



ASSOCIATION
RESERVES™

The Importance of Reserve Studies

Presented by Bryan Farley, RS



ASSOCIATION RESERVES™

Bryan Farley is the President of Association Reserves – Colorado. A Reserve Specialist, Bryan has completed ~2,000 Reserve Studies and has been a frequent speaker on the topic of Reserve Studies.

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Things you will learn in this presentation:


Part I

- What is a Reserve Study
 - How Reserve Health is Determined
 - Which Components Belong on a Reserve Study
 - Reserve Strength

Part II

- Consequences of Underfunding
- Funding Ideas

Part III

- How to read a Reserve Study in 5 minutes
 - Frequency of Reserve Study updates
 - Importance of a Reserve Study
- 

Part I

- What is a Reserve Study?



Reserve for the Here & Now



COLORADO RESERVE STUDY LAW

[C.R.S. 38-33.3-209.5\(IX\)](#), requires a Reserve Study Policy to include:

- (1) When the association has a reserve study prepared for the portions of the community maintained, repaired, replaced and improved by the association;
- (2) Whether there is a funding plan for any work recommended by the reserve study;
- (3) If there is a funding plan, the projected sources of funding for the work; and
- (4) Whether the reserve study is based on a physical analysis and financial analysis.

Policy Templates available at reservestudy.com

What Are Reserves

Operating	Reserves
Recurring Expense	Recurring Expense
Month to Month & Year to Year	Longer Term Timeline
Less Than 1% of Annual Budget	Greater Than 1% of Annual Budget
As Needed	Planned Expense

What Isn't a Reserve Study?

- Engineering Report
- Structural Report
- Appraisal
- Insurance Audit



What's Inside a Reserve Study?

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**ASSOCIATION
RESERVES**
Est. 1986
Over 30,000 Reserve Studies nationwide

Regional Offices
Arizona
California
Colorado
Florida
Hawaii
Nevada
Washington

Sample Reserve Study



Sample Condominium Anywhere, USA

Report #: 28695-0

For Period Beginning: January 1, 2016

Expires: December 31, 2016

Date Prepared: June 5, 2015





RESERVE STUDY RESULTS



RESERVE STUDY RESULTS

Based on a visual site inspection & research



RESERVE COMPONENT “FOUR-PART TEST”


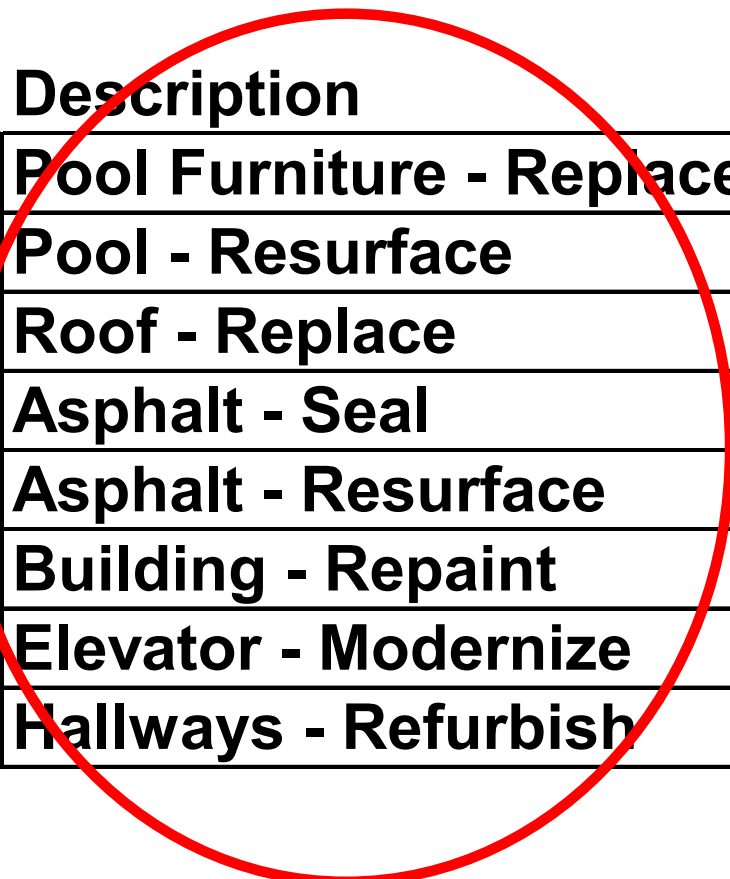


RESERVE STUDY RESULTS

Component List Definitions

- Description
 - ▣ The repair & replacement project
- Useful Life (UL)
 - ▣ Estimate of how long component was designed to fulfill its intended function
- Remaining Useful Life (RUL)
 - ▣ Estimate of how much longer component will perform its intended function
- Replacement Cost
 - ▣ Current cost of repair/replacement

