\$5,600
955	Security TV - Replace	10	2	\$19,000
960	Elevator - Modernize	30	24	\$600,000
961	Elevator Cab - Remodel	20	14	\$54,500
990	Trash Compactor - Replace	18	17	\$20,600
So. ARCADE (shared 66%-69%) Exterior				
505	Tower Roof - Repair/Replace	20	2	\$165,000
506	Roof: Low Slope - Recoat	15	2	\$180,000
507	Atrium Metal Roof - Repair/Replace	50	16	\$5,250
520	EIFS Coating - Recoat/Repair	16	1	\$416,000
521	EIFS - Staging	8	9	\$65,000
522	EIFS Coating - Low Pressure Wash	8	9	\$36,000
540	Roof Decks - Repair/Replace	15	2	\$4,400
541	Atrium Walking Surface - Clean/Seal		1	\$60,000
542	Tower Decks - Clean/Seal/Repair	6	5	\$18,500
550	Rails: Metal - Repair/Replace		3	\$240,500
So. ARCADE (shared 66%-68%) Systems				
909	Emergency Generator- Repair/Replace	40	6	\$62,000
927	Fire Pump Motor- Repair/Replace	50	17	\$8,450
928	Fire Pump Control - Replace	35	34	\$6,750
965	Fire Panel - Replace	20	6	\$215,000
968	Fire Pump - Repair/Replace	55	22	\$10,500
37 Total Funded Components				

Note 1: Yellow highlighted line items are expected to require attention in this initial year, green highlighted items are expected to occur within the first-five years.

Introduction



A Reserve Study is the art and science of anticipating, and preparing for, an association's major common area repair and replacement expenses. Partially art, because in this field we are making projections about the future. Partially science, because our work is a combination of research and well-defined computations, following consistent National Reserve Study Standard principles.

The foundation of this and every Reserve Study is your Reserve Component List (what you are reserving for). This is because the Reserve Component List defines the *scope and schedule* of all your anticipated upcoming Reserve projects. Based on that List and your starting balance, we calculate the association's Reserve Fund Strength (reported in terms of "Percent Funded"). Then we compute a Reserve Funding Plan to provide for the Reserve needs of the association. These form the three results of your Reserve Study.



Reserve contributions are not “for the future”. Reserve contributions are designed to offset the ongoing, daily deterioration of your Reserve assets. Done well, a stable, budgeted Reserve Funding Plan will collect sufficient funds from the owners who enjoyed the use of those assets, so the association is financially prepared for the irregular expenditures scattered through future years when those projects eventually require replacement.

Methodology



For this [Update No-Site-Visit Reserve Study](#), we started with a review of your prior Reserve Study, then looked into recent Reserve expenditures, evaluated how expenditures are handled (ongoing maintenance vs Reserves), and researched any well-established association

precedents. We updated and adjusted your Reserve Component List on the basis of time elapsed since the last Reserve Study and interviews with association representatives.

Which Physical Assets are Funded by Reserves?

There is a national-standard four-part test to determine which expenses should appear in your Reserve Component List. First, it must be a common area maintenance responsibility. Second, the component must have a limited life. Third, the remaining life must be predictable (or it by definition is a *surprise* which cannot be accurately anticipated). Fourth, the component must be above a minimum threshold cost (often between .5% and 1% of an association's total budget). This limits Reserve



Components to major, predictable expenses. Within this framework, it is inappropriate to include *lifetime* components, unpredictable expenses (such as damage due to fire, flood, or earthquake), and expenses more appropriately handled from the Operational Budget or as an insured loss.

How do we establish Useful Life and Remaining Useful Life estimates?

- 1) Visual Inspection (observed wear and age)
- 2) Association Reserves database of experience
- 3) Client History (install dates & previous life cycle information)
- 4) Vendor Evaluation and Recommendation

How do we establish Current Repair/Replacement Cost Estimates?

In this order...

- 1) Actual client cost history, or current proposals
- 2) Comparison to Association Reserves database of work done at similar associations
- 3) Vendor Recommendations
- 4) Reliable National Industry cost estimating guidebooks

How much Reserves are enough?

Reserve adequacy is not measured in cash terms. Reserve adequacy is found when the *amount* of current Reserve cash is compared to Reserve component deterioration (the *needs of the association*). Having *enough* means the association can execute its projects in a timely manner with existing Reserve funds. Not having *enough* typically creates deferred maintenance or special assessments.

Adequacy is measured in a two-step process:

- 1) Calculate the *value of deterioration* at the association (called Fully Funded Balance, or FFB).
- 2) Compare that to the Reserve Fund Balance, and express as a percentage.



Each year, the *value of deterioration* at the association changes. When there is more deterioration (as components approach the time they need to be replaced), there should be more cash to offset that deterioration and prepare for the expenditure. Conversely, the *value of deterioration* shrinks after projects are accomplished. The *value of deterioration* (the FFB) changes each year, and is a moving but predictable target.

There is a high risk of special assessments and deferred maintenance when the Percent Funded is *weak*, below 30%. Approximately 30% of all associations are in this high risk range. While the 100% point is Ideal (indicating Reserve cash is equal to the *value of deterioration*), a Reserve Fund in the 70% - 130% range is considered strong (low risk of special assessment).

Measuring your Reserves by Percent Funded tells how well prepared your association is for upcoming Reserve expenses. New buyers should be very aware of this important disclosure!

How much should we contribute?



RESERVE FUNDING PRINCIPLES

According to National Reserve Study Standards, there are four Funding Principles to balance in developing your Reserve Funding Plan. Our first objective is to design a plan that provides you with sufficient cash to perform your Reserve projects on time. Second, a stable contribution is desirable because it keeps these naturally irregular expenses from unsettling the budget.

Reserve contributions that are evenly distributed over current and future owners enable each owner to pay their fair share of the association's Reserve expenses over the years. And finally, we develop a plan that is fiscally responsible and safe for Boardmembers to recommend to their association. Remember, it is the Board's job to provide for the ongoing care of the common areas. Boardmembers invite liability exposure when Reserve contributions are inadequate to offset ongoing common area deterioration.

What is our Recommended Funding Goal?

Maintaining the Reserve Fund at a level equal to the *value* of deterioration is called "Full Funding" (100% Funded). As each asset ages and becomes "used up," the Reserve Fund grows proportionally. **This is simple, responsible, and our recommendation.** Evidence shows that associations in the 70 - 130% range *enjoy a low risk of special assessments or deferred maintenance.*



FUNDING OBJECTIVES

Allowing the Reserves to fall close to zero, but not below zero, is called Baseline Funding. Doing so allows the Reserve Fund to drop into the 0 - 30% range, where there is a high risk of special assessments & deferred maintenance. Since Baseline Funding still provides for the timely execution of all Reserve projects, and only the "margin of safety" is different, Baseline Funding contributions average only 10% - 15% less than Full Funding contributions. Threshold Funding is the title of all other Cash or Percent Funded objectives *between* Baseline Funding and Full Funding.

Projected Expenses

While this Reserve Study looks forward 30 years, we have no expectation that all these expenses will all take place as anticipated. This Reserve Study needs to be updated annually because we expect the timing of these expenses to shift and the size of these expenses to change. We do feel more certain of the timing and cost of near-term expenses than expenses many years away.

The figure below summarizes the projected future expenses at your association as defined by your Reserve Component List. A summary of these expenses are shown in the 30-yr Summary Table, while details of the projects that make up these expenses are shown in the Cash Flow Detail Table.

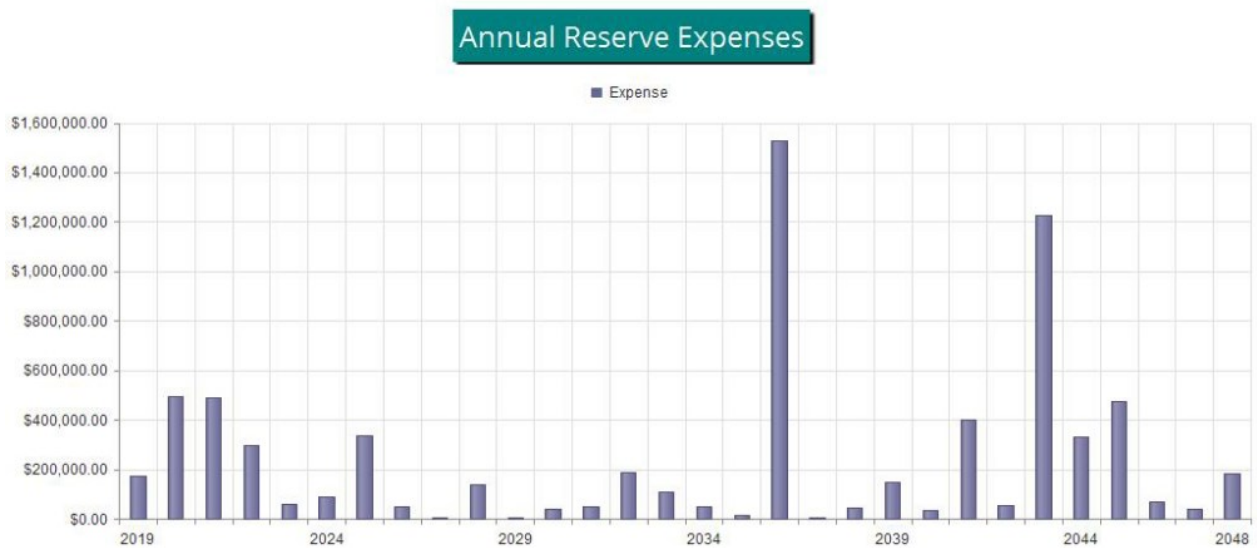


Figure 1

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$1,143,500 as-of the start of your Fiscal Year on 1/1/2019. As of that date, your Fully Funded Balance is computed to be \$1,491,857 (see Fully Funded Balance Table). This figure represents the deteriorated value of your common area components.

Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted contributions of \$15,000 per month this Fiscal Year. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both the 30-yr Summary Table and the Cash Flow Detail Table.

