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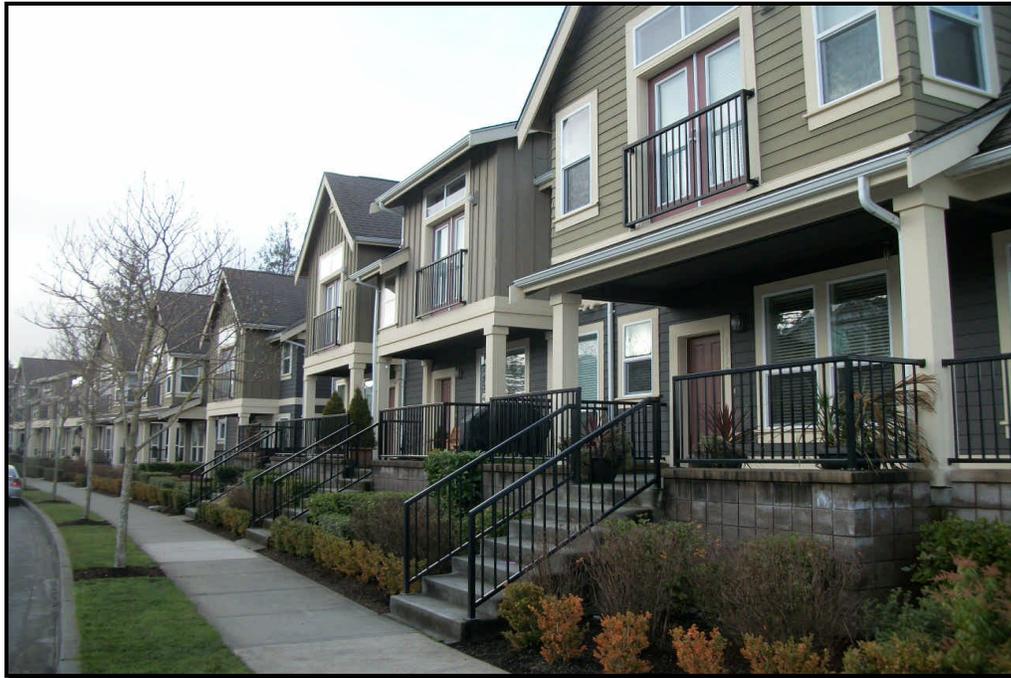
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## Update “With-Site-Visit” Reserve Study



### Villaggio Neighborhood Issaquah, WA



**Report #: 21948-2**  
**For Period Beginning: July 1, 2013**  
**Expires: June 30, 2014**

**Date Prepared: February 19, 2013**



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## **Hello, and welcome to your Reserve Study!**

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

**W**ith respect to Reserves, this Report will tell you “where you are”, and “where to go from here”.

**In this Report, you will find...**

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

### **More Questions?**

Visit our website at [www.ReserveStudy.com](http://www.ReserveStudy.com) or call us at:

253.661.5437



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# 3- Minute Executive Summary

**Association:** Villaggio Neighborhood **Assoc. #: 21948-2**  
**Location:** Issaquah, WA  
**# of Units:** 50  
**Report Period:** July 1, 2013 through June 30, 2014



**Results as-of 7/1/2013:**

<b>Projected Starting Reserve Balance:</b> .....	<b>\$218,712</b>
<b>Fully Funded Reserve Balance:</b> .....	<b>\$408,251</b>
<b>Average Reserve Deficit (Surplus) Per Unit:</b> .....	<b>\$3,791</b>
<b>Percent Funded:</b> .....	<b>53.6%</b>
<b>100% Full Funding 2014 Monthly Reserve Contribution:</b> .....	<b>\$4,860</b>
<b>70% Threshold Monthly Reserve Contribution:</b> .....	<b>\$4,320</b>
<b>Baseline Contribution (min to maintain reserves above \$0)</b> .....	<b>\$4,180</b>
<b>Recommended 2014 Special Assessment for Reserves:</b> .....	<b>\$0</b>
<b>Most Recent Reserve Contribution Rate:</b> .....	<b>\$4,100</b>

**Economic Assumptions:**

**Net Annual “After Tax” Interest Earnings Accruing to Reserves..... 0.15%**  
**Annual Inflation Rate ..... 3.00%**

- This is an “Update With-Site-Visit” Reserve Study, based on a prior Report prepared by Association Reserves for your 2012-2013 Fiscal Year. The information in this Reserve Study is based on our site inspection on February 1, 2013 and meets or exceeds all requirements of the RCW. This Reserve Study was prepared by a credentialed Reserve Specialist (RS).
- Your Reserve Fund is 53.6% Funded. Comparatively, the 70-130% level is where associations statistically enjoy fiscal stability with low risk of special assessment and/or deferred maintenance.
- Based on this starting point and your anticipated future expenses, our recommendation is to increase your Monthly Reserve Contributions to within the 70% to 100% Full Funding range as noted above (Tables and charts herein reflect Full Funding as our recommended contribution). Full and 70% contribution rates are designed to achieve the stated funding objective by the end of our 30-year report scope. See photo pages for detailed component information and the basis of our assumptions.

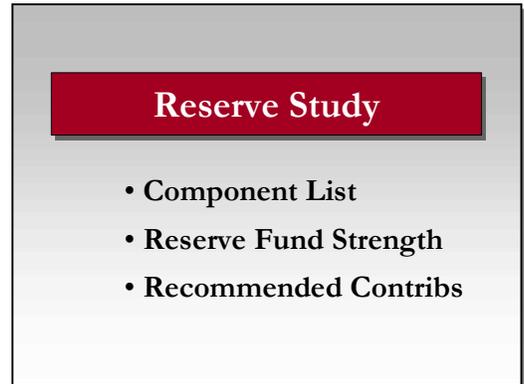
# Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost	Future Average Cost
<b>Site/Grounds</b>				
100 Conc. Driveways/Sdwlks - Repr/Replc	5	1	\$4,500	\$4,635
120 Asphalt - Resurface/Overlay	30	22	\$8,000	\$15,329
121 Asphalt - Seal/Repair	5	3	\$1,850	\$2,022
140 Wood Trellis/Arbor - Repair/Replace	20	11	\$2,500	\$3,461
165 Path/Site Lights - Replace	20	11	\$1,750	\$2,422
175 Drain Lines - Clean/Inspect	5	2	\$6,900	\$7,320
180 Irrigation System - Maintain/Repair	5	4	\$4,000	\$4,502
<b>Buildings</b>				
500 Steep Slope Roofs - Repair/Replace	25	8	\$274,000	\$347,095
505 Roofs - Inspect/Clean/Repair	3	0	\$3,800	\$4,152
510 Gutters/Downspouts - Repair/Replace	25	16	\$43,550	\$69,885
520 Ext Surfaces/Siding - Repr/Replace	8	0	\$5,000	\$6,334
525 Full Exterior - Paint/Caulk	8	0	\$120,000	\$152,012
527 Partial Exterior - Paint/Caulk	8	4	\$37,500	\$42,207
529 Caulk, etc. - Inspect/Repair	4	2	\$4,500	\$4,774
545 Wood Decks/Porches - Repair/Replace	20	11	\$42,000	\$58,138
550 Wood Deck Rail - Repair/Replace	20	11	\$11,000	\$15,227
552 Metal/Alum. Rails - Repair/Replace	30	21	\$46,200	\$85,946
560 Bldg. Exterior Lights - Replace	24	16	\$16,250	\$26,076
<b>18 Total Funded Components</b>				

Note: Cross reference component numbers with photographic inventory appendix. Highlighting denotes projects anticipated to occur in the initial year. A reserve-funding threshold of 1% of the total annual operating expenses is typical; expenses below this level best factored within the operating budget.

## Introduction

A Reserve Study is the art and science of anticipating, and preparing for, an association's major common area repair and replacement expenses. Partially art, because in this field we are making projections about the future. Partially science, because our work is a process of research and analysis along well defined methodologies.

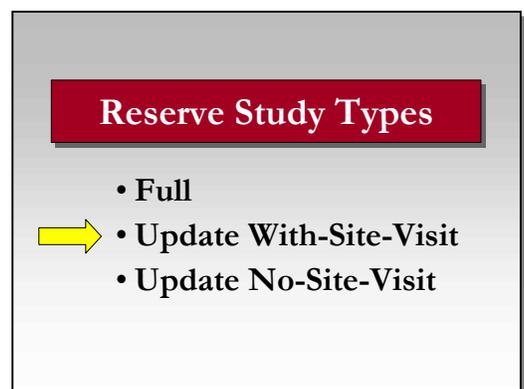
In this Report you will find the Reserve Component List (what you are reserving for). It contains our estimates for Useful Life, Remaining Useful Life, and the current repair or replacement cost for each major component the association is obligated to maintain. Based on that List and your starting balance we computed the association's Reserve Fund Strength (measured as "Percent Funded"), and created a recommended multi-year Reserve Funding Plan to offset future Reserve expenses.



As the physical assets age and deteriorate, it is important to accumulate financial assets to keep the two "in balance". A stable Reserve Funding Plan that offsets the irregular Reserve expenses will ensure that each owner pays their own "fair share" of ongoing common area deterioration.

## Methodology

First we establish what the projected expenses are, then we determine the association's financial status and create a Funding Plan. For this "Update With-Site-Visit" Reserve Study, we started with a review of your prior Reserve Study, recent Reserve expenditures, an evaluation of how expenditures are handled (ongoing maintenance vs Reserves), and research into any well-established association precedents. We performed an on-site inspection to evaluate your common areas, updating and adjusting your Reserve Component List as appropriate.



### *Which Physical Assets are Covered by Reserves?*

There is a national-standard four-part test to determine which expenses should be funded through Reserves. First, it must be a common area maintenance responsibility. Second, the component must have a limited life. Third, the limited life must be predictable (or it by definition is a “surprise” which cannot be accurately anticipated). Fourth, the component must be above a minimum threshold cost. This limits Reserve

#### **Reserve Components**

- Common Area
- Limited Useful Life
- Predictable Life Limit
- Cost must be Significant

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

### *How are Useful Life and Remaining Useful Life established?*

- 1) Visual Inspection (observed wear and age since last report)
- 2) Association Reserves database of experience
- 3) Client Component History
- 4) Vendor Evaluation and Recommendation

### *How are Cost Estimates Established?*

Financial projections are based on the average of our Best Case and Worst Case estimates, which are established in this order...

