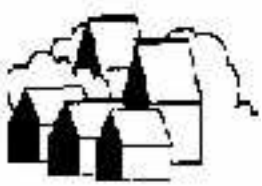

RESERVE FUNDING
By WSSC

A Division of Western States
Subdivision Consulting

Robin Meadows HOA - 9/30/08
P. O. Box 1549
Sherwood, Oregon
January 01, 2009

Prepared by D. L. “Dan”Huntley, RS, PRA

TABLE OF CONTENTS
Robin Meadows HOA - 9/30/08

Category Detail Index

PART I • EXECUTIVE SUMMARY

PART II • RESERVE STUDY

PART III • INFORMATION ABOUT YOUR RESERVE STUDY

Robin Meadows HOA - 9/30/08
Category Detail Index

Total Funded Assets	22
Total Unfunded Assets	1
Total Assets	23

RESERVE FUNDING by WSSC
A DIVISION OF WESTERN STATES SUBDIVISION CONSULTING

Attached herewith is the reserve study (physical and financial analysis) for the abovementioned Association**. Interest from reserve savings accounts must stay in the reserve accounts and not be used as an offset against monthly assessments.**

You are encouraged to thoroughly review this document and its individual reports for conformity to the description of responsibility for the Association's common element as defined in your Declaration of Covenants, Conditions and Restrictions. In addition, please pay close attention to the reserve bank balance estimated to be on hand by your staff. **Any discrepancy in the figure or interest rate can have a significant effect on the reserve study and the outcome of the assumptions shown**.

The intention of the reserve study is to forecast, as they wear out in future years, the Association's ability to repair, replace restore or maintain major components with a life expectancy of over one year and an estimated cost of over one thousand dollars. The reports will provide the Association's Board of Directors (Board) the information necessary to make the reserve projection disclosures required by existing statutes, lender's requirements, or the governing documents.

The cost outlined in the reserve study is subjective in some areas, therefore we may use costs submitted by the Declarant, management or the board, and are for budgetary and planning purposes only. Actual bid costs would depend upon the defined scope of work at the time the repair, replacement or restoration is done, and on actual price levels prevailing at the time the future repair, replacement, or restoration must be done.

The estimates on future repair, replacement and restoration in the reserve study will be good faith estimates and projections, based upon the estimated future inflation rate and interest (yield) on the monies set aside which may or may not prove accurate. Consultant submits that the probability that it may project in its reserve study, or that the Board could project in it's disclosures, future costs or actual future remaining useful lives of components having useful lives extended beyond one year with precision is the functional equivalent of winning the lottery (while it may happen in rare instances by chance, one may not reasonably expect it to happen). As a result, Consultant cannot, and does not, guaranty its projections. Assumptions on future costs and life expectancy's should be reviewed and adjusted on an annualized basis, as current and future cost projections and life expectancy's become more uncertain.

This reserve study is limited to an off-site. on-ste or plan take-off physical analysis of the property, and as such did not disturb the major components. Therefore, all common and limited common elements for which there is no access without defacement are specifically omitted. However, if sufficient historical data including costs were available that would allow a reasonable projection of future expenditures for any unobserved components, e.g., plumbing, utilities, electrical wiring, those components could be included in the reserve study and may require an engineers report.

Since no destructive testing was undertaken, this study, as stated above, does not purport to address any latent and/or patent defects, nor does it address any life expectancies that are abnormally short due either to improper design or installation, or to subsequent improper maintenance. It is assumed that all components are to be reasonably maintained for the remainder of their life expectancy.

The seal below of the signature is evidence that the reserve study was performed under the guidelines and policies of the Association of Professional Reserve Analyst.

Sincerely,

D. L. "Dan" Huntley, PRA, RS

Association of Professional Reserve Analyst-APRA-(PRA)
Community Association Institute-CAI-(RS) Reserve Specialist

EXECUTIVE SUMMARY

At the direction of the Association that recognizes the need for proper reserve planning, we have prepared a reserve study (physical and financial analysis) of the Association and submit our findings in this report. The purpose of this study is to establish a reasonable yearly reserve contribution necessary to meet future expenditures for major replacements or repairs of the common area components in compliance with Oregon Statutes that have a life expectancy of more than one year and less than thirty years.

All major common elements are likely to require capital repair or replacement over the next thirty years. Our analysis considered current and future costs of replacement for the subject common elements, the average annual fund balance, interest on invested funds, and anticipated inflation. Based on the investigation and analysis as detailed in the accompanying narrative, the attached CURRENT ASSESSMENT FUNDING MODEL PROJECTION report details the average reserve contributions that are recommended to fund the expected capital expenditures of the subject common elements over the next thirty years.

We arrived at these recommendations in part by matching the anticipated expenditures noted in the report titled "ANNUAL EXPENDITURE DETAIL" against current fund balances and the annual levels of funding. **Reserves funds would not become depleted within the next thirty years at the levels of funding recommended**.

The report titled "CURRENT ASSESSMENT FUNDING MODEL PROJECTION" enumerates the details regarding recommended annual reserve contributions and projected year-end reserve balances. We recommend subsequent yearly off-site updates of this reserve study and an on-site physical analysis every five years to confirm that the recommended reserve contributions are appropriate in view of possible changes in the property, components not completed as detailed in the expenditure report, interest rates, inflation rates, costs, and movement of any excess operating funds to the reserve savings accounts as approved by the membership.

It is necessary the regular maintenance of the common elements be done to insure maximum useful life and optimum performance of the reserve components. Components of concern are, but not limited to, items associated with water intrusion and safety.

The maintenance plan is cyclical plan that calls for regular maintenance at regular intervals and will list the maintenance activity and the frequency of maintenance as well as a short narrative.

Checklists, developed by Reed Construction Data, Inc., can be accessed, photocopied or downloaded from the RS Means web site at www.remeans.com/supplement/67346.asp. We strongly urge the Board to use these forms.

NARRATIVE REPORT

The following reports illustrate our recommendations and observations concerning anticipated expenditures, recommended reserve funding, and projected fund balances during the next thirty years.

We have not investigated the title to or any liabilities against the property subject to this report.

At the direction of the Association that recognizes the need for proper reserve planning, we have made a reserve study (physical and financial analysis) of this property and submit our findings in this report.

The purpose of this study is to establish a reasonable yearly reserve contribution necessary to meet future expenditures for major replacements or repairs of the common area components of the Association as of the beginning of their fiscal year.

Reserves for replacement are estimates of that amount of money that must be put aside to repair or replace major items or building components that will wear out before the entire facility or project wears out.

State law, such as that found in California, Florida, Oregon and Illinois, clearly establishes the fiduciary duty of "boards" and the necessity for adequate assessments including reserve funds. The legislative intent of these acts is to better protect current owners and future buyers of units in community associations. Reserving funds for future repair or replacement of the shorter-lived building components is also one of the most reliable ways of protecting the future market value of an individual's investment property from the deleterious effects of special assessments.

For the purposes of this study, the detailed cash flow analysis is limited to those components or elements that are likely to require replacement or major rehabilitation during the next thirty-year period. Replacement of an entire planned development or condominium in 50 to 75 years is not a typical event. Preventative maintenance generally extends the useful life of many components. As such, estimating useful lives beyond thirty-years from the date of this study is indeterminate and it is recommended that periodic updates of this study be made to consider that actual facts and circumstances regarding extended or diminished component lives, inflation, and appreciation of the reserves.

Our investigation included common and limited common elements as set forth in your declaration associated with the property of the Association. Excluded from our consideration was all other property including land, property owned individually by unit or homeowners, personal property, and intangible assets.

Expenditures relating to the operating budget and apart from reserves are excluded from this reserve analysis. It is our understanding that the operating budget and future operating budgets will provide for the on-going normal maintenance of common elements unless specifically identified in the component description on the "Detail Report by Category".

Our report comprises:

This letter, that sets forth the nature and extent of the investigation, identifies the classes of property considered, and presents the conclusions reached.

An Executive Summary identifying the property, current reserves, recommended reserve funding, and projections concerning reserve funding.