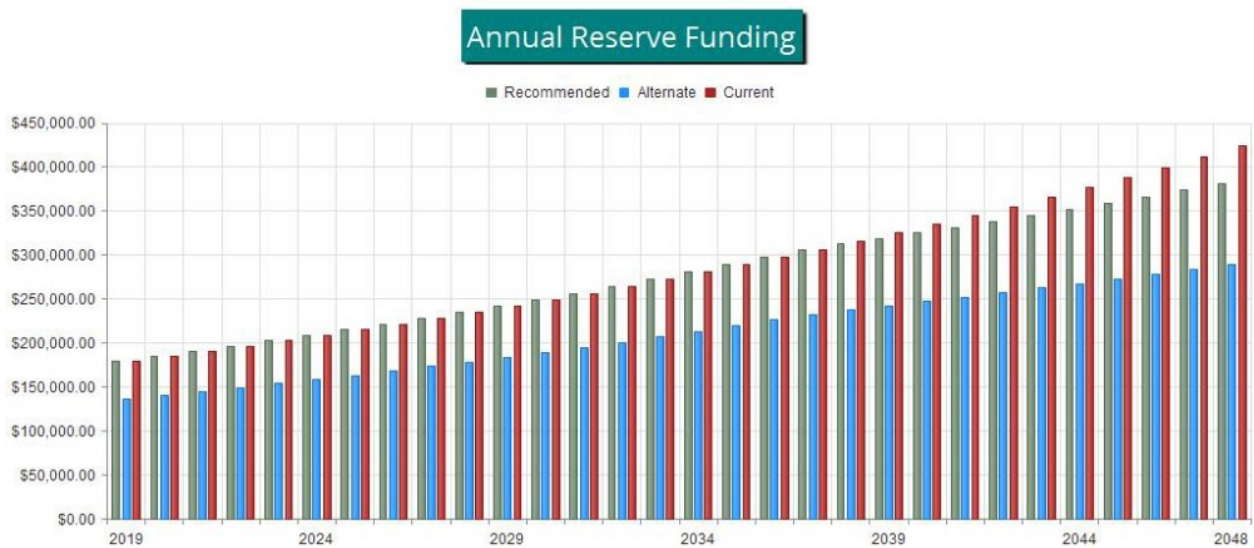


Figure 2

The following chart shows your Reserve balance under our recommended Full Funding Plan, an alternate Baseline Funding Plan, and at your current budgeted contribution rate (assumes future increases), compared to your always-changing Fully Funded Balance target.

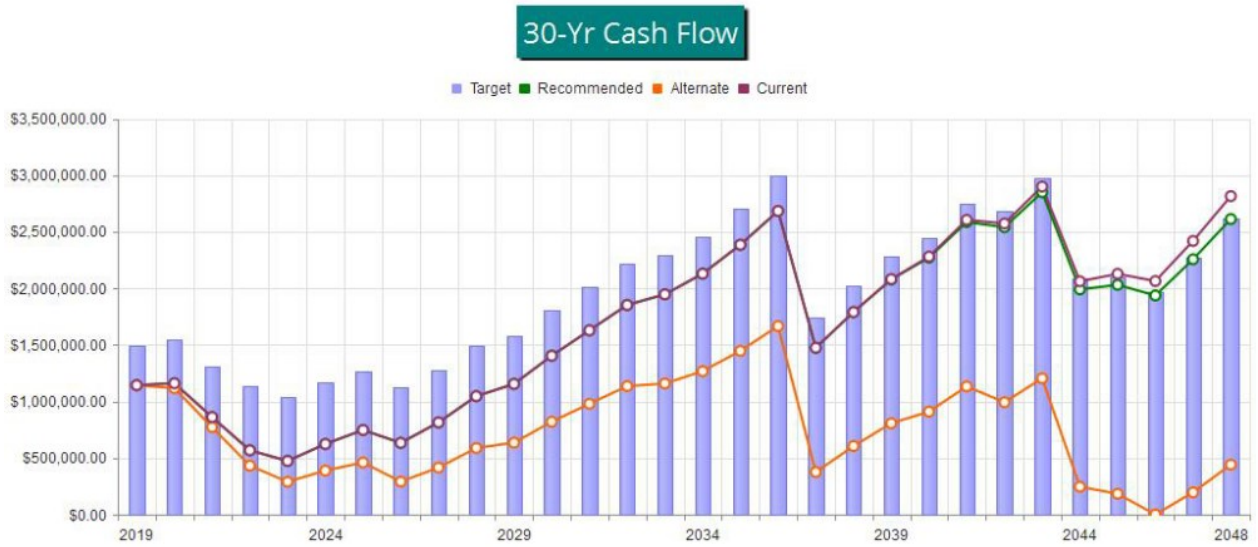


Figure 3

This figure shows the same information plotted on a Percent Funded scale. It is clear here to see how your Reserve Fund strength approaches the 100% Funded level under our recommended multi-yr Funding Plan.

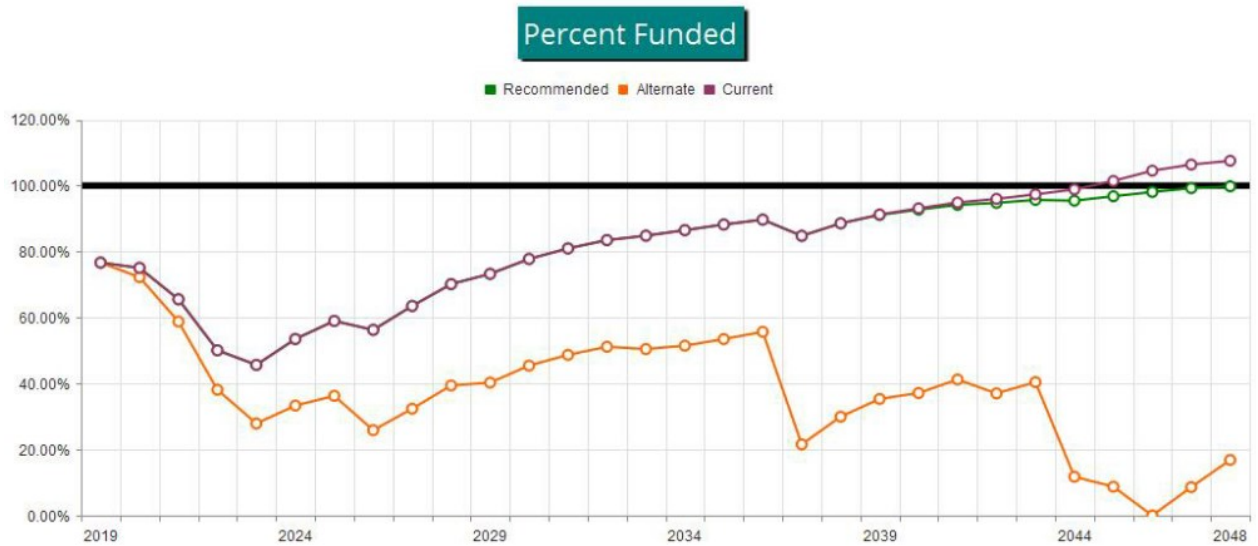


Figure 4

Table Descriptions

The tabular information in this Report is broken down into nine tables, **not all which may have been chosen by your Project Manager to appear in your report.** Tables are listed in the order in which they appear in your Report.

Executive Summary is a summary of your Reserve Components

Budget Summary is a management and accounting tool, summarizing groupings of your Reserve Components.

Analysis Summary provides a summary of the starting financial information and your Project Manager's Financial Analysis decision points.

Reserve Component List Detail discloses key Component information, providing the foundation upon which the financial analysis is performed.

Fully Funded Balance shows the calculation of the Fully Funded Balance for each of your components, and their contributions to the association total. For each component, the Fully Funded Balance is the fraction of life used up multiplied by its estimated Current Replacement Cost.

Component Significance shows the relative significance of each component to Reserve funding needs of the association, helping you see which components have more (or less) influence than others on your total Reserve contribution rate. The deterioration cost/yr of each component is calculated by dividing the estimated Current Replacement Cost by its Useful Life, then that component's percentage of the total is displayed.

Accounting-Tax Summary provides information on each Component's proportionate portion of key totals, valuable to accounting professionals primarily during tax preparation time of year.

30-Yr Reserve Plan Summary provides a one-page 30-year summary of the cash flowing into and out of the Reserve Fund, with a display of the Fully Funded Balance, Percent Funded, and special assessment risk at the beginning of each year.

30-Year Income/Expense Detail shows the detailed income and expenses for each of the next 30 years. This table makes it possible to see which components are projected to require repair or replacement in a particular year, and the size of those individual expenses.

Reserve Component List Detail

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# Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate		
				Best Case	Worst Case	
Site / Grounds						
602	Garage Doors and Openers - Replace	(1) door 18 ft x 8 ft	10	2	\$10,000	\$13,000
98 UNION: Building Interior						
701	Int Floor c: - Repair/Replace	~ 4,000 square feet		0	\$73,000	\$85,000
701	Int Floor d: - Repair/Replace	~ 4,000 square feet		2	\$73,000	\$85,000
701	Int Floor e: - Repair/Replace	~ 2,000 square feet		4	\$37,000	\$42,000
710	Int Walls and Ceilings a - Repaint	~ 12,000 square feet	12	3	\$23,000	\$29,000
710	Int Walls and Ceilings b - Repaint	~ 12,000 square feet	12	13	\$47,000	\$59,000
711	Interior Lobby - Repaint	(1) lobby	12	5	\$8,700	\$12,000
713	Garage Lobbies - Carpet & Paint	(3) Lobbies	12	7	\$19,000	\$22,000
716	Int Fire Doors - Replace	(2) doors/year	1	0	\$4,000	\$4,700
730	Mailboxes - Replace	~ (90) boxes	40	4	\$6,900	\$9,000
750	Lobby - Remodel	(1) lobby	12	5	\$12,000	\$34,000
760	Furniture - Replace	Assorted pieces	12	5	\$15,000	\$30,000
98 UNION: Systems						
915	HVAC Fans: - Repair/Replace	~ 10 fans	7	0	\$12,000	\$16,000
926	HVAC Boiler: - Repair/Replace	(2) boiler	20	17	\$100,000	\$130,000
930	HVAC: Dom Water Boost - Replace	(2) pumps	20	0	\$23,000	\$58,000
931	HVAC Assorted: - Repair/Replace	(4) pieces	20	0	\$32,000	\$42,000
932	HVAC Heat Recovery - Repair/Replace	(4) pieces	20	13	\$68,000	\$75,000
950	Entry Access System - Replace	(1) System	12	11	\$5,000	\$6,200
955	Security TV - Replace	(1) System	10	2	\$16,000	\$22,000
960	Elevator - Modernize	(2) Traction, geared	30	24	\$500,000	\$700,000
961	Elevator Cab - Remodel	(2) Elevator Cabs	20	14	\$43,000	\$66,000
990	Trash Compactor - Replace	(1) Compactor	18	17	\$18,600	\$22,600
So. ARCADE (shared 66%-69%) Exterior						
505	Tower Roof - Repair/Replace	~ 5,300 square feet	20	2	\$140,000	\$190,000
506	Roof: Low Slope - Recoat	~ 17,000 square feet	15	2	\$150,000	\$210,000
507	Atrium Metal Roof - Repair/Replace	~ 550 square feet	50	16	\$4,600	\$5,900
520	EIFS Coating - Recoat/Repair	~ 64,000 gross square ft	16	1	\$400,000	\$432,000
521	EIFS - Staging	(1) item	8	9	\$62,000	\$68,000
522	EIFS Coating - Low Pressure Wash	~ 64,000 gross square ft	8	9	\$33,000	\$39,000
540	Roof Decks - Repair/Replace	~ 240 square feet	15	2	\$3,800	\$5,000
541	Atrium Walking Surface - Clean/Seal	~ 600 square feet		1	\$50,000	\$70,000
542	Tower Decks - Clean/Seal/Repair	~ 5,500 square feet	6	5	\$16,500	\$20,500
550	Rails: Metal - Repair/Replace	extensive qty		3	\$193,000	\$288,000
So. ARCADE (shared 66%-68%) Systems						
909	Emergency Generator- Repair/Replace	(1) Generator system	40	6	\$60,000	\$64,000
927	Fire Pump Motor- Repair/Replace	(1) Electric Motor	50	17	\$6,900	\$10,000
928	Fire Pump Control - Replace	(1) Pump Controller	35	34	\$5,500	\$8,000
965	Fire Panel - Replace	(1) main fire panel	20	6	\$200,000	\$230,000
968	Fire Pump - Repair/Replace	(1) Pump	55	22	\$9,000	\$12,000
37 Total Funded Components						

