

Cottonwoods at Vine Reserve Study

October 2012



WA
WESTERN ARCHITECTURAL
forensic architects & engineers

Table of Contents

Tab

Reserve Study Analysis

☉ Executive Summary	1
☉ Remaining Useful Life Analysis	2
☉ Reserve Study Schedule	5
☉ Annual Expenditures.....	7
☉ Funding Plan Summary.....	8
☉ Percentage Funded	9
☉ Funding Allocation	10
☉ Terms and Definitions	12

General Info

☉ How to Use	16
☉ Preparation of a Reserve Study.....	18
☉ Property Info	19
☉ Disclosure	20
☉ Reserve Provider Personal Credentials	21
☉ Utah Code Title 57 Chapter 8 & 8a	22

Executive Summary

Dear Board of Directors,

Western Architectural would like to thank you for the opportunity to provide this Reserve Study Analysis for the Cottonwoods at Vine, located in Salt Lake City, Utah.

Baseline Statement

The purpose of the Baseline Statement section is to identify conditions prior to preparing this reserve study. These statements set the baseline to compare new budgeting figures with existing budgeting figures and to calculate contribution increases or decreases.

Number of Residential Units		62
Fiscal Year End		December 31
Fiscal Year Begin		January 1
Current Reserve Allocation (Annually)	From client-provided budget dated April, 2012	\$25,716
Current Reserve Allocation (Monthly per Unit)		\$34.56
Starting Reserve Account Balance		\$69,389

Economic Variables

Economic variables such as inflation of goods and services are factored into the estimated future replacement costs of common components, using historical data provided by www.Inflationdata.com. Inflation is compounded over the 30-year period to give an accurate portrait of what costs may look like over the 30 years. Using historical data allows us to forecast a fairly accurate 30-year cost analysis. Actual prices should be adjusted annually, using the current RS-Means Facilities Construction Cost Data guide, in order to provide the most up to date cost analysis. Updating your Reserve Study annually is important and will help to prevent large fluctuation in Recommended Annual Contributions.

Projected Annual Inflation (%)	Based on inflation history 2000-2010 by www.Inflationdata.com	2.96%
Reserve Account Interest Rate		0.30%

The purpose of the Economic Variables section is to identify estimates of inflation and interest rates based on relative history of these figures. Inflation and interest rates are subject to change and may not reflect the actual future rates.

Recommended Reserve Contributions

The purpose of the Recommended Reserve Contributions section is to summarize the focal points of the reserve schedule. The Recommended Reserve Contributions were determined based on anticipated estimated costs needs over the 30-year period using the "Cash Flow Funding Method". These costs are located on the "Reserve Schedule" page and more info about the "Cash Flow Funding Method" can be found under the "Preparation of a Reserve Study" section.

Recommended Minimum Reserve Contribution (Annually)	Plan assumes an increase in contributions each year based on inflation.	\$26,000
Minimum Reserve Contribution (Monthly per Unit)		\$34.95
Estimated Expenditures over 30 years		\$919,325
Estimated Reserve Contributions (factoring interest earned) over 30 Years		\$1,291,354

Remaining Useful Life Analysis

Current Year **2012**

Year Constructed **1983**

CSI Division	Component Description	Condition	Installation Date (Year)	Expected Useful Life (Years)	Remaining Useful Life (Years)	Estimated Replacement Date	Included in Reserve Schedule?	Effective Age
05-Metals								
055100	Metal Stair Assemblies	Good	1983	50	50	2033	NO	29
055100	Metal Stair Assemblies (Repair Allow.)	n/a	2012	6	6	2018	YES	0
06-Woods, Plastics, & Composites								
061533	Plywood Decking (Replacement Allow.)	Good	2012	8	8	2020	YES	0
07-Thermal & Moisture Protection								
073113	Composition Roofing	Good	2005	25	18	2030	YES	7
073113	Composition Roofing	Good	2006	25	19	2031	YES	6
073113	Composition Roofing	Good	2007	25	20	2032	YES	5
074633	Vinyl Siding	Good	1983	50	50	2033	NO	29
074633	Vinyl Siding (Repair Allowance)	n/a	2012	8	8	2020	YES	0
077123	Rain Gutters and Downspouts	Good	2006	25	19	2031	YES	6
08-Openings								
081100	Metal Doors and Frames (Clubhouse)	Good	1983	50	21	2033	YES	29
085113	Metal Windows (Clubhouse)	Good	1983	35	6	2018	YES	29
09-Finishes								
093013	Ceramic Tile Flooring	Good	1983	35	6	2018	YES	
096816	Carpeting	Good	2007	12	7	2019	YES	5
096816	Exterior Carpeting (Replacement Allow.)	Good	2012	8	8	2020	YES	0
099123	Interior Paint	Good	2007	12	7	2019	YES	5

Remaining Useful Life Analysis

Current Year **2012**

Year Constructed **1983**

CSI Division	Component Description	Condition	Installation Date (Year)	Expected Useful Life (Years)	Remaining Useful Life (Years)	Estimated Replacement Date	Included in Reserve Schedule?	Effective Age
10-Specialties								
102113	Bathroom Components	Good	1983	35	6	2018	YES	29
105523	Mailboxes	Good	1983	45	16	2028	YES	29
107323	Carport Structures (Repair Allowance)	Good	2012	8	8	2020	YES	0
107400	Monument Sign (Repair Allowance)	Good	2006	12	6	2018	YES	6
11-Equipment								
116600	Athletic Equipment	Good	1998	25	11	2023	YES	14
118213	Tennis Net	Good	2008	8	4	2016	YES	4
12-Furnishings								
122100	Window Blinds	Good	2006	20	14	2026	YES	6
125000	Furniture	Good	2006	20	14	2026	YES	6
125883	Patio Furniture	Good	2008	10	6	2018	YES	4
13-Special Construction								
131700	Pool Surfaces (Plaster)	Fair	2009	15	12	2024	YES	3
22-Plumbing								
223430	Gas Fired Residential Water Heaters	Poor	2001	12	1	2013	YES	11
225116	Pool Circulation Pump	Good	2006	15	9	2021	YES	6
225119	Pool Heater	Fair	2003	12	3	2015	YES	9
225119	Pool Filter	Good	2006	20	14	2026	YES	6
23-HVAC								
235400	Furnace	Fair	1995	30	13	2025	YES	17
238126	Evaporative Cooler	Fair	1998	15	1	2013	YES	14