Reserve Component List



Description	UL	RUL	Cost
Pool Furniture - Replace	5	0	\$4,600
Pool - Resurface	10	5	\$10,000
Roof - Replace	20	18	\$80,000
Asphalt - Seal	5	2	\$5,000
Asphalt - Resurface	20	2	\$25,000
Building - Repaint	10	1	\$50,000
Elevator - Modernize	20	5	\$80,000
Hallways - Refurbish	8	6	\$24,000

SCOPE

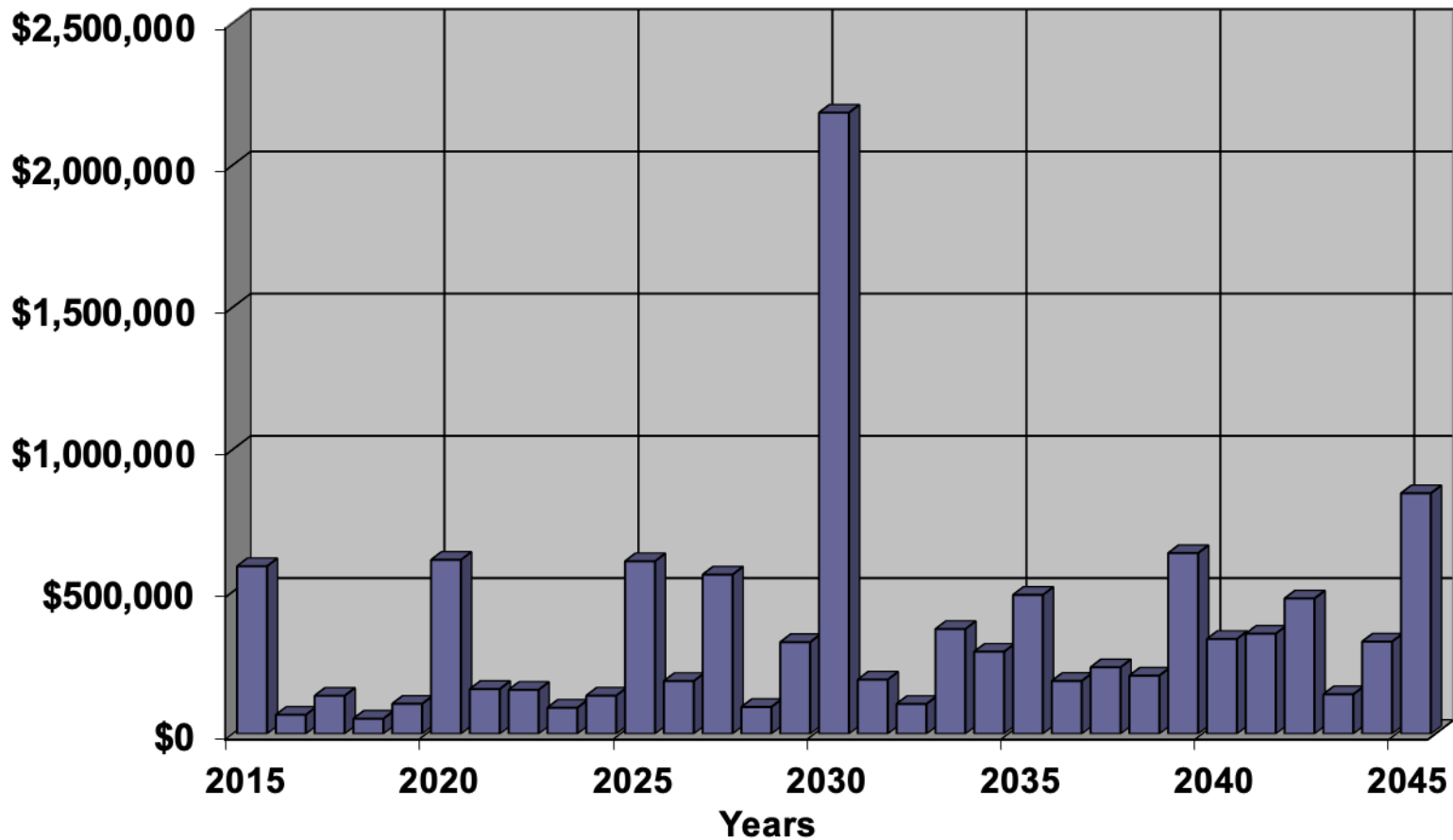
Reserve Component List

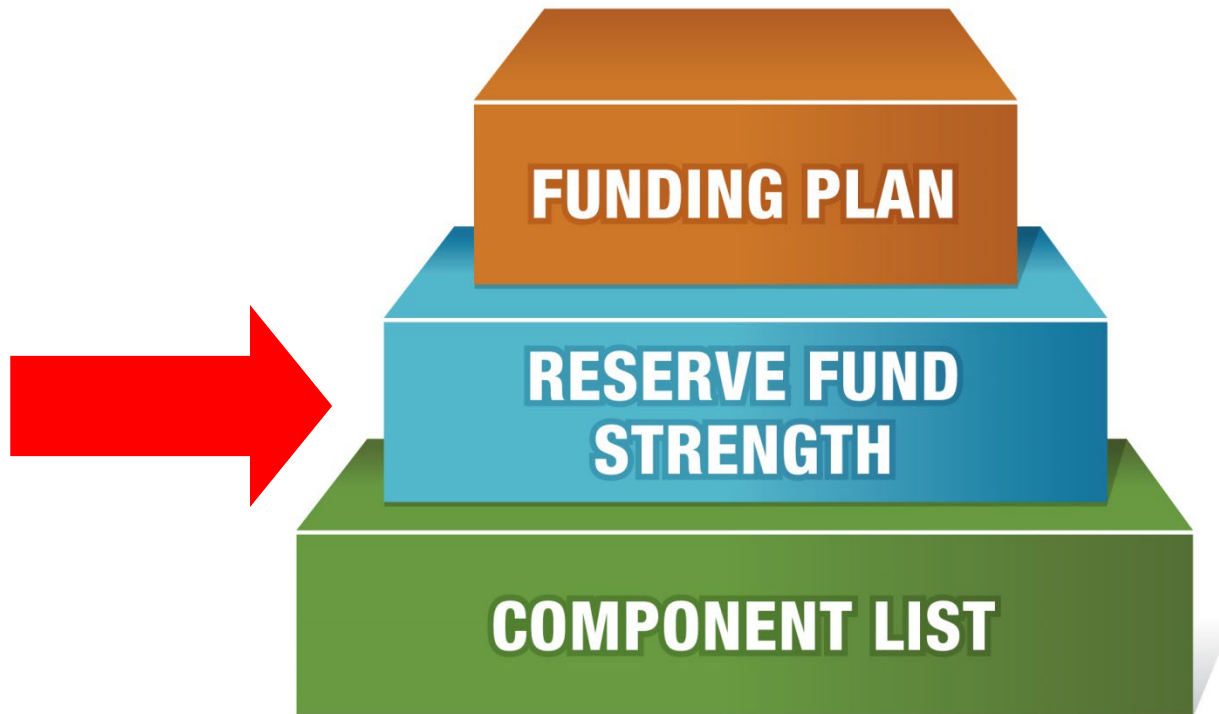