Fully Funded Balance

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#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
Site / Grounds								
602	Garage Doors and Openers - Replace	\$11,500	X	8	/	10	=	\$9,200
98 UNION: Building Interior								
701	Int Floor c: - Repair/Replace	\$79,000	X	0	/		=	\$79,000
701	Int Floor d: - Repair/Replace	\$79,000	X	0	/		=	\$26,333
701	Int Floor e: - Repair/Replace	\$39,500	X	0	/		=	\$7,900
710	Int Walls and Ceilings a - Repaint	\$26,000	X	9	/	12	=	\$19,500
710	Int Walls and Ceilings b - Repaint	\$53,000	X	0	/	12	=	\$0
711	Interior Lobby - Repaint	\$10,350	X	7	/	12	=	\$6,038
713	Garage Lobbies - Carpet & Paint	\$20,500	X	5	/	12	=	\$8,542
716	Int Fire Doors - Replace	\$4,350	X	1	/	1	=	\$4,350
730	Mailboxes - Replace	\$7,950	X	36	/	40	=	\$7,155
750	Lobby - Remodel	\$23,000	X	7	/	12	=	\$13,417
760	Furniture - Replace	\$22,500	X	7	/	12	=	\$13,125
98 UNION: Systems								
915	HVAC Fans: - Repair/Replace	\$14,000	X	7	/	7	=	\$14,000
926	HVAC Boiler: - Repair/Replace	\$115,000	X	3	/	20	=	\$17,250
930	HVAC: Dom Water Boost - Replace	\$40,500	X	20	/	20	=	\$40,500
931	HVAC Assorted: - Repair/Replace	\$37,000	X	20	/	20	=	\$37,000
932	HVAC Heat Recovery - Repair/Replace	\$71,500	X	7	/	20	=	\$25,025
950	Entry Access System - Replace	\$5,600	X	1	/	12	=	\$467
955	Security TV - Replace	\$19,000	X	8	/	10	=	\$15,200
960	Elevator - Modernize	\$600,000	X	6	/	30	=	\$120,000
961	Elevator Cab - Remodel	\$54,500	X	6	/	20	=	\$16,350
990	Trash Compactor - Replace	\$20,600	X	1	/	18	=	\$1,144
So. ARCADE (shared 66%-69%) Exterior								
505	Tower Roof - Repair/Replace	\$165,000	X	18	/	20	=	\$148,500
506	Roof: Low Slope - Recoat	\$180,000	X	13	/	15	=	\$156,000
507	Atrium Metal Roof - Repair/Replace	\$5,250	X	34	/	50	=	\$3,570
520	EIFS Coating - Recoat/Repair	\$416,000	X	15	/	16	=	\$390,000
521	EIFS - Staging	\$65,000	X	0	/	8	=	\$0
522	EIFS Coating - Low Pressure Wash	\$36,000	X	0	/	8	=	\$0
540	Roof Decks - Repair/Replace	\$4,400	X	13	/	15	=	\$3,813
541	Atrium Walking Surface - Clean/Seal	\$60,000	X	0	/		=	\$30,000
542	Tower Decks - Clean/Seal/Repair	\$18,500	X	1	/	6	=	\$3,083
550	Rails: Metal - Repair/Replace	\$240,500	X	0	/		=	\$60,125
So. ARCADE (shared 66%-68%) Systems								
909	Emergency Generator- Repair/Replace	\$62,000	X	34	/	40	=	\$52,700
927	Fire Pump Motor- Repair/Replace	\$8,450	X	33	/	50	=	\$5,577
928	Fire Pump Control - Replace	\$6,750	X	1	/	35	=	\$193
965	Fire Panel - Replace	\$215,000	X	14	/	20	=	\$150,500
968	Fire Pump - Repair/Replace	\$10,500	X	33	/	55	=	\$6,300
								\$1,491,857

Component Significance

19791-4
NSV

#	Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
Site / Grounds					
602	Garage Doors and Openers - Replace	10	\$11,500	\$1,150	0.85 %
98 UNION: Building Interior					
701	Int Floor c: - Repair/Replace		\$79,000	\$0	0.00 %
701	Int Floor d: - Repair/Replace		\$79,000	\$0	0.00 %
701	Int Floor e: - Repair/Replace		\$39,500	\$0	0.00 %
710	Int Walls and Ceilings a - Repaint	12	\$26,000	\$2,167	1.60 %
710	Int Walls and Ceilings b - Repaint	12	\$53,000	\$4,417	3.26 %
711	Interior Lobby - Repaint	12	\$10,350	\$863	0.64 %
713	Garage Lobbies - Carpet & Paint	12	\$20,500	\$1,708	1.26 %
716	Int Fire Doors - Replace	1	\$4,350	\$4,350	3.22 %
730	Mailboxes - Replace	40	\$7,950	\$199	0.15 %
750	Lobby - Remodel	12	\$23,000	\$1,917	1.42 %
760	Furniture - Replace	12	\$22,500	\$1,875	1.39 %
98 UNION: Systems					
915	HVAC Fans: - Repair/Replace	7	\$14,000	\$2,000	1.48 %
926	HVAC Boiler: - Repair/Replace	20	\$115,000	\$5,750	4.25 %
930	HVAC: Dom Water Boost - Replace	20	\$40,500	\$2,025	1.50 %
931	HVAC Assorted: - Repair/Replace	20	\$37,000	\$1,850	1.37 %
932	HVAC Heat Recovery - Repair/Replace	20	\$71,500	\$3,575	2.64 %
950	Entry Access System - Replace	12	\$5,600	\$467	0.34 %
955	Security TV - Replace	10	\$19,000	\$1,900	1.40 %
960	Elevator - Modernize	30	\$600,000	\$20,000	14.78 %
961	Elevator Cab - Remodel	20	\$54,500	\$2,725	2.01 %
990	Trash Compactor - Replace	18	\$20,600	\$1,144	0.85 %
So. ARCADE (shared 66%-69%) Exterior					
505	Tower Roof - Repair/Replace	20	\$165,000	\$8,250	6.10 %
506	Roof: Low Slope - Recoat	15	\$180,000	\$12,000	8.87 %
507	Atrium Metal Roof - Repair/Replace	50	\$5,250	\$105	0.08 %
520	EIFS Coating - Recoat/Repair	16	\$416,000	\$26,000	19.22 %
521	EIFS - Staging	8	\$65,000	\$8,125	6.01 %
522	EIFS Coating - Low Pressure Wash	8	\$36,000	\$4,500	3.33 %
540	Roof Decks - Repair/Replace	15	\$4,400	\$293	0.22 %
541	Atrium Walking Surface - Clean/Seal		\$60,000	\$0	0.00 %
542	Tower Decks - Clean/Seal/Repair	6	\$18,500	\$3,083	2.28 %
550	Rails: Metal - Repair/Replace		\$240,500	\$0	0.00 %
So. ARCADE (shared 66%-68%) Systems					
909	Emergency Generator- Repair/Replace	40	\$62,000	\$1,550	1.15 %
927	Fire Pump Motor- Repair/Replace	50	\$8,450	\$169	0.12 %
928	Fire Pump Control - Replace	35	\$6,750	\$193	0.14 %
965	Fire Panel - Replace	20	\$215,000	\$10,750	7.95 %
968	Fire Pump - Repair/Replace	55	\$10,500	\$191	0.14 %
37	Total Funded Components			\$135,290	100.00 %

30-Year Reserve Plan Summary

19791-4
NSV

Fiscal Year Start: 2019

Interest:

1.00 %

Inflation:

3.00 %

Reserve Fund Strength Calculations: (All values of Fiscal Year Start Date)