Consideration and Methodology

The purpose of this study is to estimate the amount of yearly reserve contributions necessary to meet future expenditures for major replacements and repairs of the common area components of the association without a special assessment. We reviewed the property subject of this investigation and considered the following:

Local costs of material, equipment and labor combined in the cost factor

The current and future costs of replacement or repair for the common components as detailed in the Item Parameter Report

The cost of removal if required of the worn out components as part of the cost of replacement

The anticipated effects of inflation on the amount to be reserved annually.

The anticipated effects of appreciation of the reserves over time in accord with your average current return or yield on investments. **We were informed all accrued interest on association investments would be included within the reserve funds.**

The past and current maintenance practices of your association and their effects on remaining lives.

We have not considered as part of the reserve contributions the amounts required for yearly maintenance activities.

SUMMARY AND CONCLUSION

This study indicates that based on the anticipated expenditures noted in the ANNUAL EXPENDITURE DETAIL report, the current reserves and annual recommended levels of funding are adequate to avoid future special assessments. We find that current reserves and existing annual levels of funding are adequate to avoid future special assessments. Reserves would not become depleted within the next thirty-years at current recommended levels of funding

ASSUMPTIONS, SCOPE, AND LIMITED CONDITIONS

To the best of our knowledge, all data set forth in this report are true and accurate. Although gathered from reliable sources, no guarantee is made nor liability assumed for the accuracy of any data, opinions, or estimates identified as being furnished by others or ourselves that have been used in formulating this analysis.

No soils analysis or geological studies were ordered or made in conjunction with this report, nor was any water, oil, gas, coal or other subsurface mineral and use rights or conditions investigated.

Any latent defects will not be a part of the reserve study. Should we find signs of possible latent defects or problems not within the scope of the reserve study, the association will be notified immediately so that the association can retain the proper experts. However, the study will not be designed to uncover any possible latent defects, and the absence of any indications to such effect will not be, and should not be construed to be, an indication that there are no defects not so noted, or we warrant the absence of any such defects.

Substances such as fungi, mold, asbestos, lead paint, urea-formaldehyde foam insulation, termite control substances other chemicals, toxic wastes, radon gas, electro-magnetic radiation or other potentially hazardous materials (on the surface or sub-surface) could, if present, adversely affect the validity of our reserve study. Unless otherwise stated in our reserve study, the existence of hazardous substances, that may or may not be present on the property, can and will not be considered nor will there be any inspection for termites. Our opinions are predicated on the assumption that there is no such material on or in the property nor the existence of termites. No responsibility is assumed for any such conditions, and you are advised that we are not qualified to detect such substances, quantify the impact, or develop the remedial cost.

The association needs to review each line item in the reports to be certain corrections are made from information you may possess that we are not aware of. It is assumed in our reserve study, no work, or expenditures from the reserve funds will occurred for the balance of the fiscal year. If this is not correct, you need to let us know what extra work was done and how much money will be spent.

This physical analysis was made by individuals generally familiar with real estate and building construction and 30 years experience preparing reserve studies; however, no invasive testing was performed. Our report does not consider electrical wiring, plumbing or utilities that may be the responsibility of the association. Accordingly, we do not opine on, nor are we responsible for, the structural integrity of the property, including, but not limited to, its conformity to specific governmental code requirements, such as fire, building safety, earthquake, occupancy, land movement and/or slides, or any physical defects that were not readily apparent in our physical analysis and this reserve study is not an engineering study.

The cost outlined in the reserve study is subjective in some areas, therefore we may use costs submitted by the association, and are for budgetary and planning purposes only. Actual bid costs would depend upon the defined scope of work at the time the repair, replacement or restoration is done, and on actual price levels prevailing at the time the future repair, replacement or restoration must be done. The estimates on future repair, replacement and restoration in the reserve study will be good faith estimates and projections, based upon the estimated future inflation rate and interest (yield) on the monies set aside which may or may not prove accurate. We submit that the probability that it may project in it's reserve study, or that the Board could project in it's disclosures, future costs or actual future remaining useful lives of components having useful lives extended beyond one year with precision is the functional equivalent of winning the lottery (while it may happen in rare instances by chance, one may not reasonably expect it to happen). As a result, we cannot, and do not, guaranty its projections. Assumptions on future costs and life expectancy's should be reviewed and adjusted on an annualized basis, as current future costs projections and life expectancy's become more uncertain.

PROFESSIONAL SERVICE CONDITIONS

The services provided by Reserve Funding by WSSC were performed in accordance with our professional practice standards. Our compensation is not contingent in any way upon our conclusions. We assume, without independent verification, the accuracy of all data provided to us. We will act as an independent contractor. All files, work papers or documents developed by us during the course of the engagement will remain our property.

Our report is to be used only for the purposes stated herein, any use or reliance for any other purpose, by you or third parties, is invalid. You may show our report in its entirety to those third parties that need to review the information contained herein. No reference to our name or our report, in whole or in part, in any document you prepare and/or distribute to third parties may be made without our written consent.

You shall defend, indemnify, and hold harmless Reserve Funding by WSSC, and Western States Subdivision Consulting and its employees and subagents, who were or are a party or are threatened to be made a party to any threatened, pending, or completed actions, suits, or proceedings, whether civil, criminal, administrative, or investigative by reason of the fact that Reserve Funding by WSSC, and Western States Subdivision Consulting and its employees and subagents, are or were the authorized representatives of the Association, as to any expense, including attorneys' fees, judgments, fines, and amounts paid in settlement actually and reasonably incurred by Reserve Funding by WSSC, and Western States Subdivision Consulting and its employees and subagents, in connection with such action, suit, or proceeding, if Reserve Funding by WSSC, and Western States Subdivision Consulting and its employees and subagents acted in good faith and in a manner Reserve Funding by WSSC, and Western States Subdivision Consulting and its employees and subagents reasonably believed to be in, or not opposed to, the best interest of association, and with respect to any criminal action or proceeding, had no reasonable cause to believe their conduct was unlawful.

We have prepared an initial draft of the study and will make one adjustment to the report upon a written request from the association within 30 days of the date the initial draft of the study is sent to the Board.

We reserve the right to include your association's name in our client list, but we will maintain the confidentiality of all conversations, documents provided to us, and the contents of our reports, subject to legal or administrative process or proceedings.

These conditions can only be modified by written documents executed by both parties.

Respectfully submitted

D. L. "Dan" Huntley, PRA, RS
Association of Professional Reserve Analyst-APRA-(PRA)
Community Association Institute-CAI-(RS) Reserve Specialist

Robin Meadows HOA - 9/30/08
Sherwood, Oregon
Current Assessment Funding Model Summary

Report Date	January 01, 2009
Account Number	Superior Community Management
Version	1.0 (2009)-Off-Site
Budget Year Begining	January 01, 2009
Budget Year Ending	December 31, 2009
Total Units	46
Phase Development	1 of 1

Required Annual Contribution

Inflation	3.11%
Annual Assessment Increase	7.17%
Interest Rate on Reserve Deposit	1.55%
Tax Rate on Interest	0.00%
Contingency	0.00%
2009 Begining Balance	$79,758.00

Current Assessment Funding Model Summary
Cash Flow Time Value Of Money With Threshold

- For budgeting purposes, unless otherwise indicated, we have used January 1, 2002 to begin aging the original components in this reserve study.
- This reserve study is a build out total of 46 units/lots located in Hillsboro, Oregon 97123.
- The last on-site physical analysis done by Reserve Funding by WSSC as completed on October 10, 2005.
- House Bill 955 (HB 955), in Oregon since 1/1/2006, specifically calls for the provision of a reserve study, reserve study update, maintenance plan and reserve summary. ORS 94.595 states that: "The board of directors of the association annually shall conduct a reserve study, or review and update an existing reserve study to determine the reserve study requirements". In addition ORS 94.595 (3)(B)(c) and ORS 100.175 (3)(C)(c) further require that a Reserve Study Update be done each year.

  House Bill 2665 (Chapter 409, Oregon Laws 2007) revises portions on SB 955 by removing the requirement for a maintenance plan from the reserve study and makes it a separate requirement. Also, after 9/27/2007 HB 2665 no longer requires that owners be provided a reserve summary of the reserve study or any revisions thereto.

  Further House Bill 2665 makes windows and unit access doors, except for glazing and screening, general common elements, unless Declaration provides otherwise, (Sec 5).

- Often times there can be a significant expenditure in those years that exceeds the life of the reserve study. Hence, annual updates should be done to allow adjustments in the reserve contribution each year if required.
- Should components suggested by Consultant be removed from the reserve study or any life cycles or costs other than current bids, engineering construction standards, or current component history by used in this reserve study the Client accepts full responsibility for the results of the reserve study and is not warranted by Consultant.
- Quantity, design and material information included in this report was provided by the developer and is subject to course of construction changes and further data was provided by the previous reserve study or studies done by prior reserve study provider. Association should have an on-site verification (as-built) and up-date prepared for the 2008 budget to assure completeness and accuracy of the reserve study.
- **This reserve study and its recommendations should not be construed in any way to constitute a warranty or guaranty regarding the current or future performance of the components. Components will be replaced as required, not necessarily in their expected replacement year.**
- **The tax consequences are not considered in this reserve study due to the uncertainty of all factors affecting net taxable income and the election of the tax form to be filed.**
- **The following items, but not limited to, are not included in the physical analysis because they have a useful life greater than 30 years. Grading/drainage, foundations/footings, party walls, concrete stair surfaces, windows, doors, plumbing system, flues (chimneys), sanitary sewage and storm drains, telephone, cable and internet lines.**
- **We recommend a building envelope (water intrusion) inspection be done every twp years to assure the workmanship of the building envelope is to code and construction standarads and a roofing inspection every six years.**
- **The Board has failed to increase reserve assessments as suggested in the reserve study, hence, the Association is underfunded and requires annual increases to prevent Speacial Assessments.**

Robin Meadows HOA - 9/30/08
Sherwood, Oregon
Current Assessment Funding Model Summary

- **A minimum threshold of $9,141.00 has been used over the thirty years of this reserve study with a monthly assessment of $51.75 and an annual increase of 5.75%.**

  Checking CH 1/1/2009 12/31/2038 1.55% $79,758.10

AFM Model Summary of Calculations

Required Monthly Contribution	$2,380.50
$51.75 per unit monthly	
Average Net Monthly Interest Earned	$68.62
Total Monthly Allocation to Reserves	$2,449.12
$53.24 per unit monthly	

Robin Meadows HOA - 9/30/08
Current Assessment Funding Model Projection

Beginning Balance: $79,758

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves
2009	566,081	28,566	823	42,445	66,703
2010	583,686	30,209	1,296		98,207
2011	601,839	31,946	1,556	15,807	115,901
2012	620,556	33,782	1,221	55,940	94,965
2013	639,855	35,725	1,773	678	131,785
2014	659,755	37,779	2,249	8,145	163,667
2015	680,273	39,951	2,227	42,608	163,237
2016	701,430	42,249	2,905		208,390
2017	723,244	44,678	3,333	18,996	237,406
2018	745,737	47,247	3,137	61,955	225,835
2019	768,929	49,964	3,786	10,308	269,276
2020	792,843	52,836	4,649		326,762
2021	817,501	55,875	4,773	51,203	336,206
2022	842,925	59,087	5,502	15,710	385,085
2023	869,140	62,485	6,182	22,828	430,925
2024	896,170	66,078	3,940	214,224	286,718
2025	924,041	69,877	5,050	979	360,666
2026	952,779	73,895	4,807	92,643	346,726
2027	982,410	73,895	5,075	61,532	364,164
2028	1,012,963	73,895		428,918	9,141
2029	1,044,466	73,895	137	40,328	42,845
2030	1,076,949	73,895		89,472	27,268
2031	1,110,442	73,895	1,031	1,177	101,017
2032	1,144,977	73,895		161,308	13,605
2033	1,180,586	73,895		73,945	13,555
2034	1,217,302	73,895	600	15,029	73,022
2035	1,255,160	73,895	1,249	32,967	115,199
2036	1,294,195	73,895	743	107,521	82,317
2037	1,334,445	73,895	1,886	1,414	156,684
2038	1,375,946	73,895	3,069		233,648

Robin Meadows HOA - 9/30/08
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2009	
Asphalt - Seal Coat - Drives	6,157
Asphalt - Seal Coat - Paths	832
Bark Dust	600
Inspection - Building Envelope	6,440
Paint - Siding - Fiber Cement	27,666
Siding - Vinyl - Repair	750
Total for 2009	**$42,445**
No Replacement in 2010	
Replacement Year 2011	
Bark Dust	638
Siding - Vinyl - Wash	15,169
Total for 2011	**$15,807**
Replacement Year 2012	
Fence - Wood - Paint	29,946
Irrigation Controls	4,385
Paint - Wood -Trim & Doors	21,610
Total for 2012	**$55,940**
Replacement Year 2013	
Bark Dust	678
Total for 2013	**$678**
Replacement Year 2014	
Asphalt - Seal Coat - Drives	7,176
Asphalt - Seal Coat - Paths	969
Total for 2014	**$8,145**
Replacement Year 2015	
Bark Dust	721
Inspection - Building Envelope	7,739
Paint - Siding - Fiber Cement	33,247
Siding - Vinyl - Repair	901
Total for 2015	**$42,608**
No Replacement in 2016	

Robin Meadows HOA - 9/30/08
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2017	
Bark Dust	767
Siding - Vinyl - Wash	18,229
Total for 2017	**$18,996**
Replacement Year 2018	
Fence - Wood - Paint	35,986
Paint - Wood -Trim & Doors	25,969
Total for 2018	**$61,955**
Replacement Year 2019	
Asphalt - Seal Coat - Drives	8,364
Asphalt - Seal Coat - Paths	1,130
Bark Dust	815
Total for 2019	**$10,308**
No Replacement in 2020	
Replacement Year 2021	
Bark Dust	866
Inspection - Building Envelope	9,300
Paint - Siding - Fiber Cement	39,954
Siding - Vinyl - Repair	1,083
Total for 2021	**$51,203**
Replacement Year 2022	
Irrigation Controls	5,956
Mailboxes	6,031
Monument	3,723
Total for 2022	**$15,710**
Replacement Year 2023	
Bark Dust	921
Siding - Vinyl - Wash	21,907
Total for 2023	**$22,828**
Replacement Year 2024	
Asphalt - Seal Coat - Drives	9,748
Asphalt - Seal Coat - Paths	1,317

Robin Meadows HOA - 9/30/08
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2024 continued...	
Fence - Wood - Paint	43,246
Fence - Wood - Replace	128,707
Paint - Wood -Trim & Doors	31,208
Total for 2024	**$214,224**
Replacement Year 2025	
Bark Dust	979
Total for 2025	**$979**
Replacement Year 2026	
Gutters/Downspouts - B	16,723
Roof - Architectural Composition - 8	75,920
Total for 2026	**$92,643**
Replacement Year 2027	
Bark Dust	1,041
Inspection - Building Envelope	11,176
Paint - Siding - Fiber Cement	48,013
Siding - Vinyl - Repair	1,302
Total for 2027	**$61,532**
Replacement Year 2028	
Gutters/Downspouts - A	76,009
Roof - Architectural Composition - 38	352,909
Total for 2028	**$428,918**
Replacement Year 2029	
Asphalt - Seal Coat - Drives	11,361
Asphalt - Seal Coat - Paths	1,534
Bark Dust	1,107
Siding - Vinyl - Wash	26,326
Total for 2029	**$40,328**
Replacement Year 2030	
Fence - Wood - Paint	51,969
Paint - Wood -Trim & Doors	37,503
Total for 2030	**$89,472**
Replacement Year 2031	
Bark Dust	1,177
Total for 2031	**$1,177**

Robin Meadows HOA - 9/30/08
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2032	
Asphalt - O/L - Drives	136,992
Asphalt - O/L - Paths	6,167
Curbs - Concrete	807
Fences - Vinyl	3,183
Irrigation Controls	8,091
Storm Drains	6,068
Total for 2032	**$161,308**
Replacement Year 2033	
Bark Dust	1,251
Inspection - Building Envelope	13,431
Paint - Siding - Fiber Cement	57,699
Siding - Vinyl - Repair	1,564
Total for 2033	**$73,945**
Replacement Year 2034	
Asphalt - Seal Coat - Drives	13,240
Asphalt - Seal Coat - Paths	1,788
Total for 2034	**$15,029**
Replacement Year 2035	
Bark Dust	1,330
Siding - Vinyl - Wash	31,636
Total for 2035	**$32,967**
Replacement Year 2036	
Fence - Wood - Paint	62,453
Paint - Wood -Trim & Doors	45,068
Total for 2036	**$107,521**
Replacement Year 2037	
Bark Dust	1,414
Total for 2037	**$1,414**

Robin Meadows HOA - 9/30/08
Annual Expenditure Detail

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Asphalt - O/L - Drives										
Asphalt - O/L - Paths										
Asphalt - Seal Coat - Drives	6,157					7,176				
Asphalt - Seal Coat - Paths	832					969				
Bark Dust	600		638		678		721		767	
Curbs - Concrete										
Fence - Wood - Paint				29,946						35,986
Fence - Wood - Replace										
Fences - Vinyl										
Gutters/Downspouts - A										
Gutters/Downspouts - B										
Inspection - Building Envelope	6,440						7,739			
Irrigation Controls				4,385						
Mailboxes										
Monument										
Paint - Siding - Fiber Cement	27,666						33,247			
Paint - Wood -Trim & Doors				21,610						25,969
Roof - Architectural Composition - 38										
Roof - Architectural Composition - 8										
Siding - Fiber Cement	*unfunded*									
Siding - Vinyl - Repair	750						901			
Siding - Vinyl - Wash			15,169						18,229	
Storm Drains										
Year Total:	**42,445**		**15,807**	**55,940**	**678**	**8,145**	**42,608**		**18,996**	**61,955**

Robin Meadows HOA - 9/30/08
Annual Expenditure Detail

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Asphalt - O/L - Drives										
Asphalt - O/L - Paths										
Asphalt - Seal Coat - Drives	8,364					9,748				
Asphalt - Seal Coat - Paths	1,130					1,317				
Bark Dust	815		866		921		979		1,041	
Curbs - Concrete										
Fence - Wood - Paint						43,246				
Fence - Wood - Replace						128,707				
Fences - Vinyl										
Gutters/Downspouts - A										76,009
Gutters/Downspouts - B								16,723		
Inspection - Building Envelope			9,300						11,176	
Irrigation Controls				5,956						
Mailboxes				6,031						
Monument				3,723						
Paint - Siding - Fiber Cement			39,954						48,013	
Paint - Wood -Trim & Doors						31,208				
Roof - Architectural Composition - 38										352,909
Roof - Architectural Composition - 8								75,920		
Siding - Fiber Cement	*unfunded*									
Siding - Vinyl - Repair			1,083						1,302	
Siding - Vinyl - Wash					21,907					
Storm Drains										
Year Total:	**10,308**		**51,203**	**15,710**	**22,828**	**214,224**	**979**	**92,643**	**61,532**	**428,918**

Robin Meadows HOA - 9/30/08
Annual Expenditure Detail

Description	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Asphalt - O/L - Drives				136,992						
Asphalt - O/L - Paths				6,167						
Asphalt - Seal Coat - Drives	11,361					13,240				
Asphalt - Seal Coat - Paths	1,534					1,788				
Bark Dust	1,107		1,177		1,251		1,330		1,414	
Curbs - Concrete				807						
Fence - Wood - Paint		51,969						62,453		
Fence - Wood - Replace										
Fences - Vinyl				3,183						
Gutters/Downspouts - A										
Gutters/Downspouts - B										
Inspection - Building Envelope					13,431					
Irrigation Controls				8,091						
Mailboxes										
Monument										
Paint - Siding - Fiber Cement					57,699					
Paint - Wood -Trim & Doors		37,503						45,068		
Roof - Architectural Composition - 38										
Roof - Architectural Composition - 8										
Siding - Fiber Cement	*unfunded*									
Siding - Vinyl - Repair					1,564					
Siding - Vinyl - Wash	26,326						31,636			
Storm Drains				6,068						
Year Total:	**40,328**	**89,472**	**1,177**	**161,308**	**73,945**	**15,029**	**32,967**	**107,521**	**1,414**	

Asphalt - O/L - Drives - 2032

		61,572 SF	@ $1.10
Asset ID	1001	Asset Cost	$67,729.20
	Capital	Percent Replacement	100%
	Streets/Asphalt	Future Cost	$136,991.63
Placed in Service	January 2002		
Useful Life	30		
Replacement Year	2032		
Remaining Life	23		

Remarks:

This item is the overlay (1 1/2" to 2") of the private drives and includes re-setting manhole or valve covers and grinding edges as required.

Asphalt - O/L - Paths - 2032

		2,772 SF	@ $1.10
Asset ID	1003	Asset Cost	$3,049.20
	Capital	Percent Replacement	100%
	Streets/Asphalt	Future Cost	$6,167.42
Placed in Service	January 2002		
Useful Life	30		
Replacement Year	2032		
Remaining Life	23		

Remarks:

This item is the overlay (1 1/2" to 2") of the pathways in the common area.

Asphalt - Seal Coat - Drives - 2009

		61,572 SF	@ $0.10
Asset ID	1002	Asset Cost	$6,157.20
	Non-Capital	Percent Replacement	100%
	Streets/Asphalt	Future Cost	$6,157.20
Placed in Service	January 2002		
Useful Life	5		
Adjustment	2		
Replacement Year	2009		
Remaining Life	0		

Remarks:

This item is the sealcoat (slurry seal) of the drives and includes any re-striping and ADA stencils as required.

This component has been moved back by the board to the year 2008 and now 2009

Asphalt - Seal Coat - Paths - 2009

		2,772 SF	@ $0.30
Asset ID	1004	Asset Cost	$831.60
	Non-Capital	Percent Replacement	100%
	Streets/Asphalt	Future Cost	$831.60
Placed in Service	January 2002		
Useful Life	5		
Adjustment	2		
Replacement Year	2009		
Remaining Life	0		

Remarks:

This item is the sealcoat (slurry seal) of the pathways in the common area.

This component has been moved back by the board to the year 2008 and now 2009

Bark Dust - 2009

		1 Total	@ $600.00
Asset ID	1023	Asset Cost	$600.00
	Non-Capital	Percent Replacement	100%
	Grounds Components	Future Cost	$600.00
Placed in Service	January 2000		
Useful Life	2		
Adjustment	7		
Replacement Year	2009		
Remaining Life	0		

Remarks:

This item is the replacement of bark dust in the planted common areas.

This item has been moved back by the Board to the year 2003, 2004, 2005, 2006, 2007, 2008 and now 2009.

Curbs - Concrete - 2032

		57 LF	@ $7.00
Asset ID	1005	Asset Cost	$399.00
	Capital	Percent Replacement	100%
	Concrete	Future Cost	$807.03
Placed in Service	January 2002		
Useful Life	30		
Replacement Year	2032		
Remaining Life	23		

Remarks:

This item is the concrete curbs in the parking area.

Fence - Wood - Paint - 2012

		32,520 SF	@ $0.84
Asset ID	1006	Asset Cost	$27,316.80
	Non-Capital	Percent Replacement	100%
	Painting	Future Cost	$29,945.54
Placed in Service	July 2005		
Useful Life	6		
Adjustment	1		
Replacement Year	2012		
Remaining Life	3		

Remarks:

This item is the cleaning, treating and staining of the wooden fences for the back yard perimeters.

Cost was provided by Vendor bid.

Fence - Wood - Replace - 2024

		2,710 LF	@ $30.00
Asset ID	1007	Asset Cost	$81,300.00
	Capital	Percent Replacement	100%
	Fencing	Future Cost	$128,707.05
Placed in Service	January 2004		
Useful Life	20		
Replacement Year	2024		
Remaining Life	15		

Remarks:

This item is the replacement of the wooden yard fences.

Fences - Vinyl - 2032

		125 LF	@ $12.59
Asset ID	1008	Asset Cost	$1,573.75
	Capital	Percent Replacement	100%
	Fencing	Future Cost	$3,183.12
Placed in Service	January 2002		
Useful Life	30		
Replacement Year	2032		
Remaining Life	23		

Remarks:

This item is the replacement of the vinyl fencing on some back yard perimeters.

Gutters/Downspouts - A - 2028

		7,866 LF	@ $5.40
Asset ID	1009	Asset Cost	$42,476.40
	Capital	Percent Replacement	100%
	Gutters and Downspouts	Future Cost	$76,008.58
Placed in Service	January 2004		
Useful Life	24		
Replacement Year	2028		
Remaining Life	19		

Remarks:

This item is the gutters and downspouts on 38 units.

Gutters/Downspouts - B - 2026

		1,840 LF	@ $5.40
Asset ID	1010	Asset Cost	$9,936.00
	Capital	Percent Replacement	100%
	Gutters and Downspouts	Future Cost	$16,723.41
Placed in Service	January 2002		
Useful Life	24		
Replacement Year	2026		
Remaining Life	17		

Remarks:

This item is the gutters and downspouts on the first buildings, including the garages.

Inspection - Building Envelope - 2009

		46 Each	@ $140.00
Asset ID	1022	Asset Cost	$6,440.00
	Non-Capital	Percent Replacement	100%
	Building Components	Future Cost	$6,440.00
Placed in Service	January 2000		
Useful Life	6		
Adjustment	3		
Replacement Year	2009		
Remaining Life	0		

Remarks:

This item is the building envelope inspection, including caulking, of all buildings.

This item has been moved back by the Board to the year 2007, 2008 and now 2009.

Irrigation Controls - 2012

		4 Total	@ $1,000.00
Asset ID	1011	Asset Cost	$4,000.00
	Capital	Percent Replacement	100%
	Grounds Components	Future Cost	$4,384.92
Placed in Service	January 2002		
Useful Life	10		
Replacement Year	2012		
Remaining Life	3		

Remarks:

This item is the electric irrigation controllers in the common area.

Mailboxes - 2022

		3 Total	@ $1,350.00
Asset ID	1012	Asset Cost	$4,050.00
	Capital	Percent Replacement	100%
	Mailboxes	Future Cost	$6,030.66
Placed in Service	January 2002		
Useful Life	20		
Replacement Year	2022		
Remaining Life	13		

Remarks:

This item is the gang mailboxes in the common area.

Monument - 2022

		1 Total	@ $2,500.00
Asset ID	1013	Asset Cost	$2,500.00
	Capital	Percent Replacement	100%
	Signs	Future Cost	$3,722.63
Placed in Service	January 2002		
Useful Life	20		
Replacement Year	2022		
Remaining Life	13		

Remarks:

This item is the repair or refurbishing of the entry monument.

Paint - Siding - Fiber Cement - 2009

		19,080 SF	@ $1.45
Asset ID	1021	Asset Cost	$27,666.00
	Non-Capital	Percent Replacement	100%
	Painting	Future Cost	$27,666.00
Placed in Service	January 2002		
Useful Life	6		
Adjustment	1		
Replacement Year	2009		
Remaining Life	0		

Remarks:

This item is the painting of the cementeous siding and includes trim, fascia, soffit, doors and windows.

Costs include any re-caulking as needed.

This item has been moved back by the Board to the year 2009.

Paint - Wood -Trim & Doors - 2012

		13,595 SF	@ $1.45
Asset ID	1019	Asset Cost	$19,712.75
	Non-Capital	Percent Replacement	100%
	Painting	Future Cost	$21,609.74
Placed in Service	January 2007		
Useful Life	6		
Adjustment	-1		
Replacement Year	2012		
Remaining Life	3		

Remarks:

This item is re-painting of the wood trim and doors on all buildings and the garages. Some painting was been done in the year 2006 and the balance was painted in 2007. Costs include any re-caulking as needed.

Roof - Architectural Composition - 38 - 2028

		64,032 SF	@ $3.08
Asset ID	1014	Asset Cost	$197,218.56
	Capital	Percent Replacement	100%
	Roofing	Future Cost	$352,908.99
Placed in Service	January 2004		
Useful Life	24		
Replacement Year	2028		
Remaining Life	19		

Remarks:

This item is the replacement of the dimensional asphalt composition three-tab shingles and flashings on 38 units.

Costs include hauling away of all debris and protection of plants, trees and shrubs.

Roof - Architectural Composition - 8 - 2026

		14,645 sf	@ $3.08
Asset ID	1015	Asset Cost	$45,106.60
	Capital	Percent Replacement	100%
	Roofing	Future Cost	$75,919.52
Placed in Service	January 2002		
Useful Life	24		
Replacement Year	2026		
Remaining Life	17		

Remarks:

This item is the replacement of the dimensional asphalt composition three-tab shingles and flashings on 8 units.

Costs include hauling away of all debris and protection of plants, trees and shrubs.

Siding - Fiber Cement

		19,080 SF	@ $6.35
Asset ID	1016	Asset Cost	$121,158.00
	Capital	Percent Replacement	100%
	Building Components	Future Cost	$452,153.53
Placed in Service	January 2002		
Useful Life	50		
Replacement Year	2052		
Remaining Life	43		

Remarks:

This item is the replacement of the cementeous siding for 8 units including the garages in the year 2052, which exceeds the parameters of this reserve study. This item should be brought into the study in the year 2017.

Costs include any re-caulking as needed.

Siding - Vinyl - Repair - 2009

		1 Total	@ $750.00
Asset ID	1017	Asset Cost	$750.00
	Capital	Percent Replacement	100%
	Building Components	Future Cost	$750.00
Placed in Service	January 2002		
Useful Life	6		
Adjustment	1		
Replacement Year	2009		
Remaining Life	0		

Remarks:

This item is the repair of the vinyl siding (cracks or broken siding) for 38 units at the time the trim is painted.

Some funds were spent in 2007 at a cost of $100.00.

This item has been moved back by the Board to the year 2009.

Siding - Vinyl - Wash - 2011

		95,120 SF	@ $0.15
Asset ID	1020	Asset Cost	$14,268.00
	Non-Capital	Percent Replacement	100%
	Building Components	Future Cost	$15,169.26
Placed in Service	January 2005		
Useful Life	6		
Replacement Year	2011		
Remaining Life	2		

Remarks:

This item is the low pressure washing of the vinyl siding.

Storm Drains - 2032

		1 Total	@ $3,000.00
Asset ID	1018	Asset Cost	$3,000.00
	Capital	Percent Replacement	100%
	Grounds Components	Future Cost	$6,067.91
Placed in Service	January 2002		
Useful Life	30		
Replacement Year	2032		
Remaining Life	23		

Remarks:

This item is any repairs that may need to be made in the drainage system in the common area.

Robin Meadows HOA - 9/30/08
Distribution by Percentage of Ideally Funded

Description	Remaining Life		Begining Balance	Assessment Distributed	Interest Distributed	Expenditures	Ending Balance
Streets/Asphalt							
Asphalt - O/L - Drives	23		5,641	3,129	90		8,861
Asphalt - O/L - Paths	23		254	141	4		399
Asphalt - Seal Coat - Drives	0		5,410	726	21	6,157	0
Asphalt - Seal Coat - Paths	0		731	98	3	832	0
Streets/Asphalt - Total			$12,036	$4,095	$118	$6,989	$9,260
Roofing							
Roof - Architectural Composition - 38	19		13,424	7,447	215		21,085
Roof - Architectural Composition - 8	17		4,107	2,278	66		6,451
Roofing - Total			$17,531	$9,725	$280		$27,536
Painting							
Fence - Wood - Paint	3		3,555	1,972	57		5,584
Paint - Siding - Fiber Cement	0		24,308	3,264	94	27,666	0
Paint - Wood -Trim & Doors	3		1,796	996	29		2,821
Painting - Total			$29,658	$6,233	$180	$27,666	$8,404
Fencing							
Fence - Wood - Replace	15		6,070	3,367	97		9,535
Fences - Vinyl	23		131	73	2		206
Fencing - Total			$6,201	$3,440	$99		$9,741
Building Components							
Inspection - Building Envelope	0		5,658	760	22	6,440	0
Siding - Fiber Cement		*Unfunded*					
Siding - Vinyl - Repair	0		659	88	3	750	0
Siding - Vinyl - Wash	2		2,117	1,175	34		3,326
Building Components - Total			$8,435	$2,023	$58	$7,190	$3,326
Grounds Components							
Bark Dust	0		527	71	2	600	0
Irrigation Controls	3		638	354	10		1,001
Storm Drains	23		250	139	4		392
Grounds Components - Total			$1,415	$563	$16	$600	$1,394
Gutters and Downspouts							
Gutters/Downspouts - A	19		2,891	1,604	46		4,541
Gutters/Downspouts - B	17		905	502	14		1,421
Gutters and Downspouts - Total			$3,796	$2,106	$61		$5,962
Signs							
Monument	13		250	139	4		392
Signs - Total			$250	$139	$4		$392

Robin Meadows HOA - 9/30/08
Distribution by Percentage of Ideally Funded

Description	Remaining Life	Beginning Balance	Assessment Distributed	Interest Distributed	Expenditures	Ending Balance
Mailboxes						
Mailboxes	13	405	224	6		635
Mailboxes - Total		$405	$224	$6		$635
Concrete						
Curbs - Concrete	23	33	18	1		52
Concrete - Total		$33	$18	$1		$52
Grand - Total		$79,758	$28,566	$823	$42,445	$66,703

Important Information

This document has been provided pursuant to an agreement containing restrictions on its use. No part of this document may be copied or distributed, in any form or by any means, nor disclosed to third parties without the expressed written permission of Reserve Funding by WSSC©. The client shall have the right to reproduce and distribute copies of this report, or the information contained within, as may be required for compliance with all applicable regulations.

This reserve analysis study and the parameters under which it has been completed are based upon information provided to us in part by representatives of the association, its contractors, assorted vendors, specialist and independent contractors, the Community Association Institute, Association of Professional Reserve Analyst and various construction pricing and scheduling manuals including, but not limited to: Marshall & Swift Valuation Service, RS Means Facilities Maintenance & Repair Cost Data, RS Means Repair & Remodeling Cost Data, National Construction Estimator, National Repair & Remodel Estimator, Dodge Cost Manual and McGraw-Hill Professional. Additionally, costs are obtained from numerous vendor catalogues, actual quotations or historical costs, and our own experience in the field of property management and reserve study preparation.

It has been assumed, unless otherwise noted in this report, that all assets have been designed and constructed properly and that each estimated useful life will approximate that of the norm per industry standards and/or manufacturer's specifications. In some cases, estimates may have been used on assets, which have an indeterminable but potential liability to the association. The decision for the inclusion of these as well as all assets considered is left to the client.

We recommend that your reserve analysis study be updated on an annual basis due to fluctuating interest rates, inflationary changes, and the unpredictable nature of the lives of many of the assets under consideration (our contract provides that we shall update the reserve study annually). All of the information collected during our physical analysis of the association and computations made subsequently in preparing this reserve analysis study are retained in our computer files. Therefore, annual updates may be completed quickly and inexpensively each year.

Reserve Funding by WSSC© would like to thank you for using our services. We invite you to call us at any time, should you have questions, comments or need assistance. In addition, any of the parameters and estimates used in this study may be changed at your request, after which we will provide a revised study. Client shall accept all responsibility and liability for changes made and the results thereof. Consultant does not warranty the results of the revised study.

This reserve analysis study is provided as an aid for planning purposes and not as an accounting tool. Since it deals with events yet to take place, there is no assurance that the results enumerated within it will, in fact, occur as described.

Part III

Introduction

Preparing the annual budget and overseeing the association's finances are perhaps the most important responsibilities of board members. The annual operating and reserve budgets reflect the planning and goals of the association and set the level and quality of service for all of the association's activities.

Funding Options

When a major repair or replacement is required in a community, an association has essentially four options available to address the expenditure:

The first, and only logical means that the Board of Directors has to ensure its ability to maintain the assets for which it is obligated, is by **assessing an adequate level of reserves** as part of the regular membership assessment, thereby distributing the cost of the replacements uniformly over the entire membership. The community is not only comprised of present members, but also future members. Any decision by the Board of Directors to adopt a calculation method or funding plan which would disproportionately burden future members in order to make up for past reserve deficits, would be a breach of its fiduciary responsibility to those future members. Unlike individuals determining their own course of action, the board is responsible to the "community" as a whole.

Whereas, if the association was setting aside reserves for this purpose, using the vehicle of the regularly assessed membership dues, it would have had the full term of the life of the roof, for example, to accumulate the necessary moneys. Additionally, those contributions would have been evenly distributed over the entire membership and would have earned interest as part of that contribution.

The second option is for the association to **acquire a loan** from a lending institution in order to effect the required repairs. In many cases, banks will lend to an association using "future homeowner assessments" as collateral for the loan. With this method, the current board is pledging the future assets of an association. They are also incurring the additional expense of interest fees along with the original principal amount. In the case of a $150,000 roofing replacement, the association may be required to pay back the loan over a three to five year period, with interest.

The third option, too often used, is simply to **defer the required repair or replacement**. This option, which is not recommended, can create an environment of declining property values due to expanding lists of deferred maintenance items and the association's financial inability to keep pace with the normal aging process of the common area components. This, in turn, can have a seriously negative impact on sellers in the association by making it difficult, or even impossible, for potential buyers to obtain financing from lenders. Increasingly, lending institutions are requesting copies of the association's most recent reserve study before granting loans, either for the association itself, a prospective purchaser, or for an individual within such an association.

The fourth option is to pass a "**special assessment**" to the membership in an amount required to cover the expenditure. When a special assessment is passed, the association has the authority and responsibility to collect the assessments, even by means of foreclosure, if necessary. However, an association considering a special assessment cannot guarantee that an assessment, when needed, will be passed. Consequently, the association cannot guarantee its ability to perform the required repairs or replacements to those major components for which it is obligated when the need arises. Additionally, while relatively new communities require very little in the way of major "reserve" expenditures, associations reaching 12 to 15 years of age and older, find many components reaching the end of their effective useful lives. These required expenditures, all accruing at the same time, could be devastating to an association's overall budget.

Types of Reserve Studies

Most reserve studies fit into one of three categories:

Full Reserve Study;

Update with site inspection; and

Update without site inspection.

In a **Full Reserve Study**, the reserve provider conducts a component inventory, a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both a "fund status" and "funding plan".

In an **Update with site inspection**, the reserve provider conducts a component inventory (verification only, not quantification unless new components have been added to the inventory), a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both the "fund status and "funding plan."

In an **Update without site inspection**, the reserve provider conducts life and valuation estimates to determine the "fund status" and "funding plan."

The Reserve Study: A Physical and a Financial Analysis

There are two components of a reserve study: a physical analysis and a financial analysis.

Physical Analysis

During the physical analysis, a reserve study provider evaluates information regarding the physical status and repair/replacement cost of the association's major common area components. To do so, the provider conducts a component inventory, a condition assessment, and life and valuation estimates.

Developing a Component List

The budget process begins with full inventory of all the major components for which the association is responsible. The determination of whether an expense should be labeled as operational, reserve, or excluded altogether is sometimes subjective. Since this labeling may have a major impact on the financial plans of the association, subjective determinations should be minimized. We suggest the following considerations when labeling an expense.

Operational Expenses

Occur at least annually, no matter how large the expense, and can be effectively budgeted each year. They are characterized as being reasonably predictable, both in terms of frequency and cost. Operational expenses include all minor expenses, which would not otherwise adversely affect an operational budget from one year to the next. Examples of ***operational expenses*** include:

Utilities:
- Electricity
- Gas
- Water
- Telephone
- Cable TV

Administrative:
- Supplies
- Bank Service Charges
- Dues & Publications
- Licenses, Permits & Fees
- Insurance(s)

Services:
- Landscaping
- Pool Maintenance
- Street Sweeping
- Accounting
- Reserve Study

Repair Expenses:
- Tile Roof Repairs
- Equipment Repairs
- Minor Concrete Repairs
- Operating Contingency

Reserve Expenses

These are major expenses that occur other than annually, and which must be budgeted in advance in order to ensure the availability of the necessary funds in time for their use. Reserve expenses are reasonably predictable both in terms of frequency and cost. However, they may include significant assets that have an indeterminable but potential liability that may be demonstrated as a likely occurrence. They are expenses that, when incurred, would have a significant effect on the smooth operation of the budgetary process from one year to the next, if they were not reserved in advance. Examples of reserve expenses include:

Roof Replacements	Park/Play Equipment
Painting	Pool/Spa Re-plastering
Deck Resurfacing	Pool Equipment Replacement
Fencing Replacement	Pool Furniture Replacement
Asphalt Seal Coating	Tennis Court Resurfacing
Asphalt Repairs	Lighting Replacement
Asphalt Overlays	Insurance(s)
Equipment Replacement	Reserve Study
Interior Furnishings	

Budgeting is Normally Excluded for:

Repairs or replacements of assets which are deemed to have an estimated useful life equal to or exceeding the estimated useful life of the facility or community itself, or exceeding the legal life of the community as defined in an association's governing documents. Examples include the complete replacement of elevators, tile roofs, wiring and plumbing. Also excluded are insignificant expenses that may be covered either by an operating or reserve contingency, or otherwise in a general maintenance fund. Expenses that are necessitated by acts of nature, accidents, or other occurrences that are more properly insured, rather than reserved, are also excluded.

Financial Analysis

The financial analysis assesses the association's reserve balance or "fund status" (measured in cash or as percent fully funded) to determine a recommendation for the appropriate reserve contribution rate in the future, known as the "funding plan."

Preparing the Reserve Study

Once the reserve assets have been identified and quantified, their respective replacement costs, useful lives, and remaining lives must be assigned so that a funding schedule can be constructed. Replacement costs and useful lives can be found in published manuals such as construction estimators, appraisal handbooks, and valuation guides. Remaining lives are calculated from the useful lives and ages of assets and adjusted according to conditions such as design, manufactured quality, usage, exposure to the elements, and maintenance history.

By following the recommendations of an effective reserve study, the association should avoid any major shortfalls. However, to remain accurate, the report should be updated on an annual basis to reflect such changes as shifts in economic parameters, additions of phases or assets, or expenditures of reserve funds. The association can assist in simplifying the reserve analysis update process by keeping accurate records of these changes throughout the year.

Funding Methods

From the simplest to the most complex, reserve analysis providers use many different computational processes to calculate reserve requirements. However, there are two basic processes identified as industry standards: the cash flow method and the component method.

The cash flow method develops 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 actual anticipated schedule of reserve expenses until the desired funding goal is achieved. This method sets up a "window" in which all future anticipated replacement costs are computed, based upon the individual lives of the components under consideration. The Reserve Funding by WSSC© Threshold and the Reserve Funding by WSSC© Current Assessment funding models are based upon the cash flow method.

The component method develops a reserve-funding plan where the total contribution is based upon the sum of contributions for individual components. The component method is the more conservative of the two funding options, and assures that the association will achieve and maintain an ideal level of reserve over time. This method also allows for computations on individual components in the analysis. The Reserve Funding by WSSC© Component Funding model is based upon the component methodology.

Funding Strategies

Once an association has established its funding goals, the association can select an appropriate funding plan. There are four basic strategies from which most associations select. It is recommended that associations consult professionals to determine the best strategy or combination of plans that best suit the association's need. Additionally, associations should consult with their financial advisor to determine the tax implications of selecting a particular plan. Further, consultation with the American Institute of Certified Public Accountants (AICPA) for their reporting requirements is advisable. The four funding plans and descriptions of each are detailed below. Associations will have to update their reserve studies more or less frequently depending on the funding strategy they select.

Full Funding---Given that the basis of funding for reserves is to distribute the costs of the replacements over the lives of the components in question, it follows that the ideal level of reserves would be proportionately related to those lives and costs. If an association has a component with an expected estimated useful life of ten years, it would set aside approximately one-tenth of the replacement cost each year. At the end of three years, one would expect three-tenths of the replacement cost to have accumulated, and if so, that component would be "fully-funded." This model is important in that it is a measure of the adequacy of an association's reserves at any one point of time, and is independent of any particular method which may have been used for past funding or may be under consideration for future funding. This formula represents a snapshot in time and is based upon current replacement cost, independent of future inflationary or investment factors:

Fully Funded Reserves = **Age** divided by **Useful Life** the results multiplied by **Current Replacement Cost**

When an association's total accumulated reserves for all components meet this criterion, its reserves are considered "fully-funded."

The Reserve Funding by WSSC© **Threshold Funding Model (Minimum Funding)**. The goal of this funding method is to keep the reserve cash balance above zero. This means that while each individual component may not be fully funded, the reserve balance overall does not drop below zero during the projected period. An association using this funding method must understand that even a minor reduction in a component's remaining useful life can result in a deficit in the reserve cash balance.

The Reserve Funding by WSSC© **Threshold Funding Model.** This method is based upon the cash flow funding concept. The minimum reserve cash balance in threshold funding, however, is set at a predetermined dollar amount (other than $0).

The Reserve Funding by WSSC© **Current Assessment Funding Model**. This method is also based upon the cash flow funding concept. The initial reserve assessment is set at the association's current fiscal year funding level and a 30-year projection is calculated to illustrate the adequacy of the current funding over time.

The Reserve Funding by WSSC© **Component Funding Model**. This is a straight-line funding model. It distributes the cash reserves to individual reserve components and then calculates what the reserve assessment and interest contribution (minus taxes) should be, again by each reserve component. The current annual assessment is then determined by summing all the individual component assessments, hence the name "Component Funding Model". This is the most conservative funding model. It leads to or maintains the fully funded reserve position. The following details this calculation process.

Component Funding Model Distribution of Accumulated Reserves

The "Distribution of Accumulated Reserves Report" is a "Component Funding Model" calculation. This distribution **does not** apply to the cash flow funding models.

When calculating reserves based upon the component methodology, a beginning reserve balance must be allocated for each of the individual components considered in the analysis, before the individual calculations can be completed. When this distribution is not available, or of sufficient detail, the following method is suggested for allocating reserves:

The first step the program performs in this process is subtracting, from the total accumulated reserves, any amounts for assets that have predetermined (fixed) reserve balances. The user can "fix" the accumulated reserve balance within the program on the individual asset's detail page. If, by error, these amounts total more than the amount of funds available, then the remaining assets are adjusted accordingly. A provision for a contingency reserve is then deducted by the determined percentage used, and if there are sufficient remaining funds available.

The second step is to identify the ideal level of reserves for each asset. As indicated in the prior section, this is accomplished by evaluating the component's age proportionate to its estimated useful life and current replacement cost. Again, the equation used is as follows:

Fully Funded Reserves = (Age/Useful Life) x Current Replacement Cost

The Reserve Analyst© software program performs the above calculations to the actual month the component was placed-in-service. The program projects that the accumulation of necessary reserves for repairs or replacements will be available on the first day of the fiscal year in which they are scheduled to occur.

The next step the program performs is to arrange all of the assets used in the study in ascending order by remaining life, and alphabetically within each grouping of remaining life items. These assets are then assigned their respective ideal level of reserves until the amount of funds available is depleted, or until all assets are appropriately funded. If any assets are assigned a zero remaining life (scheduled for replacement in the current fiscal year), then the amount assigned equals the current replacement cost and funding begins for the next cycle of replacement. If there are insufficient funds available to accomplish this, then the software automatically adjusts the zero remaining life items to one year, and that asset assumes its new grouping position alphabetically in the final printed report.

If, at the completion of this task, there are additional moneys that have not been distributed, the remaining reserves are then assigned, in ascending order, to a level equal to, but not exceeding, the

current replacement cost for each component. If there are sufficient moneys available to fund all assets at their current replacement cost levels, then any excess funds are designated as such and are not factored into any of the report computations. If, at the end of this assignment process there are designated excess funds, they can be used to offset the monthly contribution requirements recommended, or used in any other manner the client may desire.

Assigning the reserves in this manner defers the make-up period for any under-funding over the longest remaining life of all assets under consideration, thereby minimizing the impact of any deficiency. For example, if the report indicates an under funding of $50,000, this under-funding will be assigned to components with the longest remaining lives in order to give more time to "replenish" the account. If the $50,000 under-funding were to be assigned to short remaining life items, the impact would be felt immediately.

If the reserves are under-funded, the monthly contribution requirements, as outlined in this report, can be expected to be higher than normal. In future years, as individual assets are replaced, the funding requirements will return to their normal levels. In the case of a large deficiency, a special assessment may be considered. The program can easily generate revised reports outlining how the monthly contributions would be affected by such an adjustment, or by any other changes that may be under consideration.

Funding Reserves

Three assessment and contribution figures are provided in the report, the "Monthly Reserve Assessment Required", the "Average Net Monthly Interest Earned" contribution and the "Total Monthly Allocation to Reserves." The association should allocate the "Monthly Reserve Assessment Required" amount to reserves each month when the interest earned on the reserves is left in the reserve accounts as part of the contribution. Any interest earned on reserve deposits, must be left in the reserve account.

Users' Guide to your Reserve Analysis Study

Part II of your Reserve Funding by WSSC© Report contains the reserve analysis study for your association. There are seven types of reports in the study as described below.

Report Summaries

The Report Summary for all funding models lists all of the parameters that were used in calculating the report as well as the summary of your reserve analysis study.

Index Reports

The **Distribution of Accumulated Reserves** report lists all assets in remaining life order. It also identifies the ideal level of reserves that should have accumulated for the association as well as the actual reserves available. This information is valid only for the "Component Funding Model" calculation.

The **Component Listing/Summary** lists all assets by category (i.e. roofing, painting, lighting, etc.) together with their remaining life, current cost, monthly reserve contribution, and net monthly allocation.

Detail Reports

The Detail Report itemizes each asset and lists all measurements, current and future costs, and calculations for that asset. Provisions for percentage replacements, salvage values, and one-time replacements can also be utilized. These reports can be sorted by category or group.

The numerical listings for each asset are enhanced by extensive narrative detailing factors such as design, manufactured quality, usage, exposure to elements and maintenance history.

The Reserve Funding by WSSC© Detail Index is an alphabetical listing of all assets, together with the page number of the asset's detail report, the projected replacement year, and the asset number.

Projections

Thirty-year projections add to the usefulness of your reserve analysis study.

Definitions

Report I.D.
Includes the Report Date (example: June 19, 2006), Account Number (example: 9773), and Version (example: 1.0). Please use this information (displayed on the summary page) when referencing your report.

Budget Year Beginning/Ending
The budgetary year for which the report is prepared. For associations with fiscal years ending December 31st, the monthly contribution figures indicated are for the 12-month period beginning 1/1/20xx and ending 12/31/20xx.

Number of Units and/or Phases
If applicable, the number of units and/or phases included in this version of the report.

Inflation
This figure (information taken from "Inflationdata.com" is used to approximate the future cost to repair or replace each component in the report. The current cost for each component is compounded on an annual basis by the number of remaining years to replacement, and the total is used in calculating the monthly reserve contribution that will be necessary to accumulate the required funds in time for replacement.

Annual Assessment Increase
This represents the percentage rate at which the association will increase its assessment to reserves at the end of each year. For example, in order to accumulate $10,000 in 10 years, you could set aside $1,000 per year. As an alternative, you could set aside $795 the first year and increase that amount by 5% each year until the year of replacement. In either case you arrive at the same amount. The idea is that you start setting aside a lower amount and increase that number each year in accordance with the planned percentage. Ideally this figure should be equal to the rate of inflation. It can, however, be used to aide those associations that have not set aside appropriate reserves in the past, by making the initial year's allocation less formidable.

Investment Yield Before Taxes
The average interest rate anticipated by the association based upon its current investment practices.

Taxes on Interest Yield
The estimated percentage of interest income that will be set aside to pay income taxes on the interest earned.

Projected Reserve Balance
The anticipated reserve balance on the first day of the fiscal year for which this report has been prepared. This is based upon information provided and not audited.

Percent Fully Funded
The ratio, at the beginning of the fiscal year, of the actual (or projected) reserve balance to the calculated fully funded balance, expressed as a percentage.

Phase Increment Detail and/or Age
Comments regarding aging of the components on the basis of construction date or date of acceptance by the association.

Monthly Assessment
The assessment to reserves required by the association each month.

Interest Contribution (After Taxes)
The interest that should be earned on the reserves, net of taxes, based upon their beginning reserve balance and monthly contributions for one year. This figure is averaged for budgeting purposes.

Total Monthly Allocation
The sum of the monthly assessment and interest contribution figures.

Group and Category
The report may be prepared and sorted either by group (location, building, phase, etc.) or by category (roofing, painting, etc.). The standard report printing format is by category.

Percentage of Replacement or Repairs
In some cases, an asset may not be replaced in its entirety or the cost may be shared with a second party. Examples are budgeting for a percentage of replacement of streets over a period of time, or sharing the expense to replace a common wall with a neighboring party.

Placed-In-Service Date
The month and year that the asset was placed-in-service. This may be the construction date, the first escrow closure date in a given phase, or the date of the last servicing or replacement.

Estimated Useful Life
The estimated useful life of an asset based upon industry standards, manufacturer specifications, visual inspection, location, usage, association standards and prior history. All of these factors are taken into consideration when tailoring the estimated useful life to the particular asset. For example, the carpeting in a hallway or elevator (a heavy traffic area) will not have the same life as the identical carpeting in a seldom-used meeting room or office.

Adjustment to Useful Life
Once the useful life is determined, it may be adjusted, up or down, by this separate figure for the current cycle of replacement. This will allow for a current period adjustment without affecting the estimated replacement cycles for future replacements.

Estimated Remaining Life
This calculation is completed internally based upon the report's fiscal year date and the date the asset was placed-in-service.

Replacement Year
The year that the asset is scheduled to be replaced. The appropriate funds will be available by the first day of the fiscal year for which replacement is anticipated.

Annual Fixed Reserves
An optional figure which, if used, will override the normal process of allocating reserves to each asset.

Fixed Assessment
An optional figure which, if used, will override all calculations and set the assessment at this amount. This assessment can be set for monthly, quarterly or annually as necessary.

Salvage Value
The salvage value of the asset at the time of replacement, if applicable.

One-Time Replacement
Notation if the asset is to be replaced on a one-time basis.

Current Replacement Cost
The estimated replacement cost effective at the beginning of the fiscal year for which the report is being prepared

Future Replacement Cost
The estimated cost to repair or replace the asset at the end of its estimated useful life based upon the current replacement cost and inflation.

Component Inventory
The task of selecting and qualifying reserve components. This task can be accomplished through on-site visual, review of association design and organizational documents, a review of established association precedents, and discussion with appropriate association representative(s).

A Multi-Purpose Tool

Your Reserve Funding by WSSC© Report is an important part of your association's budgetary process. Following its recommendations should ensure the association's smooth budgetary transitions from one fiscal year to the next, and either decrease or eliminate the need for "special assessments".

In addition, your Reserve Funding by WSSC© reserve study serves a variety of useful purposes:

- Following the recommendations of a reserve study performed by a professional consultant can protect the Board of Directors in a community from personal liability concerning reserve components and reserve funding.
- A reserve analysis study is required by your accountant during the preparation of the association's annual audit.
- The Reserve Funding by WSSC© reserve study is often requested by lending institutions during the process of loan applications, both for the community and, in many cases, the individual owners.
- Your Reserve Funding by WSSC© Report is also a detailed inventory of the association's major assets and serves as a management tool for scheduling, coordinating and planning future repairs and replacements.
- Your Reserve Funding by WSSC© Report is a tool that can assist the Board in fulfilling its legal and fiduciary obligations for maintaining the community in a state of good repair. If a community is operating on a special assessment basis, it cannot guarantee that an assessment, when needed, will be passed. Therefore, it cannot guarantee its ability to perform the required repairs or replacements to those major components for which the association is obligated.
- Since the Reserve Funding by WSSC© reserve analysis study includes measurements and cost estimates of the client's assets, the detail reports may be used to evaluate the accuracy and price of contractor bids when assets are due to be repaired or replaced.
- The Reserve Funding by WSSC© reserve study is an annual disclosure to the membership concerning the financial condition of the association, and may be used as a "consumers' guide" by prospective purchasers.
- The Reserve Funding by WSSC© Owners' Summary meets the disclosure requirements of the Oregon Civil Codes §94.595 and §100.175 and also the recently adopted ECHO standards.
- Your Reserve Funding by WSSC© Report provides a record of the time, cost, and quantities of past reserve replacements. At times the association's management company and board of directors are transitory which may result in the loss of these important records.