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SCHEDULE

Reserve Component List

Annual Reserve Expenses





RESERVE STUDY RESULTS

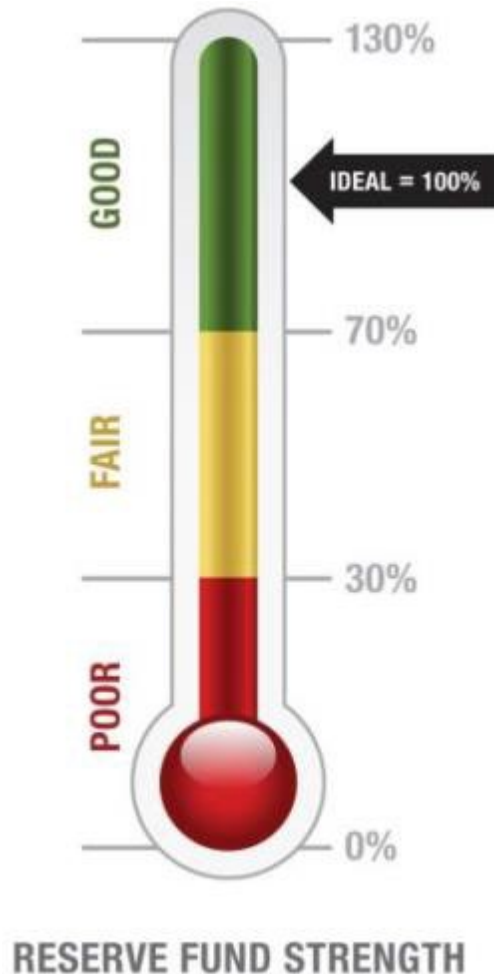


Reserve Fund Strength

$$\% \text{ Funded} = \frac{\$ \text{ in Reserve Fund}}{\$ \text{ in Deterioration}}$$

Physical deterioration can be expressed in monetary terms
by factoring in the Remaining Useful Lives (RULs)
& Replacement Costs of all the components
on the Component List.

Reserve Fund Strength

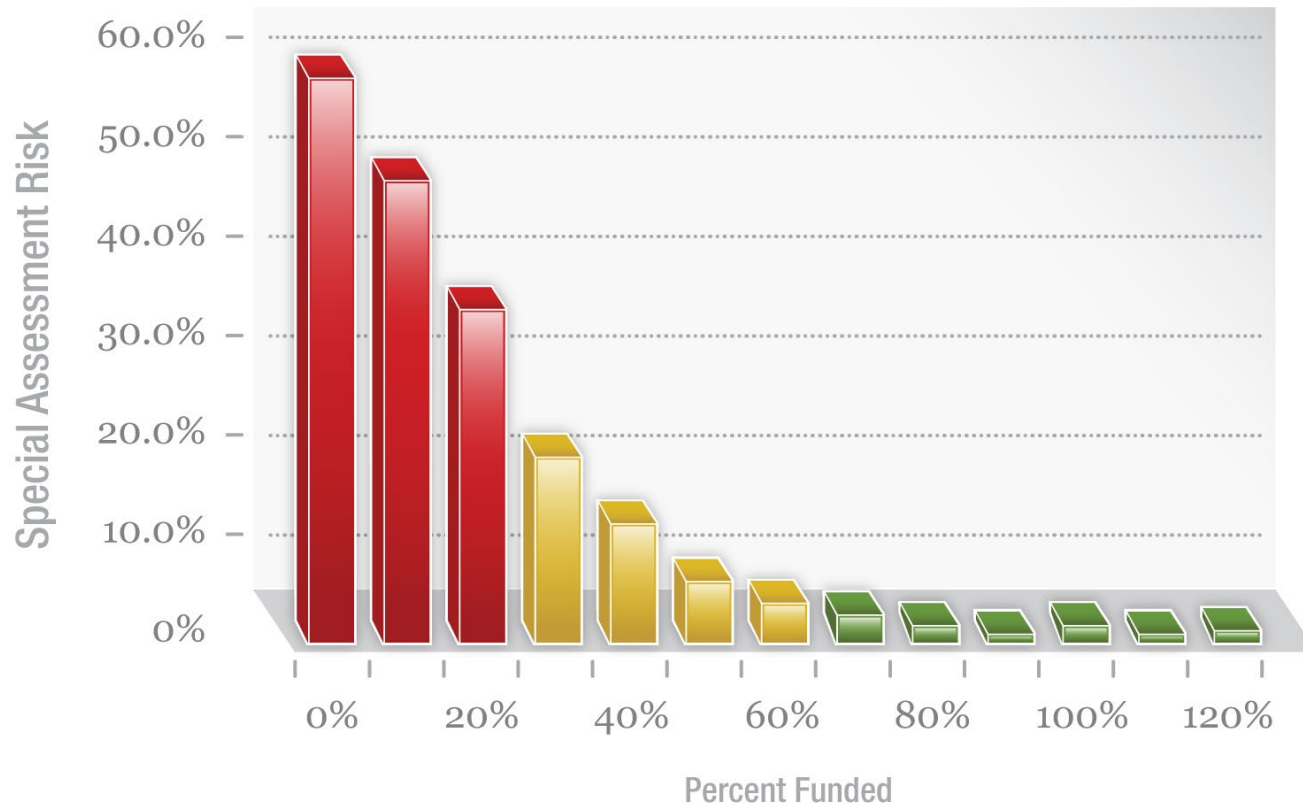


aka “0% Funded”

Provides a clear indication how financially prepared you are to make timely repair and replacement, where 100% funded is “ideal”.

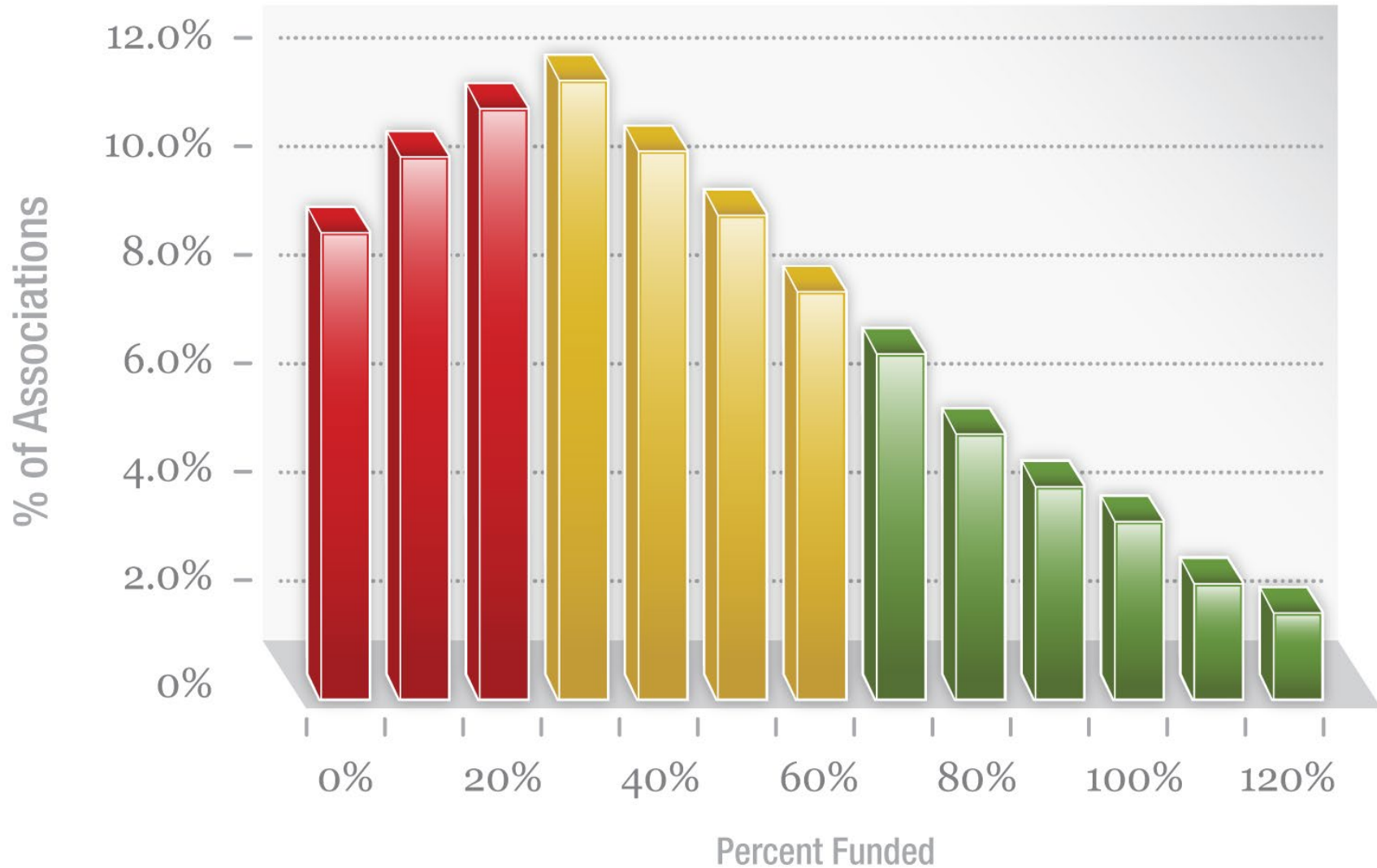
Reserve Fund Strength

NATIONAL SPECIAL ASSESSMENT RISK



Risk of Cash-Flow problems & deferred maintenance

NATIONAL RESERVE FUND STRENGTH



Part II

Consequences of Underfunding



Deferred Maintenance

- Capital Reserve Expenses get more expensive when ignored/deferred

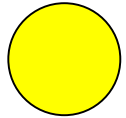


Deferred Maintenance

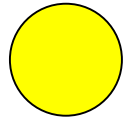
5 Failure Modes



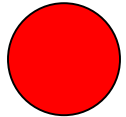
Inconsequential



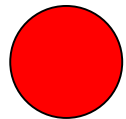
Re-Evaluate



Obsolescence



Protection



Catastrophic



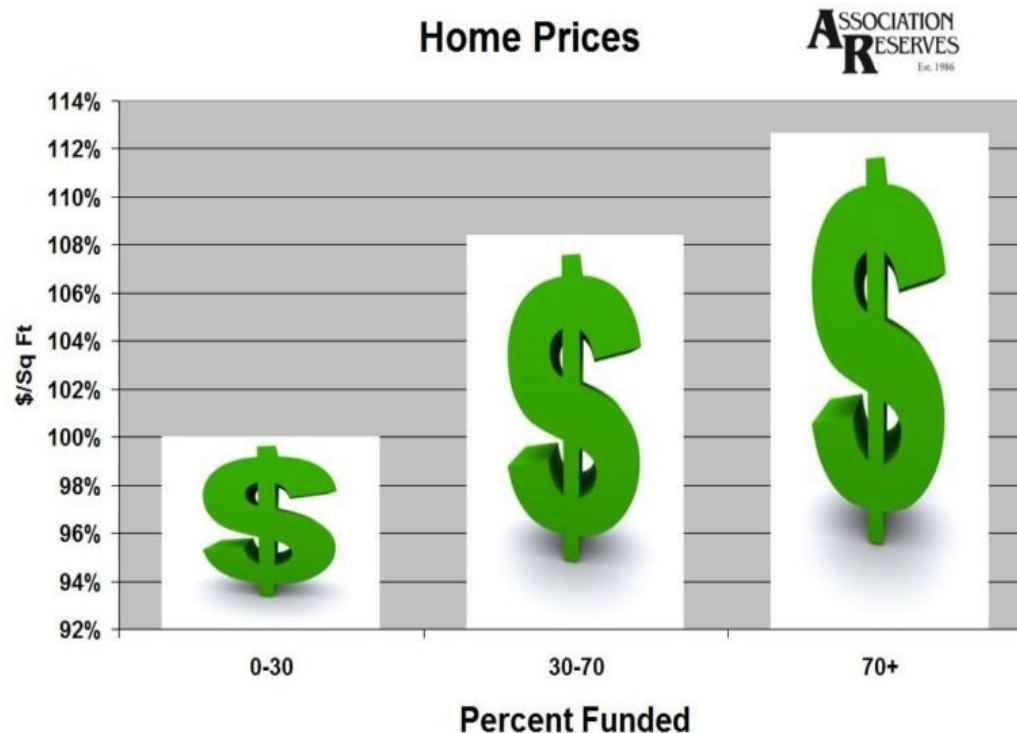


Lower Property Values

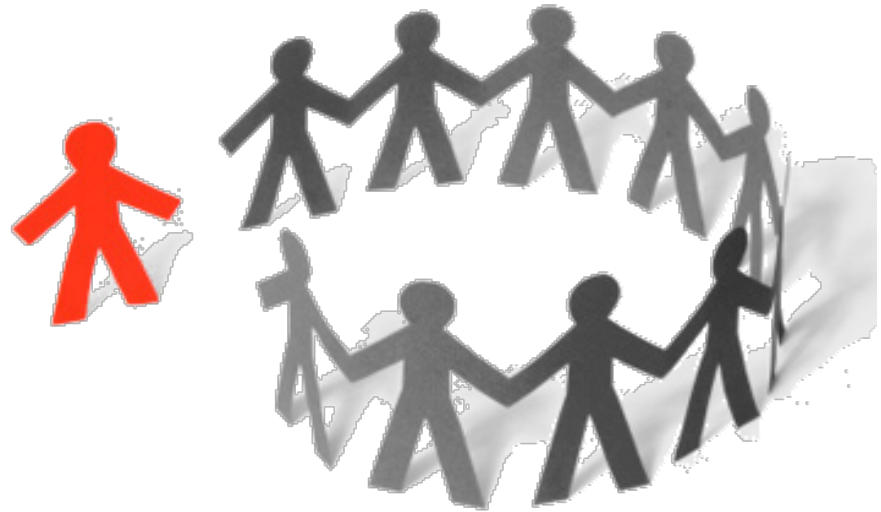


Lower Property Values

- A well funded association will increase the home resale value by 12%

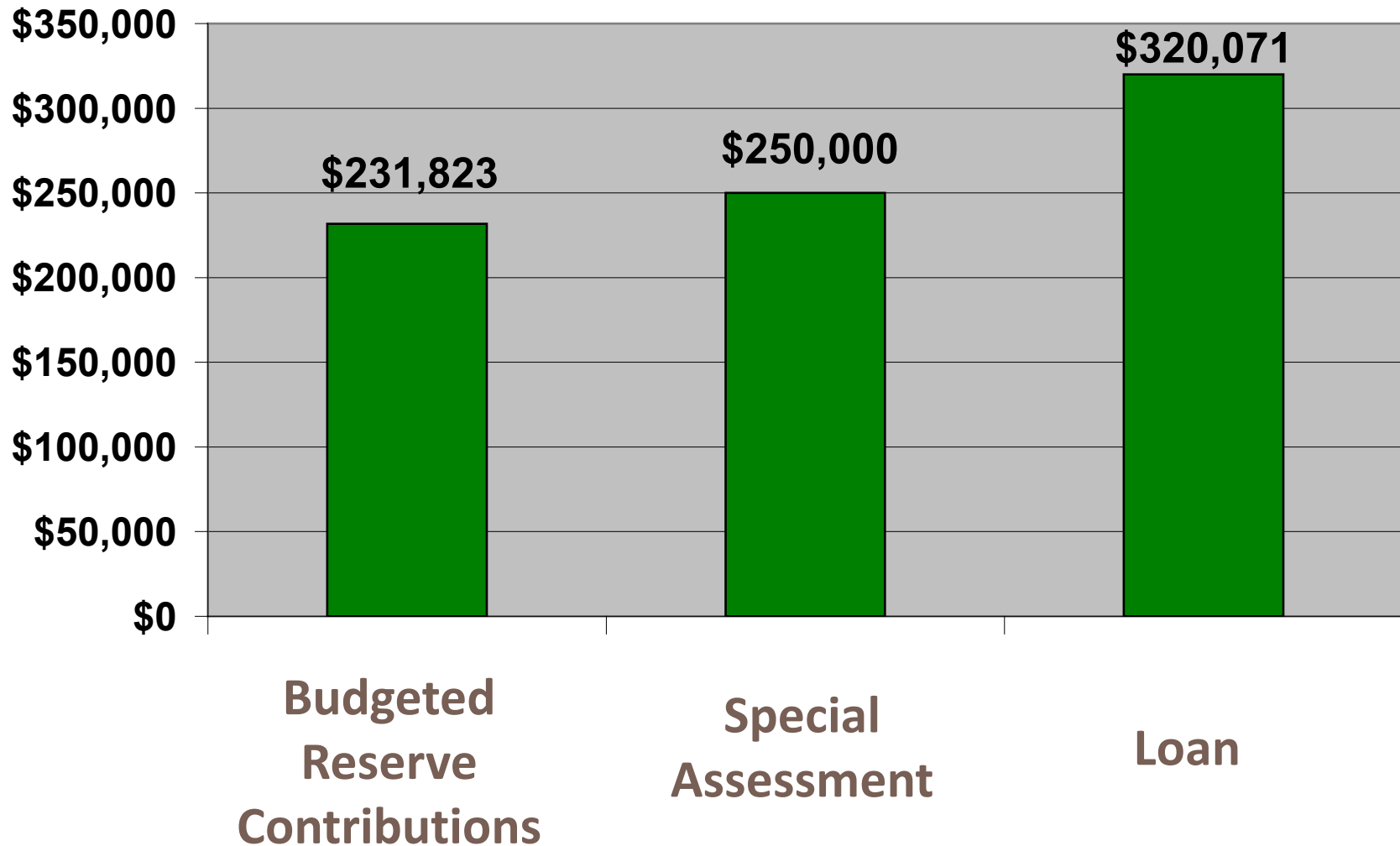


Special Assessments & Loans



- Unfair to Brand New Owners
- Unfair to Future Owners

Funding a \$250,000 Roof project



Mortgage Difficulties...



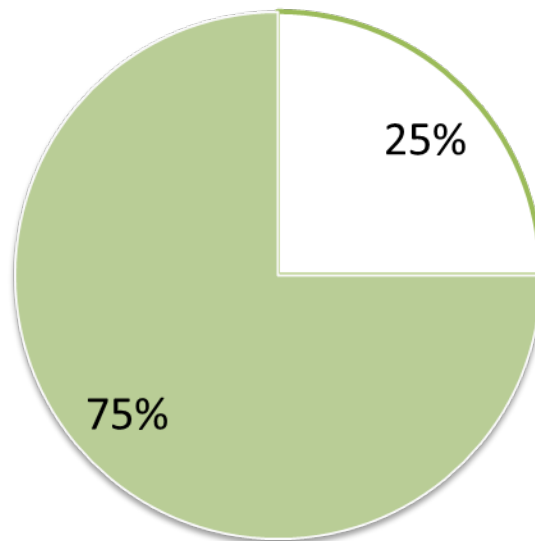


(15 - 40%)

How Much Money?

Budget

□ Reserves ■ Operating



Liability Exposure





RESERVE STUDY RESULTS

Funding Ideas



Part III

- **Using Your Reserve Study**



How To Read A Reserve Study

3- Minute Executive Summary

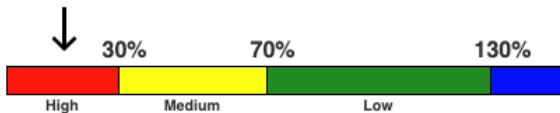
Association: _____
Location: Aspen, CO
Report Period: January 1, 2020 through December 31, 2020

Assoc. #: _____
of Units: 10

Findings/Recommendations as-of: January 1, 2020

Projected Starting Reserve Balance	\$109,217
Current Fully Funded Reserve Balance	\$685,493
Percent Funded	15.9 %
Recommended 2020 Annual "Fully Funding" Contributions	\$61,800
Alternate/Baseline Annual Minimum Contributions to Keep Reserves Above \$0	\$55,000
Recommended 2020 Special Assessments for Reserves	\$130,000
Most Recent Annual Reserve Contribution Rate	\$60,000

Reserves % Funded: 15.9%



Special Assessment Risk:

How To Read A Reserve Study

Executive Summary

26478-0

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
Sites & Grounds				
21190	Asphalt - Seal/Repair - 50%	4	0	\$3,350
21200	Asphalt - Resurface - 50%	25	17	\$23,000
21820	Shed - Refurbish	30	8	\$7,350
Building Exteriors				
23030	Ext. Lights (Utility) – Replace	25	5	\$6,350
23100	Staircase Treads (Wood) - Replace	50	10	\$38,250
23130	Patio Fencing - Replace	30	15	\$8,900
23190	Wood Balcony Decks - Seal	5	0	\$2,650
23200	Wood Balcony Decks - Resurface	30	5	\$34,550
23220	Balcony Rails - Paint	7	2	\$3,300
23230	Balcony Rails - Replace	30	5	\$13,850
23240	Walkway Wood Deck - Recoat	5	5	\$14,750
23245	Walkway Wood Deck – Resurface	30	0	\$180,000
23250	Walkway Deck Railing - Paint	7	2	\$3,150
23260	Walkway Deck Railing - Replace	30	10	\$13,350
23310	Wood Siding – Repair/Repaint	7	2	\$52,600
23320	Wood Siding - Replace	60	20	\$266,150
23550	Roof: Single Ply - Replace	20	1	\$141,650
23570	Roof: Composition Shingle - Replace	25	5	\$31,400
23650	Gutters/Downspouts - Replace	25	5	\$5,600
23660	Heat Tape - Replace	10	0	\$13,600
20	Total Funded Components			

How To Read A Reserve Study

30-Year Reserve Plan Summary

26478-0
Full

Fiscal Year Start: 2020

Interest:

1.25 %

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 In Annual Reserve Contribs.	Reserve Contribs.	Loan or Special Assmts	Interest Income	Reserve Expenses
2020	\$109,217	\$685,493	15.9 %		High	3.00 %	\$61,800	\$130,000	\$1,324	\$199,600
2021	\$102,741	\$539,250	19.1 %		High	3.00 %	\$63,654	\$0	\$775	\$145,900
2022	\$21,270	\$445,094	4.8 %		High	3.00 %	\$65,564	\$0	\$286	\$62,646
2023	\$24,473	\$435,063	5.6 %		High	3.00 %	\$67,531	\$0	\$732	\$0
2024	\$92,736	\$490,491	18.9 %		High	3.00 %	\$69,556	\$0	\$1,579	\$3,770
2025	\$160,101	\$544,970	29.4 %		High	3.00 %	\$71,643	\$0	\$1,668	\$126,535
2026	\$106,878	\$475,945	22.5 %		High	3.00 %	\$73,792	\$0	\$1,808	\$0
2027	\$182,478	\$536,528	34.0 %		Medium	3.00 %	\$76,006	\$0	\$2,772	\$0
2028	\$261,256	\$600,319	43.5 %		Medium	3.00 %	\$78,286	\$0	\$3,691	\$13,554
2029	\$329,679	\$653,493	50.4 %		Medium	3.00 %	\$80,635	\$0	\$4,167	\$77,047
2030	\$337,434	\$644,338	52.4 %		Medium	3.00 %	\$83,054	\$0	\$4,066	\$111,007
2031	\$313,547	\$601,448	52.1 %		Medium	2.00 %	\$84,715	\$0	\$4,474	\$0
2032	\$402,737	\$673,172	59.8 %		Medium	2.00 %	\$86,409	\$0	\$5,576	\$4,776
2033	\$489,946	\$743,739	65.9 %		Medium	2.00 %	\$88,138	\$0	\$6,714	\$0
2034	\$584,797	\$823,001	71.1 %		Low	2.00 %	\$89,900	\$0	\$7,917	\$0
2035	\$682,615	\$906,349	75.3 %		Low	2.00 %	\$91,698	\$0	\$8,901	\$40,975
2036	\$742,239	\$951,754	78.0 %		Low	2.00 %	\$93,532	\$0	\$9,290	\$100,134
2037	\$744,928	\$939,399	79.3 %		Low	2.00 %	\$95,403	\$0	\$9,726	\$38,015
2038	\$812,041	\$992,523	81.8 %		Low	2.00 %	\$97,311	\$0	\$10,821	\$0
2039	\$920,173	\$1,088,319	84.5 %		Low	2.00 %	\$99,257	\$0	\$12,192	\$0
2040	\$1,031,622	\$1,188,970	86.8 %		Low	2.00 %	\$101,242	\$0	\$10,194	\$542,736
2041	\$600,322	\$735,661	81.6 %		Low	2.00 %	\$103,267	\$0	\$6,540	\$263,511
2042	\$446,619	\$558,458	80.0 %		Low	2.00 %	\$105,333	\$0	\$6,277	\$0
2043	\$558,228	\$649,518	85.9 %		Low	2.00 %	\$107,439	\$0	\$6,961	\$116,540
2044	\$556,088	\$625,503	88.9 %		Low	2.00 %	\$109,588	\$0	\$7,637	\$6,810
2045	\$666,503	\$716,086	93.1 %		Low	2.00 %	\$111,780	\$0	\$8,853	\$36,432
2046	\$750,704	\$781,240	96.1 %		Low	2.00 %	\$114,015	\$0	\$10,154	\$0
2047	\$874,874	\$888,310	98.5 %		Low	2.00 %	\$116,296	\$0	\$11,730	\$0
2048	\$1,002,899	\$1,001,101	100.2 %		Low	2.00 %	\$118,622	\$0	\$13,306	\$7,665
2049	\$1,127,162	\$1,111,966	101.4 %		Low	2.00 %	\$120,994	\$0	\$14,931	\$0

Updating a Reserve Study

Boards who update their Reserve Study:

- Have demonstrably fewer special assessments
- Have a stable budget
- Ensure all owners pay their fair share
- Receive cost savings on Reserve Studies and projects

Annual Reserve Studies reduce your
Special Assessment Risk!

Update
Every 5 yrs?

35.1%
less



Update
annually

Update
Every 3 yrs?

28.5%
less



Update
annually

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RESERVES**
Est. 1986

Benefits from a Reserve Study?

- Avoid Surprises
 - Save Money
 - Clear Communication on Repair & Replacement Priorities
 - Preserve Property Values
-

Remember...

- Have a Reserve Study Completed
 - Boards are Responsible
 - Reserve Expenses are inevitable & predictable
 - Reserve Expenses get more expensive when ignored/deferred
 - Owners pay the cost - one way or another
-

Reserve for the Here & Now



Do you know (1) Property that needs a Reserve Study or an Update?

Thank You

**Please e-mail any follow-up
questions or comments to:**

Bryan Farley, RS

BFarley@ReserveStudy.com

303/394-9181



**ASSOCIATION
RESERVES™**

Planning For The Inevitable™