Projected Reserve Balance Changes

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	Reserve Contribs.	Loan or Special Assmts	Interest Income	Reserve Expenses
2019	\$1,143,500	\$1,491,857	76.6 %	Low	\$180,000	\$0	\$11,513	\$174,850
2020	\$1,160,163	\$1,545,452	75.1 %	Low	\$185,400	\$0	\$10,101	\$494,761
2021	\$860,904	\$1,313,663	65.5 %	Medium	\$190,962	\$0	\$7,139	\$491,462
2022	\$567,543	\$1,133,297	50.1 %	Medium	\$196,691	\$0	\$5,203	\$295,965
2023	\$473,472	\$1,036,951	45.7 %	Medium	\$202,592	\$0	\$5,481	\$58,301
2024	\$623,243	\$1,164,847	53.5 %	Medium	\$208,669	\$0	\$6,851	\$91,235
2025	\$747,529	\$1,267,364	59.0 %	Medium	\$214,929	\$0	\$6,902	\$335,947
2026	\$633,413	\$1,125,750	56.3 %	Medium	\$221,377	\$0	\$7,235	\$47,781
2027	\$814,245	\$1,281,690	63.5 %	Medium	\$228,019	\$0	\$9,298	\$5,510
2028	\$1,046,051	\$1,490,988	70.2 %	Low	\$234,859	\$0	\$10,998	\$137,458
2029	\$1,154,450	\$1,575,954	73.3 %	Low	\$241,905	\$0	\$12,783	\$5,846
2030	\$1,403,292	\$1,804,485	77.8 %	Low	\$249,162	\$0	\$15,151	\$39,381
2031	\$1,628,224	\$2,010,948	81.0 %	Low	\$256,637	\$0	\$17,397	\$49,688
2032	\$1,852,570	\$2,218,776	83.5 %	Low	\$264,336	\$0	\$18,988	\$189,221
2033	\$1,946,673	\$2,295,081	84.8 %	Low	\$272,266	\$0	\$20,370	\$110,192
2034	\$2,129,118	\$2,461,213	86.5 %	Low	\$280,434	\$0	\$22,560	\$47,284
2035	\$2,384,828	\$2,703,447	88.2 %	Low	\$288,847	\$0	\$25,331	\$15,405
2036	\$2,683,601	\$2,992,297	89.7 %	Low	\$297,513	\$0	\$20,781	\$1,527,479
2037	\$1,474,416	\$1,739,085	84.8 %	Low	\$306,438	\$0	\$16,314	\$7,406
2038	\$1,789,762	\$2,020,862	88.6 %	Low	\$312,567	\$0	\$19,331	\$43,575
2039	\$2,078,085	\$2,280,955	91.1 %	Low	\$318,818	\$0	\$21,735	\$147,830
2040	\$2,270,808	\$2,448,798	92.7 %	Low	\$325,194	\$0	\$24,274	\$34,136
2041	\$2,586,141	\$2,746,331	94.2 %	Low	\$331,698	\$0	\$25,622	\$403,052
2042	\$2,540,409	\$2,680,584	94.8 %	Low	\$338,332	\$0	\$26,938	\$56,149
2043	\$2,849,530	\$2,978,185	95.7 %	Low	\$345,099	\$0	\$24,189	\$1,228,519
2044	\$1,990,299	\$2,085,424	95.4 %	Low	\$352,001	\$0	\$20,097	\$331,550
2045	\$2,030,847	\$2,098,256	96.8 %	Low	\$359,041	\$0	\$19,829	\$473,048
2046	\$1,936,669	\$1,974,482	98.1 %	Low	\$366,222	\$0	\$20,957	\$67,416
2047	\$2,256,431	\$2,273,812	99.2 %	Low	\$373,546	\$0	\$24,333	\$41,983
2048	\$2,612,328	\$2,617,603	99.8 %	Low	\$381,017	\$0	\$27,226	\$185,462

(Alternate Funding Plan) 30-Year Reserve Plan Summary

**19791-4
NSV**

Fiscal Year Start: 2019	Interest: 1.00 %	Inflation: 3.00 %
Reserve Fund Strength Calculations: (All values of Fiscal Year Start Date)	Projected Reserve Balance Changes	

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	% Increase		Loan or Special Assmts	Interest Income	Reserve Expenses
					In Annual Reserve Contribs.	Reserve Contribs.			
2019	\$1,143,500	\$1,491,857	76.6 %	Low	-24.00 %	\$136,800	\$0	\$11,296	\$174,850
2020	\$1,116,746	\$1,545,452	72.3 %	Low	3.00 %	\$140,904	\$0	\$9,441	\$494,761
2021	\$772,331	\$1,313,663	58.8 %	Medium	3.00 %	\$145,131	\$0	\$6,019	\$491,462
2022	\$432,020	\$1,133,297	38.1 %	Medium	3.00 %	\$149,485	\$0	\$3,604	\$295,965
2023	\$289,144	\$1,036,951	27.9 %	High	3.00 %	\$153,970	\$0	\$3,385	\$58,301
2024	\$388,197	\$1,164,847	33.3 %	Medium	3.00 %	\$158,589	\$0	\$4,238	\$91,235
2025	\$459,789	\$1,267,364	36.3 %	Medium	3.00 %	\$163,346	\$0	\$3,752	\$335,947
2026	\$290,941	\$1,125,750	25.8 %	High	3.00 %	\$168,247	\$0	\$3,528	\$47,781
2027	\$414,935	\$1,281,690	32.4 %	Medium	3.00 %	\$173,294	\$0	\$5,011	\$5,510
2028	\$587,730	\$1,490,988	39.4 %	Medium	3.00 %	\$178,493	\$0	\$6,110	\$137,458
2029	\$634,876	\$1,575,954	40.3 %	Medium	3.00 %	\$183,848	\$0	\$7,272	\$5,846
2030	\$820,149	\$1,804,485	45.5 %	Medium	3.00 %	\$189,363	\$0	\$8,993	\$39,381
2031	\$979,124	\$2,010,948	48.7 %	Medium	3.00 %	\$195,044	\$0	\$10,566	\$49,688
2032	\$1,135,046	\$2,218,776	51.2 %	Medium	3.00 %	\$200,895	\$0	\$11,461	\$189,221
2033	\$1,158,183	\$2,295,081	50.5 %	Medium	3.00 %	\$206,922	\$0	\$12,121	\$110,192
2034	\$1,267,034	\$2,461,213	51.5 %	Medium	3.00 %	\$213,130	\$0	\$13,562	\$47,284
2035	\$1,446,441	\$2,703,447	53.5 %	Medium	3.00 %	\$219,524	\$0	\$15,556	\$15,405
2036	\$1,666,116	\$2,992,297	55.7 %	Medium	3.00 %	\$226,110	\$0	\$10,201	\$1,527,479
2037	\$374,947	\$1,739,085	21.6 %	High	3.00 %	\$232,893	\$0	\$4,899	\$7,406
2038	\$605,334	\$2,020,862	30.0 %	High	2.00 %	\$237,551	\$0	\$7,055	\$43,575
2039	\$806,365	\$2,280,955	35.4 %	Medium	2.00 %	\$242,302	\$0	\$8,575	\$147,830
2040	\$909,412	\$2,448,798	37.1 %	Medium	2.00 %	\$247,148	\$0	\$10,206	\$34,136
2041	\$1,132,629	\$2,746,331	41.2 %	Medium	2.00 %	\$252,091	\$0	\$10,620	\$403,052
2042	\$992,288	\$2,680,584	37.0 %	Medium	2.00 %	\$257,133	\$0	\$10,978	\$56,149
2043	\$1,204,250	\$2,978,185	40.4 %	Medium	2.00 %	\$262,275	\$0	\$7,244	\$1,228,519
2044	\$245,250	\$2,085,424	11.8 %	High	2.00 %	\$267,521	\$0	\$2,142	\$331,550
2045	\$183,363	\$2,098,256	8.7 %	High	2.00 %	\$272,871	\$0	\$837	\$473,048
2046	(\$15,977)	\$1,974,482	0.0 %	High	2.00 %	\$278,329	\$0	\$899	\$67,416
2047	\$195,834	\$2,273,812	8.6 %	High	2.00 %	\$283,895	\$0	\$3,182	\$41,983
2048	\$440,928	\$2,617,603	16.8 %	High	2.00 %	\$289,573	\$0	\$4,952	\$185,462

30-Year Income/Expense Detail

19791-4
NSV

Fiscal Year	2019	2020	2021	2022	2023
Starting Reserve Balance	\$1,143,500	\$1,160,163	\$860,904	\$567,543	\$473,472
Annual Reserve Contribution	\$180,000	\$185,400	\$190,962	\$196,691	\$202,592
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$11,513	\$10,101	\$7,139	\$5,203	\$5,481
Total Income	\$1,335,013	\$1,355,664	\$1,059,005	\$769,437	\$681,545
# Component					
Site / Grounds					
602 Garage Doors and Openers - Replace	\$0	\$0	\$12,200	\$0	\$0
98 UNION: Building Interior					
701 Int Floor c: - Repair/Replace	\$79,000	\$0	\$0	\$0	\$0
701 Int Floor d: - Repair/Replace	\$0	\$0	\$83,811	\$0	\$0
701 Int Floor e: - Repair/Replace	\$0	\$0	\$0	\$0	\$44,458
710 Int Walls and Ceilings a - Repaint	\$0	\$0	\$0	\$28,411	\$0
710 Int Walls and Ceilings b - Repaint	\$0	\$0	\$0	\$0	\$0
711 Interior Lobby - Repaint	\$0	\$0	\$0	\$0	\$0
713 Garage Lobbies - Carpet & Paint	\$0	\$0	\$0	\$0	\$0
716 Int Fire Doors - Replace	\$4,350	\$4,481	\$4,615	\$4,753	\$4,896
730 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$8,948
750 Lobby - Remodel	\$0	\$0	\$0	\$0	\$0
760 Furniture - Replace	\$0	\$0	\$0	\$0	\$0
98 UNION: Systems					
915 HVAC Fans: - Repair/Replace	\$14,000	\$0	\$0	\$0	\$0
926 HVAC Boiler: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
930 HVAC: Dom Water Boost - Replace	\$40,500	\$0	\$0	\$0	\$0
931 HVAC Assorted: - Repair/Replace	\$37,000	\$0	\$0	\$0	\$0
932 HVAC Heat Recovery - Repair/Replace	\$0	\$0	\$0	\$0	\$0
950 Entry Access System - Replace	\$0	\$0	\$0	\$0	\$0
955 Security TV - Replace	\$0	\$0	\$20,157	\$0	\$0
960 Elevator - Modernize	\$0	\$0	\$0	\$0	\$0
961 Elevator Cab - Remodel	\$0	\$0	\$0	\$0	\$0
990 Trash Compactor - Replace	\$0	\$0	\$0	\$0	\$0
So. ARCADE (shared 66%-69%) Exterior					
505 Tower Roof - Repair/Replace	\$0	\$0	\$175,049	\$0	\$0
506 Roof: Low Slope - Recoat	\$0	\$0	\$190,962	\$0	\$0
507 Atrium Metal Roof - Repair/Replace	\$0	\$0	\$0	\$0	\$0
520 EIFS Coating - Recoat/Repair	\$0	\$428,480	\$0	\$0	\$0
521 EIFS - Staging	\$0	\$0	\$0	\$0	\$0
522 EIFS Coating - Low Pressure Wash	\$0	\$0	\$0	\$0	\$0
540 Roof Decks - Repair/Replace	\$0	\$0	\$4,668	\$0	\$0
541 Atrium Walking Surface - Clean/Seal	\$0	\$61,800	\$0	\$0	\$0
542 Tower Decks - Clean/Seal/Repair	\$0	\$0	\$0	\$0	\$0
550 Rails: Metal - Repair/Replace	\$0	\$0	\$0	\$262,801	\$0
So. ARCADE (shared 66%-68%) Systems					
909 Emergency Generator- Repair/Replace	\$0	\$0	\$0	\$0	\$0
927 Fire Pump Motor- Repair/Replace	\$0	\$0	\$0	\$0	\$0
928 Fire Pump Control - Replace	\$0	\$0	\$0	\$0	\$0
965 Fire Panel - Replace	\$0	\$0	\$0	\$0	\$0
968 Fire Pump - Repair/Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$174,850	\$494,761	\$491,462	\$295,965	\$58,301
Ending Reserve Balance	\$1,160,163	\$860,904	\$567,543	\$473,472	\$623,243