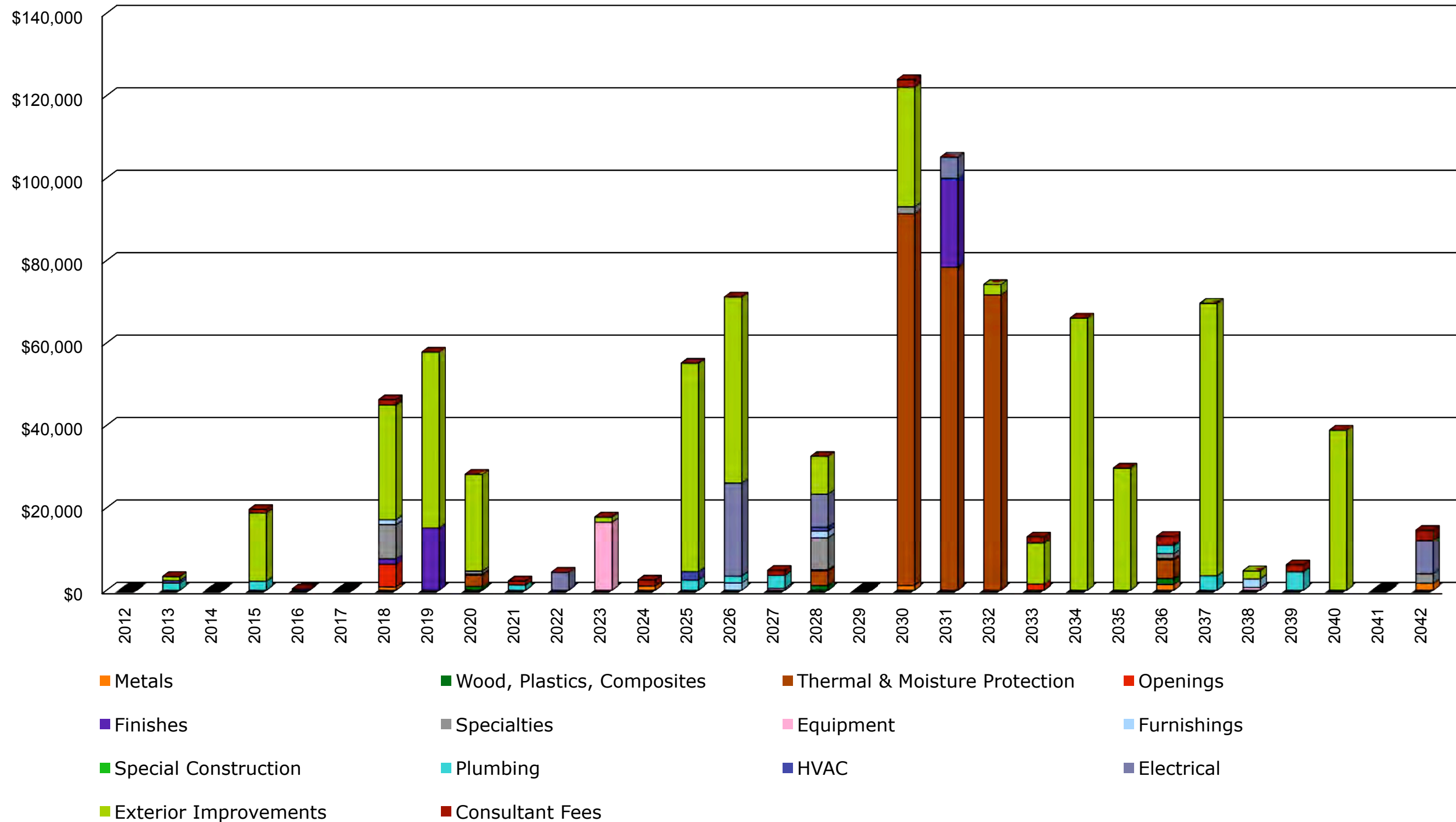
Remaining Useful Life Analysis

Current Year **2012**

Year Constructed **1983**

CSI Division	Component Description	Condition	Installation Date (Year)	Expected Useful Life (Years)	Remaining Useful Life (Years)	Estimated Replacement Date	Included in Reserve Schedule?	Effective Age
26-Electrical								
265100	Interior Lighting	Good	2006	25	19	2031	YES	6
265100	Interior Lighting w/ Fan	Good	2006	25	19	2031	YES	6
265600	Building Lighting	Good	2006	20	14	2026	YES	6
265613	Site Lighting	Good	2008	20	16	2028	YES	4
265616	Flood Lighting	Good	2002	20	10	2022	YES	10
32-Exterior Improvements								
321216	Asphalt Paving Overlay	Fair	1990	35	13	2025	YES	22
321236	Asphalt Sealants Sealer	Good	2010	5	3	2015	YES	2
321313	Pool Deck	Fair	1983	35	6	2018	YES	29
321313	Concrete Sidewalk (Repair Allowance)	Good	2010	10	8	2020	YES	2
321713	Sports Surfacing	Good	2004	15	7	2019	YES	8
321723	Parking Area Striping & Graphics	Good	2008	5	1	2013	YES	4
323113	Chain-Link Fencing	Good	1983	45	16	2028	YES	29
323123	Vinyl Fencing	Good	2012	25	25	2037	YES	0
323129	Wood Fencing	Good	2006	20	14	2026	YES	6
328000	Irrigation Systems	Good	2008	25	21	2033	YES	4
328000	Irrigation Timers	Good	2008	12	8	2020	YES	4