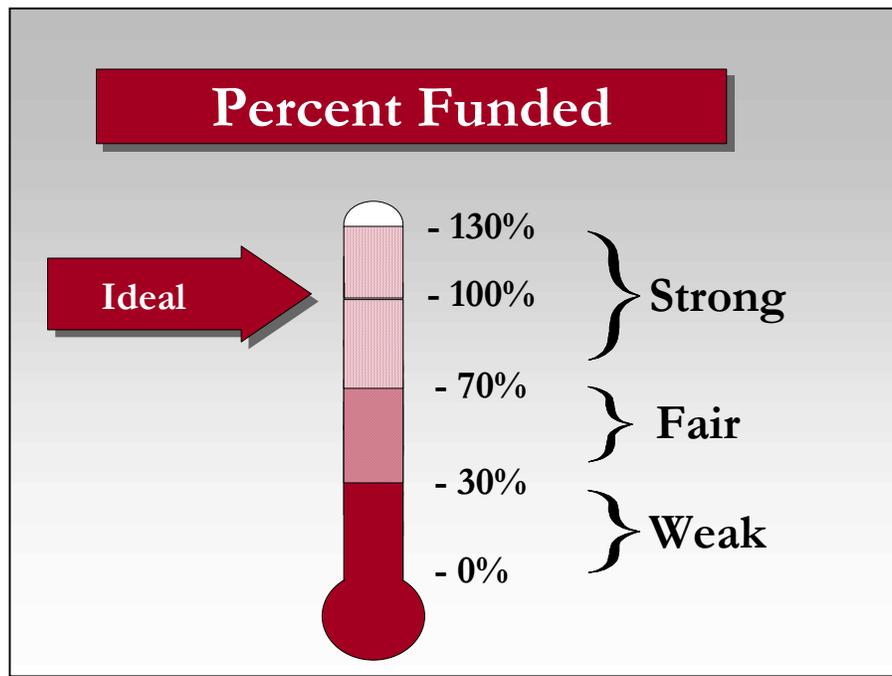
- 1) Client Cost History
- 2) Comparison to Association Reserves database of work done at similar associations
- 3) Vendor Recommendations
- 4) Reliable National Industry cost estimating guidebooks

### *How much Reserves are enough?*

Your Reserve cash Balance can measure reserves, but the true measure is whether the funds are adequate. Adequacy is measured in a two-step process:

- 1) Calculate the association's Fully Funded Balance (FFB).
- 2) Compare to the Reserve Fund Balance, and express as a percentage.

The FFB grows as assets age and the Reserve needs of the association increase, but shrinks when projects are accomplished and the Reserve needs of the association decrease. The Fully Funded Balance changes each year, and is a moving but predictable target.



Special assessments and deferred maintenance are common when the Percent Funded is below 30%. While the 100% point is Ideal, a Reserve Fund in the 70% -130% range is considered “strong” because in this range cash flow problems are rare.

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

*How much should we contribute?*

There are four Funding Principles that we balance in developing your Reserve Funding Plan. Our first objective is to design a plan that provides you with sufficient cash to perform your Reserve projects on time. A stable contribution rate is desirable because it is a hallmark of a proactive plan.

Reserve contributions that are evenly distributed over the owners, over the years, enable each owner to pay their “fair share” of the association’s Reserve expenses (this means we recommend special assessments only when all other options have been exhausted). And finally, we develop a plan that is fiscally responsible and “safe” for Boardmembers to recommend to their association.

**Funding Principles**

- Sufficient Cash
- Stable Contribution Rate
- Evenly Distributed
- Fiscally Responsible

*What is our Recommended Funding Goal?*

Maintaining the Reserve Fund at a level equal to the physical deterioration that has occurred is called “Full Funding” the Reserves (100% Funded). As each asset ages and becomes “used up”, the Reserve Fund grows proportionally. **This is simple, responsible, and our recommendation.** As stated previously, associations in the 100% range rarely experience special assessments or deferred maintenance.

Allowing the Reserves to fall close to zero, but not below zero, is called Baseline Funding. In these associations, deterioration occurs without matching Reserve contributions. With a low Percent Funded, special assessments and deferred maintenance are common.

Threshold Funding is the title of all other objectives randomly selected between Baseline Funding and Full Funding.

**Funding Goals**

- Full Funding
- Threshold Funding
- Baseline Funding

## **Site Inspection Notes**

During our site visit on February 1, 2013, we visually inspected all the common areas of responsibility and were able to see most all areas. We also met with Association Management. We discussed past projects, current concerns and future plans. We were also informed which items are typically being handled from the Operational maintenance budget, not Reserves.

### Projected Expenses

The figure below shows the array of the projected future expenses at your association. This figure clearly shows the near term and future expenses that your association will face.

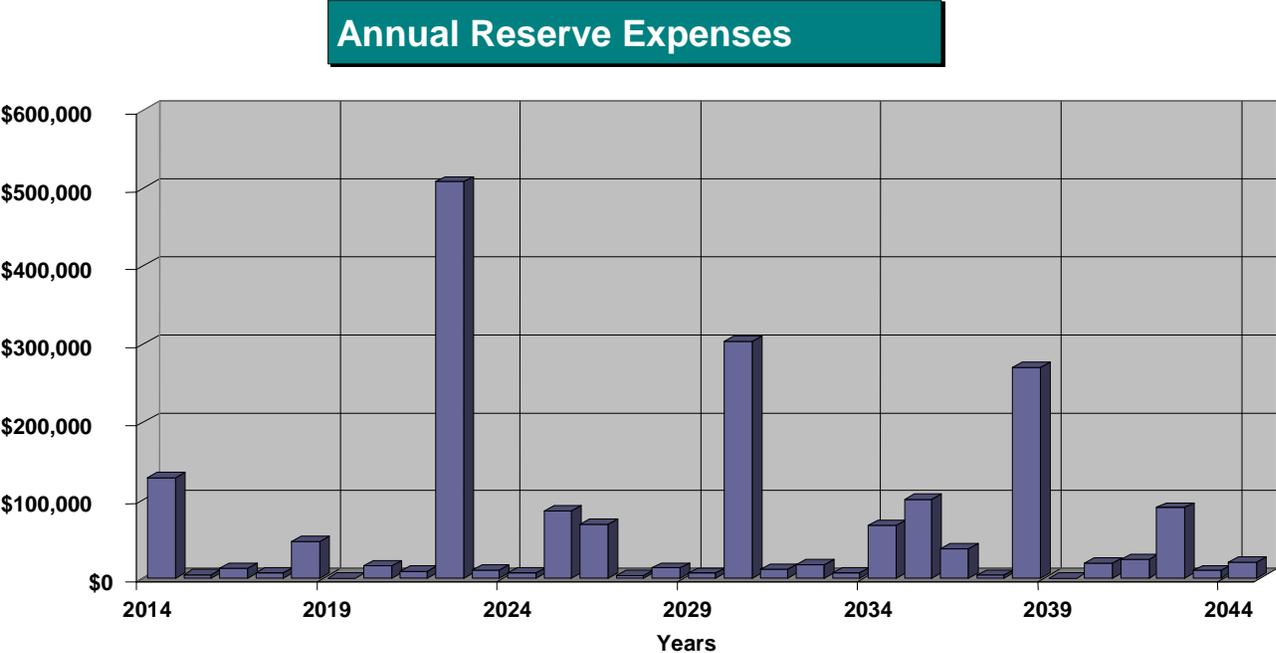


Figure 1

A summary of this information is shown in Table 4, while details of the projects that make up this information are shown in Table 5. Since this is a projection about future events that may or may not take place as anticipated, we feel more certain about “near-term” projects than those many years away. While this Reserve Study is a one-year document, it is based on 30 years worth of looking forward into the future.

### Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$218,712 as-of the start of your Fiscal Year on July 1, 2013. This is based on information provided to us by Association Management. As of July 1, 2013, your Fully Funded Balance is computed to be \$408,251 (see Table 3). This figure represents the deteriorated value of your common area components. Comparing your Reserve Balance to your Fully Funded Balance indicates your Reserves are 54% Funded;this represents a fair status.

### Recommended Funding Plan

Based on your current Percent Funded and your projected cash flow requirements, we are recommending Reserve contributions of \$4,860/month this Fiscal Year. This represents the first year of the 30-year Funding Plan shown below. This same information is shown numerically in both Table 4 and Table 5.

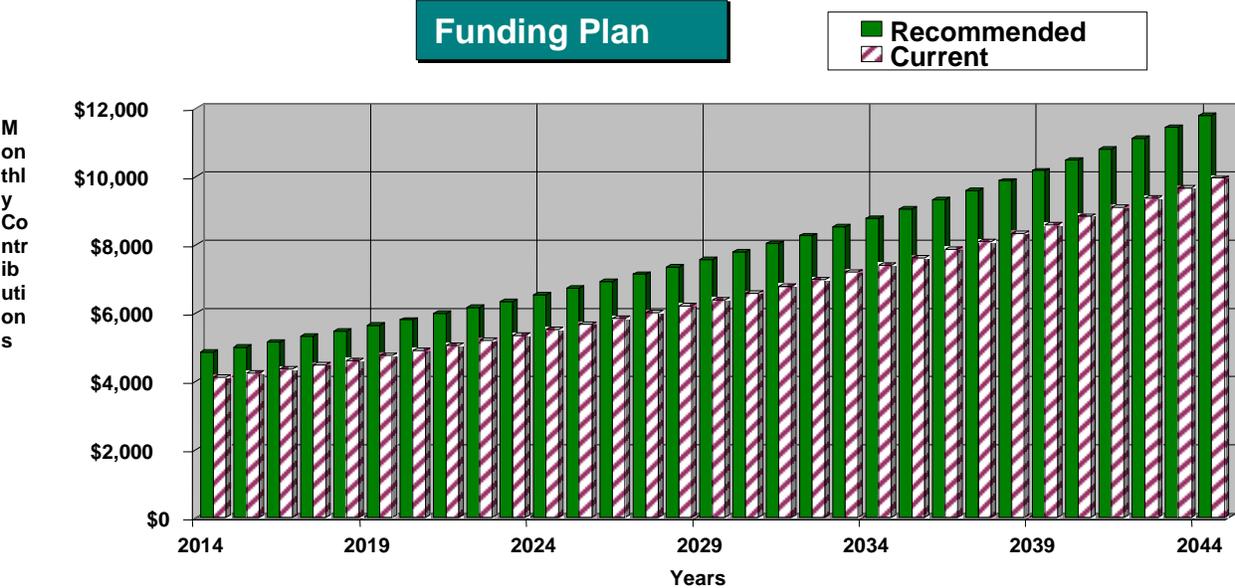


Figure 2

The following chart shows your Reserve balance under our recommended Funding Plan and your current Funding Plan, and your always-changing Fully Funded Balance target.

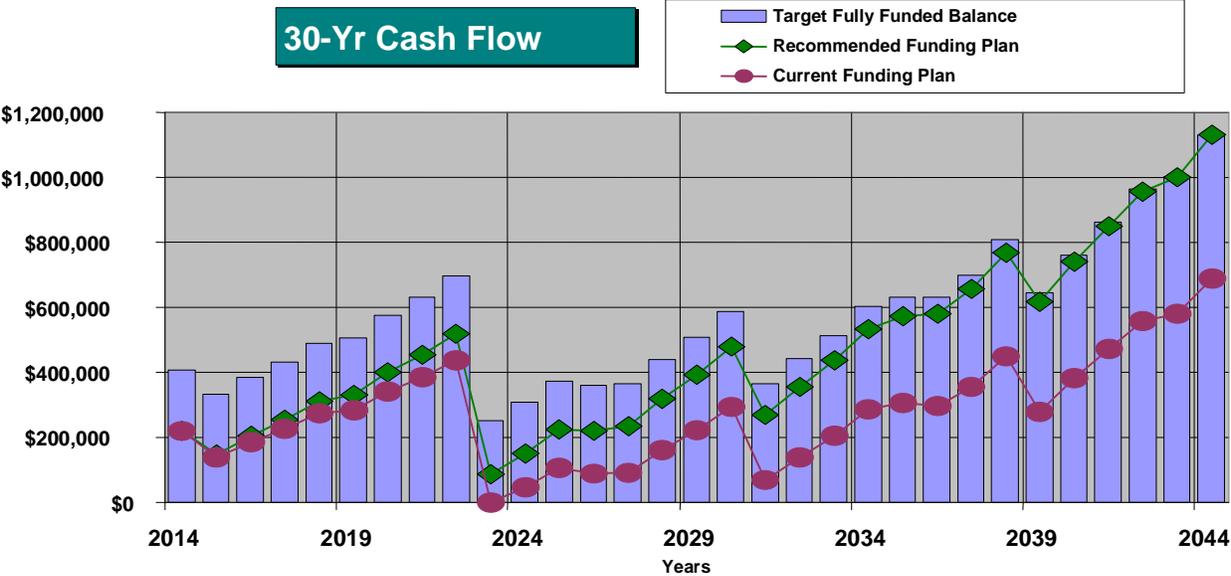


Figure 3

In this figure it is easy to see how your Reserve Fund gradually draws closer to the Fully Funded (100%) level.

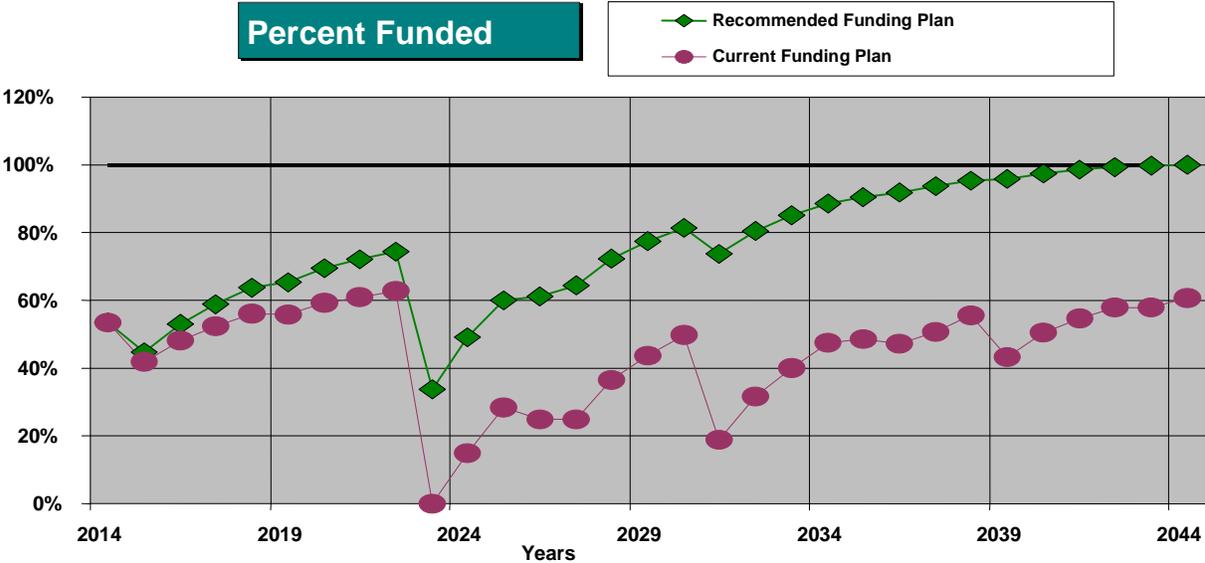


Figure 4

## Table Descriptions

The tabular information in this Report is broken down into five tables.

Table 1 summarizes your funded Reserve Components, and is part of the Executive Report summary that appeared earlier in this Report.

Table 2 provides the main component description, life, and cost factors for all components determined to be appropriate for Reserve designation. This table represents the core information from which all other tables are derived.

Table 3 is presented primarily as an accounting summary page. The results of the individual line item Fully Funded Balance computations are shown. These individual quantities are summed to arrive at the Fully Funded Balance for the association as of the start date of the Report. The figures in the Current Fund Balance column and the Monthly Reserve Contribution column show our distribution throughout the line items. If the association is underfunded, Reserve Funds are distributed first to components with a short Remaining Useful Life. If the association's Reserve Balance is above 100% Funded, funds are distributed evenly for all components. Contribution rates for each component are a proportionate distribution of the total contribution on the basis of the component's significance to the association (current cost divided by useful life). This presentation is not meant to cause clients to redistribute association funds, it simply presents one way to evenly distribute the total among all the different line items.

Table 4: This table provides a one-page 30-year summary of the cash flowing into and out of the association, compared to the Fully Funded Balance for each year.

Table 5: This table shows the cash flow detail for the next 30 years. This table makes it possible to see what components are projected to require repair or replacement each year, and the size of those individual expenses.

**Table 2: Reserve Component List Detail**
**21948-2**

# Component	Quantity	Useful Life	Rem. Useful Life	Best Cost	Current Worst Cost
<b>Site/Grounds</b>					
100 Conc. Driveways/Sdwlks - Repr/Replc	Extensive SF	5	1	\$3,500	\$5,500
120 Asphalt - Resurface/Overlay	Approx. 4,000 square feet	30	22	\$7,200	\$8,800
121 Asphalt - Seal/Repair	Approx 4,000 square ft	5	3	\$1,700	\$2,000
140 Wood Trellis/Arbor - Repair/Replace	(1) moderate size	20	11	\$2,250	\$2,750
165 Path/Site Lights - Replace	(10) fixtures	20	11	\$1,500	\$2,000
175 Drain Lines - Clean/Inspect	Storm drains, etc.	5	2	\$6,500	\$7,300
180 Irrigation System - Maintain/Repair	Extensive system	5	4	\$3,000	\$5,000
<b>Buildings</b>					
500 Steep Slope Roofs - Repair/Replace	~75,600 SF, shingles	25	8	\$246,000	\$302,000
505 Roofs - Inspect/Clean/Repair	~75,600 SF, shingles	3	0	\$3,500	\$4,100
510 Gutters/Downspouts - Repair/Replace	Approx 7,250 linear feet	25	16	\$36,300	\$50,800
520 Ext Surfaces/Siding - Repr/Replace	Extensive GSF	8	0	\$4,000	\$6,000
525 Full Exterior - Paint/Caulk	Extensive GSF	8	0	\$100,000	\$140,000
527 Partial Exterior - Paint/Caulk	Extensive GSF	8	4	\$30,000	\$45,000
529 Caulk, etc. - Inspect/Repair	Extensive GSF	4	2	\$3,500	\$5,500
545 Wood Decks/Porches - Repair/Replace	(12) decks, ~1,200 SF	20	11	\$36,000	\$48,000
550 Wood Deck Rail - Repair/Replace	Approx 220 linear feet	20	11	\$9,900	\$12,100
552 Metal/Alum. Rails - Repair/Replace	Approx 770 linear feet	30	21	\$38,500	\$53,900
560 Bldg. Exterior Lights - Replace	Approx (130) fixtures	24	16	\$13,000	\$19,500
18 Total Funded Components					

**Table 3: Contribution and Fund Breakdown****21948-2**

# Component	Useful Life	Rem. Useful Life	Current (Avg) Cost	Fully Funded Balance	Current Fund Balance	Reserve Contributions
<b>Site/Grounds</b>						
100 Conc. Driveways/Sdwlks - Repr/Replc	5	1	\$4,500	\$3,600	\$3,600.00	\$98.95
120 Asphalt - Resurface/Overlay	30	22	\$8,000	\$2,133	\$2,133.33	\$29.32
121 Asphalt - Seal/Repair	5	3	\$1,850	\$740	\$740.00	\$40.68
140 Wood Trellis/Arbor - Repair/Replace	20	11	\$2,500	\$1,125	\$1,125.00	\$13.74
165 Path/Site Lights - Replace	20	11	\$1,750	\$788	\$787.50	\$9.62
175 Drain Lines - Clean/Inspect	5	2	\$6,900	\$4,140	\$4,140.00	\$151.73
180 Irrigation System - Maintain/Repair	5	4	\$4,000	\$800	\$800.00	\$87.96
<b>Buildings</b>						
500 Steep Slope Roofs - Repair/Replace	25	8	\$274,000	\$186,320	\$186,320.00	\$1,205.04
505 Roofs - Inspect/Clean/Repair	3	0	\$3,800	\$3,800	\$3,800.00	\$139.27
510 Gutters/Downspouts - Repair/Replace	25	16	\$43,550	\$15,678	\$15,265.89	\$191.53
520 Ext Surfaces/Siding - Repr/Replace	8	0	\$5,000	\$5,000	\$0.00	\$68.72
525 Full Exterior - Paint/Caulk	8	0	\$120,000	\$120,000	\$0.00	\$1,649.23
527 Partial Exterior - Paint/Caulk	8	4	\$37,500	\$18,750	\$0.00	\$515.38
529 Caulk, etc. - Inspect/Repair	4	2	\$4,500	\$2,250	\$0.00	\$123.69
545 Wood Decks/Porches - Repair/Replace	20	11	\$42,000	\$18,900	\$0.00	\$230.89
550 Wood Deck Rail - Repair/Replace	20	11	\$11,000	\$4,950	\$0.00	\$60.47
552 Metal/Alum. Rails - Repair/Replace	30	21	\$46,200	\$13,860	\$0.00	\$169.32
560 Bldg. Exterior Lights - Replace	24	16	\$16,250	\$5,417	\$0.00	\$74.44
18 Total Funded Components				\$408,251	\$218,712	\$4,860

**Table 4: 30-Year Reserve Plan Summary**

**21948-2**

**Fiscal Year Beginning: 07/01/13**

**Interest: 0.2%**

**Inflation: 3.0%**

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Rating	Annual Reserve Contribs.	Loans or Special Assmts	Interest Income	Projected Reserve Expenses
2014	\$218,712	\$408,251	53.6%	Fair	\$58,320	\$0	\$275	\$128,800
2015	\$148,507	\$333,363	44.5%	Fair	\$60,070	\$0	\$265	\$4,635
2016	\$204,206	\$385,484	53.0%	Fair	\$61,872	\$0	\$344	\$12,094
2017	\$254,328	\$432,892	58.8%	Fair	\$63,728	\$0	\$425	\$6,174
2018	\$312,306	\$489,270	63.8%	Fair	\$65,640	\$0	\$483	\$46,709
2019	\$331,720	\$507,081	65.4%	Fair	\$67,609	\$0	\$549	\$0
2020	\$399,878	\$575,073	69.5%	Fair	\$69,637	\$0	\$641	\$15,284
2021	\$454,872	\$630,947	72.1%	Strong	\$71,726	\$0	\$730	\$8,486
2022	\$518,843	\$697,129	74.4%	Strong	\$73,878	\$0	\$453	\$507,785
2023	\$85,389	\$252,698	33.8%	Fair	\$76,094	\$0	\$178	\$10,177
2024	\$151,484	\$309,201	49.0%	Fair	\$78,377	\$0	\$282	\$6,048
2025	\$224,095	\$373,435	60.0%	Fair	\$80,729	\$0	\$333	\$85,476
2026	\$219,680	\$359,619	61.1%	Fair	\$83,150	\$0	\$341	\$68,722
2027	\$234,449	\$364,537	64.3%	Fair	\$85,645	\$0	\$414	\$2,717
2028	\$317,791	\$439,535	72.3%	Strong	\$88,214	\$0	\$534	\$12,857
2029	\$393,682	\$508,344	77.4%	Strong	\$90,861	\$0	\$655	\$5,920
2030	\$479,277	\$588,428	81.5%	Strong	\$93,586	\$0	\$562	\$303,771
2031	\$269,655	\$366,257	73.6%	Strong	\$96,394	\$0	\$469	\$11,405
2032	\$355,113	\$440,750	80.6%	Strong	\$99,286	\$0	\$595	\$17,280
2033	\$437,713	\$513,683	85.2%	Strong	\$102,264	\$0	\$729	\$7,014
2034	\$533,692	\$601,704	88.7%	Strong	\$105,332	\$0	\$829	\$67,729
2035	\$572,125	\$632,223	90.5%	Strong	\$108,492	\$0	\$864	\$101,386
2036	\$580,095	\$631,459	91.9%	Strong	\$111,747	\$0	\$927	\$37,172
2037	\$655,597	\$699,352	93.7%	Strong	\$115,100	\$0	\$1,068	\$3,651
2038	\$768,113	\$806,427	95.2%	Strong	\$118,553	\$0	\$1,039	\$269,955
2039	\$617,750	\$645,116	95.8%	Strong	\$122,109	\$0	\$1,019	\$0
2040	\$740,878	\$759,796	97.5%	Strong	\$125,772	\$0	\$1,192	\$19,409
2041	\$848,433	\$860,784	98.6%	Strong	\$129,546	\$0	\$1,353	\$23,768
2042	\$955,563	\$963,259	99.2%	Strong	\$133,432	\$0	\$1,467	\$90,030
2043	\$1,000,432	\$1,003,592	99.7%	Strong	\$137,435	\$0	\$1,598	\$9,426

**Table 5: 30-Year Income/Expense Detail (yrs 0 through 4)****21948-2**

Fiscal Year	2014	2015	2016	2017	2018
Starting Reserve Balance	\$218,712	\$148,507	\$204,206	\$254,328	\$312,306
Annual Reserve Contribution	\$58,320	\$60,070	\$61,872	\$63,728	\$65,640
Planned Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$275	\$265	\$344	\$425	\$483
Total Income	\$277,307	\$208,841	\$266,422	\$318,480	\$378,429
# Component					
<b>Site/Grounds</b>					
100 Conc. Driveways/Sdwlks - Repr/Replc	\$0	\$4,635	\$0	\$0	\$0
120 Asphalt - Resurface/Overlay	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal/Repair	\$0	\$0	\$0	\$2,022	\$0
140 Wood Trellis/Arbor - Repair/Replace	\$0	\$0	\$0	\$0	\$0
165 Path/Site Lights - Replace	\$0	\$0	\$0	\$0	\$0
175 Drain Lines - Clean/Inspect	\$0	\$0	\$7,320	\$0	\$0
180 Irrigation System - Maintain/Repair	\$0	\$0	\$0	\$0	\$4,502
<b>Buildings</b>					
500 Steep Slope Roofs - Repair/Replace	\$0	\$0	\$0	\$0	\$0
505 Roofs - Inspect/Clean/Repair	\$3,800	\$0	\$0	\$4,152	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
520 Ext Surfaces/Siding - Repr/Replace	\$5,000	\$0	\$0	\$0	\$0
525 Full Exterior - Paint/Caulk	\$120,000	\$0	\$0	\$0	\$0
527 Partial Exterior - Paint/Caulk	\$0	\$0	\$0	\$0	\$42,207
529 Caulk, etc. - Inspect/Repair	\$0	\$0	\$4,774	\$0	\$0
545 Wood Decks/Porches - Repair/Replace	\$0	\$0	\$0	\$0	\$0
550 Wood Deck Rail - Repair/Replace	\$0	\$0	\$0	\$0	\$0
552 Metal/Alum. Rails - Repair/Replace	\$0	\$0	\$0	\$0	\$0
560 Bldg. Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$128,800	\$4,635	\$12,094	\$6,174	\$46,709
Ending Reserve Balance:	\$148,507	\$204,206	\$254,328	\$312,306	\$331,720

**Table 5: 30-Year Income/Expense Detail (yrs 5 through 9)****21948-2**

Fiscal Year	2019	2020	2021	2022	2023
Starting Reserve Balance	\$331,720	\$399,878	\$454,872	\$518,843	\$85,389
Annual Reserve Contribution	\$67,609	\$69,637	\$71,726	\$73,878	\$76,094
Planned Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$549	\$641	\$730	\$453	\$178
Total Income	\$399,878	\$470,156	\$527,329	\$593,174	\$161,661
# Component					
<b>Site/Grounds</b>					
100 Conc. Driveways/Sdwlks - Repr/Replc	\$0	\$5,373	\$0	\$0	\$0
120 Asphalt - Resurface/Overlay	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal/Repair	\$0	\$0	\$0	\$2,344	\$0
140 Wood Trellis/Arbor - Repair/Replace	\$0	\$0	\$0	\$0	\$0
165 Path/Site Lights - Replace	\$0	\$0	\$0	\$0	\$0
175 Drain Lines - Clean/Inspect	\$0	\$0	\$8,486	\$0	\$0
180 Irrigation System - Maintain/Repair	\$0	\$0	\$0	\$0	\$5,219
<b>Buildings</b>					
500 Steep Slope Roofs - Repair/Replace	\$0	\$0	\$0	\$347,095	\$0
505 Roofs - Inspect/Clean/Repair	\$0	\$4,537	\$0	\$0	\$4,958
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
520 Ext Surfaces/Siding - Repr/Replace	\$0	\$0	\$0	\$6,334	\$0
525 Full Exterior - Paint/Caulk	\$0	\$0	\$0	\$152,012	\$0
527 Partial Exterior - Paint/Caulk	\$0	\$0	\$0	\$0	\$0
529 Caulk, etc. - Inspect/Repair	\$0	\$5,373	\$0	\$0	\$0
545 Wood Decks/Porches - Repair/Replace	\$0	\$0	\$0	\$0	\$0
550 Wood Deck Rail - Repair/Replace	\$0	\$0	\$0	\$0	\$0
552 Metal/Alum. Rails - Repair/Replace	\$0	\$0	\$0	\$0	\$0
560 Bldg. Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$0	\$15,284	\$8,486	\$507,785	\$10,177
Ending Reserve Balance:	\$399,878	\$454,872	\$518,843	\$85,389	\$151,484

**Table 5: 30-Year Income/Expense Detail (yrs 10 through 14)****21948-2**

Fiscal Year	2024	2025	2026	2027	2028
Starting Reserve Balance	\$151,484	\$224,095	\$219,680	\$234,449	\$317,791
Annual Reserve Contribution	\$78,377	\$80,729	\$83,150	\$85,645	\$88,214
Planned Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$282	\$333	\$341	\$414	\$534
Total Income	\$230,143	\$305,156	\$303,171	\$320,508	\$406,539
# Component					
<b>Site/Grounds</b>					
100 Conc. Driveways/Sdwlks - Repr/Replc	\$0	\$6,229	\$0	\$0	\$0
120 Asphalt - Resurface/Overlay	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal/Repair	\$0	\$0	\$0	\$2,717	\$0
140 Wood Trellis/Arbor - Repair/Replace	\$0	\$3,461	\$0	\$0	\$0
165 Path/Site Lights - Replace	\$0	\$2,422	\$0	\$0	\$0
175 Drain Lines - Clean/Inspect	\$0	\$0	\$9,838	\$0	\$0
180 Irrigation System - Maintain/Repair	\$0	\$0	\$0	\$0	\$6,050
<b>Buildings</b>					
500 Steep Slope Roofs - Repair/Replace	\$0	\$0	\$0	\$0	\$0
505 Roofs - Inspect/Clean/Repair	\$0	\$0	\$5,418	\$0	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
520 Ext Surfaces/Siding - Repr/Replace	\$0	\$0	\$0	\$0	\$0
525 Full Exterior - Paint/Caulk	\$0	\$0	\$0	\$0	\$0
527 Partial Exterior - Paint/Caulk	\$0	\$0	\$53,466	\$0	\$0
529 Caulk, etc. - Inspect/Repair	\$6,048	\$0	\$0	\$0	\$6,807
545 Wood Decks/Porches - Repair/Replace	\$0	\$58,138	\$0	\$0	\$0
550 Wood Deck Rail - Repair/Replace	\$0	\$15,227	\$0	\$0	\$0
552 Metal/Alum. Rails - Repair/Replace	\$0	\$0	\$0	\$0	\$0
560 Bldg. Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$6,048	\$85,476	\$68,722	\$2,717	\$12,857
Ending Reserve Balance:	\$224,095	\$219,680	\$234,449	\$317,791	\$393,682

**Table 5: 30-Year Income/Expense Detail (yrs 15 through 19)****21948-2**

Fiscal Year	2029	2030	2031	2032	2033
Starting Reserve Balance	\$393,682	\$479,277	\$269,655	\$355,113	\$437,713
Annual Reserve Contribution	\$90,861	\$93,586	\$96,394	\$99,286	\$102,264
Planned Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$655	\$562	\$469	\$595	\$729
Total Income	\$485,198	\$573,425	\$366,517	\$454,993	\$540,706
# Component					
<b>Site/Grounds</b>					
100 Conc. Driveways/Sdwlks - Repr/Replc	\$0	\$7,221	\$0	\$0	\$0
120 Asphalt - Resurface/Overlay	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal/Repair	\$0	\$0	\$0	\$3,150	\$0
140 Wood Trellis/Arbor - Repair/Replace	\$0	\$0	\$0	\$0	\$0
165 Path/Site Lights - Replace	\$0	\$0	\$0	\$0	\$0
175 Drain Lines - Clean/Inspect	\$0	\$0	\$11,405	\$0	\$0
180 Irrigation System - Maintain/Repair	\$0	\$0	\$0	\$0	\$7,014
<b>Buildings</b>					
500 Steep Slope Roofs - Repair/Replace	\$0	\$0	\$0	\$0	\$0
505 Roofs - Inspect/Clean/Repair	\$5,920	\$0	\$0	\$6,469	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$69,885	\$0	\$0	\$0
520 Ext Surfaces/Siding - Repr/Replace	\$0	\$8,024	\$0	\$0	\$0
525 Full Exterior - Paint/Caulk	\$0	\$192,565	\$0	\$0	\$0
527 Partial Exterior - Paint/Caulk	\$0	\$0	\$0	\$0	\$0
529 Caulk, etc. - Inspect/Repair	\$0	\$0	\$0	\$7,661	\$0
545 Wood Decks/Porches - Repair/Replace	\$0	\$0	\$0	\$0	\$0
550 Wood Deck Rail - Repair/Replace	\$0	\$0	\$0	\$0	\$0
552 Metal/Alum. Rails - Repair/Replace	\$0	\$0	\$0	\$0	\$0
560 Bldg. Exterior Lights - Replace	\$0	\$26,076	\$0	\$0	\$0
Total Expenses	\$5,920	\$303,771	\$11,405	\$17,280	\$7,014
Ending Reserve Balance:	\$479,277	\$269,655	\$355,113	\$437,713	\$533,692

**Table 5: 30-Year Income/Expense Detail (yrs 20 through 24)****21948-2**

Fiscal Year	2034	2035	2036	2037	2038
Starting Reserve Balance	\$533,692	\$572,125	\$580,095	\$655,597	\$768,113
Annual Reserve Contribution	\$105,332	\$108,492	\$111,747	\$115,100	\$118,553
Planned Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$829	\$864	\$927	\$1,068	\$1,039
Total Income	\$639,854	\$681,481	\$692,769	\$771,764	\$887,705
# Component					
<b>Site/Grounds</b>					
100 Conc. Driveways/Sdwlks - Repr/Replc	\$0	\$8,371	\$0	\$0	\$0
120 Asphalt - Resurface/Overlay	\$0	\$0	\$15,329	\$0	\$0
121 Asphalt - Seal/Repair	\$0	\$0	\$0	\$3,651	\$0
140 Wood Trellis/Arbor - Repair/Replace	\$0	\$0	\$0	\$0	\$0
165 Path/Site Lights - Replace	\$0	\$0	\$0	\$0	\$0
175 Drain Lines - Clean/Inspect	\$0	\$0	\$13,221	\$0	\$0
180 Irrigation System - Maintain/Repair	\$0	\$0	\$0	\$0	\$8,131
<b>Buildings</b>					
500 Steep Slope Roofs - Repair/Replace	\$0	\$0	\$0	\$0	\$0
505 Roofs - Inspect/Clean/Repair	\$0	\$7,069	\$0	\$0	\$7,725
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
520 Ext Surfaces/Siding - Repr/Replace	\$0	\$0	\$0	\$0	\$10,164
525 Full Exterior - Paint/Caulk	\$0	\$0	\$0	\$0	\$243,935
527 Partial Exterior - Paint/Caulk	\$67,729	\$0	\$0	\$0	\$0
529 Caulk, etc. - Inspect/Repair	\$0	\$0	\$8,622	\$0	\$0
545 Wood Decks/Porches - Repair/Replace	\$0	\$0	\$0	\$0	\$0
550 Wood Deck Rail - Repair/Replace	\$0	\$0	\$0	\$0	\$0
552 Metal/Alum. Rails - Repair/Replace	\$0	\$85,946	\$0	\$0	\$0
560 Bldg. Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$67,729	\$101,386	\$37,172	\$3,651	\$269,955
Ending Reserve Balance:	\$572,125	\$580,095	\$655,597	\$768,113	\$617,750

**Table 5: 30-Year Income/Expense Detail (yrs 25 through 29)**

**21948-2**

Fiscal Year	2039	2040	2041	2042	2043
Starting Reserve Balance	\$617,750	\$740,878	\$848,433	\$955,563	\$1,000,432
Annual Reserve Contribution	\$122,109	\$125,772	\$129,546	\$133,432	\$137,435
Planned Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,019	\$1,192	\$1,353	\$1,467	\$1,598
<b>Total Income</b>	<b>\$740,878</b>	<b>\$867,842</b>	<b>\$979,331</b>	<b>\$1,090,462</b>	<b>\$1,139,465</b>
<b># Component</b>					
<b>Site/Grounds</b>					
100 Conc. Driveways/Sdwlks - Repr/Replc	\$0	\$9,705	\$0	\$0	\$0
120 Asphalt - Resurface/Overlay	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal/Repair	\$0	\$0	\$0	\$4,233	\$0
140 Wood Trellis/Arbor - Repair/Replace	\$0	\$0	\$0	\$0	\$0
165 Path/Site Lights - Replace	\$0	\$0	\$0	\$0	\$0
175 Drain Lines - Clean/Inspect	\$0	\$0	\$15,327	\$0	\$0
180 Irrigation System - Maintain/Repair	\$0	\$0	\$0	\$0	\$9,426
<b>Buildings</b>					
500 Steep Slope Roofs - Repair/Replace	\$0	\$0	\$0	\$0	\$0
505 Roofs - Inspect/Clean/Repair	\$0	\$0	\$8,441	\$0	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
520 Ext Surfaces/Siding - Repr/Replace	\$0	\$0	\$0	\$0	\$0
525 Full Exterior - Paint/Caulk	\$0	\$0	\$0	\$0	\$0
527 Partial Exterior - Paint/Caulk	\$0	\$0	\$0	\$85,797	\$0
529 Caulk, etc. - Inspect/Repair	\$0	\$9,705	\$0	\$0	\$0
545 Wood Decks/Porches - Repair/Replace	\$0	\$0	\$0	\$0	\$0
550 Wood Deck Rail - Repair/Replace	\$0	\$0	\$0	\$0	\$0
552 Metal/Alum. Rails - Repair/Replace	\$0	\$0	\$0	\$0	\$0
560 Bldg. Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
<b>Total Expenses</b>	<b>\$0</b>	<b>\$19,409</b>	<b>\$23,768</b>	<b>\$90,030</b>	<b>\$9,426</b>
Ending Reserve Balance:	\$740,878	\$848,433	\$955,563	\$1,000,432	\$1,130,039

## Accuracy, Limitations, and Disclosures

Washington disclosure, per RCW 64.34.382:

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

Because we have no control over future events, we cannot claim that all the events we anticipate will occur as planned. We expect that inflationary trends will continue, and we expect that financial institutions will provide interest earnings on funds on-deposit. We believe that reasonable estimates for these figures are much more accurate than ignoring these economic realities. The things we can control are measurements, which we attempt to establish within 5% accuracy. Your starting Reserve Balance and current Reserve interest earnings are also numbers that can be identified with a high degree of certainty. These figures have been provided to us, and were not confirmed by our independent research. Our projections assume a stable economic environment and lack of natural disasters.

Because both the physical status and financial status of the association change each year, this Reserve Study is by nature a "one-year" document. This information can and should be adjusted annually as part of the Reserve Study Update process so that more accurate estimates can be reflected in the Reserve plan. Reality often differs from even the best assumptions due to changing economic factors, physical factors, or ownership expectations. Because many years of financial preparation help the preparation for large expenses, this Report shows expenses for the next 30 years. We fully expect a number of adjustments will be necessary through the interim years to both the cost and timing of distant expense projections. It is our recommendation and that of the American Institute of Certified Public Accountants (AICPA) that your Reserve Study be updated annually.

Association Reserves, Inc., and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. James D. Talaga R.S., company president, is a credentialed Reserve Specialist (#66). All work done by Association Reserves is performed under his Responsible Charge. There are no material issues to our knowledge that have not been disclosed to the client that would cause a distortion of the association's situation.

We have relied upon the client to provide the current (or projected) Reserve Balance, the estimated net-after-tax current rate of interest earnings, and to indicate if those earnings accrue to the Reserve Fund. In addition, we have considered the association's representation of current and historical Reserve projects reliable, and we have considered the representations made by its vendors and suppliers to also be accurate and reliable.

Component quantities indicated in this Report were developed by Association Reserves unless otherwise noted in our "Site Inspection Notes" comments. No destructive or intrusive testing was performed, nor should the site inspection be assumed to be anything other than for budget purposes.

## Terms and Definitions

<b>BTU</b>	British Thermal Unit (a standard unit of energy)
<b>DIA</b>	Diameter
<b>GSF</b>	Gross Square Feet (area)
<b>GSY</b>	Gross Square Yards (area)
<b>HP</b>	Horsepower
<b>LF</b>	Linear Feet (length)

**Effective Age:** The difference between Useful Life and Remaining Useful Life. Note that this is not necessarily equivalent to the chronological age of the component.

**Fully Funded Balance (FFB):** The Reserve Balance that is in direct proportion to the fraction of life “used up” of the current Repair or Replacement cost. This benchmark balance represents the value of the deterioration of the Reserve Components. This number is calculated for each component, then summed together for an association total.

$$\text{FFB} = (\text{Current Cost} \times \text{Effective Age}) / \text{Useful Life}$$

**Inflation:** Cost factors are adjusted for inflation at the rate defined in the Executive Summary and compounded annually. These increasing costs can be seen as you follow the recurring cycles of a component on Table 5.

**Interest:** Interest earnings on Reserve Funds are calculated using the average balance for the year (taking into account income and expenses through the year) and compounded monthly using the rate defined in the Executive Summary. Annual interest earning assumption appears in the Executive Summary, page ii.

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

**Remaining Useful Life:** The estimated time, in years, that a common area component can be expected to continue to serve its intended function.

**Useful Life:** The estimated time, in years, that a common area component can be expected to serve its intended function.

## Photographic Inventory Appendix

The primary purpose of the photographic appendix is to provide the reader with the basis of our funding assumptions resulting from our physical analysis and subsequent research. The photographs herein represent a wide range of elements that were observed and measured against National Reserve Study Standards to determine if they meet the criteria for reserve funding:

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

Some components are recommended for reserve funding, while others are not. The components that meet these criteria in our judgment are shown with corresponding maintenance, repair or replacement cycles to the left of the photo (UL = Useful Life or how often the project is expected to occur, RUL = Remaining Useful Life or how many years from our reporting period) and a representative market cost range termed “Best Cost” and “Worst Cost” below the photo. There are many factors that can result in a wide variety of potential costs; we are attempting to represent a market average for budget purposes. Where there is no UL, the component is expected to be a one-time expense. Where no pricing, the component deemed inappropriate for Reserve Funding.

Client: 21948A Villaggio Neighborhood

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Comp #: 100 Conc. Driveways/Sdwlks - Repr/Replc

Quantity: Extensive SF

Location: Driveways and sidewalks throughout community

Evaluation: We noted soiled surfaces and some local cracking, however no widespread or significant damage/deterioration observed. Repair any trip and fall hazards (1/2" or larger displacement) immediately to ensure safety.

In our experience, larger repair/replacement expenses can emerge as the community ages. Although difficult to predict timing, cost and scope, we suggest a funding allowance to supplement the operating/maintenance budget for periodic, larger repairs. Adjust as conditions, actual expense history dictates within future reserve study updates.

As routine maintenance, inspect regularly, pressure wash for appearance and repair promptly as needed to prevent water penetrating into the base and causing further damage. Monitor tree roots nearby; consult with arborist for best practice.

Useful Life:  
5 years

Remaining Life:  
1 years



Best Case: \$3,500.00

Worst Case: \$5,500.00

Lower allowance for partial repair

Higher allowance; more repair needs

Cost Source: ARI Cost Database: Similar Project Cost History

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Client: 21948A Villaggio Neighborhood

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**Comp #:** 120 **Asphalt - Resurface/Overlay**

Quantity: Approx. 4,000 square feet

Location: NE Monroe Lane (other asphalt roadways are not Association but public streets)

Evaluation: Overall stable condition noted with no significant raveling (loss of binder), cracking or other deterioration observed. We recommend having surface sealed and repaired regularly as directed in component #121 for maximum design life.

Even with ordinary care and maintenance, plan for eventual, large scale resurface (overlay) at roughly the time frame below. As timing draws nearer, consult with asphalt vendor/consultant for recommendations and complete scope.

As routine maintenance, keep roadway clean, free of debris and well drained; fill/seal cracks (hot rubberized crack fill) to prevent water from penetrating into the sub-base and accelerating damage.

Useful Life:  
30 years

Remaining Life:  
22 years



Best Case: \$7,200.00

Worst Case: \$8,800.00

\$1.80/Sq Ft, Lower allowance to resurface (overlay)

\$2.20/Sq Ft, Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

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Client: 21948A Villaggio Neighborhood

**Comp #:** 121 Asphalt - Seal/Repair

Quantity: Approx 4,000 square ft

Location: NE Monroe Lane (other asphalt areas are not Association but public streets)

Evaluation: Stable surface condition and appearance observed with no significant or widespread fading or other deterioration noted. Seal coverage is generally adequate; last seal coated in July 2011.

Regular cycles of seal coating every 3-5 years (along with any needed repair) has proven to be the best program in our opinion for the long term care of lower traffic asphalt areas such as these. The State of Washington, Department of Transportation recommends regular cycles of seal coating (they use the term bituminous surface treatment, BST) for the long-term care of asphalt paving with low traffic and low speed. The primary reason to seal coat asphalt pavement is to protect the pavement from the deteriorating effects of sun and water. When asphalt pavement is exposed, the asphalt oxidizes, or hardens which causes the pavement to become more brittle. As a result, the pavement will be more likely to crack, because it is unable to bend and flex when subjected to traffic and temperature changes. A seal coat combats this situation by providing a waterproof membrane, which not only slows down the oxidation process but also helps the pavement to shed water, preventing it from entering the base material. Seal coat also provides uniform appearance, concealing the inevitable patching and repairs which accumulate over time. Seal coat ultimately extends useful life of asphalt, postponing the asphalt resurfacing, which can be one of the larger cost items in the reserve study (see component #120 for asphalt resurfacing costs). Repair asphalt before seal coating as needed. Surface preparation and dry weather, during and following application, is key to lasting performance. Apply two coats or flood application of quality asphalt emulsion. Incorporate any striping and curb repair into this project.

Useful Life:  
5 years

Remaining Life:  
3 years



Best Case: \$1,700.00

\$0.42/Sq Ft, Lower estimate to clean/seal

Worst Case: \$2,000.00

\$0.50/Sq Ft, Higher estimate, more repairs

Cost Source: Inflated Client Cost History

Client: 21948A Villaggio Neighborhood

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**Comp #:** 140 Wood Trellis/Arbor - Repair/Replace

Quantity: (1) moderate size

Location: Tract AB, between Lots 46 and 47

Evaluation: Stable condition - no damage or significant deterioration observed at this time.

With ordinary care and maintenance, plan for replacement at roughly the interval indicated below due to deterioration that will result from constant exposure.

Clean and paint/stain along with other larger projects or as general maintenance (not separate reserve item) to preserve the wood and extend the useful life. Local repairs between large scale replacements can be funded as general maintenance item.

Useful Life:  
20 years

Remaining Life:  
11 years



Best Case: \$2,250.00

Lower allowance to remove and replace

Worst Case: \$2,750.00

Higher allowance, upgraded design, materials, etc.

Cost Source: ARI Cost Database: Similar Project Cost History

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Client: 21948A Villaggio Neighborhood

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**Comp #:** 165 **Path/Site Lights - Replace**

Quantity: (10) fixtures

Location: Adjacent to paths near Lots 46 and 47

Evaluation: Mostly stable condition observed with no problems reported. Observed during daylight hours; assumed to be in functional operating condition.

Best to plan for replacement as shown here due to damage/deterioration that will result from constant exposure.

As routine maintenance, inspect regularly, clean for appearance and repair/change bulbs as needed.



Useful Life:  
20 years

Remaining Life:  
11 years

Best Case: \$1,500.00

\$150/Fixture (x10), Lower allowance to replace with Community-standard fixture

Worst Case: \$2,000.00

\$200/Fixture (x10), Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

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Client: 21948A Villaggio Neighborhood

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Comp #: 170 Landscape/Tree - Refurbish

Quantity: Extensive areas

Location: Scattered areas throughout site

Evaluation: Overall stable condition of common area landscaping with no specific problems observed or identified by association contact.

Although typically funded as ongoing maintenance item, this component may be utilized for setting aside funds for larger expenses that do not occur on an annual basis, such as large scale plantings, resodding lawn areas, bark/mulch replenishment, etc. Often times these type of projects can be handled within the annual operating budget as a separate line item from the landscape maintenance contract. At this time no specific projects anticipated and no desire by community for refurbishing. Monitor and include funding in reserve study updates if needed / desired.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

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Client: 21948A Villaggio Neighborhood

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**Comp #:** 175 **Drain Lines - Clean/Inspect**

Quantity: Storm drains, etc.

Location: Scattered throughout community

Evaluation: No problems observed and none reported to us. Large scale drain line cleaning was performed in this community in 2011. Drainage facilities are typically inspected periodically by governing authority; typically storm system maintenance guidelines can be found on their website.

Association management is requesting cyclical drain line cleaning be included within the reserve budget every 5 years for best performance.

Local cleaning/inspections can be conducted as part of routine annual maintenance.

Useful Life:  
5 years

Remaining Life:  
2 years



Best Case: \$6,500.00

Worst Case: \$7,300.00

Lower estimate to inspect/clean drain lines

Higher estimate

Cost Source: Estimate Provided by Client per Bid

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Client: 21948A Villaggio Neighborhood

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**Comp #:** 180 Irrigation System - Maintain/Repair

Quantity: Extensive system

Location: Scattered throughout community

Evaluation: System was winterized during our site visit therefore we did not observe functioning. No problems reported to us.

If properly installed and bedded without defect, the lines themselves are expected to be long-lived with no predictable expectation for replacement. However, typically large system renovations, repairs, zone reconfiguration, etc. may become necessary and although difficult to predict cost/timing, we recommend a periodic funding allowance for these type of larger items. The timing/pricing here are to be used for planning purposes and are not for a specific project.

As routine maintenance, inspect regularly, test system and repair as needed. Follow proper winterization and spring start up procedures.

Useful Life:  
5 years

Remaining Life:  
4 years



Best Case: \$3,000.00

Worst Case: \$5,000.00

Lower periodic allowance for repairs/replacement

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

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Client: 21948A Villaggio Neighborhood

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**Comp #:** 335 **Site Bench - Replace**

**Quantity:** (1) metal

**Location:** Behind Lots 46 and 47 adjacent to wetland buffer at south portion of site

**Evaluation:** Stable condition noted of sturdy, metal bench with no significant or advanced damage/deterioration observed.

Although at one point will need to be replaced due to deterioration that will result from constant exposure, cost to replace this single bench best funded within annual operating budget, not long term reserve planning.

Inspect regularly, clean for appearance and repair as needed from general operating funds.



Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

Client: 21948A Villaggio Neighborhood

**Comp #: 500 Steep Slope Roofs - Repair/Replace**

Quantity: ~75,600 SF, shingles

Location: Rooftops of building

Evaluation: Roofing appears to be laminated shingle with no significant or widespread damage/deterioration observed from our limited visual inspection. As was discussed with us in our previous reserve studies, significant roof repairs were completed in Fall 2010 during 2010-11 Fiscal Year due to deficiencies primarily with flashings and details at penetrations throughout rooftops. This was discovered during a building inspection and the association funded these repairs through reserve funds. The roofs were also cleaned/treated in 2010-11 (see component #505 for future cycles).

Plan for replacement at roughly the time frame indicated below with costs shown here for similar shingle to what is currently in place. The remaining useful life has been adjusted downward based on the roof inspection discussed above and while repairs were made, further problems exist that are not feasible to correct but is anticipated to decrease the roof life. The Useful Life here is typical life expectancy. At time of re-roof we recommend that you hire a professional roof consultant such as Architect, Engineer, or building envelope consultant; to evaluate, design, specify, help bid the project, select best bidder, and observe construction to ensure proper installation. We recommend all Associations seek advice from a qualified consultant whenever they are considering having work performed on any building envelope components (roof, walls, windows, decks, exterior painting and caulking/sealant).

As routine maintenance, many manufacturers recommend inspections at least twice annually (once in the fall, before the rainy season, and again in the spring) and after large storm events. Promptly replace any damaged/missing sections or any other repair needed to ensure waterproof integrity of roof. Keep roof surface, gutters and downspouts clear and free of moss or debris. Funding for moss removal/treatment shown in component #505.

There is a wealth of information available through Roofing Organizations such as the Western States Roofing Contractors Association (WSRCA) <http://www.wsrca.com/> Roof Consultant Institute <http://www.rci-online.org/> and the National Roofing Contractors Association (NRCA) <http://www.nrca.net/> NCRA has some very good information for homeowners. They have an entire section dedicated to "consumer" with valuable information including this page for getting your monies worth out of your new roof. <http://www.nrca.net/consumer/fyi.aspx?homeowners>. Their page on maintenance is here: <http://www.nrca.net/consumer/maintenance.aspx>.

Useful Life:  
25 years

Remaining Life:  
8 years



Best Case: \$246,000.00

\$3.25/Sq Ft, Lower allowance to tear off and reroof

Worst Case: \$302,000.00

\$4.00/Sq Ft, Higher allowance, upgrades, underlying repair needs, metal work, etc.

Cost Source: ARI Cost Database: Similar Project Cost History

Client: 21948A Villaggio Neighborhood

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**Comp #:** 505 Roofs - Inspect/Clean/Repair

Quantity: ~75,600 SF, shingles

Location: Rooftops of building

Evaluation: No widespread or significant moss/debris observed on roofs at this time, however our inspection was limited from ground level. Association Management reports last cleaning and moss treatment applied in fiscal year 2010-11.

As requested by Association Management, plan for periodic inspections, repairs, cleaning and moss treatment every 3 years as shown here. Moss growth can decrease the life of the roofing shingles and should be removed as soon as possible. Liquid applied fungicide (moss killer) is recommended instead of power washing the living moss off the shingles. Moss roots grow into the shingles. Killing the moss in-place, with a fungicide, allows the roots to gradually release from the shingles where they can be swept away. Do not use high pressure wash.

As routine maintenance, many manufacturers recommend inspections at least twice annually (once in the fall, before the rainy season, and again in the spring) and after large storm events. Promptly replace any damaged/missing sections or any other repair needed to ensure waterproof integrity of roof.

Useful Life:  
3 years

Remaining Life:  
0 years



Best Case: \$3,500.00

Lower allowance to inspect, clean, repair and apply moss treatment

Worst Case: \$4,100.00

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

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Client: 21948A Villaggio Neighborhood

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**Comp #:** 510 Gutters/Downspouts - Repair/Replace

Quantity: Approx 7,250 linear feet

Location: Perimeter of buildings

Evaluation: No problems such as improper sloping, poor attachment and other damage/deterioration observed at this time. We inspected on a dry day so we did not observe functioning, however no problems reported to us.

Although replacement is best done along with roof replacement (#500) for cost efficiency/consistency, reduced roof life anticipated therefore replacement of gutters/downspouts recommended further out at typical life shown here.

As routine maintenance, inspect regularly, keep gutters and downspouts free of debris.

Useful Life:  
25 years

Remaining Life:  
16 years



Best Case: \$36,300.00

Worst Case: \$50,800.00

\$5.00/Linear Ft, Lower allowance to remove and replace

\$7.00/Linear Ft, Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

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Client: 21948A Villaggio Neighborhood

**Comp #: 520 Ext Surfaces/Siding - Repr/Replace**

Quantity: Extensive GSF

Location: Exterior of buildings

Evaluation: According to the Association declaration, section 3.1. (c) (i), "the exterior façade of the improvements" is maintained by the Association. The word "façade" is not defined in Association documents - interpretations may vary.

Buildings appear to be fiber-cement materials of lap and bat/board style; trim, fascia, door moldings, etc. are painted wood. Although we did not observe any significant or widespread problems/deterioration with siding, we noted some areas of the board/bath with wear/fading of surfaces. There was also an areas just below a metal Juliet balcony where the belly band trim was showing signs of rot/water intrusion. Actual manufacturer of siding was not confirmed since we conducted only a limited visual review. The largest manufacturer of fiber-cement siding is James Hardie Company (Hardie Siding). Currently Hardie offers the choice of a 30-year non-prorated or 50-year pro-rated warranty. In our discussion with local Hardie representative, suggestion is to plan for 50 year total service life which includes the underlying waterproofing which degrade over time and may require replacement.

Typically we would recommend planning for complete replacement of this type of siding and underlying waterproofing at the 50-year mark of life, however we are not including this large scale replacement funding in this study due to the vague wording as discussed above. However, at the request of the Association Management and based on our observation, a periodic allowance is included for repairs coinciding with paint projects. We recommend the Association consult with an attorney for definitive interpretation of the documents to clarify which siding components (siding, trim, waterproofing, etc.) if any, are Association responsibility and alter this component in future reserve studies if needed.



Useful Life:  
8 years

Remaining Life:  
0 years

Best Case: \$4,000.00

Lower repair/replacement allowance

Worst Case: \$6,000.00

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Client: 21948A Villaggio Neighborhood

**Comp #:** 525 Full Exterior - Paint/Caulk

Quantity: Extensive GSF

Location: Exterior of buildings

Evaluation: According to the Association declaration Section 3.1.(c) (ii), painting (including staining) of all exterior painted portions of the improvements, including any garage, garage door, exterior doors, shutters, fascia on the improvements, etc. is the responsibility of the Neighborhood Association. For discussion of exterior repairs/replacement, see component #520. According to the Association declaration Section 3.1.(c) (iii), caulking of the exterior portions of all windows and doors is the responsibility of the Neighborhood Association. For discussion of repairs/replacements of windows and doors see #535 and #580.

We noted fading and wear of surfaces at this time with majority at the board/bath style siding. Association had a caulking/trim paint project performed Fall 2010 during the 2010-11 fiscal year.

Typical Northwest paint cycles vary greatly depending upon many factors including; type of material painted, surface preparations, quality of primer/paint/stain, application methods, weather conditions during application, moisture beneath paint, and exposure to weather conditions. We recommend planning to paint entire building exterior surfaces (body/field area of siding) and caulk every 8 years as shown here. Association Management is requesting touch-up/partial paint project (#527) at the mid-way point between these cycles as well as inspection/touch-up caulk cycles (#529) between the partial and full paint projects.

As routine maintenance, inspect regularly (including sealants) repair locally and touch-up paint as needed. Additional information on painting is available through American Coatings Association at <http://www.paint.org/>.

Useful Life:  
8 years

Remaining Life:  
0 years



Best Case: \$100,000.00  
\$2,000/unit (x50 units), Lower allowance to repaint all exterior building surfaces

Worst Case: \$140,000.00  
\$2,800/unit (x50), Higher allowance, includes other things such as benches, small light posts, doors, etc.

Cost Source: ARI Cost Database: Similar Project Cost History/Prior Est.

Client: 21948A Villaggio Neighborhood

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**Comp #:** 527 Partial Exterior - Paint/Caulk

Quantity: Extensive GSF

Location: Exterior of buildings ; trim, fascia, door moldings, etc. are painted wood

Evaluation: No significant or widespread fading/wear of wood trim, deck wood components, wood shingles, etc. observed at this time. There was a trim/partial paint project performed here in Fall 2010 during the 2010-11 fiscal year.

Typical Northwest paint cycles vary greatly depending upon many factors including; type of material painted, surface preparations, quality of primer/paint/stain, application methods, weather conditions during application, moisture beneath paint, and exposure to weather conditions. At the request of Association Management, this component reflects partial paint projects (trim, touch-up) and caulking at the mid-way point between exhaustive paint projects (#525) hence this reflects 8 year cycles which fund 4 years following the full paint project.

As routine maintenance, inspect regularly (including sealants) repair locally and touch-up paint as needed. Additional information on painting is available through American Coatings Association at <http://www.paint.org/>

Useful Life:  
8 years

Remaining Life:  
4 years



Best Case: \$30,000.00

\$600/unit (x50 units), Lower allowance to paint trim areas including decks, awnings, belly bands, etc.

Worst Case: \$45,000.00

\$900/unit (x50), Higher allowance, additional color schemes, doors, etc.

Cost Source: ARI Cost Database: Similar Project Cost History

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Client: 21948A Villaggio Neighborhood

**Comp #:** 529 **Caulk, etc. - Inspect/Repair**

**Quantity:** Extensive GSF

**Location:** Exterior perimeters of windows

**Evaluation:** According to the Association declaration Section 3.1.(c) (iii), caulking of the exterior portions of all windows and doors is the responsibility of the Neighborhood Association. For discussion of repairs/replacements of windows and doors see #535 and #580.

From our limited, ground level inspection, no obvious signs of significant or widespread failure of caulking/sealant.

At the request of the Association Management, this component includes funding for inspections/caulking touch-up as needed between the exhaustive paint projects (#525) and the trim/partial paint projects (#527). Caulking and painting during these paint projects is assumed to be included in the costs in those separate components.

Proper sealant/caulking is critical to keeping water out of the walls, and preventing water damage. Incorrect installations of sealant are common, and can greatly decrease its useful life. Inspect sealant, more frequently as it ages, to determine if it is failing. Typical sealant problems include failure of sealant to adhere to adjacent materials and tearing/splitting of the sealant itself. As sealants age and are exposure to ultra-violet sunlight, they will dry out, harden, and lose their elastic ability. Remove and replace sealant as signs of failure begin to appear. Proper cleaning, prep work, and installation are critical for a long lasting sealant/caulking - use services of specialty caulking contractor, not painter or other. Do not install sealant in locations that would block water drainage from behind the siding. Repair areas as needed prior to painting/caulking.

As routine maintenance, inspect regularly (including sealants) repair locally and touch-up paint as needed.

Useful Life:  
4 years

Remaining Life:  
2 years



Best Case: \$3,500.00

Worst Case: \$5,500.00

Lower allowance to inspect and replace caulking

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

**Client: 21948A Villaggio Neighborhood**

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**Comp #:** 535 **Windows, Sliders - Repair/Replace**

**Quantity:** Extensive, assorted

**Location:** Exterior walls

**Evaluation:** Windows were generally noted to be in good condition throughout the association. According to Governing Documents for Villaggio Neighborhood Article 3.1 (c) (iii), although the residential association is responsible for caulking of the exterior portions of all windows, "The Residential Association shall not be responsible for any maintenance or repairs to any ...window" (Article 3.1(i)). With this understanding, no funding for association repair/replacement however association should establish specific guidelines for repairs/replacements to ensure adequate waterproofing, consistent appearance, etc. throughout community. Note: funding for inspections/caulking within component #529.



**Useful Life:**

**Remaining Life:**

**Best Case:**

**Worst Case:**

**Cost Source:**

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**Client: 21948A Villaggio Neighborhood**

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**Comp #: 545 Wood Decks/Porches - Repair/Replace**

Quantity: (12) decks, ~1,200 SF

Location: Decks at Lots 39-50

Evaluation: No instability observed based on our limited, inspection as we were not provided direct decktop access as accessible only through individual owner units.

Almost all exterior wood in the Puget Sound area will decay over time and require replacement. Assuming proactive maintenance, plan for large scale repair/replacement at roughly the interval shown here. Inspect regularly and adjust this component as needed.

As routine maintenance, inspect decks/railings annually and repair as needed. Best to clean/stain along with building exterior projects to help extend life.

Useful Life:  
20 years

Remaining Life:  
11 years



Best Case: \$36,000.00

\$30/GSF, Lower allowance to replace

Worst Case: \$48,000.00

\$40/GSF, Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

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Client: 21948A Villaggio Neighborhood

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**Comp #:** 550 **Wood Deck Rail - Repair/Replace**

Quantity: Approx 220 linear feet

Location: Adjacent to decks at Lots 39-50

Evaluation: No problems observed from our ground level inspection and no problems reported to us. Limited inspection as decks accessible through individual owner units; rails are exterior fascia mounted and are painted.

We suggest reserve funding for regular intervals of total replacement as indicated below. This component coincides with other deck component (#545) for cost efficiency/consistency.

As routine maintenance, inspect regularly to ensure safety and stability; repair promptly as needed using general operating/maintenance funds.



Useful Life:  
20 years

Remaining Life:  
11 years

Best Case: \$9,900.00

45/LF, Lower allowance to remove and replace

Worst Case: \$12,100.00

\$55/LF, Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

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Client: 21948A Villaggio Neighborhood

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**Comp #:** 551 Concrete Porch/Patio - Repr/Replace

Quantity: Extensive, Concrete

Location: Scattered areas throughout Association

Evaluation: We noted dirty and soiled in some areas and while some local cracking (see photo) observed, no significant or widespread damage/deterioration noted.

Although larger repair/replacement expenses can emerge as the community ages, at this time no predictable basis that this may be needed therefore no reserve funding included at this time.

As routine maintenance, inspect regularly, pressure wash for appearance and repair promptly as needed to prevent water penetrating into the base and causing further damage. Repair any trip and fall hazards (1/2" or larger displacement) immediately to ensure safety. Monitor tree roots nearby; consult with arborist for best practice.



Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

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Client: 21948A Villaggio Neighborhood

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**Comp #:** 552 Metal/Alum. Rails - Repair/Replace

Quantity: Approx 770 linear feet

Location: Adjacent to entry areas of units, site stairs, etc.

Evaluation: Generally the aluminum railings appeared to be in good condition with no widespread instability observed at this time.

Over time, these railings will deteriorate due to constant exposure and use/abuse over time. We suggest reserve funding for regular intervals of total replacement as indicated below.

As routine maintenance, inspect regularly to ensure safety and stability; repair promptly as needed using general operating/maintenance funds.



Useful Life:  
30 years

Remaining Life:  
21 years

Best Case: \$38,500.00

\$50/LF, Lower allowance to replace

Worst Case: \$53,900.00

\$70/LF, Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

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Client: 21948A Villaggio Neighborhood

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**Comp #:** 560 **Bldg. Exterior Lights - Replace**

Quantity: Approx (130) fixtures

Location: Scattered exterior doors throughout association; entry, deck, garage, etc. doors

Evaluation: Stable condition of lights with no widespread damage/deterioration observed. We observed during daylight hours so did not observe functioning however no problems reported to us.

Best to plan for large scale replacement, best timed to coincide with exterior paint cycles (#525/#527), if possible, for cost efficiency and consistent quality/appearance throughout association. A mid-range replacement allowance is factored below for planning purposes.

As routine maintenance, inspect, repair/change bulbs as needed.



Useful Life:  
24 years

Remaining Life:  
16 years

Best Case: \$13,000.00

\$100/each (x130), Lower allowance to replace

Worst Case: \$19,500.00

\$150/each (x130), Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

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Client: 21948A Villaggio Neighborhood

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Comp #: 580 Unit/Garage Doors - Replace

Quantity: Extensive, assorted

Location: Entries to units and garages

Evaluation: Stable condition of metal/aluminum garage doors and metal/glass entry/porch doors with no significant damage or deterioration observed. We assume installed without defect of material and/or workmanship. As with windows (#535), according to Governing Documents for Villaggio Neighborhood Article 3.1 (c) (iii), although the residential association is responsible for caulking of the exterior portions of all ..doors, "The Residential Association shall not be responsible for any maintenance or repairs to any ... door" (Article 3.1(i)). With this understanding, no funding for association repair/replacement however association should establish specific guidelines to provide to homeowners for repairs/replacements to ensure adequate waterproofing, consistent appearance, etc. throughout community. These door types should have long life.



Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

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Client: 21948A Villaggio Neighborhood

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**Comp #:** 900 **Side Sewers - Repair/Replace**

Quantity: Moderate areas

Location: Throughout community

Evaluation: According to the Association declaration Section 3.1.(v), maintenance, repair and replacement as necessary of all side sewers connecting Villaggio Neighborhood Units with public sewer lines are the responsibility of the Neighborhood Association. No problems reported to us.

Analysis of these system(s) beyond visual inspection and is not within the scope of a reserve study. The association may want to have camera scope from time to time to look for blockages or other problems. No predictable basis for reserve funding at this time.



Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

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Client: 21948A Villaggio Neighborhood

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**Comp #:** 905 **Resd. Water Lines - Repair/Replace**

Quantity: Moderate areas

Location: Throughout community

Evaluation: According to the Association declaration Section 3.1.(vi), maintenance, repair and replacement as necessary of all residential water lines connecting Villaggio Neighborhood Units with residential water lines are the responsibility of the Neighborhood Association. No problems reported to us. Analysis of these system(s) beyond visual inspection and is not within the scope of a reserve study. No predictable basis for reserve funding at this time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

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**Comp #:** 970 **Fire Sprinkler Sys - Repair/Replace**

Quantity: Misc.

Location: At select building locations

Evaluation: Reported to us, no common area equipment with assumption that some units have fire sprinklers installed which are the responsibility of the individual unit owner to maintain, repair/replace, not association.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

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Client: 21948A Villaggio Neighborhood

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**Comp #:** 997 Association Annual Inspection

Quantity: Every year

Location: Common elements of association

Evaluation: Many Associations are required to have annual inspections by a qualified engineer or architect to assess the physical condition of the improvements. The inspection typically covers, at a minimum, the building envelope, including: roofs, exterior, decks, waterproofing / sealants, flashings, glazing systems and doors. Forensic evaluation, building drops, etc...are beyond the scope of a typical reserve study.

Although your Associations governing documents do not appear to have such a requirement, we recommend the Board provide for periodic building envelope inspections, funded from the operating budget, to help ensure critical areas are functioning properly.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

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Client: 21948A Villaggio Neighborhood

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Comp #: 999 Reserve Study Update

Quantity: Annual

Location: Common elements of association

Evaluation: Per Washington law (RCW), reserve studies are to be updated annually, with site inspections by an independent reserve study professional to occur no less than every three years to assess changes in condition (i.e., physical, economic, governmental, etc...) and the resulting effect on the community's long-term reserve plan. Most appropriately factored within operating budget, not as reserve component.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

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