Fiscal Year	2024	2025	2026	2027	2028
Starting Reserve Balance	\$623,243	\$747,529	\$633,413	\$814,245	\$1,046,051
Annual Reserve Contribution	\$208,669	\$214,929	\$221,377	\$228,019	\$234,859
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$6,851	\$6,902	\$7,235	\$9,298	\$10,998
Total Income	\$838,764	\$969,360	\$862,026	\$1,051,561	\$1,291,908
# Component					
Site / Grounds					
602 Garage Doors and Openers - Replace	\$0	\$0	\$0	\$0	\$0
98 UNION: Building Interior					
701 Int Floor c: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
701 Int Floor d: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
701 Int Floor e: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
710 Int Walls and Ceilings a - Repaint	\$0	\$0	\$0	\$0	\$0
710 Int Walls and Ceilings b - Repaint	\$0	\$0	\$0	\$0	\$0
711 Interior Lobby - Repaint	\$11,998	\$0	\$0	\$0	\$0
713 Garage Lobbies - Carpet & Paint	\$0	\$0	\$25,212	\$0	\$0
716 Int Fire Doors - Replace	\$5,043	\$5,194	\$5,350	\$5,510	\$5,676
730 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
750 Lobby - Remodel	\$26,663	\$0	\$0	\$0	\$0
760 Furniture - Replace	\$26,084	\$0	\$0	\$0	\$0
98 UNION: Systems					
915 HVAC Fans: - Repair/Replace	\$0	\$0	\$17,218	\$0	\$0
926 HVAC Boiler: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
930 HVAC: Dom Water Boost - Replace	\$0	\$0	\$0	\$0	\$0
931 HVAC Assorted: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
932 HVAC Heat Recovery - Repair/Replace	\$0	\$0	\$0	\$0	\$0
950 Entry Access System - Replace	\$0	\$0	\$0	\$0	\$0
955 Security TV - Replace	\$0	\$0	\$0	\$0	\$0
960 Elevator - Modernize	\$0	\$0	\$0	\$0	\$0
961 Elevator Cab - Remodel	\$0	\$0	\$0	\$0	\$0
990 Trash Compactor - Replace	\$0	\$0	\$0	\$0	\$0
So. ARCADE (shared 66%-69%) Exterior					
505 Tower Roof - Repair/Replace	\$0	\$0	\$0	\$0	\$0
506 Roof: Low Slope - Recoat	\$0	\$0	\$0	\$0	\$0
507 Atrium Metal Roof - Repair/Replace	\$0	\$0	\$0	\$0	\$0
520 EIFS Coating - Recoat/Repair	\$0	\$0	\$0	\$0	\$0
521 EIFS - Staging	\$0	\$0	\$0	\$0	\$84,810
522 EIFS Coating - Low Pressure Wash	\$0	\$0	\$0	\$0	\$46,972
540 Roof Decks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
541 Atrium Walking Surface - Clean/Seal	\$0	\$0	\$0	\$0	\$0
542 Tower Decks - Clean/Seal/Repair	\$21,447	\$0	\$0	\$0	\$0
550 Rails: Metal - Repair/Replace	\$0	\$0	\$0	\$0	\$0
So. ARCADE (shared 66%-68%) Systems					
909 Emergency Generator- Repair/Replace	\$0	\$74,031	\$0	\$0	\$0
927 Fire Pump Motor- Repair/Replace	\$0	\$0	\$0	\$0	\$0
928 Fire Pump Control - Replace	\$0	\$0	\$0	\$0	\$0
965 Fire Panel - Replace	\$0	\$256,721	\$0	\$0	\$0
968 Fire Pump - Repair/Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$91,235	\$335,947	\$47,781	\$5,510	\$137,458
Ending Reserve Balance	\$747,529	\$633,413	\$814,245	\$1,046,051	\$1,154,450

Fiscal Year	2029	2030	2031	2032	2033
Starting Reserve Balance	\$1,154,450	\$1,403,292	\$1,628,224	\$1,852,570	\$1,946,673
Annual Reserve Contribution	\$241,905	\$249,162	\$256,637	\$264,336	\$272,266
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$12,783	\$15,151	\$17,397	\$18,988	\$20,370
Total Income	\$1,409,138	\$1,667,606	\$1,902,258	\$2,135,894	\$2,239,310
# Component					
Site / Grounds					
602 Garage Doors and Openers - Replace	\$0	\$0	\$16,396	\$0	\$0
98 UNION: Building Interior					
701 Int Floor c: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
701 Int Floor d: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
701 Int Floor e: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
710 Int Walls and Ceilings a - Repaint	\$0	\$0	\$0	\$0	\$0
710 Int Walls and Ceilings b - Repaint	\$0	\$0	\$0	\$77,832	\$0
711 Interior Lobby - Repaint	\$0	\$0	\$0	\$0	\$0
713 Garage Lobbies - Carpet & Paint	\$0	\$0	\$0	\$0	\$0
716 Int Fire Doors - Replace	\$5,846	\$6,021	\$6,202	\$6,388	\$6,580
730 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
750 Lobby - Remodel	\$0	\$0	\$0	\$0	\$0
760 Furniture - Replace	\$0	\$0	\$0	\$0	\$0
98 UNION: Systems					
915 HVAC Fans: - Repair/Replace	\$0	\$0	\$0	\$0	\$21,176
926 HVAC Boiler: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
930 HVAC: Dom Water Boost - Replace	\$0	\$0	\$0	\$0	\$0
931 HVAC Assorted: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
932 HVAC Heat Recovery - Repair/Replace	\$0	\$0	\$0	\$105,000	\$0
950 Entry Access System - Replace	\$0	\$7,752	\$0	\$0	\$0
955 Security TV - Replace	\$0	\$0	\$27,089	\$0	\$0
960 Elevator - Modernize	\$0	\$0	\$0	\$0	\$0
961 Elevator Cab - Remodel	\$0	\$0	\$0	\$0	\$82,436
990 Trash Compactor - Replace	\$0	\$0	\$0	\$0	\$0
So. ARCADE (shared 66%-69%) Exterior					
505 Tower Roof - Repair/Replace	\$0	\$0	\$0	\$0	\$0
506 Roof: Low Slope - Recoat	\$0	\$0	\$0	\$0	\$0
507 Atrium Metal Roof - Repair/Replace	\$0	\$0	\$0	\$0	\$0
520 EIFS Coating - Recoat/Repair	\$0	\$0	\$0	\$0	\$0
521 EIFS - Staging	\$0	\$0	\$0	\$0	\$0
522 EIFS Coating - Low Pressure Wash	\$0	\$0	\$0	\$0	\$0
540 Roof Decks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
541 Atrium Walking Surface - Clean/Seal	\$0	\$0	\$0	\$0	\$0
542 Tower Decks - Clean/Seal/Repair	\$0	\$25,608	\$0	\$0	\$0
550 Rails: Metal - Repair/Replace	\$0	\$0	\$0	\$0	\$0
So. ARCADE (shared 66%-68%) Systems					
909 Emergency Generator- Repair/Replace	\$0	\$0	\$0	\$0	\$0
927 Fire Pump Motor- Repair/Replace	\$0	\$0	\$0	\$0	\$0
928 Fire Pump Control - Replace	\$0	\$0	\$0	\$0	\$0
965 Fire Panel - Replace	\$0	\$0	\$0	\$0	\$0
968 Fire Pump - Repair/Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$5,846	\$39,381	\$49,688	\$189,221	\$110,192
Ending Reserve Balance	\$1,403,292	\$1,628,224	\$1,852,570	\$1,946,673	\$2,129,118

Fiscal Year	2034	2035	2036	2037	2038
Starting Reserve Balance	\$2,129,118	\$2,384,828	\$2,683,601	\$1,474,416	\$1,789,762
Annual Reserve Contribution	\$280,434	\$288,847	\$297,513	\$306,438	\$312,567
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$22,560	\$25,331	\$20,781	\$16,314	\$19,331
Total Income	\$2,432,112	\$2,699,006	\$3,001,895	\$1,797,168	\$2,121,660
# Component					
Site / Grounds					
602 Garage Doors and Openers - Replace	\$0	\$0	\$0	\$0	\$0
98 UNION: Building Interior					
701 Int Floor c: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
701 Int Floor d: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
701 Int Floor e: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
710 Int Walls and Ceilings a - Repaint	\$40,507	\$0	\$0	\$0	\$0
710 Int Walls and Ceilings b - Repaint	\$0	\$0	\$0	\$0	\$0
711 Interior Lobby - Repaint	\$0	\$0	\$17,107	\$0	\$0
713 Garage Lobbies - Carpet & Paint	\$0	\$0	\$0	\$0	\$35,947
716 Int Fire Doors - Replace	\$6,777	\$6,980	\$7,190	\$7,406	\$7,628
730 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
750 Lobby - Remodel	\$0	\$0	\$38,015	\$0	\$0
760 Furniture - Replace	\$0	\$0	\$37,189	\$0	\$0
98 UNION: Systems					
915 HVAC Fans: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
926 HVAC Boiler: - Repair/Replace	\$0	\$0	\$190,077	\$0	\$0
930 HVAC: Dom Water Boost - Replace	\$0	\$0	\$0	\$0	\$0
931 HVAC Assorted: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
932 HVAC Heat Recovery - Repair/Replace	\$0	\$0	\$0	\$0	\$0
950 Entry Access System - Replace	\$0	\$0	\$0	\$0	\$0
955 Security TV - Replace	\$0	\$0	\$0	\$0	\$0
960 Elevator - Modernize	\$0	\$0	\$0	\$0	\$0
961 Elevator Cab - Remodel	\$0	\$0	\$0	\$0	\$0
990 Trash Compactor - Replace	\$0	\$0	\$34,049	\$0	\$0
So. ARCADE (shared 66%-69%) Exterior					
505 Tower Roof - Repair/Replace	\$0	\$0	\$0	\$0	\$0
506 Roof: Low Slope - Recoat	\$0	\$0	\$297,513	\$0	\$0
507 Atrium Metal Roof - Repair/Replace	\$0	\$8,425	\$0	\$0	\$0
520 EIFS Coating - Recoat/Repair	\$0	\$0	\$687,585	\$0	\$0
521 EIFS - Staging	\$0	\$0	\$107,435	\$0	\$0
522 EIFS Coating - Low Pressure Wash	\$0	\$0	\$59,503	\$0	\$0
540 Roof Decks - Repair/Replace	\$0	\$0	\$7,273	\$0	\$0
541 Atrium Walking Surface - Clean/Seal	\$0	\$0	\$0	\$0	\$0
542 Tower Decks - Clean/Seal/Repair	\$0	\$0	\$30,578	\$0	\$0
550 Rails: Metal - Repair/Replace	\$0	\$0	\$0	\$0	\$0
So. ARCADE (shared 66%-68%) Systems					
909 Emergency Generator- Repair/Replace	\$0	\$0	\$0	\$0	\$0
927 Fire Pump Motor- Repair/Replace	\$0	\$0	\$13,967	\$0	\$0
928 Fire Pump Control - Replace	\$0	\$0	\$0	\$0	\$0
965 Fire Panel - Replace	\$0	\$0	\$0	\$0	\$0
968 Fire Pump - Repair/Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$47,284	\$15,405	\$1,527,479	\$7,406	\$43,575
Ending Reserve Balance	\$2,384,828	\$2,683,601	\$1,474,416	\$1,789,762	\$2,078,085