Annual Expenditures



Reserve Study Schedule

Recommended Contributions: Per Unit / Per Month:	\$34.95
Fiscal Year: January 1 to December 31	2012
Inflation Rate (%)	2.96%
Year Built	1983
Number of Units	62

Component Description	Remaining Useful Life (Years)	Quantity	Units	Cost	Total Cost in 2012	Replacement Date	Total Spent Over 30 Years	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30						
								2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042						
05-Metals							\$6,100																																					
Metal Stair Assemblies (Repair Allow.)	6	1	Allowance	\$700.00	\$700	2018	\$6,100								\$834													\$1,183									\$1,410					\$1,679		
06-Woods, Plastics, & Composites							\$3,571																																					
Plywood Decking (Replacement Allow.)	8	1725	SF 5%	\$8.50	\$733	2020	\$3,571									\$926																										\$1,476		
07-Thermal & Moisture Protection							\$251,122																																					
Composition Roofing	18	17208	SF	\$3.10	\$53,345	2030	\$90,183																																					
Composition Roofing	19	12906	SF	\$3.10	\$40,009	2031	\$69,639																																					
Composition Roofing	20	12906	SF	\$3.10	\$40,009	2032	\$71,701																																					
Vinyl Siding (Repair Allowance)	8	23640	SF 5%	\$1.88	\$2,222	2020	\$10,825										\$2,806												\$71,701														\$4,475	
Rain Gutters and Downspouts	19	1200	LF	\$4.20	\$5,040	2031	\$8,773																																					
08-Openings							\$7,030																																					
Metal Doors and Frames (Clubhouse)	21	3	EA	\$280.00	\$840	2033	\$1,550																																					
Metal Windows (Clubhouse)	6	10	EA	\$460.00	\$4,600	2018	\$5,480									\$5,480																												
09-Finishes							\$38,821																																					
Ceramic Tile Flooring	6	260	SF	\$4.25	\$1,105	2018	\$1,316								\$1,316																													
Carpeting	7	2240	SF	\$2.84	\$6,362	2019	\$18,876									\$7,803																												
Exterior Carpeting (Replacement Allow.)	8	1725	SF 5%	\$2.00	\$173	2020	\$840																																					
Interior Paint	7	5500	SF	\$1.09	\$5,995	2019	\$17,788									\$7,353																												
10-Specialties							\$22,174																																					
Bathroom Components	6	2	Allowance	\$3,000.00	\$6,000	2018	\$7,148								\$7,148																													
Mailboxes	16	62	EA	\$69.00	\$4,278	2028	\$6,822																																					
Carport Structures (Repair Allowance)	8	1	Allowance	\$600.00	\$600	2020	\$2,923																																					
Monument Sign (Repair Allowance)	6	2	Allowance	\$500.00	\$1,000	2018	\$5,281								\$1,191																													
11-Equipment							\$18,054																																					
Athletic Equipment	11	1	Allowance	\$12,000.00	\$12,000	2023	\$16,540																																					
Tennis Net	4	1	EA	\$315.00	\$315	2016	\$1,514					\$354																															\$673	
12-Furnishings							\$6,726																																					
Furniture	14	1	EA	\$1,200.00	\$1,200	2026	\$1,805																																					
Patio Furniture	6	1	EA	\$1,000.00	\$1,000	2018	\$4,921								\$1,191																												\$2,135	
13-Special Construction							\$14,017																																					
Pool Surfaces (Plaster)	12	1250	SF	\$3.10	\$3,875	2024	\$14,017																																			\$8,518		
22-Plumbing							\$22,686																																					
Gas Fired Residential Water Heaters	1	1	EA	\$1,710.00	\$1,710	2013	\$7,805																																			\$1,761		
Pool Circulation Pump	9	1	EA	\$989.00	\$989	2021	\$3,278																																			\$1,286		
Pool Heater	3	1	EA	\$2,050.00	\$2,050	2015	\$9,919																																			\$2,237		
Pool Filter	14	1	EA	\$1,120.00	\$1,120	2026	\$1,685																																			\$3,175		

Funding Plan Summary

Year #	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Year Date	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Ideal Reserve Account Balance	\$161,456	\$186,584	\$211,332	\$240,949	\$251,052	\$282,884	\$316,756	\$305,877	\$282,440	\$285,692	\$315,356	\$345,462	\$363,438	\$382,960	\$369,734	\$340,561
Actual Reserve Account Balance	\$69,389	\$95,675	\$119,436	\$147,439	\$156,649	\$186,070	\$216,801	\$202,116	\$176,725	\$181,943	\$214,102	\$245,225	\$264,058	\$293,809	\$277,498	\$246,184
Total Annual Deposit	\$26,000	\$26,770	\$27,562	\$28,378	\$29,218	\$30,083	\$30,973	\$31,890	\$32,834	\$33,806	\$34,806	\$35,837	\$36,897	\$37,990	\$39,114	\$40,272
Expenditures	\$0	\$3,366	\$0	\$19,636	\$354	\$0	\$46,262	\$57,810	\$28,160	\$2,287	\$4,418	\$17,793	\$8,025	\$55,130	\$71,165	\$4,856
Percent Funded	59%	64%	70%	65%	74%	77%	64%	58%	64%	75%	78%	76%	81%	72%	67%	83%

Year #	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Year Date	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Ideal Reserve Account Balance	\$378,360	\$391,221	\$438,987	\$361,658	\$302,522	\$271,521	\$305,425	\$288,310	\$309,398	\$349,467	\$333,807	\$385,589	\$428,550	\$451,099	\$515,804
Actual Reserve Account Balance	\$282,445	\$292,261	\$335,957	\$256,768	\$197,525	\$170,420	\$206,060	\$189,956	\$211,771	\$251,802	\$236,783	\$288,405	\$331,832	\$352,869	\$414,694
Total Annual Deposit	\$41,464	\$42,691	\$43,955	\$45,256	\$46,596	\$47,975	\$49,395	\$50,857	\$52,362	\$53,912	\$55,508	\$57,151	\$58,843	\$60,584	\$62,378
Expenditures	\$32,522	\$0	\$123,912	\$105,090	\$74,210	\$12,951	\$66,067	\$29,675	\$13,084	\$69,640	\$4,748	\$14,716	\$38,861	\$0	\$14,587
Percent Funded	77%	86%	58%	55%	56%	76%	62%	73%	81%	68%	86%	86%	82%	92%	90%

Current Reserve Fund Status

The reserve account balance is currently in a **Fair** financial position; however, is projected to achieve a Strong Financial Position within the next few years, based on our recommendations.

Measure of Strength for Reserve Funding Plan

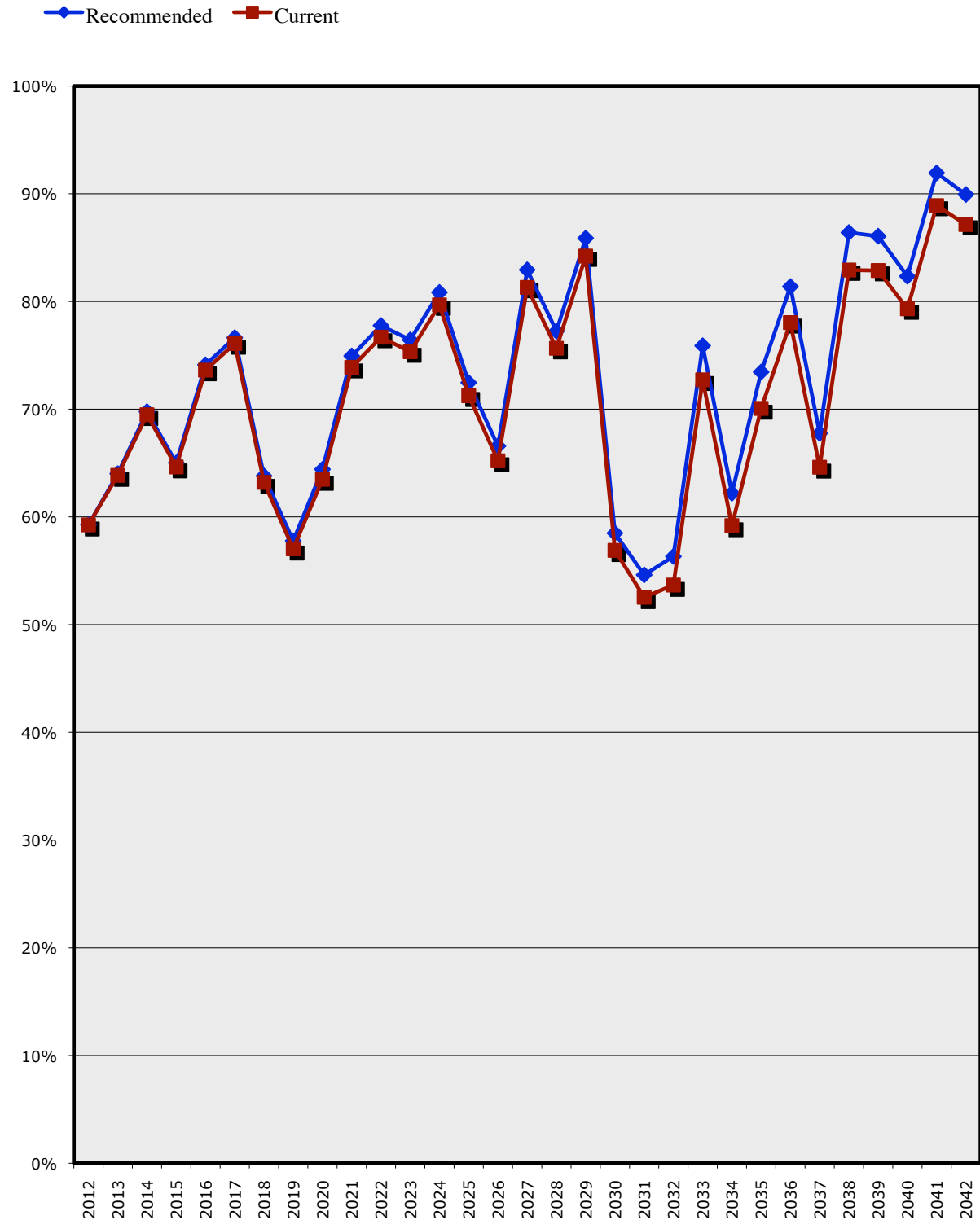
0% - 30% Funded is a weak financial position. Reserve accounts which fall into this category are subject to special assessment charges and deferred maintenance which may harm the property value and building performance. If the reserve account is in this position, immediate action should be taken to improve the reserve account balance.

31% - 69% Funded is a fair financial position. The majority of reserve accounts are within this range. Special assessments probably won't occur in this position; however, improvements should be made to the reserve account to stabilize the balance.

70% - 99% Funded is a strong financial position. This position indicates a near-adequate reserve account balance and special assessments are likely to be omitted in this category. Efforts should be taken to maintain this level of status of the reserve account.

100% or more Funded is an ideal financial position. This means the reserve account is equal to, or exceeds, the amount of money needed to maintain the development. A 100% or more funding status does not necessarily indicate halting reserve contributions. This funding status indicates the reserve account balance is adequate, as intended.

Percent Funded



Funding Allocation

Component Description	% of Total Expenditures	Funds Allocated Annually
05-Metals		
Metal Stair Assemblies (Repair Allow.)	0.66%	\$172.51
06-Woods, Plastics, & Composites		
Plywood Decking (Replacement Allow.)	0.39%	\$101.01
07-Thermal & Moisture Protection		
Composition Roofing	9.81%	\$2,550.53
Composition Roofing	7.58%	\$1,969.52
Composition Roofing	7.80%	\$2,027.82
Vinyl Siding (Repair Allowance)	1.18%	\$306.16
Rain Gutters and Downspouts	0.95%	\$248.11
08-Openings		
Metal Doors and Frames (Clubhouse)	0.17%	\$43.84
Metal Windows (Clubhouse)	0.60%	\$154.98
09-Finishes		
Ceramic Tile Flooring	0.14%	\$37.23
Carpeting	2.05%	\$533.84
Exterior Carpeting (Replacement Allow.)	0.09%	\$23.77
Interior Paint	1.93%	\$503.07
10-Specialties		
Bathroom Components	0.78%	\$202.15
Mailboxes	0.74%	\$192.95
Carport Structures (Repair Allowance)	0.32%	\$82.66
Monument Sign (Repair Allowance)	0.57%	\$149.35
11-Equipment		
Athletic Equipment	1.80%	\$467.78
Tennis Net	0.16%	\$42.83
12-Furnishings		
Furniture	0.20%	\$51.06
Patio Furniture	0.54%	\$139.17
13-Special Construction		
Pool Surfaces (Plaster)	1.52%	\$396.42

Funding Allocation

Component Description	% of Total Expenditures	Funds Allocated Annually
22-Plumbing		
Gas Fired Residential Water Heaters	0.85%	\$220.74
Pool Circulation Pump	0.36%	\$92.70
Pool Heater	1.08%	\$280.52
Pool Filter	0.18%	\$47.65
23-HVAC		
Furnace	0.22%	\$57.85
Evaporative Cooler	0.19%	\$48.24
26-Electrical		
Interior Lighting	0.31%	\$79.75
Interior Lighting w/ Fan	0.26%	\$66.46
Building Lighting	2.45%	\$637.56
Site Lighting	0.87%	\$225.51
Flood Lighting	1.34%	\$348.85
32-Exterior Improvements		
Asphalt Paving Overlay	5.50%	\$1,430.66
Asphalt Sealants Sealer	13.64%	\$3,545.79
Pool Deck	2.91%	\$756.03
Concrete Sidewalk (Repair Allowance)	1.13%	\$295.07
Sports Surfacing	11.83%	\$3,074.82
Parking Area Striping & Graphics	0.91%	\$235.85
Chain-Link Fencing	0.84%	\$217.76
Vinyl Fencing	7.19%	\$1,869.25
Wood Fencing	4.91%	\$1,276.40
Irrigation Systems	0.90%	\$234.83
Irrigation Timers	0.47%	\$120.96
Inspection/Consultant Fees		
Reserve Study Update	0.67%	\$173.86
Reserve Study Update w/ Site Visit	1.02%	\$266.16
Total	100.00%	\$26,000

Terms and Definitions

The following list of terms and definitions is based on the standards set fourth by Community Associations Institute (CAI). Not all of these terms and definitions may be utilized within this reserve study report; however, some may be used in the process of collecting information, calculating the financial and physical analysis, or reviewing the reserve study with consultants.

CASH FLOW METHOD: A method of developing a Reserve Funding Plan where contributions to the Reserve fund are designed to offset the variable annual expenditures from the Reserve fund. Different Reserve Funding Plans are tested against the anticipated schedule of Reserve expenses until the desired Funding Goal is achieved.

COMPONENT: The individual line items in the Reserve Study, developed or updated in the Physical Analysis. These elements form the building blocks for the Reserve Study. Components typically are: 1) Association responsibility, 2) with limited Useful Life expectancies, 3) predictable Remaining Useful Life expectancies, 4) above a minimum threshold cost, and 5) as required by local codes.

COMPONENT INVENTORY: The task of selecting and quantifying Reserve Components. This task can be accomplished through on-site visual observations, review of association design and organizational documents, a review of established association precedents, and discussion with appropriate representative(s) of the association or cooperative.

COMPONENT METHOD: A method of developing a Reserve Funding Plan where the total contribution is based on the sum of contributions for individual components. See “Cash Flow Method.”

CONDITION ASSESSMENT: The task of evaluating the current condition of the component based on observed or reported characteristics.

CURRENT REPLACEMENT COST: See “Replacement Cost.”

DEFICIT: An actual (or projected) Reserve Balance less then the Fully Funded Balance. The opposite would be a Surplus.

EFFECTIVE AGE: The difference between Useful Life and Remaining Useful Life. Not always equivalent to chronological age, since some components age irregularly. Used primarily in computations.

FINANCIAL ANALYSIS: The portion of the Reserve Study where current status of the Reserves (measured as cash or Percent Funded) and a recommended Reserve contribution rate (Reserve Funding Plan) are derived, and the projected Reserve income and expense over time is presented. The Financial Analysis is one of the two parts of the Reserve Study.

FULLY FUNDED: 100% funded. When the actual (or projected) Reserve balance is equal to the Fully Funded Balance.

FULLY FUNDED BALANCE (FFB): Total Accrued Depreciation. An indicator against which Actual (or projected) Reserve balance can be compared. The Reserve balance that is in direct proportion to the fraction of life “used up” of the current Repair or Replacement cost. This number is calculated for each component, and then summed together for an association total.

FUND STATUS: The status of the reserve fund as compared to an established benchmark such as percent funding.

FUNDING GOALS: Independent of methodology utilized, the following represent the basic categories of Funding Plan goals:

- Baseline Funding: Establishing a Reserve funding goal of keeping the Reserve cash balance above zero.
- Full Funding: Setting a Reserve funding goal of attaining and maintaining Reserves at or near 100% funded.
- Statutory Funding: Establishing a Reserve funding goal of setting aside the specific minimum amount of Reserves required by local statutes.
- Threshold Funding: Establishing a Reserve funding goal of keeping the Reserve balance above a specified dollar or Percent Funded amount. Depending on the threshold, this may be more or less conservative than “Fully Funding.”

FUNDING PLAN: An association’s plan to provide income to a Reserve fund to offset anticipated expenditures from that fund.

FUNDING PRINCIPLES:

- Sufficient Funds When Required
- Stable Contribution Rate over the Years
- Evenly Distributed Contributions over the Years
- Fiscally Responsible

LIFE AND VALUATION ESTIMATES: The task of estimating Useful Life, Remaining Useful Life, and Repair or Replacement Costs for the Reserve components.

PERCENT FUNDED: The ratio at a particular point of time (typically the beginning of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded balance, expressed as a percentage.

PHYSICAL ANALYSIS: The portion of the Reserve Study where the Component Inventory, Condition Assessment, and Life and Valuation Estimate tasks are performed. This represents one of the two parts of the Reserve Study.

REMAINING USEFUL LIFE (RUL): Also referred to as “Remaining Life” (RL). The estimated time, in years, that a reserve component can be expected to continue to serve its intended function. Projects anticipated to occur in the initial year have “zero” Remaining Useful Life.

REPLACEMENT COST: The cost of replacing, repairing, or restoring a Reserve Component to its original functional condition. The Current Replacement Cost would be the cost to replace, repair, or restore the component during the particular year.

RESERVE BALANCE: Actual or projected funds as of a particular point in time that the association has identified for use to defray the future repair or replacement of those major components which the association is obligated to maintain. Also known as Reserves, Reserve Accounts, Cash Reserves. Based upon information provided and not audited.

RESERVE PROVIDER: An individual that prepares Reserve Studies.

RESERVE STUDY: A budget planning tool which identifies the current status of the Reserve fund and a stable and equitable Funding Plan to offset the anticipated future major common area expenditures. The Reserve Study consists of two parts: the Physical Analysis and the Financial Analysis. “Our budget and finance committee is soliciting proposals to update our Reserve Study for next year’s budget.”

RESPONSIBLE CHARGE: A reserve specialist in responsible charge of a reserve study shall render regular and effective supervision to those individuals performing services which directly and materially affect the quality and competence rendered by the reserve specialist. A reserve specialist shall maintain such records as are reasonably necessary to establish that the reserve specialist exercised regular and effective supervision of a reserve study of which he/she is in responsible charge. A reserve specialist engaged in any of the following acts or practices shall be deemed not to have rendered the regular and effective supervision required herein:

1. The regular and continuous absence from principal office premises from which professional services are rendered; expect for performance of field work or presence in a field office maintained exclusively for a specific project;

2. The failure to personally inspect or review the work of subordinate where necessary and appropriate;
3. The rendering of a limited, cursory or perfunctory review of plans or projects in lieu of an appropriate detailed review;
4. The failure to personally be available on a reasonable basis or with adequate advance notice for consultation and inspection where circumstances require personal availability.

SPECIAL ASSESSMENT: An assessment levied on the members of an association in addition to regular assessments. Special Assessments are often regulated by governing documents or local statutes.

SURPLUS: An actual (or projected) Reserve Balance greater than the Full Funded Balance. See “Deficit.”

USEFUL LIFE (UL): Total Useful Life or Depreciable Life. The estimated time, in years, that a reserve component can be expected to serve its intended function if properly constructed in its present application or installation.

Cottonwoods at Vine
c/o Mr. Steve Brightling
Earthwork Property Management
PO Box 57115
Salt Lake City, UT 84157

This reserve study is a budget-planning tool that identifies the status of the reserve fund and schedules the anticipated major commonly owned item replacements. This reserve study will also estimate the expected useful life and remaining useful life of building and site components or systems, and will provide an estimated replacement or refurbishment cost for those components or systems. Major components or systems may include, but are not limited to building exteriors, tennis court, swimming pool, clubhouse, etc.

The scope of work identified within our contract is to provide you with a “full” reserve study, which includes:

- Component/System Inventory
- Expected Useful Life and Remaining Useful Life Estimates
- Condition Assessment (based upon on-site visual observations using Good/Fair/Poor grading scale)
- Reserve Replacement Schedule and Estimated Pricing
- Identify Current Reserve Account Balance & Financial Status
- 30 Year Funding Plan

How to Use a Reserve Study

The documents included within the reserve study are intended to be used as guidelines and estimates. It is nearly impossible to know exactly when a common component or system will fail; however, an estimation of useful life based on similar product history and professional experience is used to estimate the time of replacement and associated costs. All costs included within this reserve study should be used as budgeting figures. For exact pricing, a qualified, licensed contractor should be contacted to provide a bid for any anticipated replacements.

The replacement schedule lists all components and systems which are anticipated to ‘wear out’ or fail within 30 years. Items which are anticipated to be replaced or repaired in the current year (2012) are included within the reserve study. These items should already be budgeted for and scheduled to be replaced.

On the reserve schedule, review which items are anticipated to fail in the near future, and keep a close eye on them. It is always better to replace items prior to failure to eliminate the opportunity for surrounding components or associated systems to be affected. Be aware of items scheduled within 2-3 years of the current year. Remember, items listed are scheduled based on history and replacement is scheduled as an estimate. Items commonly fail sooner or later than the estimated date.

If items fail prematurely, a warranty may still be valid. Be sure to check with the manufacturer about warranty coverage prior to replacing the item. Warranty information may be available on the actual items, located within the “Warranty” section of this document. This reserve study is not a guarantee or warranty for any components or systems. The product manufacturer or installation contractor generally provides warranties. The manufacturer and/or installation contractor may not be identified for some components or systems and therefore may be difficult to obtain warranty information. Anytime warranty info is provided by a service provider or upon the purchase of a new component or system, that information should be stored in the “Warranty” section of this document for future reference.

The anticipated funds per unit assume all units are participating. If vacant units exist or otherwise do not contribute to the reserve fund, adjustments may need to be made to compensate for that loss of revenue.

The reserve account anticipates earning 0.3% interest annually on the reserve account, based on average market assessments. If the association has multiple accounts with varying rates a conservative estimate for interest earned has been made. If the association believes that the stated rate is inaccurate, they can request an adjustment to the interest rate in writing, providing the new interest rate, so necessary revisions can be made.

Over time, deposits, interest rates, inflation, and replacement costs will vary, making the reserve study inaccurate. It is required to update this reserve study at least every 5 years, per the state of Utah *Senate Bill 89* to ensure accuracy and adequate funding.

Preparation of a Reserve Study

Data is collected from many sources to prepare a reserve study as a variety of document reviews, interviews, and site observations are required to adequately fulfill our duties as a reserve provider. The following sources and methods may have been utilized in preparation of this reserve study document:

- Property Management Personnel Interviews
- As-built Plans and Specifications Document Reviews
- On-site Observations
- In-house Architects and Engineers Consulting
- Interviewing Engineering Consultants
- RS Means Facilities Maintenance & Repair Cost Data, 18th Edition (2011) printed manual
- RS Means Facilities Construction Cost Data, 26th Edition (2011) printed manual
- Interviewing General Contractor Consultants

A tabular list of commonly owned items is developed and given a current condition grade, expected useful life, and remaining useful life. This document is called a “Remaining Useful Life Analysis” and also determines which items are to be replaced over the upcoming 30 years.

A “Reserve Schedule” identifies the quantity of items throughout the development and a current replacement or refurbishment cost. Based on the remaining useful life of the item (per the Remaining Useful Life Analysis), it is scheduled to be replaced if expected to fail or wear out within the next 30 years.

The “Funding Plan” portion of the reserve study is the association’s plan to provide income to a reserve fund in order to pay for anticipated expenditures (per the Reserve Schedule) to maintain the development. The funding plan is developed through a “Cash Flow Method”, which is a method of developing a reserve-funding plan where contributions into the reserve account are designed to offset the variable annual expenditures in order to maintain the development. Different reserve funding plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

The goal of the Funding Plan is to achieve a fully funded status, which means the reserve account balance is equal to the anticipated expenditures identified in the Reserve Schedule. As monthly deposits are made into the reserve account in order to save for future costs, the funding plan rarely reaches a “fully funded” status. The motivation of achieving a “fully funded” status is to save enough money to afford the replacement of items as they are expected to fail or wear out. Depositing the adequate amount of money into the reserve account each month will result in being “fully funded” when items are expected to be replaced.

Property Information

Site observations were performed on March 7, 2012 at the Cottonwoods at Vine Association. The following is a description of the subject development based on information collected during the site observation review of the CC&R.

- Address or Cross Street: 6149 South 1300 East, Salt Lake City, Utah
- Residential Units: 62
- Number of Buildings: 4
- Constructed: 1983
- Jurisdiction: Salt Lake County

Site Description

Cottonwoods at Vine Association is a multi-family development located in Salt Lake City, Utah. The development is constructed on a relatively flat parcel of land. A tennis court, clubhouse, and swimming pool are located centrally within the development. Cottonwoods at Vine is located in a mostly residential area of town, however is within close proximity to commercial and retail districts.

Disclosures

1. **General** – Cottonwoods at Vine and Western Architectural have no professional or personal involvements with one another, other than the scope of work identified in the reserve study contract. This relationship cannot be perceived as a conflict of interest.
2. **Physical Analysis** - On-site observations were limited to visual observations only. Destructive testing (invasive testing) was not performed. Any items that were not clearly visible at the time of the site observation were not viewed, and therefore were not included in the drafting of this report.
3. **Measurements** - Measuring and inventory were identified via a combination of on-site physical measurements and drawing take-offs. Drawing sets were provided by the property management for our use relating only to the reserve study scope of work.
4. **Completeness** - Western Architectural has found no material issues which, if not disclosed, would cause a distortion of the association's situation.
5. **Reliance on Client Data** - Data received from property management and association representatives is deemed reliable by Western Architectural. Such data received may include financial information, physical deficiencies or physical conditions, quantity of physical assets, or historical issues.
6. **Scope** - This reserve study is a reflection of information provided by Western Architectural and was assembled for use by Cottonwoods at Vine. The intent of this reserve study is not to be used for performing an audit, quality or forensic analysis, or background checks of historical records.
7. **Reserve Balance** - The actual or projected total presented in the reserve study is based upon information provided or collected and was not audited.
8. **Reserve Projects** - Information provided or collected for the purpose of the reserve study will be considered reliable and should not be considered a project audit or quality inspection.

Reserve Provider Personal Credentials

Mr. Justin Barnhart has prepared hundreds of reserve studies since 2007. He has provided reserve studies for high-rise condominiums of more than 300 residential units, to rural apartment-style condominiums containing less than 10 residential units, to master HOA's containing over 2,000 homes.

- Awarded the Reserve Specialist (RS) designation through Community Associations Institute (CAI) (RS designation #240)
- Graduated from Portland State University with a degree in Art History, 2006.
- Received the LEED AP designation from the GBCI in 2009.
- Certified EIFS Inspector, Association of the Wall and Ceiling Industry, #989009.
- Conducted hundreds of reserve studies in four states since 2007.
- Active member of ASTM International and Community Associations Institute (CAI).
- Excels in programs such as ASTM training for property condition assessments & RS Means Maintenance & Facilities Cost Estimating.
- Co-developed the Reserve Study and Maintenance Plan department for current company.
- Reserve study clients range from management companies, new construction contractors, and community associations.

Justin Barnhart, RS, CEI, LEED AP



Manager, Maintenance Plan and Reserve Study Department

Compliance with Utah State Requirements

The State of Utah has a statute describing reserve studies and requirements of these documents (Utah Code Title 57 Chapter 8 & 8a). This document is provided following this page.

Utah Code Title 57 Chapter 8 Section 7.5

Real Estate Condominium Ownership Act

57-8-7.5. Reserve analysis -- Reserve fund.

(1) As used in this section, "reserve analysis" means an analysis to determine:

(a) the need for a reserve fund to accumulate money to cover the cost of repairing, replacing, and restoring common areas and facilities that have a useful life of three years or more, but excluding any cost that can reasonably be funded from the general budget or other funds of the association of unit owners; and

(b) the appropriate amount of any reserve fund.

(2) Except as otherwise provided in the declaration, a management committee shall:

(a) (i) subject to Subsection (2)(a)(ii), cause a reserve analysis to be conducted no less frequently than every five years; and

(ii) if no reserve analysis has been conducted since March 1, 2008, cause a reserve analysis to be conducted before July 1, 2012; and

(b) review and, if necessary, update a previously conducted reserve analysis no less frequently than every two years.

(3) The management committee may conduct a reserve analysis itself or may engage a reliable person or organization, as determined by the management committee, to conduct the reserve analysis.

(4) (a) A management committee may not use money in a reserve fund:

(i) for daily maintenance expenses, unless a majority of the members of the association of unit owners vote to approve the use of reserve fund money for that purpose; or

(ii) for any purpose other than the purpose for which the reserve fund was established.

(b) A management committee shall maintain a reserve fund separate from other funds of the association of unit owners.

(c) This Subsection (4) may not be construed to limit a management committee from prudently investing money in a reserve fund, subject to any investment constraints imposed by the declaration.

(5) Subsections (2), (3), (4), and (6) do not apply to an association of unit owners during the period of declarant management.

(6) An association of unit owners shall:

(a) annually, at the annual meeting of unit owners or at a special meeting of unit owners:

(i) present the reserve study; and

(ii) provide an opportunity for unit owners to discuss reserves and to vote on whether to fund a reserve fund and, if so, how to fund it and in what amount;

(b) prepare and keep minutes of each meeting held under Subsection (6)(a) and indicate in the minutes any decision relating to funding a reserve fund.

(7) This section applies to each association of unit owners, regardless of when the association of unit owners was created.

Utah Code Title 57 Chapter 8a Section 211

Real Estate Community Association Act

57-8a-211. Reserve analysis -- Reserve fund.

(1) As used in this section, "reserve analysis" means an analysis to determine:

(a) the need for a reserve fund to accumulate money to cover the cost of repairing, replacing, and restoring common areas that have a useful life of three years or more, but excluding any cost that can reasonably be funded from the association's general budget or from other association funds; and

(b) the appropriate amount of any reserve fund.

(2) Except as otherwise provided in the governing documents, a board shall:

(a) (i) subject to Subsection (2)(a)(ii), cause a reserve analysis to be conducted no less frequently than every five years; and

(ii) if no reserve analysis has been conducted since March 1, 2008, cause a reserve analysis to be conducted before July 1, 2012; and

(b) review and, if necessary, update a previously conducted reserve analysis no less frequently than every two years.

(3) The board may conduct a reserve analysis itself or may engage a reliable person or organization, as determined by the board, to conduct the reserve analysis.

(4) (a) A board may not use money in a reserve fund:

(i) for daily maintenance expenses, unless a majority of association members vote to approve the use of reserve fund money for that purpose; or

(ii) for any purpose other than the purpose for which the reserve fund was established.

(b) A board shall maintain a reserve fund separate from other association funds.

(c) This Subsection (4) may not be construed to limit a board from prudently investing money in a reserve fund, subject to any investment constraints imposed by the governing documents.

(5) Subsections (2), (3), (4), and (6) do not apply to an association during the period of administrative control.

(6) An association shall:

(a) annually, at the annual meeting of lot owners or at a special meeting of lot owners:

(i) present the reserve study; and

(ii) provide an opportunity for lot owners to discuss reserves and to vote on whether to fund a reserve fund and, if so, how to fund it and in what amount;

(b) prepare and keep minutes of each meeting held under Subsection (6)(a) and indicate in the minutes any decision relating to funding a reserve fund.

(7) This section applies to each association, regardless of when the association was created.