



# Reserve Funding



## **Arbor Ridge P.U.D. Homeowners Association-Master**

NW Laidlaw Road & NW 174th Avenue  
Beaverton, Oregon  
August 21, 2012

Prepared by:  
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Category Detail Index**

Asset ID	Description	Replacement	Page
<b>Asphalt</b>			
1012	Asphalt-Overlay-Moon Valley	2031	2-9
1001	Asphalt-Overlay-Path	2031	2-10
1014	Asphalt-Overlay-Silver Creek	2031	2-11
1016	Asphalt-Overlay-Tatum Ranch	2031	2-12
1027	Asphalt-Repairs-Moon Valley	2015	2-13
1031	Asphalt-Repairs-Path	2016	2-14
1032	Asphalt-Repairs-Silver Creek	2015	2-15
1033	Asphalt-Repairs-Tatum Ranch	2015	2-16
1013	Asphalt-Sealcoat-Moon Valley	2015	2-17
1002	Asphalt-Sealcoat-Path	2016	2-18
1015	Asphalt-Sealcoat-Silver Creek	2015	2-19
1017	Asphalt-Sealcoat-Tatum Ranch	2015	2-20
<b>Bridge</b>			
1004	Bridge-Wooden	2026	2-23
<b>Concrete</b>			
1019	Curb-Gutter-Moon Valley	2013	2-24
1020	Curb-Gutter-Silver Creek	2013	2-25
1018	Curb-Gutter-Tatum Ranch	2013	2-26
1024	Sidewalks-Concrete	2013	2-35
1022	Sidewalks-Moon Valley	2013	2-36
1023	Sidewalks-Silver Creek	2013	2-37
<b>Fencing</b>			
1011	Fence-Chain Link	2031	2-27
1010	Fence-Vinyl	2026	2-28
1025	Fence-Vinyl-Wash	2016	2-29
<b>Landscape</b>			
1006	Bark Dust	2020	2-21
1005	Plant & Arborvitae	2013	2-33
<b>Lighting</b>			
1009	Lighting-Entry Monument	2013	2-30
<b>Mailboxes</b>			
1021	Mailboxes	2031	2-31
<b>Masonry</b>			
1007	Brick Pilaster-Wall	2031	2-22

**Arbor Ridge P.U.D. Homeowners Association-Master  
Category Detail Index**

Asset ID	Description	Replacement	Page
<b>Signs</b>			
1008	Monument/Signs	2016	2-32
<b>Trees</b>			
1026	Trees	2013	2-38
<b>Walls</b>			
1003	Retaining Walls	2013	2-34
	Total Funded Assets	30	
	Total Unfunded Assets	<u>0</u>	
	Total Assets	30	



## RESERVE STUDIES BY RESERVE FUNDING

Attached herewith is the reserve study (physical and financial analysis) for the Association. **Interest from reserve savings accounts must stay in the reserve account(s) 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 Areas and Commonly Maintained Property as those terms are 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 its 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, warrant or 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-site or plan take-off physical analysis of the property, and as such did not disturb the major components. Therefore, all Common Areas and Commonly Maintained Property as those terms are defined in the Declaration 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 engineer's report.

Since no destructive testing was undertaken, this reserve 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 seals below the signature is evidence that the reserve study was performed under the guidelines and policies of the Association of Professional Reserve Analysts and the Community Association Institute.

Sincerely,

*D. L. "Dan" Huntley, PRA, RS*  
*Tamarra "Tammy" Axton, PRA*

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's Common Areas and Commonly Maintained Property as those terms are defined in the Declaration and submit our findings in this report. The purpose of this Reserve Study is to establish a reasonable yearly reserve contribution necessary to meet future expenditures for major replacements or repairs of the Common Areas and Commonly Maintained Property as those terms are defined in the Declaration in compliance with Oregon Revised Statutes 94.595 that components have a life expectancy of more than one year and less than thirty years.

All major Common Areas and Commonly Maintained Property as those terms are defined in the Declaration 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 Areas and Commonly Maintained Property as those terms are defined in the Declaration, 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 Areas and Commonly Maintained Property as those terms are defined in the Declaration over the next thirty years.

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

The *CURRENT ASSESSMENT FUNDING MODEL PROJECTION* enumerates the details regarding recommended annual reserve contributions and projected year-end reserve balances. We recommend, in accordance with state statutes, 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 that regular maintenance of the Common Areas and Commonly Maintained Property as those terms are defined in the Declaration be done to insure maximum useful life and optimum performance of the reserve components. Components of concern include items associated with water intrusion and safety.

The maintenance plan is a 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.rsmeans.com/supplement/67346.asp](http://www.rsmeans.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, which recognizes the need for proper reserve planning, we have made a reserve study (physical and financial analysis) of this community 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 Areas and Commonly Maintained Property of the Association as those terms are defined in the Declaration as of the beginning of its 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, Oregon and Washington, 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. Preventive 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 actual facts and circumstances regarding extended or diminished component lives, inflation, and appreciation of the reserves.

Our investigation included Common Areas and Commonly Maintained Property as those term are defined in the Declaration 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 home owners that is not Commonly Maintained Property, 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 Areas and Commonly Maintained Property as those terms are defined in the Declaration 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 identifies 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 and Commonly Maintained Property as those terms are defined in the Declaration 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 Areas and Commonly Maintained Property as those terms are defined in the Declaration as detailed in the *DETAIL REPORT BY CATEGORY*.

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. 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 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 that 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, 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 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 that no work, or expenditures from the reserve funds will occur 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 33 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. 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 that 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 the board may project in its reserve study or 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 expectancies should be reviewed and adjusted on an annualized basis, as current future costs projections and life expectancies become more uncertain.

## PROFESSIONAL SERVICE CONDITIONS

The services provided by Reserve Studies by Reserve Funding© 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 Studies by Reserve Funding© 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 Studies by Reserve Funding©, 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 Studies by Reserve Funding© and its employees and subagents, in connection with such action, suit, or proceeding, if Reserve Studies by Reserve Funding© and its employees and subagents acted in good faith and in a manner Reserve Studies by Reserve Funding© and its employees and subagents reasonably believed to be in, or not opposed to, the best interest of the 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

*Tamarra "Tammy" Axton*, PRA

Association of Professional Reserve Analyst-APRA-(PRA)

Community Association Institute-CAI-(RS) Reserve Specialist

**Arbor Ridge P.U.D. Homeowners Association-Master  
Base Line Assessment Funding Model Summary**

Report Date	August 21, 2012
Account Number	TMG
Version	1.0 (2013) Level III
Budget Year Beginning	January 01, 2013
Budget Year Ending	December 31, 2013
Total Units	571

<i>Report Parameters</i>	
Inflation	2.19%
Interest Rate on Reserve Deposit	0.39%
2013 Beginning Balance	\$166,631.92

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

- **This reserve study is for budget and planning purposes and 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 the building and site components or systems, and will provide an estimate replacement or refurbishment cost for those components or systems. Major components or systems may include, but are not limited to, painting, gutters and downspouts. mailboxes, roofing, siding, windows, doors, paving, mechanical equipment, common area furnishings and amenities and other commonly owned systems or items.**
- **The scope of work identified within our contract is to provide the association with an "Updated No-Site Visit" (level III) reserve study which includes:**
  - Component/System Inventory**
  - Expected Useful Life and Remaining Useful Life Estimates**
  - Condition Assessment (based upon on-site visual observations if applicable).**
  - Component/System Replacement Schedule and Estimated Pricing**
  - Identify Current Reserve Account Balance**
  - 30 Year Funding Plan**

**Arbor Ridge P.U.D. Homeowners Association-Master  
Base Line Assessment Funding Model Summary**

- **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 building component 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 known components and systems that are anticipated to "wear out" or fail within 30 years. Items which are anticipated to be replaced or repaired in the current year are not included within the reserve study as those items should already be budgeted for, and scheduled to be replaced or repaired.

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 cognizant of items scheduled for replacement or repair within 2-3 years of the current year. Remember, items listed are scheduled based on history and replacement or repair is scheduled as an estimate. Items commonly fail sooner or later than the estimated date.

- **Disclosures**

- **General - The Arbor Ridge P.U.D. Homeowners Association-Master and Reserve Studies by Reserve Funding have no professional or personal involvements with each other, other than the scope of work identified in the reserve study contract. This relationship cannot be perceived as a conflict of interest.**
- **Physical Analysis - If an on-site reserve study was performed 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 reserve study.**
- **Measurements - Measuring and inventory (+/- 10%) were identified via a combination of on-site physical measurements, previous reserve study and/or drawing take-offs. Drawing sets (if used) were provided by the property manager or Declarant for our use relating only to the reserve study scope of work.**

**Arbor Ridge P.U.D. Homeowners Association-Master  
Base Line Assessment Funding Model Summary**

- **Reliance on Client Data** - Data received from property management, association representatives and/or Declarant is deemed reliable by Reserve Funding. Such data may include financial information, physical deficiencies or physical conditions, quantity of physical assets, or historical issues.
- **Scope** - The Reserve Study is a reflection of information provided to the Consultant and assembled for the Association's use, not for the purpose of performing an audit, quality/forensic analysis, or background checks of historical records.
- **Reserve Balance** - The actual or projected (estimated) total presented in this reserve study is based upon information provided or collected and was not audited.
- **Reserve Projects** -Information provided or collected for the purpose of this reserve study will be considered reliable and should not be considered a project audit or quality inspection.
- **Adjustments to Reserve Study** - 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 be used in this reserve study the Client accepts full responsibility for the results of the reserve study and is not warranted by Consultant.
- **Information Provided** - Quantity, design and material information included in this report was provided in part by the Association and is subject to course of construction changes.
- **Limitations on Inventory** -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, bearing and shear walls, perimeter walls, beams, columns and girders, sub floors, unfinished floors, concrete stair surfaces, windows, exterior doors, window and door frames, plumbing system, flues (chimneys), air delivery or return systems, ducts, chutes, conduits, pipes, plumbing, sanitary sewage and storm drains, wire, telephone, cable, central television system, sprinklers systems and internet lines.
- **Warranty or Guaranty** - 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.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Base Line Assessment Funding Model Summary**

- **Annual Updates** - 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.
- **Tax Consequences** - 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.
- If applicable we recommend a building envelope (water intrusion) inspection every six years and a roofing inspection every six years (not funded in the reserve).
- **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).
- **NOTE:** Management or the Board shall notify the reserve study provider if the windows and doors are the responsibility of the Association and if so, will be added to the next update of the reserve study. Management or the Association to provide the count of windows and doors including type and size.
- **Preparation of a Reserve Study**

Data is collected from many sources to prepare a reserve study and a variety of document reviews, interviews, and site observations are required to adequately fulfill our duties as a reserve provider. The following sources, but not limited to, and methods were utilized in the preparation of this reserve study document:



**Arbor Ridge P.U.D. Homeowners Association-Master  
Base Line Assessment Funding Model Summary**

**Property Management Personnel Interviews**

**As built Plans and Specifications Document Reviews**

**On-site Observations - If Applicable**

**In-house company consultations with accredited RS and PRA personnel**

**Discussions with Engineering or Architectural Consultants**

**RS Means Facilities Maintenance & Repair Cost Data, 19th Edition (2012) printed manual**

**Interviewing General Contractor Consultants**

- **A tabular list of commonly owned items has been developed and given a current condition grade, expected useful life, and remaining useful life. A portion of that data will determine in what year it is estimated the component should be replaced.**
- **Property Information**
- **Original Starting Date of Reserve Study - Unless otherwise indicated, we have used January 1, 2005 to begin aging the original components in this reserve study.**
- **Number of Units/Lots and Location - This reserve study is a total of 571 Lots located in Beaverton, Oregon.**
- **Date of Last Reserve Study (if applicable) - The last plan take-off physical analysis done by Reserve Funding by WSSC was completed on October 15, 2004.**
- **NOTE: All interest accrued from reserve savings account(s) must remain in the reserve savings account(s) and not used as an off-set for operating expenses.**
- **NOTE: The board has failed to repair, maintain or replace many of the reserve components at the time scheduled even though funds were in the bank accounts to do the work. This could have a devastating affect of the association's financial position, condition of the components and future reserve assessments.**

**Arbor Ridge P.U.D. Homeowners Association-Master  
Base Line Assessment Funding Model Summary**

- **Infrastructure Exposure:** The possibility of infrastructure system failures as buildings age such as, but not limited to, aluminum wiring, cast iron piping, polybutylene plumbing and coaxial cable may be a threat to the soundness of a building or the expected health both physically and financially to all owners.

**We strongly suggest the board have a qualified , credentialed, bonded and licensed engineer or architect inspect the infrastructure for any signs of failure or potential liability of any kind to owners and provide a written report to the board for future concerns and mitigation and the estimated cost for potential repairs, maintenance or replacement including expected remaining useful life.**

**Tests may include ultrasound, thermographic imaging , sonar imaging and video snaking.**

**These infrastructure components are not considered in the reserve study as they may be out of view (hidden) or beyond the expertise of the reserve study provider.**

**Arbor Ridge P.U.D. Homeowners Association-Master  
Base Line Assessment Funding Model Summary**

- **Funding Required** - A minimum balance of \$77,396.00 has been used over the thirty years of this reserve study with an average monthly reserve assessment of \$4.13 per Lot and an annual increase of 2.35% to reach full funding within the thirty years of the reserve study.
- **NOTE:** The board/management has expressed a concern regarding the retaining walls and the paths. We suggest the board seek out a qualified, bonded and licensed contractor(s) to review these concerns and provide the Reserve Study provider with and copy of the results so that they can become a part of the reserve study.

**The industry standards for percent funded are:**

**0% to 29% - Poor**

**30% to 69% - Fair**

**70% to 100% - Good**

**This association is 76% funded on 1/1/2013.**

***Base Line Funding Model Summary of Calculations***

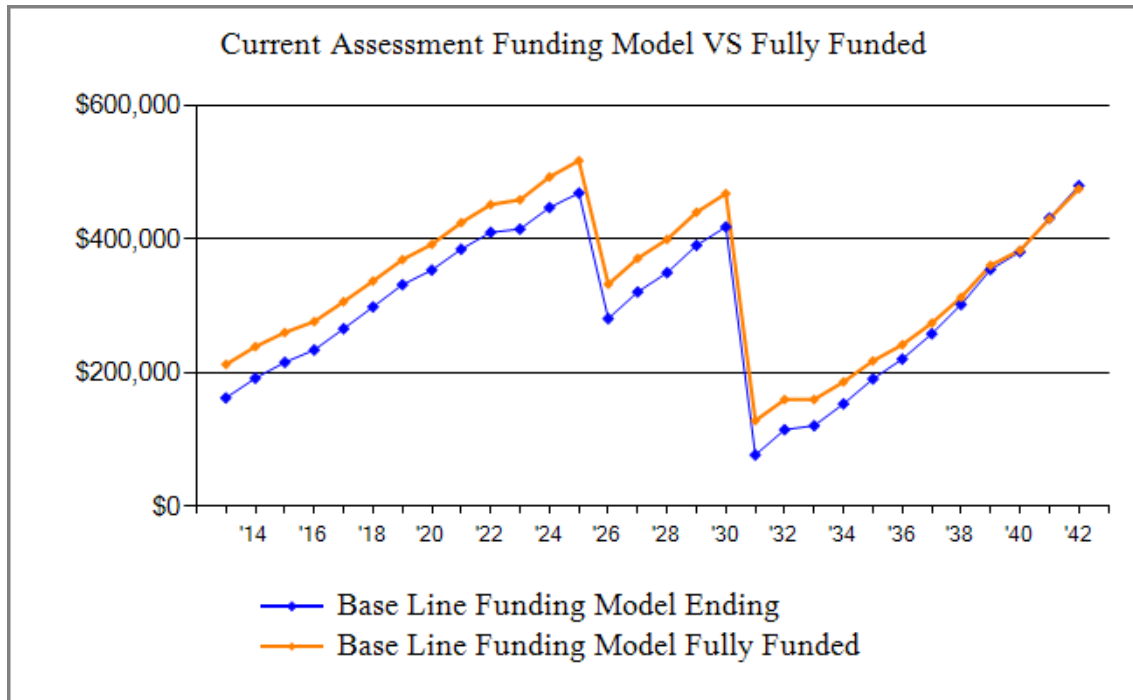
Required Monthly Contribution	\$2,360.00
<i>\$4.13 per unit monthly</i>	
Average Net Monthly Interest Earned	\$46.63
Total Monthly Allocation to Reserves	\$2,406.63
<i>\$4.21 per unit monthly</i>	

**Arbor Ridge P.U.D. Homeowners Association-Master  
Base Assessment Funding Model Projection**

Beginning Balance: \$166,632

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2013	472,882	28,320	560	32,756	162,756	212,850	76%
2014	483,238	28,986	603		192,345	239,521	80%
2015	493,821	29,667	638	6,614	216,036	260,644	82%
2016	504,636	30,364	666	12,560	234,506	276,947	84%
2017	515,687	31,077	713		266,296	306,674	86%
2018	526,981	31,808	761		298,865	337,570	88%
2019	538,522	32,555	811		332,230	369,673	89%
2020	550,315	33,320	843	12,305	354,089	392,565	90%
2021	562,367	34,103	889	3,815	385,266	425,042	90%
2022	574,683	34,905	926	10,636	410,461	452,016	90%
2023	587,268	35,725	933	31,660	415,459	459,176	90%
2024	600,130	36,564	981	5,381	447,623	493,405	90%
2025	613,272	37,424	1,013	16,659	469,401	517,754	90%
2026	626,703	38,303	730	227,109	281,326	332,847	84%
2027	640,428	39,203	790		321,319	371,675	86%
2028	654,453	40,125	832	12,113	350,163	399,932	87%
2029	668,786	41,068	893	1,061	391,063	440,566	88%
2030	683,432	42,033	934	15,281	418,748	468,590	89%
2031	698,399	43,020	172	384,545	77,396	128,701	60%
2032	713,694	44,031	228	6,399	115,256	160,267	71%
2033	729,324	45,066	236	39,319	121,239	160,375	75%
2034	745,296	46,125	284	13,794	153,855	186,797	82%
2035	761,618	47,209	340	10,200	191,204	218,195	87%
2036	778,298	48,319	384	18,924	220,982	242,378	91%
2037	795,343	49,454	439	12,214	258,661	274,640	94%
2038	812,761	50,616	504	7,288	302,494	313,393	96%
2039	830,560	51,806	582		354,881	361,159	98%
2040	848,749	53,023	621	27,076	381,450	383,791	99%
2041	867,337	54,269	696	4,508	431,906	430,401	100%
2042	886,332	55,544	767	7,947	480,271	475,529	100%

**Arbor Ridge P.U.D. Homeowners Association-Master  
Base Line Funding Model & Fully Funded Comparison Chart**



**The Current Assessment Funding Model** is based on the current annual assessment, parameters, and reserve fund balance. Because it is calculated using the current annual assessment, it will give the accurate projection of how well the association is funded for the next 30 years of planned reserve expenditures.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Distribution by Percentage of Ideally Funded**

Description	Remaining Life	Fully Funded	Beginning Balance	Percent Funded	Assessment Distributed	Interest Distributed	Expenditures	Ending Balance
<b>Asphalt</b>								
Asphalt-Overlay-Moon Valley	18	2,090	1,509	72%	264	5		1,778
Asphalt-Overlay-Path	18	1,984	1,432	72%	251	5		1,688
Asphalt-Overlay-Silver Creek	18	2,255	1,628	72%	285	6		1,918
Asphalt-Overlay-Tatum Ranch	18	612	442	72%	77	2		521
Asphalt-Repairs-Moon Valley	2	499	360	72%	63	1		424
Asphalt-Repairs-Path	3	316	228	72%	40	1		269
Asphalt-Repairs-Silver Creek	2	566	409	72%	72	1		481
Asphalt-Repairs-Tatum Ranch	2	292	211	72%	37	1		249
Asphalt-Sealcoat-Moon Valley	2	1,054	761	72%	133	3		897
Asphalt-Sealcoat-Path	3	667	482	72%	84	2		568
Asphalt-Sealcoat-Silver Creek	2	1,197	864	72%	151	3		1,018
Asphalt-Sealcoat-Tatum Ranch	2	192	139	72%	24			163
Asphalt - Total		\$11,724	\$8,463	72%	\$1,482	\$29		\$9,974
<b>Bridge</b>								
Bridge-Wooden	13	8,400	6,064	72%	1,062	21		7,146
Bridge - Total		\$8,400	\$6,064	72%	\$1,062	\$21		\$7,146
<b>Concrete</b>								
Curb-Gutter-Moon Valley	0	2,104	1,833	87%	266	5	2,104	0
Curb-Gutter-Silver Creek	0	2,600	2,265	87%	329	6	2,600	0
Curb-Gutter-Tatum Ranch	0	1,808	1,575	87%	229	5	1,808	0
Sidewalks-Concrete	0	5,582	4,863	87%	706	14	5,582	0
Sidewalks-Moon Valley	0	631	550	87%	80	2	631	0
Sidewalks-Silver Creek	0	780	679	87%	99	2	780	0
Concrete - Total		\$13,506	\$11,765	87%	\$1,707	\$34	\$13,506	
<b>Fencing</b>								
Fence-Chain Link	18	71,032	51,274	72%	8,978	177		60,429
Fence-Vinyl	13	68,337	49,329	72%	8,637	171		58,136
Fence-Vinyl-Wash	3	2,256	1,628	72%	285	6		1,919
Fencing - Total		\$141,624	\$102,231	72%	\$17,900	\$354		\$120,485
<b>Landscape</b>								
Bark Dust	7	530	383	72%	67	1		451
Plant & Arborvitae	0	6,000	5,227	87%	758	15	6,000	0
Landscape - Total		\$6,530	\$5,609	86%	\$825	\$16	\$6,000	\$451
<b>Lighting</b>								
Lighting-Entry Monument	0	750	653	87%	95	2	750	0
Lighting - Total		\$750	\$653	87%	\$95	\$2	\$750	

**Arbor Ridge P.U.D. Homeowners Association-Master  
Distribution by Percentage of Ideally Funded**

Description	Remaining Life	Fully Funded	Beginning Balance	Percent Funded	Assessment Distributed	Interest Distributed	Expenditures	Ending Balance
<b>Mailboxes</b>								
Mailboxes	18	<u>22,493</u>	<u>16,236</u>	<u>72%</u>	<u>2,843</u>	<u>56</u>		<u>19,135</u>
Mailboxes - Total		<u>\$22,493</u>	<u>\$16,236</u>	<u>72%</u>	<u>\$2,843</u>	<u>\$56</u>		<u>\$19,135</u>
<b>Masonry</b>								
Brick Pilaster-Wall	18	<u>2,700</u>	<u>1,949</u>	<u>72%</u>	<u>341</u>	<u>7</u>		<u>2,297</u>
Masonry - Total		<u>\$2,700</u>	<u>\$1,949</u>	<u>72%</u>	<u>\$341</u>	<u>\$7</u>		<u>\$2,297</u>
<b>Signs</b>								
Monument/Signs	3	<u>3,840</u>	<u>2,772</u>	<u>72%</u>	<u>485</u>	<u>10</u>		<u>3,267</u>
Signs - Total		<u>\$3,840</u>	<u>\$2,772</u>	<u>72%</u>	<u>\$485</u>	<u>\$10</u>		<u>\$3,267</u>
<b>Trees</b>								
Trees	0	<u>2,500</u>	<u>2,178</u>	<u>87%</u>	<u>316</u>	<u>6</u>	<u>2,500</u>	0
Trees - Total		<u>\$2,500</u>	<u>\$2,178</u>	<u>87%</u>	<u>\$316</u>	<u>\$6</u>	<u>\$2,500</u>	
<b>Walls</b>								
Retaining Walls	0	<u>10,000</u>	<u>8,711</u>	<u>87%</u>	<u>1,264</u>	<u>25</u>	<u>10,000</u>	0
Walls - Total		<u>\$10,000</u>	<u>\$8,711</u>	<u>87%</u>	<u>\$1,264</u>	<u>\$25</u>	<u>\$10,000</u>	
Grand - Total		<u><u>\$224,067</u></u>	<u><u>\$166,632</u></u>		<u><u>\$28,320</u></u>	<u><u>\$560</u></u>	<u><u>\$32,756</u></u>	<u><u>\$162,756</u></u>

**Arbor Ridge P.U.D. Homeowners Association-Master  
Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2013</b>	
Curb-Gutter-Moon Valley	2,104
Curb-Gutter-Silver Creek	2,600
Curb-Gutter-Tatum Ranch	1,808
Lighting-Entry Monument	750
Plant & Arborvitae	6,000
Retaining Walls	10,000
Sidewalks-Concrete	5,582
Sidewalks-Moon Valley	631
Sidewalks-Silver Creek	780
Trees	2,500
<b>Total for 2013</b>	<b>\$32,756</b>
<i>No Replacement in 2014</i>	
<b>Replacement Year 2015</b>	
Asphalt-Repairs-Moon Valley	868
Asphalt-Repairs-Silver Creek	985
Asphalt-Repairs-Tatum Ranch	508
Asphalt-Sealcoat-Moon Valley	1,835
Asphalt-Sealcoat-Silver Creek	2,083
Asphalt-Sealcoat-Tatum Ranch	334
<b>Total for 2015</b>	<b>\$6,614</b>
<b>Replacement Year 2016</b>	
Asphalt-Repairs-Path	842
Asphalt-Sealcoat-Path	1,781
Fence-Vinyl-Wash	4,815
Monument/Signs	5,122
<b>Total for 2016</b>	<b>\$12,560</b>
<i>No Replacement in 2017</i>	
<i>No Replacement in 2018</i>	
<i>No Replacement in 2019</i>	
<b>Replacement Year 2020</b>	
Asphalt-Repairs-Moon Valley	967
Asphalt-Repairs-Silver Creek	1,098
Asphalt-Repairs-Tatum Ranch	567



**Arbor Ridge P.U.D. Homeowners Association-Master  
Annual Expenditure Detail**

Description	Expenditures
<b><i>Replacement Year 2020 continued...</i></b>	
Asphalt-Sealcoat-Moon Valley	2,045
Asphalt-Sealcoat-Silver Creek	2,321
Asphalt-Sealcoat-Tatum Ranch	372
Bark Dust	4,934
<b>Total for 2020</b>	<b>\$12,305</b>
<b>Replacement Year 2021</b>	
Asphalt-Repairs-Path	939
Asphalt-Sealcoat-Path	1,984
Lighting-Entry Monument	892
<b>Total for 2021</b>	<b>\$3,815</b>
<b>Replacement Year 2022</b>	
Bark Dust	5,153
Fence-Vinyl-Wash	5,483
<b>Total for 2022</b>	<b>\$10,636</b>
<b>Replacement Year 2023</b>	
Plant & Arborvitae	7,451
Retaining Walls	12,419
Sidewalks-Concrete	6,933
Sidewalks-Moon Valley	784
Sidewalks-Silver Creek	969
Trees	3,105
<b>Total for 2023</b>	<b>\$31,660</b>
<b>Replacement Year 2024</b>	
Bark Dust	5,381
<b>Total for 2024</b>	<b>\$5,381</b>
<b>Replacement Year 2025</b>	
Asphalt-Repairs-Moon Valley	1,078
Asphalt-Repairs-Silver Creek	1,223
Asphalt-Repairs-Tatum Ranch	631
Asphalt-Sealcoat-Moon Valley	2,279
Asphalt-Sealcoat-Silver Creek	2,586
Asphalt-Sealcoat-Tatum Ranch	415

**Arbor Ridge P.U.D. Homeowners Association-Master  
Annual Expenditure Detail**

Description	Expenditures
<b><i>Replacement Year 2025 continued...</i></b>	
Curb-Gutter-Moon Valley	2,729
Curb-Gutter-Silver Creek	3,372
Curb-Gutter-Tatum Ranch	2,345
<b>Total for 2025</b>	<b>\$16,659</b>
<b>Replacement Year 2026</b>	
Asphalt-Repairs-Path	1,046
Asphalt-Sealcoat-Path	2,212
Bark Dust	5,619
Bridge-Wooden	23,192
Fence-Vinyl	188,678
Monument/Signs	6,361
<b>Total for 2026</b>	<b>\$227,109</b>
<i>No Replacement in 2027</i>	
<b>Replacement Year 2028</b>	
Bark Dust	5,868
Fence-Vinyl-Wash	6,244
<b>Total for 2028</b>	<b>\$12,113</b>
<b>Replacement Year 2029</b>	
Lighting-Entry Monument	1,061
<b>Total for 2029</b>	<b>\$1,061</b>
<b>Replacement Year 2030</b>	
Asphalt-Repairs-Moon Valley	1,201
Asphalt-Repairs-Silver Creek	1,363
Asphalt-Repairs-Tatum Ranch	704
Asphalt-Sealcoat-Moon Valley	2,540
Asphalt-Sealcoat-Silver Creek	2,882
Asphalt-Sealcoat-Tatum Ranch	462
Bark Dust	6,128
<b>Total for 2030</b>	<b>\$15,281</b>
<b>Replacement Year 2031</b>	
Asphalt-Overlay-Moon Valley	7,717

**Arbor Ridge P.U.D. Homeowners Association-Master  
Annual Expenditure Detail**

Description	Expenditures
<b><i>Replacement Year 2031 continued...</i></b>	
Asphalt-Overlay-Path	7,327
Asphalt-Overlay-Silver Creek	8,326
Asphalt-Overlay-Tatum Ranch	2,260
Asphalt-Repairs-Path	1,166
Asphalt-Sealcoat-Path	2,465
Brick Pilaster-Wall	9,969
Fence-Chain Link	262,267
Mailboxes	83,049
<b>Total for 2031</b>	<b>\$384,545</b>
<b>Replacement Year 2032</b>	
Bark Dust	6,399
<b>Total for 2032</b>	<b>\$6,399</b>
<b>Replacement Year 2033</b>	
Plant & Arborvitae	9,254
Retaining Walls	15,423
Sidewalks-Concrete	8,610
Sidewalks-Moon Valley	973
Sidewalks-Silver Creek	1,203
Trees	3,856
<b>Total for 2033</b>	<b>\$39,319</b>
<b>Replacement Year 2034</b>	
Bark Dust	6,683
Fence-Vinyl-Wash	7,111
<b>Total for 2034</b>	<b>\$13,794</b>
<b>Replacement Year 2035</b>	
Asphalt-Repairs-Moon Valley	1,339
Asphalt-Repairs-Silver Creek	1,519
Asphalt-Repairs-Tatum Ranch	784
Asphalt-Sealcoat-Moon Valley	2,831
Asphalt-Sealcoat-Silver Creek	3,212
Asphalt-Sealcoat-Tatum Ranch	515
<b>Total for 2035</b>	<b>\$10,200</b>

**Arbor Ridge P.U.D. Homeowners Association-Master  
Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2036</b>	
Asphalt-Repairs-Path	1,299
Asphalt-Sealcoat-Path	2,746
Bark Dust	6,979
Monument/Signs	7,900
<b>Total for 2036</b>	<b>\$18,924</b>
<b>Replacement Year 2037</b>	
Curb-Gutter-Moon Valley	3,539
Curb-Gutter-Silver Creek	4,373
Curb-Gutter-Tatum Ranch	3,041
Lighting-Entry Monument	1,261
<b>Total for 2037</b>	<b>\$12,214</b>
<b>Replacement Year 2038</b>	
Bark Dust	7,288
<b>Total for 2038</b>	<b>\$7,288</b>
<i>No Replacement in 2039</i>	
<b>Replacement Year 2040</b>	
Asphalt-Repairs-Moon Valley	1,492
Asphalt-Repairs-Silver Creek	1,693
Asphalt-Repairs-Tatum Ranch	874
Asphalt-Sealcoat-Moon Valley	3,154
Asphalt-Sealcoat-Silver Creek	3,579
Asphalt-Sealcoat-Tatum Ranch	574
Bark Dust	7,610
Fence-Vinyl-Wash	8,098
<b>Total for 2040</b>	<b>\$27,076</b>
<b>Replacement Year 2041</b>	
Asphalt-Repairs-Path	1,448
Asphalt-Sealcoat-Path	3,061
<b>Total for 2041</b>	<b>\$4,508</b>
<b>Replacement Year 2042</b>	
Bark Dust	7,947
<b>Total for 2042</b>	<b>\$7,947</b>

**Arbor Ridge P.U.D. Homeowners Association-Master  
Annual Expenditure Detail**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Description</b>										
Asphalt-Overlay-Moon Valley										
Asphalt-Overlay-Path										
Asphalt-Overlay-Silver Creek										
Asphalt-Overlay-Tatum Ranch										
Asphalt-Repairs-Moon Valley			868					967		
Asphalt-Repairs-Path				842					939	
Asphalt-Repairs-Silver Creek			985					1,098		
Asphalt-Repairs-Tatum Ranch			508					567		
Asphalt-Sealcoat-Moon Valley			1,835					2,045		
Asphalt-Sealcoat-Path				1,781					1,984	
Asphalt-Sealcoat-Silver Creek			2,083					2,321		
Asphalt-Sealcoat-Tatum Ranch			334					372		
Bark Dust								4,934		5,153
Brick Pilaster-Wall										
Bridge-Wooden										
Curb-Gutter-Moon Valley	2,104									
Curb-Gutter-Silver Creek	2,600									
Curb-Gutter-Tatum Ranch	1,808									
Fence-Chain Link										
Fence-Vinyl										
Fence-Vinyl-Wash				4,815						5,483
Lighting-Entry Monument	750								892	
Mailboxes										
Monument/Signs				5,122						
Plant & Arborvitae	6,000									
Retaining Walls	10,000									
Sidewalks-Concrete	5,582									
Sidewalks-Moon Valley	631									
Sidewalks-Silver Creek	780									
Trees	2,500									
<b>Year Total:</b>	<b>32,756</b>		<b>6,614</b>	<b>12,560</b>				<b>12,305</b>	<b>3,815</b>	<b>10,636</b>

**Arbor Ridge P.U.D. Homeowners Association-Master  
Annual Expenditure Detail**

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>Description</b>										
Asphalt-Overlay-Moon Valley									7,717	
Asphalt-Overlay-Path									7,327	
Asphalt-Overlay-Silver Creek									8,326	
Asphalt-Overlay-Tatum Ranch									2,260	
Asphalt-Repairs-Moon Valley			1,078					1,201		
Asphalt-Repairs-Path				1,046					1,166	
Asphalt-Repairs-Silver Creek			1,223					1,363		
Asphalt-Repairs-Tatum Ranch			631					704		
Asphalt-Sealcoat-Moon Valley			2,279					2,540		
Asphalt-Sealcoat-Path				2,212					2,465	
Asphalt-Sealcoat-Silver Creek			2,586					2,882		
Asphalt-Sealcoat-Tatum Ranch			415					462		
Bark Dust		5,381		5,619		5,868		6,128		6,399
Brick Pilaster-Wall									9,969	
Bridge-Wooden				23,192						
Curb-Gutter-Moon Valley			2,729							
Curb-Gutter-Silver Creek			3,372							
Curb-Gutter-Tatum Ranch			2,345							
Fence-Chain Link									262,267	
Fence-Vinyl				188,678						
Fence-Vinyl-Wash						6,244				
Lighting-Entry Monument							1,061			
Mailboxes									83,049	
Monument/Signs				6,361						
Plant & Arborvitae	7,451									
Retaining Walls	12,419									
Sidewalks-Concrete	6,933									
Sidewalks-Moon Valley	784									
Sidewalks-Silver Creek	969									
Trees	3,105									
<b>Year Total:</b>	<b>31,660</b>	<b>5,381</b>	<b>16,659</b>	<b>227,109</b>		<b>12,113</b>	<b>1,061</b>	<b>15,281</b>	<b>384,545</b>	<b>6,399</b>

**Arbor Ridge P.U.D. Homeowners Association-Master  
Annual Expenditure Detail**

	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
<b>Description</b>										
Asphalt-Overlay-Moon Valley										
Asphalt-Overlay-Path										
Asphalt-Overlay-Silver Creek										
Asphalt-Overlay-Tatum Ranch										
Asphalt-Repairs-Moon Valley			1,339					1,492		
Asphalt-Repairs-Path				1,299					1,448	
Asphalt-Repairs-Silver Creek			1,519					1,693		
Asphalt-Repairs-Tatum Ranch			784					874		
Asphalt-Sealcoat-Moon Valley			2,831					3,154		
Asphalt-Sealcoat-Path				2,746					3,061	
Asphalt-Sealcoat-Silver Creek			3,212					3,579		
Asphalt-Sealcoat-Tatum Ranch			515					574		
Bark Dust		6,683		6,979		7,288		7,610		7,947
Brick Pilaster-Wall										
Bridge-Wooden										
Curb-Gutter-Moon Valley					3,539					
Curb-Gutter-Silver Creek					4,373					
Curb-Gutter-Tatum Ranch					3,041					
Fence-Chain Link										
Fence-Vinyl										
Fence-Vinyl-Wash		7,111						8,098		
Lighting-Entry Monument					1,261					
Mailboxes										
Monument/Signs				7,900						
Plant & Arborvitae	9,254									
Retaining Walls	15,423									
Sidewalks-Concrete	8,610									
Sidewalks-Moon Valley	973									
Sidewalks-Silver Creek	1,203									
Trees	3,856									
<b>Year Total:</b>	<b>39,319</b>	<b>13,794</b>	<b>10,200</b>	<b>18,924</b>	<b>12,214</b>	<b>7,288</b>		<b>27,076</b>	<b>4,508</b>	<b>7,947</b>

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Asphalt-Overlay-Moon Valley**

		4,750 SF	@ \$1.10
Asset ID	1012	Asset Cost	\$5,225.00
Group	Capital	Percent Replacement	100%
Category	Asphalt	Future Cost	\$7,716.80
Placed in Service	January 2001		
Useful Life	30		
Replacement Year	2031		
Remaining Life	18		



**Remarks:**

This item is the overlay of the asphalt street serving 6 lots per the Declaration called Moon Valley Terrace.

There are actually 7 lots using this cul-d-sac.



**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Asphalt-Overlay-Path**

		4,510 SF	@ \$1.10
Asset ID	1001	Asset Cost	\$4,961.00
Group	Capital	Percent Replacement	100%
Category	Asphalt	Future Cost	\$7,326.90
Placed in Service	January 2001		
Useful Life	30		
Replacement Year	2031		
Remaining Life	18		



**Remarks:**

This item is the overlay of the asphalt pathway for the master association.

Funds may be used to repair the asphalt failure if needed (see Asphalt-S/C-Path.).

The board has expressed a concern (2007) regarding the pathways; hence, we suggest a licensed and bonded contractor review the paths and make a recommendation to the board and management.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Asphalt-Overlay-Silver Creek**

		5,125 SF	@ \$1.10
Asset ID	1014	Asset Cost	\$5,637.50
Group	Capital	Percent Replacement	100%
Category	Asphalt	Future Cost	\$8,326.02
Placed in Service	January 2001		
Useful Life	30		
Replacement Year	2031		
Remaining Life	18		



**Remarks:**

This item is the overlay of the asphalt street serving 7 lots called Silver Creek Place.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Asphalt-Overlay-Tatum Ranch**

		1,391 SF	@ \$1.10
Asset ID	1016	Asset Cost	\$1,530.10
Group	Capital	Percent Replacement	100%
Category	Asphalt	Future Cost	\$2,259.80
Placed in Service	January 2001		
Useful Life	30		
Replacement Year	2031		
Remaining Life	18		



**Remarks:**

This item is the overlay of the asphalt street serving 3 lots called Tatum Ranch Place.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Asphalt-Repairs-Moon Valley**

		4,750 SF	@ \$3.50
Asset ID	1027	Asset Cost	\$831.25
Group	Capital	Percent Replacement	5%
Category	Asphalt	Future Cost	\$868.06
Placed in Service	January 2010		
Useful Life	5		
Replacement Year	2015		
Remaining Life	2		



**Remarks:**

This item is the repairs required on the private street.  
There are actually 7 lots using this street.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Asphalt-Repairs-Path**

Asset ID	1031	4,510 SF	@ \$3.50
Group	Capital	Asset Cost	\$789.25
Category	Asphalt	Percent Replacement	5%
Placed in Service	January 2011	Future Cost	\$842.25
Useful Life	5		
Replacement Year	2016		
Remaining Life	3		



**Remarks:**

This item is the repairs required on the private street.

The asphalt has numerous cracks and subsidence at the present time.

It appears the infrastructure base may be failing under the pathway as there appears to be ground movement.

Funds may be used from the Asphaly-O/L-Path item if needed.

The board has expressed a concern (2007) regarding the pathways; hence, we suggest a licensed and bonded contractor review the paths and make a recommendation to the board and management.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Asphalt-Repairs-Silver Creek**

Asset ID	1032	5,390 SF	@ \$3.50
Group	Non-Capital	Asset Cost	\$943.25
Category	Asphalt	Percent Replacement	5%
Placed in Service	January 2010	Future Cost	\$985.02
Useful Life	5		
Replacement Year	2015		
Remaining Life	2		



**Remarks:**

This item is the repairs required on the private street.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Asphalt-Repairs-Tatum Ranch**

Asset ID	1033	1,391 SF	@ \$3.50
Group	Capital	Asset Cost	\$486.85
Category	Asphalt	Percent Replacement	10%
Placed in Service	January 2010	Future Cost	\$508.41
Useful Life	5		
Replacement Year	2015		
Remaining Life	2		



**Remarks:**

This item is the repairs required on the private street.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Asphalt-Sealcoat-Moon Valley**

		4,750 SF	@ \$0.37
Asset ID	1013	Asset Cost	\$1,757.50
Group	Non-Capital	Percent Replacement	100%
Category	Asphalt	Future Cost	\$1,835.32
Placed in Service	January 2010		
Useful Life	5		
Replacement Year	2015		
Remaining Life	2		



**Remarks:**

This item is the seal coating, repairs and re-striping of the asphalt street serving 6 lots called Moon Valley Terrace.

There are actually 7 lots using this street.



**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

<b>Asphalt-Sealcoat-Path</b>		4,510 SF	@ \$0.37
Asset ID	1002	Asset Cost	\$1,668.70
Group	Non-Capital	Percent Replacement	100%
Category	Asphalt	Future Cost	\$1,780.75
Placed in Service	January 2011		
Useful Life	5		
Replacement Year	2016		
Remaining Life	3		



**Remarks:**

This item is the resealing, repair and re-striping of the asphalt path for the master association.

The asphalt has numerous cracks and subsidence at the present time.

It appears the infrastructure base may be failing under the pathway as there appears to be ground movement.

Funds may be used from the Asphaly-O/L-Path item if needed.

The board has expressed a concern (2007) regarding the pathways; hence, we suggest a licensed and bonded contractor review the paths and make a recommendation to the board and management.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Asphalt-Sealcoat-Silver Creek**

		5,390 SF	@ \$0.37
Asset ID	1015	Asset Cost	\$1,994.30
Group	Non-Capital	Percent Replacement	100%
Category	Asphalt	Future Cost	\$2,082.61
Placed in Service	January 2010		
Useful Life	5		
Replacement Year	2015		
Remaining Life	2		



**Remarks:**

This item is the sealcoating, repairs, and restriping of the asphalt street serving 7 lots called Silver Creek Place.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Asphalt-Sealcoat-Tatum Ranch**

		1,391 SF	@ \$0.23
Asset ID	1017	Asset Cost	\$319.93
Group	Non-Capital	Percent Replacement	100%
Category	Asphalt	Future Cost	\$334.10
Placed in Service	January 2010		
Useful Life	5		
Replacement Year	2015		
Remaining Life	2		



**Remarks:**

This item is the sealcoating, repairs and re-striping of the asphalt street serving 3 lots called Tatum Ranch Place.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Bark Dust**

		24,942 SF	@ \$0.17
Asset ID	1006	Asset Cost	\$4,240.14
Group	Non-Capital	Percent Replacement	100%
Category	Landscape	Future Cost	\$4,934.45
Placed in Service	August 2012		
Useful Life	2		
Adjustment	6		
Replacement Year	2020		
Remaining Life	7		



**Remarks:**

This item is the bark dust spread around the landscape beds in the common area

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Brick Pilaster-Wall**

		15 Each	@ \$450.00
Asset ID	1007	Asset Cost	\$6,750.00
Group	Capital	Percent Replacement	100%
Category	Masonry	Future Cost	\$9,969.08
Placed in Service	January 2001		
Useful Life	30		
Replacement Year	2031		
Remaining Life	18		



**Remarks:**

This item is an allowance for any work required on the masonry pilasters and walls at the common area fencing and monument, which may have a life expectancy of more than 30 years. However, we have allowed for any repair, maintenance or replacement within the thirty years.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Bridge-Wooden**

Asset ID	1004	1 Each	@ \$17,500.00
Group	Capital	Asset Cost	\$17,500.00
Category	Bridge	Percent Replacement	100%
Placed in Service	January 2001	Future Cost	\$23,192.48
Useful Life	25		
Replacement Year	2026		
Remaining Life	13		

**Remarks:**

This item is the wooden pedestrian bridge over the wet lands in the common area.

The bridge is mostly glu-lam beams or stringers with Douglas Fir uprights.

Picture not available.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Curb-Gutter-Moon Valley**

		263 LF	@ \$8.00
Asset ID	1019	Asset Cost	\$2,104.00
Group	Capital	Percent Replacement	100%
Category	Concrete	Future Cost	\$2,104.00
Placed in Service	January 2001		
Useful Life	12		
Replacement Year	2013		
Remaining Life	0		



**Remarks:**

This item is the repair, maintenance or replacement of the concrete vertical curb and gutter on the private street.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Curb-Gutter-Silver Creek**

		325 LF	@ \$8.00
Asset ID	1020	Asset Cost	\$2,600.00
Group	Capital	Percent Replacement	100%
Category	Concrete	Future Cost	\$2,600.00
Placed in Service	January 2001		
Useful Life	12		
Replacement Year	2013		
Remaining Life	0		



**Remarks:**

This item is the repair, maintenance or replacement of the concrete vertical curb and gutter on the private street.



**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Curb-Gutter-Tatum Ranch**

		226 LF	@ \$8.00
Asset ID	1018	Asset Cost	\$1,808.00
Group	Capital	Percent Replacement	100%
Category	Concrete	Future Cost	\$1,808.00
Placed in Service	January 2001		
Useful Life	12		
Replacement Year	2013		
Remaining Life	0		



**Remarks:**

This item is the repair, maintenance or replacement of the concrete vertical curb and gutters on the private street.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Fence-Chain Link**

Asset ID	1011	11,225 LF	@ \$15.82
Group	Capital	Asset Cost	\$177,579.50
Category	Fencing	Percent Replacement	100%
Placed in Service	January 2001	Future Cost	\$262,267.22
Useful Life	30		
Replacement Year	2031		
Remaining Life	18		



**Remarks:**

This item is the black vinyl-coated chain link fencing around the wet lands and street areas in the common area (NW Laidlaw Road and NW West Union Road).

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Fence-Vinyl**

		9,600 LF	@ \$14.83
Asset ID	1010	Asset Cost	\$142,368.00
Group	Capital	Percent Replacement	100%
Category	Fencing	Future Cost	\$188,678.13
Placed in Service	January 2001		
Useful Life	25		
Replacement Year	2026		
Remaining Life	13		



**Remarks:**

This item is the vinyl 3-rail fencing around the wet lands in the common area, NW Laidlaw Road , NW West Union Road, and some side streets.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Fence-Vinyl-Wash**

Asset ID	1025	9,600 LF	@ \$0.47
Group	Capital	Asset Cost	\$4,512.00
Category	Fencing	Percent Replacement	100%
Placed in Service	January 2010	Future Cost	\$4,814.98
Useful Life	6		
Replacement Year	2016		
Remaining Life	3		



**Remarks:**

This item is the washing of the vinyl 3-rail fencing around the wet lands in the common area, NW Laidlaw Road , NW West Union Road, and some side streets.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Lighting-Entry Monument**

		6 Each	@ \$125.00
Asset ID	1009	Asset Cost	\$750.00
Group	Non-Capital	Percent Replacement	100%
Category	Lighting	Future Cost	\$750.00
Placed in Service	January 2001		
Useful Life	8		
Adjustment	4		
Replacement Year	2013		
Remaining Life	0		



**Remarks:**

This item is the area lighting at the monuments.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Mailboxes**

Asset ID	1021	36 Each	@ \$1,562.00
Group	Capital	Asset Cost	\$56,232.00
Category	Mailboxes	Percent Replacement	100%
Placed in Service	January 2001	Future Cost	\$83,049.06
Useful Life	30		
Replacement Year	2031		
Remaining Life	18		



**Remarks:**

This item is the gang mail boxes located throughout the subdivision.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

<b>Monument/Signs</b>			
Asset ID	1008	2 Each	@ \$2,400.00
Group	Capital	Asset Cost	\$4,800.00
Category	Signs	Percent Replacement	100%
Placed in Service	January 2001	Future Cost	\$5,122.32
Useful Life	10		
Adjustment	5		
Replacement Year	2016		
Remaining Life	3		



**Remarks:**

This item is the entry aluminum lettered monument signs at the corner of Laidlaw and West Union.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Plant & Arborvitae**

Asset ID	1005	1 Each	@ \$6,000.00
Group	Non-Capital	Asset Cost	\$6,000.00
Category	Landscape	Percent Replacement	100%
Placed in Service	January 2001	Future Cost	\$6,000.00
Useful Life	10		
Adjustment	2		
Replacement Year	2013		
Remaining Life	0		



**Remarks:**

This item is the replacement of any landscape plants, shrubs, trees.

Funds may be used at any time work needs to be done during the ten years.



**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Retaining Walls**

Asset ID	1003	1 Total	@ \$10,000.00
Group	Capital	Asset Cost	\$10,000.00
Category	Walls	Percent Replacement	100%
Placed in Service	January 2001	Future Cost	\$10,000.00
Useful Life	10		
Adjustment	2		
Replacement Year	2013		
Remaining Life	0		



**Remarks:**

While the retaining wall consists of concrete key-lock blocks and large ballast rocks that may have a life expectancy of more than 30 years, we have allowed for a portion of the replacement work that may need to be done every 10 years or during the ten years.

The board has expressed a concern (2007) regarding the retaining walls; hence, we suggest a licensed and bonded contractor review the walls and make a recommendation to the board and mangement.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Sidewalks-Concrete**

		2,326 SF	@ \$12.00
Asset ID	1024	Asset Cost	\$5,582.40
Group	Capital	Percent Replacement	20%
Category	Concrete	Future Cost	\$5,582.40
Placed in Service	January 2001		
Useful Life	10		
Adjustment	2		
Replacement Year	2013		
Remaining Life	0		



**Remarks:**

This item is 20% of the total concrete sidewalks in the common area, which may need repairs, maintenance or replacement within a 10 year period.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Sidewalks-Moon Valley**

Asset ID	1022	263 SF	@ \$12.00
Group	Capital	Asset Cost	\$631.20
Category	Concrete	Percent Replacement	20%
Placed in Service	January 2001	Future Cost	\$631.20
Useful Life	10		
Adjustment	2		
Replacement Year	2013		
Remaining Life	0		



**Remarks:**

This item is the repair, maintenance or replacement of 20% of the concrete sidewalk by the private street Moon Terrace, which may need work within 10 years.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Sidewalks-Silver Creek**

Asset ID	1023	325 SF	@ \$12.00
Group	Capital	Asset Cost	\$780.00
Category	Concrete	Percent Replacement	20%
Placed in Service	January 2001	Future Cost	\$780.00
Useful Life	10		
Adjustment	2		
Replacement Year	2013		
Remaining Life	0		



**Remarks:**

This item is the repair, maintenance or replacement of 20% of the concrete sidewalks on the private street Silver Creek which may need work within 10 years.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Detail Report by Category**

**Trees**

Asset ID	1026	1 Total	@ \$2,500.00
Group	Non-Capital	Asset Cost	\$2,500.00
Category	Trees	Percent Replacement	100%
Placed in Service	January 2001	Future Cost	\$2,500.00
Useful Life	10		
Adjustment	2		
Replacement Year	2013		
Remaining Life	0		



**Remarks:**

This item is an allowance for any tree work in the common area or in the parking strips.

## **Important Information About Your Reserve Study**

### **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 Studies by Reserve Funding©. 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 Studies by Reserve Funding© 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 monies. 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 *some operational expenses* include:

Utilities:	Administrative:	Services:	Repair Expenses:
Electrical/Lights	Supplies	Landscape	Operating Contingency
Water/Irrigation	Bank Service Charges	Reserve Study Costs	
	Insurance		

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 some reserve expenses include:

Asphalt Seal Coating	Painting-Mail Box Structures
Asphalt Overlays	Lighting Replacement
Asphalt Repair or Replacement	Underground Utilities
Masonry Repair	Concrete Curbs, Sidewalks, Aprons, and Parking Pads
Fencing Repair and Replacement	Insurance Deductible

## 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 masonry walls and concrete. 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 Studies by Reserve Funding© Threshold and the Reserve Studies by Reserve Funding© 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 Studies by Reserve Funding© 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 Studies by Reserve Funding© **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 Studies by Reserve Funding © **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 Studies by Reserve Funding © **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 Studies by Reserve Funding © **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.

## **Distribution of Reserves**

### **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 Studies by Reserve Funding® 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 and only amounts set aside for taxes should be removed .

The second alternative is to allocate the "Total Monthly Allocation" to reserves (this is the member assessment plus the anticipated interest earned for the fiscal year. This method assumes that all interest earned will be assigned directly as operating income. This allocation takes into consideration the anticipated interest earned on accumulated reserves regardless of whether or not it is actually earned. When taxes are paid, the amount due will be taken directly from the association's operating accounts as the reserve accounts are allocating only those moneys net of taxes.

## Users' Guide to your Reserve Analysis Study

Part II of your Reserve Funding© 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 Studies by Reserve Funding© 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 31<sup>st</sup>, 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" and averaged over 5 years 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 Studies by Reserve Funding © 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 Studies by Reserve Funding© 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 Studies by Reserve Funding© 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 Studies by Reserve Funding© 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 Studies by Reserve Funding© 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 Studies by Reserve Funding© 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 Studies by Reserve Funding© 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 Studies by Reserve Funding© Owners' Summary meets the disclosure requirements of the Oregon Civil Codes §94.595 and §100.175.
- Your Reserve Studies by Reserve Funding© 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.

**ASSOCIATION RESOLUTION FOR REVENUE RULING 70-604 ELECTION  
EXCESS INCOME APPLIED TO THE FOLLOWING YEAR'S ASSESSMENTS**

**RESOLUTION MUST BE VOTED ON BY THE MEMBERSHIP  
AT THE ANNUAL MEETING**

**ANNUAL RESOLUTION OF THE (Association)**\_\_\_\_\_

**RE: EXCESS INCOME APPLIED TO THE FOLLOWING YEAR'S  
ASSESSMENTS REVENUE RULING 70-604**

**WHEREAS, The (Association)**\_\_\_\_\_ **is a (State)**  
\_\_\_\_\_ **corporation duly organized and existing under the laws of the State of**  
**(State)** \_\_\_\_\_;

**and**

**WHEREAS, The members desire that the corporation shall act in full accordance with the  
rulings and regulations of the Internal Revenue Service;**

**and**

**NOW, THEREFORE, the members hereby adopt the following resolution by and on behalf  
of the (Association)** \_\_\_\_\_:

**RESOLVED, that any excess of membership income over membership expenses for the year  
ending \_\_\_\_\_20\_\_ shall be applied against the subsequent tax year  
member assessment as provided by IRS Revenue Ruling 70-604.**

**This resolution was voted on and made a part of the minutes of the annual meeting of  
(Association)** \_\_\_\_\_.

**BY:** \_\_\_\_\_  
**President**

**ATTESTED:** \_\_\_\_\_  
**Secretary**

**Form compliant with IRS Ruling 70-604**

# **ARBOR RIDGE P.U.D. HOMEOWNER ASSOCIATION-MASTER**

## **MAINTAINANCE PLAN**

The current maintenance plan prepared by Reserve Studies by Reserve Funding is attached as an addendum to this reserve study by separate document. The reserve study and the maintenance plan should be filed together as one document.

Each year, during the update process whether Level II or Level III, the maintenance plan should be updated and revised as required.

The maintenance plan should be used as a guide for the timing of maintenance procedures and the forms attached to the maintenance plan used in order to have an on-going record of maintenance done.

This maintenance plan may be the original maintenance plan done (Level 1) or an update of a previous maintenance plan.

If component materials have been changed or substituted the Client should notify Reserve Funding by Reserve Studies so that changes can be taken into consideration during the preparation of the reserve study.

**Arbor Ridge P.U.D. Homeowners Association-Master  
Member Summary Report**

Description	Date In Service	Replacement Year	Current Cost	Useful Life	Adjustment	Remaining	Future Cost	Quantity	Unit Cost
Asphalt-Overlay-Moon Valley	2001	2031	5,225	30	0	18	7,717	4750 @	1.10
Asphalt-Overlay-Path	2001	2031	4,961	30	0	18	7,327	4510 @	1.10
Asphalt-Overlay-Silver Creek	2001	2031	5,637	30	0	18	8,326	5125 @	1.10
Asphalt-Overlay-Tatum Ranch	2001	2031	1,530	30	0	18	2,260	1391 @	1.10
Asphalt-Repairs-Moon Valley	2010	2015	831	5	0	2	868	4750 @	3.50
Asphalt-Repairs-Path	2011	2016	789	5	0	3	842	4510 @	3.50
Asphalt-Repairs-Silver Creek	2010	2015	943	5	0	2	985	5390 @	3.50
Asphalt-Repairs-Tatum Ranch	2010	2015	487	5	0	2	508	1391 @	3.50
Asphalt-Sealcoat-Moon Valley	2010	2015	1,757	5	0	2	1,835	4750 @	0.37
Asphalt-Sealcoat-Path	2011	2016	1,669	5	0	3	1,781	4510 @	0.37
Asphalt-Sealcoat-Silver Creek	2010	2015	1,994	5	0	2	2,083	5390 @	0.37
Asphalt-Sealcoat-Tatum Ranch	2010	2015	320	5	0	2	334	1391 @	0.23
Bark Dust	2012	2020	4,240	2	6	7	4,934	24942 @	0.17
Brick Pilaster-Wall	2001	2031	6,750	30	0	18	9,969	15 @	450.00
Bridge-Wooden	2001	2026	17,500	25	0	13	23,192	1 @	17,500.00
Curb-Gutter-Moon Valley	2001	2013	2,104	12	0	0	2,104	263 @	8.00
Curb-Gutter-Silver Creek	2001	2013	2,600	12	0	0	2,600	325 @	8.00
Curb-Gutter-Tatum Ranch	2001	2013	1,808	12	0	0	1,808	226 @	8.00
Fence-Chain Link	2001	2031	177,579	30	0	18	262,267	11225 @	15.82
Fence-Vinyl	2001	2026	142,368	25	0	13	188,678	9600 @	14.83
Fence-Vinyl-Wash	2010	2016	4,512	6	0	3	4,815	9600 @	0.47
Lighting-Entry Monument	2001	2013	750	8	4	0	750	6 @	125.00
Mailboxes	2001	2031	56,232	30	0	18	83,049	36 @	1,562.00
Monument/Signs	2001	2016	4,800	10	5	3	5,122	2 @	2,400.00
Plant & Arborvitae	2001	2013	6,000	10	2	0	6,000	1 @	6,000.00
Retaining Walls	2001	2013	10,000	10	2	0	10,000	1 @	10,000.00
Sidewalks-Concrete	2001	2013	5,582	10	2	0	5,582	2326 @	12.00
Sidewalks-Moon Valley	2001	2013	631	10	2	0	631	263 @	12.00
Sidewalks-Silver Creek	2001	2013	780	10	2	0	780	325 @	12.00
Trees	2001	2013	2,500	10	2	0	2,500	1 @	2,500.00