Fiscal Year	2039	2040	2041	2042	2043
Starting Reserve Balance	\$2,078,085	\$2,270,808	\$2,586,141	\$2,540,409	\$2,849,530
Annual Reserve Contribution	\$318,818	\$325,194	\$331,698	\$338,332	\$345,099
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$21,735	\$24,274	\$25,622	\$26,938	\$24,189
Total Income	\$2,418,639	\$2,620,277	\$2,943,461	\$2,905,679	\$3,218,818
# Component					
Site / Grounds					
602 Garage Doors and Openers - Replace	\$0	\$0	\$22,035	\$0	\$0
98 UNION: Building Interior					
701 Int Floor c: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
701 Int Floor d: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
701 Int Floor e: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
710 Int Walls and Ceilings a - Repaint	\$0	\$0	\$0	\$0	\$0
710 Int Walls and Ceilings b - Repaint	\$0	\$0	\$0	\$0	\$0
711 Interior Lobby - Repaint	\$0	\$0	\$0	\$0	\$0
713 Garage Lobbies - Carpet & Paint	\$0	\$0	\$0	\$0	\$0
716 Int Fire Doors - Replace	\$7,857	\$8,092	\$8,335	\$8,585	\$8,843
730 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
750 Lobby - Remodel	\$0	\$0	\$0	\$0	\$0
760 Furniture - Replace	\$0	\$0	\$0	\$0	\$0
98 UNION: Systems					
915 HVAC Fans: - Repair/Replace	\$0	\$26,044	\$0	\$0	\$0
926 HVAC Boiler: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
930 HVAC: Dom Water Boost - Replace	\$73,148	\$0	\$0	\$0	\$0
931 HVAC Assorted: - Repair/Replace	\$66,826	\$0	\$0	\$0	\$0
932 HVAC Heat Recovery - Repair/Replace	\$0	\$0	\$0	\$0	\$0
950 Entry Access System - Replace	\$0	\$0	\$0	\$11,052	\$0
955 Security TV - Replace	\$0	\$0	\$36,406	\$0	\$0
960 Elevator - Modernize	\$0	\$0	\$0	\$0	\$1,219,676
961 Elevator Cab - Remodel	\$0	\$0	\$0	\$0	\$0
990 Trash Compactor - Replace	\$0	\$0	\$0	\$0	\$0
So. ARCADE (shared 66%-69%) Exterior					
505 Tower Roof - Repair/Replace	\$0	\$0	\$316,157	\$0	\$0
506 Roof: Low Slope - Recoat	\$0	\$0	\$0	\$0	\$0
507 Atrium Metal Roof - Repair/Replace	\$0	\$0	\$0	\$0	\$0
520 EIFS Coating - Recoat/Repair	\$0	\$0	\$0	\$0	\$0
521 EIFS - Staging	\$0	\$0	\$0	\$0	\$0
522 EIFS Coating - Low Pressure Wash	\$0	\$0	\$0	\$0	\$0
540 Roof Decks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
541 Atrium Walking Surface - Clean/Seal	\$0	\$0	\$0	\$0	\$0
542 Tower Decks - Clean/Seal/Repair	\$0	\$0	\$0	\$36,511	\$0
550 Rails: Metal - Repair/Replace	\$0	\$0	\$0	\$0	\$0
So. ARCADE (shared 66%-68%) Systems					
909 Emergency Generator- Repair/Replace	\$0	\$0	\$0	\$0	\$0
927 Fire Pump Motor- Repair/Replace	\$0	\$0	\$0	\$0	\$0
928 Fire Pump Control - Replace	\$0	\$0	\$0	\$0	\$0
965 Fire Panel - Replace	\$0	\$0	\$0	\$0	\$0
968 Fire Pump - Repair/Replace	\$0	\$0	\$20,119	\$0	\$0
Total Expenses	\$147,830	\$34,136	\$403,052	\$56,149	\$1,228,519
Ending Reserve Balance	\$2,270,808	\$2,586,141	\$2,540,409	\$2,849,530	\$1,990,299

Fiscal Year	2044	2045	2046	2047	2048
Starting Reserve Balance	\$1,990,299	\$2,030,847	\$1,936,669	\$2,256,431	\$2,612,328
Annual Reserve Contribution	\$352,001	\$359,041	\$366,222	\$373,546	\$381,017
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$20,097	\$19,829	\$20,957	\$24,333	\$27,226
Total Income	\$2,362,397	\$2,409,718	\$2,323,848	\$2,654,311	\$3,020,570
# Component					
Site / Grounds					
602 Garage Doors and Openers - Replace	\$0	\$0	\$0	\$0	\$0
98 UNION: Building Interior					
701 Int Floor c: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
701 Int Floor d: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
701 Int Floor e: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
710 Int Walls and Ceilings a - Repaint	\$0	\$0	\$57,754	\$0	\$0
710 Int Walls and Ceilings b - Repaint	\$110,970	\$0	\$0	\$0	\$0
711 Interior Lobby - Repaint	\$0	\$0	\$0	\$0	\$24,390
713 Garage Lobbies - Carpet & Paint	\$0	\$0	\$0	\$0	\$0
716 Int Fire Doors - Replace	\$9,108	\$9,381	\$9,663	\$9,952	\$10,251
730 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
750 Lobby - Remodel	\$0	\$0	\$0	\$0	\$54,201
760 Furniture - Replace	\$0	\$0	\$0	\$0	\$53,023
98 UNION: Systems					
915 HVAC Fans: - Repair/Replace	\$0	\$0	\$0	\$32,031	\$0
926 HVAC Boiler: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
930 HVAC: Dom Water Boost - Replace	\$0	\$0	\$0	\$0	\$0
931 HVAC Assorted: - Repair/Replace	\$0	\$0	\$0	\$0	\$0
932 HVAC Heat Recovery - Repair/Replace	\$0	\$0	\$0	\$0	\$0
950 Entry Access System - Replace	\$0	\$0	\$0	\$0	\$0
955 Security TV - Replace	\$0	\$0	\$0	\$0	\$0
960 Elevator - Modernize	\$0	\$0	\$0	\$0	\$0
961 Elevator Cab - Remodel	\$0	\$0	\$0	\$0	\$0
990 Trash Compactor - Replace	\$0	\$0	\$0	\$0	\$0
So. ARCADE (shared 66%-69%) Exterior					
505 Tower Roof - Repair/Replace	\$0	\$0	\$0	\$0	\$0
506 Roof: Low Slope - Recoat	\$0	\$0	\$0	\$0	\$0
507 Atrium Metal Roof - Repair/Replace	\$0	\$0	\$0	\$0	\$0
520 EIFS Coating - Recoat/Repair	\$0	\$0	\$0	\$0	\$0
521 EIFS - Staging	\$136,096	\$0	\$0	\$0	\$0
522 EIFS Coating - Low Pressure Wash	\$75,376	\$0	\$0	\$0	\$0
540 Roof Decks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
541 Atrium Walking Surface - Clean/Seal	\$0	\$0	\$0	\$0	\$0
542 Tower Decks - Clean/Seal/Repair	\$0	\$0	\$0	\$0	\$43,596
550 Rails: Metal - Repair/Replace	\$0	\$0	\$0	\$0	\$0
So. ARCADE (shared 66%-68%) Systems					
909 Emergency Generator- Repair/Replace	\$0	\$0	\$0	\$0	\$0
927 Fire Pump Motor- Repair/Replace	\$0	\$0	\$0	\$0	\$0
928 Fire Pump Control - Replace	\$0	\$0	\$0	\$0	\$0
965 Fire Panel - Replace	\$0	\$463,667	\$0	\$0	\$0
968 Fire Pump - Repair/Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$331,550	\$473,048	\$67,416	\$41,983	\$185,462
Ending Reserve Balance	\$2,030,847	\$1,936,669	\$2,256,431	\$2,612,328	\$2,835,109

Accuracy, Limitations, and Disclosures

"The reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay on demand as a special assessment your share of common expenses for the cost of major maintenance, repair or replacement of a reserve component."

Association Reserves and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. James Talaga, company President, is a credentialed Reserve Specialist (#066). All work done by Association Reserves WA, LLC is performed under his responsible charge and is performed in accordance with National Reserve Study Standards (NRSS). There are no material issues to our knowledge that have not been disclosed to the client that would cause a distortion of the client's situation.

Per NRSS, information provided by official representative(s) of the client, vendors, and suppliers regarding financial details, component physical details and/or quantities, or historical issues/conditions will be deemed reliable, and is not intended to be used for the purpose of any type of audit, quality/forensic analysis, or background checks of historical records. As such, information provided to us has not been audited or independently verified.

Estimates for interest and inflation have been included, because including such estimates are more accurate than ignoring them completely. When we are hired to prepare Update reports, the client is considered to have deemed those previously developed component quantities as accurate and reliable, whether established by our firm or other individuals/firms (unless specifically mentioned in our Site Inspection Notes). During inspections our company standard is to establish measurements within 5% accuracy, and our scope includes visual inspection of accessible areas and components and does not include any destructive or other testing. Our work is done only for budget purposes. Uses or expectations outside our expertise and scope of work include, but are not limited to: project audit, quality inspection, and the identification of construction defects, hazardous materials, or dangerous conditions. Identifying hidden issues such as but not limited to, plumbing or electrical problems are also outside our scope of work. Our estimates assume proper original installation & construction, adherence to recommended preventive maintenance, a stable economic environment, and do not consider frequency or severity of natural disasters. Our opinions of component Useful Life, Remaining Useful Life, and current or future cost estimates are not a warranty or guarantee of actual costs or timing.

Because the physical and financial status of the property, legislation, the economy, weather, owner expectations, and usage are all in a continual state of change over which we have no control, we do not expect that the events projected in this document will all occur exactly as planned. This Reserve Study is by nature a "one-year" document in need of being updated annually so that more accurate estimates can be incorporated. It is only because a long-term perspective improves the accuracy of near-term planning that this Report projects expenses into the future. We fully expect a number of adjustments will be necessary through the interim years to the cost and timing of expense projections and the funding necessary to prepare for those estimated expenses.

In this engagement our compensation is not contingent upon our conclusions, and our liability in any matter involving this Reserve Study is limited to our fee for services rendered.

Terms and Definitions

BTU	British Thermal Unit (a standard unit of energy)
DIA	Diameter
GSF	Gross Square Feet (area). Equivalent to Square Feet
GSY	Gross Square Yards (area). Equivalent to Square Yards
HP	Horsepower
LF	Linear Feet (length)
Effective Age	The difference between Useful Life and Remaining Useful Life. Note that this is not necessarily equivalent to the chronological age of the component.
Fully Funded Balance (FFB)	The value of the deterioration of the Reserve Components. This is the fraction of life "used up" of each component multiplied by its estimated Current Replacement. While calculated for each component, it is summed together for an association total.
Inflation	Cost factors are adjusted for inflation at the rate defined in the Executive Summary and compounded annually. These increasing costs can be seen as you follow the recurring cycles of a component on the "30-yr Income/Expense Detail" table.
Interest	Interest earnings on Reserve Funds are calculated using the average balance for the year (taking into account income and expenses through the year) and compounded monthly using the rate defined in the Executive Summary. Annual interest earning assumption appears in the Executive Summary.
Percent Funded	The ratio, at a particular point in time (the first day of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.
Remaining Useful Life (RUL)	The estimated time, in years, that a common area component can be expected to continue to serve its intended function.
Useful Life (UL)	The estimated time, in years, that a common area component can be expected to serve its intended function.

Component Details

The primary purpose of the Component Details appendix is to provide the reader with the basis of our funding assumptions resulting from our research and analysis. The information presented here represents a wide range of components that were observed and measured against National Reserve Study Standards to determine if they meet the criteria for reserve funding.

- 1) Common area repair & replacement responsibility
- 2) Component must have a limited useful life
- 3) Life limit must be predictable
- 4) Above a minimum threshold cost (board's discretion – typically ½ to 1% of Annual operating expenses).

Not all your components may have been found appropriate for reserve funding. In our judgment, the components meeting the above four criteria are shown with the Useful Life (how often the project is expected to occur), Remaining Useful Life (when the next instance of the expense will be) and representative market cost range termed “Best Cost” and “Worst Cost”. There are many factors that can result in a wide variety of potential costs, and we have attempted to present the cost range in which your actual expense will occur.

Where no Useful Life, Remaining Useful Life, or pricing exists, the component was deemed inappropriate for Reserve Funding.

Site / Grounds

Comp #: 100 Concrete - Repair/Replace**Quantity: Limited square feet**

Location: Areas at recessed entrance to commercial spaces

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 162 Exterior Lights: Assorted - Replace**Quantity: Assorted**

Location: Exterior common area locations

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 170 Landscape - Maintain/Refurbish**Quantity: Very limited**

Location: Street trees

Funded?: No. - Annual cost, best handled out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 182 Drainage/Stormwater Sys - Maintain**Quantity: Extensive system**

Location: Throughout common area

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 600 Parking Garage - Maintain**Quantity: ~ 53,000 square feet**

Location: Levels -2, -3.

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019 Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 602 Garage Doors and Openers - Replace**Quantity: (1) door 18 ft x 8 ft**

Location: Garage entry

Funded?: Yes.

History:

Comments: 2019: Reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 10 years

Remaining Life: 2 years

Best Case: \$ 10,000

Worst Case: \$13,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

Comp #: 604 Garage Lighting - Maintain/Repair

Quantity: Numerous fixtures

Location: Garage ceiling

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 610 Garbage Enclosure - Repair/Replace

Quantity: (1) Enclosure

Location: Parking garage

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 611 Garage: Exhaust Fan - Repair

Quantity: 1 fan

Location: paringgarage

Funded?: No. Useful life not predictable

History: 2018 \$10,000

Comments: 2019 added component, no funding

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

98 UNION: Building Interior

Comp #: 538 Doors: Entry - Repair/Replace**Quantity: (1) door System**

Location: 98 Union Street

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 701 Int Floor c: - Repair/Replace**Quantity: ~ 4,000 square feet**

Location: 2 Floors, Interior hallways

Funded?: Yes.

History:

Comments: 2019: Reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life:

Remaining Life: 0 years

Best Case: \$ 73,000

Worst Case: \$85,000

Lower allowance

Higher allowance

Cost Source: Client Cost History, inflated

Comp #: 701 Int Floor d: - Repair/Replace**Quantity: ~ 4,000 square feet**

Location: 2 Floors, Interior hallways

Funded?: Yes.

History:

Comments: 2019 Reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life:

Remaining Life: 2 years

Best Case: \$ 73,000

Worst Case: \$85,000

Lower allowance

Higher allowance

Cost Source: Client Cost History,, inflated

Comp #: 701 Int Floor e: - Repair/Replace**Quantity: ~ 2,000 square feet**

Location: 1 Floor, Interior hallway

Funded?: Yes.

History: 2018 2 floors. 2016 installed marble tile \$70,000 (2 floors)

Comments: 2019: Reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life:

Remaining Life: 4 years

Best Case: \$ 37,000

Worst Case: \$42,000

Lower allowance

Higher allowance

Cost Source: Estimate Provided by Client, inflated

Comp #: 710 Int Walls and Ceilings a - Repaint**Quantity: ~ 12,000 square feet**

Location: Interior hallways

Funded?: Yes.

History:

Comments: 2019: Reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 12 years

Remaining Life: 3 years

Best Case: \$ 23,000

Worst Case: \$29,000

Lower allowance

Higher allowance

Cost Source: Client Cost History, inflated

Comp #: 710 Int Walls and Ceilings b - Repaint**Quantity: ~ 12,000 square feet**

Location: Interior hallways

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 12 years

Remaining Life: 13 years

Best Case: \$ 47,000

Worst Case: \$59,000

Lower allowance

Higher allowance

Cost Source: Client Cost History, inflated

Comp #: 711 Interior Lobby - Repaint**Quantity: (1) lobby**

Location: First floor

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 12 years

Remaining Life: 5 years

Best Case: \$ 8,700

Worst Case: \$12,000

Lower allowance

Higher allowance

Cost Source: Client Cost History, inflated

Comp #: 713 Garage Lobbies - Carpet & Paint**Quantity: (3) Lobbies**

Location: Level -1, -2, and -3

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 12 years

Remaining Life: 7 years

Best Case: \$ 19,000

Worst Case: \$22,000

Lower allowance

Higher allowance

Cost Source: Prior estimate Provided by Client, inflated

Comp #: 716 Int Fire Doors - Replace**Quantity: (2) doors/year**

Location: Interior hallway

Funded?: Yes.

History:

Comments: 2019 left life unchanged (UL of 1 yr; RUL of 0 yrs) , and left at 2 doors/year.

Useful Life: 1 years

Remaining Life: 0 years

Best Case: \$ 4,000

Worst Case: \$4,700

Lower allowance

Higher allowance

Cost Source: Client Cost History, inflated

Comp #: 720 Interior Lights - Replace**Quantity: ~ (180) fixtures**

Location: Interior hallways

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019 left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 721 Lights: Stairwell - Replace**Quantity: Many fixtures**

Location: Level -1

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019: left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 730 Mailboxes - Replace**Quantity: ~ (90) boxes**

Location: Lobby

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 40 years

Remaining Life: 4 years

Best Case: \$ 6,900

Worst Case: \$9,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 750 Lobby - Remodel**Quantity: (1) lobby**

Location: First floor

Funded?: Yes.

History: 2012 \$40,000 (included furniture #760)

Comments: 2019 reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 12 years

Remaining Life: 5 years

Best Case: \$ 12,000

Worst Case: \$34,000

Lower allowance

Higher allowance

Cost Source: Client Cost History, inflated

Comp #: 751 Rental Unit 208 - Refurbish**Quantity: (1) unit**

Location: Unit 208

Funded?: No. Unit was sold

History:

Comments: 2019 reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 753 Meeting Room - Paint**Quantity: (1) large room**

Location: Level -1

Funded?: No. - Cost projected to be too small for Reserve Funding; repair/replace as needed out of operating budget

History:

Comments: 2019 Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 755 Bathroom - Refurbish**Quantity: (1) small bathroom**

Location: Adjacent to the meeting room

Funded?: No. - Cost projected to be too small for Reserve Funding; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 760 Furniture - Replace**Quantity: Assorted pieces**

Location: Interior lobby and hallways

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 12 years

Remaining Life: 5 years

Best Case: \$ 15,000

Worst Case: \$30,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

98 UNION: Systems

Comp #: 915 HVAC Fans: - Repair/Replace**Quantity: ~ 10 fans**

Location: Roofs, mechanical rooms

Funded?: Yes.

History:

Comments: 2019: Left remaining useful life at 0 years, and increased costs about 6%.

Useful Life: 7 years

Remaining Life: 0 years

Best Case: \$ 12,000

Worst Case: \$16,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

Comp #: 921 HVAC: Backflow Prevention - Repair**Quantity: (5) Backflow preventers**

Location: Common areas

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 926 HVAC Boiler: - Repair/Replace**Quantity: (2) boiler**

Location: Tower Roof

Funded?: Yes.

History: 2016 \$104,500 (installed 2 boilers)

Comments: 2019: Reduced remaining useful life 2 years from the 2017 study, and inflated costs 6%.

Useful Life: 20 years

Remaining Life: 17 years

Best Case: \$ 100,000

Worst Case: \$130,000

Lower allowance

Higher allowance

Cost Source: Client Cost History

Comp #: 930 HVAC: Dom Water Boost - Replace**Quantity: (2) pumps**

Location: Mechanical room

Funded?: Yes.

History:

Comments: 2019: Left remaining useful life at 0 years, and increased costs about 6%.

Useful Life: 20 years

Remaining Life: 0 years

Best Case: \$ 23,000

Worst Case: \$58,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

Comp #: 931 HVAC Assorted: - Repair/Replace**Quantity: (4) pieces**

Location: Tower roof and north roof

Funded?: Yes.

History:

Comments: 2019: Left remaining useful life at 0 years, and increased costs about 6%.

Useful Life: 20 years

Remaining Life: 0 years

Best Case: \$ 32,000

Worst Case: \$42,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

Comp #: 932 HVAC Heat Recovery - Repair/Replace**Quantity: (4) pieces**

Location: Tower roof and north roof

Funded?: Yes.

History: 2012 \$116,000 heat recopver & gas makeup air

Comments: 2019 reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 20 years

Remaining Life: 13 years

Best Case: \$ 68,000

Worst Case: \$75,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

Comp #: 950 Entry Access System - Replace**Quantity: (1) System**

Location: Adjacent to main entry

Funded?: Yes.

History: 2018 \$5,400. 2006

Comments: 2019 reset remaining useful life from 2017 study, and used Association cost history, inflated 3%.

Useful Life: 12 years

Remaining Life: 11 years

Best Case: \$ 5,000

Worst Case: \$6,200

Lower allowance

Higher allowance

Cost Source: Inflated Client Cost History

Comp #: 955 Security TV - Replace**Quantity: (1) System**

Location: Adjacent to main entry

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 10 years

Remaining Life: 2 years

Best Case: \$ 16,000

Worst Case: \$22,000

Lower allowance

Higher allowance

Cost Source: Prior Research w/ Electric Service and Security, inflated

Comp #: 960 Elevator - Modernize**Quantity: (2) Traction, geared**

Location: Elevator machine room penthouse

Funded?: Yes.

History: 2013 \$363,500

Comments: 2019 reduced remaining useful life 2 year from 2017 study, and increased costs about 43%.

Useful Life: 30 years

Remaining Life: 24 years

Best Case: \$ 500,000

Worst Case: \$700,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 961 Elevator Cab - Remodel**Quantity: (2) Elevator Cabs**

Location: Elevator hoistway

Funded?: Yes.

History: 2013 \$50,000

Comments: 2019 reduced remaining useful life 2 year from 2017 study, and increased costs about 6%.

Useful Life: 20 years

Remaining Life: 14 years

Best Case: \$ 43,000

Worst Case: \$66,000

Lower allowance

Higher allowance

Cost Source: Inflated Client Cost History

Comp #: 990 Trash Compactor - Replace**Quantity: (1) Compactor**

Location: Garabe enclosure

Funded?: Yes.

History: 2018 \$20,000

Comments: 2019 reset remaining useful life, and used client costs history.

Useful Life: 18 years

Remaining Life: 17 years

Best Case: \$ 18,600

Worst Case: \$22,600

Lower allowance

Higher allowance

Cost Source: Client Cost History, inflated

So. ARCADE (shared 66%-69%) Exterior

Comp #: 505 Tower Roof - Repair/Replace

Quantity: ~ 5,300 square feet

Location: Rooftop of Residential Tower

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life 2 year from 2017 study, and increased costs about 6%.

Useful Life: 20 years

Remaining Life: 2 years

Best Case: \$ 140,000

Worst Case: \$190,000

Lower allowance 69% for 98 Union

Higher allowance 69% for 98 Union

Cost Source: Client Cost History; extrapolated, adjusted for inflation

Comp #: 506 Roof: Low Slope - Recoat

Quantity: ~ 17,000 square feet

Location: Rooftop of Arcade building

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 15 years

Remaining Life: 2 years

Best Case: \$ 150,000

Worst Case: \$210,000

Lower allowance, 66% for 98 Union

Higher allowance, 66% for 98 Union

Cost Source: Client Cost History; adjusted for inflation

Comp #: 507 Atrium Metal Roof - Repair/Replace

Quantity: ~ 550 square feet

Location: Atrium elevated walkway roof

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 50 years

Remaining Life: 16 years

Best Case: \$ 4,600

Worst Case: \$5,900

Lower allowance, 66% for 98 Union

Higher allowance, 66% for 98 Union

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 508 Skylights - Repair/Replace

Quantity: (4) domed 3'-6 x 3'-6

Location: Tower roof

Funded?: No. - Cost projected to be too small for Reserve Funding; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 520 EIFS Coating - Recoat/Repair

Quantity: ~ 64,000 gross square ft

Location: Exterior walls

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life to 1 year based on Evolution Architecture ROM (dated 8/17/2017) ,.

Useful Life: 16 years

Remaining Life: 1 years

Best Case: \$ 400,000

Worst Case: \$432,000

Lower allowance, 66% for 98 Union

Higher allowance, 66% for 98 Union

Cost Source: Estimate Provided by Association (Evolution Arch (dated 8/17/2017)

Comp #: 521 EIFS - Staging**Quantity: (1) item**

Location: Exterior walls

Funded?: Yes.

History:

Comments: 2019 removed near term funding (included in #520 EIFS Recoat/Repair).

Useful Life: 8 years

Remaining Life: 9 years

Best Case: \$ 62,000

Worst Case: \$68,000

Lower allowance

Higher allowance

Cost Source: Client Cost History, infalted

Comp #: 522 EIFS Coating - Low Pressure Wash**Quantity: ~ 64,000 gross square ft**

Location: Exterior walls

Funded?: Yes.

History:

Comments: 2019 removed near term funding (included in #520 EIFS Recoat/Repair).

Useful Life: 8 years

Remaining Life: 9 years

Best Case: \$ 33,000

Worst Case: \$39,000

Lower allowance

Higher allowance

Cost Source: Inflated Client Cost History

Comp #: 528 Stucco (St. Vin)- Maintain/Repair**Quantity: ~ 5,600 gross square ft**

Location: Exterior walls of St Vincent courtyard

Funded?: No. - Recoating stucco is included in other component

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 533 EIFS Sealant - Reseal**Quantity: ~ 64,000 gross square ft**

Location: Exterior walls

Funded?: No. removed funding (included in #520 EIFS Recoat/Repair).

History:

Comments: 2019 removed funding (included in #520 EIFS Recoat/Repair).

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 535 Windows, Sliders -Repair/Replace**Quantity: ~ 600 assorted**

Location: Exterior walls

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 540 Roof Decks - Repair/Replace**Quantity: ~ 240 square feet**

Location: 7th Floor roof top decks

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 15 years

Remaining Life: 2 years

Best Case: \$ 3,800

Worst Case: \$5,000

Lower allowance 66% for 98 Union

Higher allowance 66% for 98

Union

Cost Source: Client Cost History; broken out from larger roofing project

Comp #: 541 Atrium Walking Surface - Clean/Seal**Quantity: ~ 600 square feet**

Location: Circular atrium at townhouses.

Funded?: Yes. - Cost projected to be too small for Reserve Funding; repair/replace as needed out of operating budget

History:

Comments: 2019: Added funding per So. Arcade - Evolution Arch ROM scope of repairs (dated 8/17/2017)

Useful Life:

Remaining Life: 1 years

Best Case: \$ 50,000

Worst Case: \$70,000

Lower allowance

Higher allowance

Cost Source: Allowance Provided by Association -
Evolution Architecture (8/17/2017)**Comp #: 542 Tower Decks - Clean/Seal/Repair****Quantity: ~ 5,500 square feet**

Location: Residential decks floors five through eleven

Funded?: Yes.

History: 2018 planned (Time & Material) prelim allowance of \$18,500

Comments: 2019 reset remaining useful life, and decreased costs to allowance provided by Association.

Useful Life: 6 years

Remaining Life: 5 years

Best Case: \$ 16,500

Worst Case: \$20,500

Lower allowance 66% for 98 Union

Higher allowance 66% for 98
Union

Cost Source: Allowance Provided by Association

Comp #: 550 Rails: Metal - Repair/Replace**Quantity: extensive qty**

Location: perimeter of decks/balconies

Funded?: Yes.

History:

Comments: 2019: added component based on So. Arcade's ROM repair allowance per Evolution Architecture (8/17/2017)

Useful Life:

Remaining Life: 3 years

Best Case: \$ 193,000

Worst Case: \$288,000

Lower allowance

Higher allowance

Cost Source: Estimate Provided by Association

Comp #: 599 Building Envelope - Inspection**Quantity: Every year**

Location: Common elements of association

Funded?: No. - Annual cost, best handled out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

So. ARCADE (shared 66%-68%) Systems

Comp #: 900 Plumbing - Repair**Quantity: Extensive plumbing**

Location: Throughout complex

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 905 Electrical System - Maintain/Repair**Quantity: Extensive wiring**

Location: Common areas

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 909 Emergency Generator- Repair/Replace**Quantity: (1) Generator system**

Location: Mechanical room

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life 2 years from 2017 study, and increased costs about 6%.

Useful Life: 40 years

Remaining Life: 6 years

Best Case: \$ 60,000

Worst Case: \$64,000

Lower allowance, 66% for 98 Union

Higher allowance, 66% for 98 Union

Cost Source: Prior research w/ Cummins NW 425-235-3400 Dan L. ext 3128

Comp #: 927 Fire Pump Motor- Repair/Replace**Quantity: (1) Electric Motor**

Location: Sprinkler Room

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life 2 year from 2017 study, and increased costs about 6%.

Useful Life: 50 years

Remaining Life: 17 years

Best Case: \$ 6,900

Worst Case: \$10,000

Lower allowance, 66% for 98 Union

Higher allowance, 66% for 98 Union

Cost Source: Prior research w/ Dave's Pump Service 360-456-6110, inflated

Comp #: 928 Fire Pump Control - Replace**Quantity: (1) Pump Controller**

Location: Sprinkler room

Funded?: Yes.

History: 2018: \$10,000

Comments: 2019 reset remaining useful life, and used actual Association costs.

Useful Life: 35 years

Remaining Life: 34 years

Best Case: \$ 5,500

Worst Case: \$8,000

Lower allowance, 66% for 98 Union

Higher allowance, 66% for 98 Union

Cost Source: Association reported cost history, infalted

Comp #: 930 HVAC: Backflow Preventer - Maintain**Quantity: (5) Backflow preventers**

Location: Multiple locations

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 965 Fire Panel - Replace**Quantity: (1) main fire panel**

Location: Front office and throughout building

Funded?: Yes.

History: 2006 \$300,000 paid by Insurance claim

Comments: 2019 reduced remaining useful life 2 year from 2017 study, and increased costs about 6%.

Useful Life: 20 years

Remaining Life: 6 years

Best Case: \$ 200,000

Worst Case: \$230,000

Lower allowance, 66% for 98 Union

Higher allowance, 66% for 98 Union

Cost Source: Prior research w/ Fire One 206-575-0311, inflated

Comp #: 966 Sprinkler Heads - Test**Quantity: Many heads**

Location: Through building and garage

Funded?: No. - Useful life is not predictable; repair/replace as needed out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp #: 968 Fire Pump - Repair/Replace**Quantity: (1) Pump**

Location: Sprinkler Room

Funded?: Yes.

History:

Comments: 2019 reduced remaining useful life 2 year from 2017 study, and increased costs about 6%.

Useful Life: 55 years

Remaining Life: 22 years

Best Case: \$ 9,000

Worst Case: \$12,000

Lower allowance, 66% for 98 Union

Higher allowance, 66% for 98 Union

Cost Source: 2015 research w/ Dave's Pump Service 360-456-6110, inflated

Comp #: 999 Reserve Study - Update**Quantity: Every three years**

Location: Common elements of association

Funded?: No. - Annual cost, best handled out of operating budget

History:

Comments: 2019: Left unfunded.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source: