

# Caughlin Ranch

## Reserve Study - NRS 116

August 2010



**WESTERN/ARCHITECTURAL**  
forensic/c architects & engineers

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Caughlin Ranch  
Job# NV10-196



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Caughlin Ranch  
Attn: Board of Directors  
1100 Caughlin Crossing, #60  
Reno, NV 89519

Dear Board of Directors,

Western Architectural would like to thank you for the opportunity to provide this reserve study analysis for the Caughlin Ranch Association, located at Caughlin Parkway in Reno, Nevada.

This reserve study is a budget-planning tool that identifies the status of the reserve fund and schedules the anticipated major commonly owned item replacements. This reserve study will also estimate the expected useful life and remaining useful life of building and site components or systems, and will provide an estimated replacement or refurbishment cost for those components or systems. Major components or systems may include, but are not limited to asphalt walking paths, maintenance equipment, private streets, ponds, irrigation systems, and park amenities, and other commonly owned systems or items.

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

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

### **How to Use a Reserve Study**

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

The replacement schedule lists all components and systems that are anticipated to 'wear out' or fail within 30 years. Items which are anticipated to be replaced or repaired in the current year (2011) are included within the reserve study and these items should already be budgeted for, and scheduled to be replaced.

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

If items fail prematurely, a warranty may still be valid. Be sure to check with the manufacturer about warranty coverage prior to replacing the item. Warranty information may be available on the actual item, such as truck, playground equipment, or asphalt improvements. This reserve study is not a guarantee or warranty for any components or systems. The product manufacturer or installation contractor generally provides warranties. The manufacturer and/or installation contractor may not be identified for some components or systems and therefore may be difficult to obtain warranty information.

The funds that are anticipated per unit assume all units are participating. If vacant units exist and are not contributing to the reserve fund, adjustments may need to be made to compensate for that loss.

The reserve account anticipates earning 1% interest annually on the reserve account. If a higher or lower interest rate is earned, please contact the reserve analyst (Western Architectural) to make the proper adjustments.

Over time, deposits, interest rates, inflation, and replacement costs will vary, making the reserve study inaccurate. It is required to update this reserve study at least every 5 years per the state of Nevada statute NRS 116 to ensure accuracy and adequate funding.

### **Preparation of a Reserve Study**

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

- Property Management Personnel Interviews
- As-built Plans and Specifications Document Reviews
- On-site Observations
- In-house Architects and Engineers Consulting
- Interviewing Engineering Consultants
- RS Means Facilities Maintenance & Repair Cost Data, 17<sup>th</sup> Edition (2010) printed manual
- Interviewing General Contractor Consultants

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

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

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

The goal of the Funding Plan is to reserve adequate funds to perform regular maintenance over the 30 year schedule. which means the reserve account balance is equal to the anticipated expenditures identified in the Reserve Schedule. As monthly deposits are made into the reserve account in order to save for future costs, the funding plan rarely reaches a “fully funded” status. The motivation of achieving a “fully funded” status is to save enough money to afford the replacement of items as they are expected to fail or wear out. Depositing the adequate amount of money into the reserve account each month will result in being “fully funded” when items are expected to be replaced.

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### **Property Information**

Site observations were performed on July 14-16, 2010 at the Caughlin Ranch community. The following is a description of the subject development based on information collected during the site observation and plan review.

- Residential Units: 2,168
- Constructed: 1989 - Varies by area
- County: Washoe
- Development Area: Approx. 2,300 Acres

### **Development Description**

Caughlin Ranch was completed and ready for occupancy in the year 1989. The development contains 2,168 residential units within several sub-associations. The subject development is located mostly on either side of Caughlin Parkway adjacent to S McCarran Blvd in Reno, NV. The development rests on approximately 2,300 acres. The site contains many areas of elevation changes and the site is relatively hilly. Major arterial routes, such as S McCarran Blvd and Interstate 80 are accessible nearby.

## Disclosures

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



**Reserve Provider Personal Credentials**

Mr. Mike J. Poirier has prepared hundreds of reserve studies since 2004. He has provided reserve studies for high-rise condominiums of more than 300 residential units, to rural apartment-style condominiums containing less than 10 residential units, to master HOA's containing over 2,000 homes.

- Awarded the Reserve Specialist (RS) designation through Community Associations Institute (CAI) (RS designation #166).
- Issued State of Nevada Reserve Study Specialist Permit #RSS.0000020.
- Certified window installer, by Installation Masters I.D. #700006048.
- Conducted hundreds of reserve studies in four states since 2004.
- Active member of ASTM International and Community Associations Institute (CAI).
- Excels in programs such as ASTM training for property condition assessments & RS Means Maintenance & Facilities Cost Estimating.
- Developed the reserve study and maintenance plan department for Western Architectural.
- Reserve study clients range from management companies, new construction contractors, and community associations.

Mike J. Poirier

A handwritten signature in black ink, appearing to read 'Mike J. Poirier', with a stylized flourish at the end.

Manager, Maintenance Plan and Reserve Study Department

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### Compliance with Nevada State Requirements

The State of Nevada has a statute discussing reserve studies and requirements of this document (NRS 116). This document is included within this Reserve Study on the following two pages.

**NRS 116.31152 Study of reserves; duties of executive board regarding study; person who conducts study required to hold permit; contents of study; submission of summary of study to Division; use of money credited against residential construction tax for upkeep of park facilities and related improvements identified in study.**

1. The executive board shall:
  - (a) At least once every 5 years, cause to be conducted a study of the reserves required to repair, replace and restore the major components of the common elements;
  - (b) At least annually, review the results of that study to determine whether those reserves are sufficient; and
  - (c) At least annually, make any adjustments to the association's funding plan which the executive board deems necessary to provide adequate funding for the required reserves.
2. The study of the reserves required by subsection 1 must be conducted by a person who holds a permit issued pursuant to [chapter 116A](#), of NRS.
3. The study of the reserves must include, without limitation:
  - (a) A summary of an inspection of the major components of the common elements that the association is obligated to repair, replace or restore;
  - (b) An identification of the major components of the common elements that the association is obligated to repair, replace or restore which have a remaining useful life of less than 30 years;
  - (c) An estimate of the remaining useful life of each major component of the common elements identified pursuant to paragraph (b);
  - (d) An estimate of the cost of repair, replacement or restoration of each major component of the common elements identified pursuant to paragraph (b) during and at the end of its useful life; and
  - (e) An estimate of the total annual assessment that may be necessary to cover the cost of repairing, replacement or restoration of the major components of the common elements identified pursuant to paragraph (b), after subtracting the reserves of the association as of the date of the study, and an estimate of the funding plan that may be necessary to provide adequate funding for the required reserves.
4. A summary of the study of the reserves required by subsection 1 must be submitted to the Division not later than 45 days after the date that the executive board adopts the results of the study.
5. If a common-interest community was developed as part of a planned unit development pursuant to [chapter 278A](#) of NRS and is subject to an agreement with a city

or county to receive credit against the amount of the residential construction tax that is imposed pursuant to NRS 278.4983 and 278.4985, the association that is organized for the common-interest community may use the money from that credit for the repair, replacement or restoration of park facilities and related improvements if:

(a) The park facilities and related improvements are identified as major components of the common elements of the association; and

(b) The association is obligated to repair, replace or restore the park facilities and related improvements in accordance with the study of the reserves required by subsection 1.

(Added to NRS by 1999, 2994; A 2003, 2241; 2005, 2606)

*The preparer of the reserve study is Mike Poirier of Western Architectural. Mr. Poirier currently holds a national Reserve Specialist Designation (number 166) from Community Associations Institute (CAI). In addition, Mr. Poirier is permitted to perform Reserve Studies in the state of Nevada and holds an active Reserve Study Specialist Permit (Permit Number RSS.0000020) by the State of Nevada Real Estate Division.*

## REMAINING USEFUL LIFE ANALYSIS

Fiscal Year 2011

Reference Number	Item Description	Condition	Estimated Installation (Year)	Expected Useful Life (Years)	Remaining Useful Life (Years)	Estimated Replacement Date	Included in Reserve Schedule?	Age
<b>Asphalt Streets &amp; Trails</b>								
101	Ellicot Court Slurry Seal	Good	2010	3	2	2013	YES	1
102	Ellicot Court Overlay	Good	2000	20	9	2020	YES	11
103	Asphalt Walking Trails Seal Coat (Annual Maintenance)	Good	2010	3	2	2013	YES	1
104	Asphalt Walking Trails Overlay	Good	2010	21	20	2031	YES	1
105	Asphalt Walking Trails Crack Fill	Good	2008	3	0	2011	YES	3
106	Village Green Parking Lot Slurry Seal	Good	2008	3	0	2011	YES	3
107	Village Green Parking Lot Overlay	Good	2008	3	0	2011	YES	3
108	Village Green Parking Lot Striping & Graphics	Good	1991	20	0	2011	YES	20
109	Village Green Parking Lot Crack Fill	Good	2008	3	0	2011	YES	3
110	Asphalt Trail Repairs per Padovan Consulting	Good	n/a	20	n/a	2010	NO	n/a
111	Asphalt Street Repairs per Padovan Consulting	Good	n/a	20	n/a	2010	NO	n/a
112	Asphalt Street Repairs per Padovan Consulting	Good	n/a	20	n/a	2010	NO	n/a
<b>Maintenance Equipment</b>								
201	Cushman Vehicles	Good	2002	15	6	2017	YES	9
202	Tractor Mowers	Good	2007	10	6	2017	YES	4
203	Walk-Behind Mowers	Good	2003	10	2	2013	YES	8
204	Power Washer	Good	2001	10	0	2011	YES	10
205	Generator	Good	2003	10	2	2013	YES	8
206	Weed Wackers	Good	2002	10	1	2012	YES	9
207	Backpack Blowers	Good	2006	5	0	2011	YES	5
208	Hedge Trimmers	Good	2003	10	2	2013	YES	8
209	Trailers	Good	1997	20	6	2017	YES	14
210	Snow Plow	Good	2001	15	5	2016	YES	10
211	Water Tank Trailers w/ Pump	Good	1996	20	5	2016	YES	15
212	Bobcat Skid Steer	Good	2006	20	15	2026	YES	5
213	1994 Ford Ranger	Good	1994	20	3	2014	YES	17
214	1999 Ford Ranger	Good	1999	20	8	2019	YES	12
215	2002 Ford Ranger	Good	2002	20	11	2022	YES	9
216	2003 Ford Ranger 4x4	Good	2003	20	12	2023	YES	8
217	2005 Ford Ranger	Good	2005	20	14	2025	YES	6
218	2006 Ford Ranger	Good	2006	20	15	2026	YES	5
219	2007 Ford F-150 Truck	Good	2007	20	16	2027	YES	4
220	2004 Ford F-350 Truck	Good	2004	20	13	2024	YES	7
221	Truck Fleet Maintenance	n/a	n/a	n/a	n/a	n/a	YES	n/a
<b>Parks</b>								
301	Village Green Tennis Court	Good	2010	7	6	2017	YES	1
302	Village Green Baseball Field	Poor	1990	20	-1	2010	YES	21
303	Village Green Playground Structures	Good	1998	20	7	2018	YES	13
304	Village Green Benches & Tables	Good	1998	20	7	2018	YES	13
305	Village Green Picnic Shelter Roof	Good	1998	25	12	2023	YES	13
306	Village Green Barbeques	Good	1995	20	4	2015	YES	16
307	Eastridge Playground Structure	Good/Fair	1995	20	4	2015	YES	16
308	Eastridge Benches & Tables	Good/Fair	1995	20	4	2015	YES	16
309	Caughlin Crest Playground Structure	Poor	1990	20	-1	2010	YES	21
310	Caughlin Crest Benches & Tables	Fair	1990	20	-1	2010	YES	21
311	Caughlin Crest Barbeques	Fair	1990	20	-1	2010	YES	21

## REMAINING USEFUL LIFE ANALYSIS

Fiscal Year 2011

Reference Number	Item Description	Condition	Estimated Installation (Year)	Expected Useful Life (Years)	Remaining Useful Life (Years)	Estimated Replacement Date	Included in Reserve Schedule?	Age
<b>Site Amenities</b>								
401	Maintenance Area Fence	Poor	1989	20	-2	2009	YES	22
402	Monument Signs	Good	1989	30	8	2019	YES	22
403	Irrigation Systems (Annual Maintenance Allowance)	Good	1989	25	3	2014	YES	22
404	Backflow Valves (Repair/Maintenance Allowance)	Good	1989	30	8	2019	YES	22
405	Ponds (Repair/Maintenance Allowance)	Good	2009	10	8	2019	YES	2
410	Fencing (Repair Allowance)	Good	1989	30	8	2019	YES	22
<b>Office Equipment</b>								
501	Desks	Fair	1989	25	3	2014	YES	22
502	Computers	Fair	2004	7	0	2011	YES	7
503	Printers	Fair	2004	10	3	2014	YES	7
504	Copier	Good	2007	10	6	2017	YES	4
505	Conference Table	Fair	1989	15	-7	2004	YES	22
506	Filing Cabinets	Fair	1984	30	3	2014	YES	27
507	Kitchen Appliances	Fair	2005	8	2	2013	YES	6
<b>Buildings</b>								
601	Maintenance Building Roof	Good	1989	25	3	2014	YES	22
602	Maintenance Building Paint	Good	2007	7	3	2014	YES	4
603	Maintenance Building Siding	Good	1989	40	18	2029	YES	22
604	Maintenance Shed/Office	Good	2000	20	9	2020	YES	11
605	Village Green Park Bathroom Roof	Good	1998	25	12	2023	YES	13
606	Village Green Park Bathroom Exterior Paint	Good	2008	6	3	2014	YES	3
607	Village Green Bathroom Interior Paint	Good	2008	4	1	2012	YES	3

### Reserve Study Schedule

Total Per Unit Per Month in 2011 \$5.73  
Year Built 1989  
Number of Units 2180

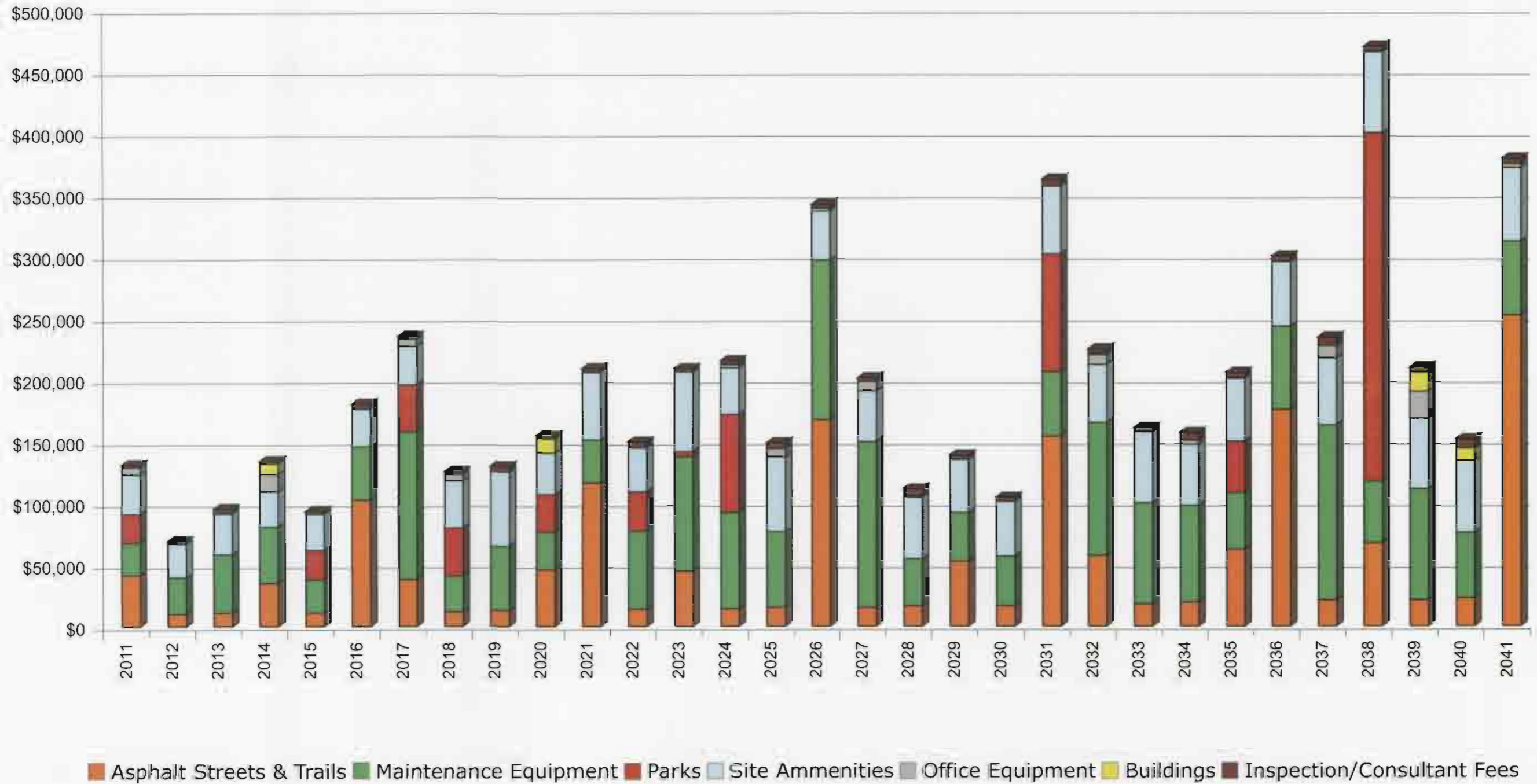
Fiscal Year 2011  
Initiation Rate (%) 2.70

Component Description	Remaining Useful Life (Years)	Quantity (SF, L.F. or Each)	Cost Per SF, L.F. or Each	Total Cost in 2011	Replacement Date	Total Spent Over 30 Years	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
							2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	
<b>Asphalt Streets &amp; Trails</b>							\$1,667,925																															
Ellicott Court Slurry Seal	2	2610	\$0.20	\$522	2013	\$8,181			\$551			\$598			\$649			\$704			\$764			\$829			\$900			\$976			\$1,059		\$1,150			
Ellicott Court Overlay	9	2610	\$1.35	\$3,524	2020	\$4,502										\$4,502																						
Asphalt Walking Trails Seal Coat (Annual Maintenance)	2	300960	\$0.10	\$30,096	2013	\$477,032	\$9,932	\$10,206	\$10,487	\$10,777	\$11,074	\$11,380	\$11,694	\$12,017	\$12,349	\$12,689	\$13,040	\$13,399	\$13,769	\$14,149	\$14,540	\$14,941	\$15,354	\$15,777	\$16,213	\$16,660	\$17,120	\$17,593	\$18,078	\$18,577	\$19,090	\$19,617	\$20,158	\$20,714	\$21,286	\$21,874		
Asphalt Walking Trails Overlay	20	300960	\$1.05	\$316,008	2031	\$784,118						\$90,523				\$103,724						\$118,850			\$136,182						\$156,042							
Asphalt Walking Trails Crack Fill	0	420	\$1.50	\$630	2011	\$10,777	\$630			\$684			\$742			\$805			\$873			\$948			\$1,028			\$1,116			\$1,211			\$1,314				
Village Green Parking Lot Slurry Seal	0	13514	\$0.20	\$2,703	2011	\$46,234	\$2,703			\$2,933			\$3,182			\$3,453			\$3,747			\$4,066			\$4,412			\$4,788			\$5,195			\$5,637				
Village Green Parking Lot Overlay	0	13514	\$1.35	\$18,244	2011	\$312,077	\$18,244			\$19,797			\$21,481			\$23,310			\$25,293			\$27,446			\$29,782			\$32,316			\$35,067			\$38,051				
Village Green Parking Lot Striping & Graphics	0	608	\$0.50	\$304	2011	\$5,200	\$304			\$330			\$358			\$388			\$421			\$457			\$496			\$538			\$584			\$634				
Village Green Parking Lot Crack Fill	0	420	\$1.50	\$630	2011	\$10,777	\$630			\$684			\$742			\$805			\$873			\$948			\$1,028			\$1,116			\$1,211			\$1,314				
Asphalt Trail Repairs per Padovan Consulting	n/a	6019	\$1.50	\$9,029	2010	\$9,029	\$9,029																															
<b>Maintenance Equipment</b>							\$1,891,500																															
Cushman Vehicles	6	4	\$8,000.00	\$32,000	2017	\$94,362							\$37,679														\$56,683											
Tractor Mowers	6	4	\$9,500.00	\$38,000	2017	\$180,616							\$44,743													\$58,745								\$77,128				
Walk-Behind Mowers	2	5	\$3,900.00	\$19,500	2013	\$83,121			\$20,591											\$27,035																		
Power Washer	0	1	\$600.00	\$600	2011	\$3,780	\$600									\$788										\$1,034									\$1,358			
Generator	2	1	\$750.00	\$750	2013	\$3,197			\$792											\$1,040																		
Weed Wackers	1	14	\$350.00	\$4,900	2012	\$20,326		\$5,035									\$6,611										\$8,680											
Backpack Blowers	0	4	\$450.00	\$1,800	2011	\$19,666	\$1,800					\$2,062				\$2,363										\$3,103								\$3,555				
Hedge Trimmers	2	2	\$350.00	\$700	2013	\$2,984			\$739											\$970								\$1,274										
Trailers	6	4	\$2,000.00	\$8,000	2017	\$25,657							\$9,420																						\$16,237			
Snow Plow	5	1	\$3,700.00	\$3,700	2016	\$10,618						\$4,240															\$6,378											
Water Tank Trailers w/ Pump	5	3	\$2,800.00	\$8,400	2016	\$26,216						\$9,625																										
Bobcat Skid Steer	15	1	\$42,000.00	\$42,000	2026	\$63,185																																
1994 Ford Ranger	3	1	\$18,000.00	\$18,000	2014	\$53,201				\$19,532																												
1999 Ford Ranger	8	1	\$18,000.00	\$18,000	2019	\$60,959									\$22,380																							
2002 Ford Ranger	11	1	\$18,000.00	\$18,000	2022	\$24,285													\$24,285																			
2003 Ford Ranger 4x4	12	1	\$22,000.00	\$22,000	2023	\$30,501														\$30,501																		
2005 Ford Ranger	14	1	\$18,000.00	\$18,000	2025	\$26,352																																
2006 Ford Ranger	15	1	\$18,000.00	\$18,000	2026	\$27,079																																
2007 Ford F-150 Truck	16	1	\$25,000.00	\$25,000	2027	\$38,648																																
2004 Ford F-350 Truck	13	1	\$31,000.00	\$31,000	2024	\$44,165																																
Truck Fleet Maintenance	n/a	1	\$24,000.00	\$24,000	n/a	\$1,152,751	\$24,000	\$24,662	\$25,343	\$26,043	\$26,761	\$27,500	\$28,259	\$29,039	\$29,840	\$30,664	\$31,510	\$32,380	\$33,274	\$34,192	\$35,136	\$36,105	\$37,102	\$38,126	\$39,178	\$40,260	\$41,371	\$42,513	\$43,686	\$44,892	\$46,131	\$47,404	\$48,712	\$50,057				
<b>Trucks</b>							\$89,876																															
Village Green Tennis Court	6	2	\$16,000.00	\$32,000	2017	\$205,171							\$37,679																									
Village Green Baseball Field	-1	1	\$1,800.00	\$1,800	2010	\$4,903	\$1,800																															
Village Green Playground Structures	7	5	\$19,000.00	\$95,000	2018	\$323,100								\$28,736		\$30,345			\$32,043																			
Village Green Benches & Tables	7	13	\$650.00	\$8,450	2018	\$27,848																																
Village Green Picnic Shelter Roof	12	748	\$3.97	\$2,970	2023	\$4,117																																
Village Green Barbeques	4	3	\$650.00	\$1,950	2015	\$5,922							\$2,174																									
Eastridge Playground Structure	4	1	\$19,000.00	\$19,000	2015	\$57,706							\$21,186																									
Eastridge Benches & Tables	4	1	\$650.00	\$650	2015	\$1,974							\$725																									
Caughlin Crest Playground Structure	-1	1	\$19,000.00	\$19,000	2010	\$51,752	\$19,000																															
Caughlin Crest Benches & Tables	-1	2	\$650.00	\$1,300	2010	\$3,541	\$1,300																															
Caughlin Crest Barbeques	-1	2	\$650.00	\$1,300	2010	\$3,541	\$1,300																															

### Reserve Study Schedule

Component Description	Remaining Useful Life (Years)	Quantity (SF, L.F. or Each)	Cost Per SF, L.F. or Each	Total Cost in 2011	Replacement Date	Total Spent Over 30 Years	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
							2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
<b>Site Amenities</b>																																					
Maintenance Area Fence	-2	230	\$24.00	\$5,520	2009	\$15,035	\$5,520																														
Monument Signs	8	4	\$1,800.00	\$7,200	2019	\$8,952									\$8,952												\$9,515										
Irrigation Systems (Annual Maintenance Allowance)	3	1	\$24,000.00	\$24,000	2014	\$1,152,751	\$24,000	\$24,662	\$25,343	\$26,043	\$26,761	\$27,500	\$28,259	\$29,039	\$29,840	\$30,664	\$31,510	\$32,380	\$33,274	\$34,192	\$35,136	\$36,105	\$37,102	\$38,126	\$39,178	\$40,260	\$41,371	\$42,513	\$43,686	\$44,892	\$46,131	\$47,404	\$48,712	\$50,057	\$51,438	\$52,858	\$54,317
Backflow Valves (Repair/Maintenance Allowance)	8	100	\$600.00	\$60,000	2019	\$81,100									\$18,650	\$19,694	\$20,796	\$21,960	\$23,196	\$24,516	\$25,920	\$27,410	\$28,986	\$30,648	\$32,396	\$34,230	\$36,150	\$38,164	\$40,268	\$42,472	\$44,776	\$47,180	\$49,684	\$52,288	\$54,992		
Ponds (Repair/Maintenance Allowance)	8	1	\$2,400.00	\$2,400	2019	\$115,275	\$2,400	\$2,466	\$2,534	\$2,604	\$2,676	\$2,750	\$2,826	\$2,904	\$2,984	\$3,066	\$3,151	\$3,238	\$3,327	\$3,419	\$3,514	\$3,611	\$3,710	\$3,813	\$3,918	\$4,026	\$4,137	\$4,251	\$4,369	\$4,489	\$4,613	\$4,740	\$4,871	\$5,006	\$5,144	\$5,286	\$5,432
Fencing (Repair Allowance)	8	1	\$5,000.00	\$5,000	2019	\$45,734			\$5,280					\$6,050					\$6,932																		\$10,428
<b>Office Equipment</b>																																					
Desks	3	5	\$1,200.00	\$6,000	2014	\$19,370				\$6,511																										\$12,860	
Computers	0	5	\$900.00	\$4,500	2011	\$34,149	\$4,500						\$5,445								\$6,588						\$7,971									\$9,645	
Printers	3	5	\$350.00	\$1,750	2014	\$7,665				\$1,899									\$2,493																		
Copier	6	1	\$5,000.00	\$5,000	2017	\$23,765						\$5,887												\$7,730											\$10,148		
Conference Table	-7	1	\$1,400.00	\$1,400	2004	\$6,675	\$1,400														\$2,106															\$3,168	
Filing Cabinets	3	8	\$650.00	\$5,200	2014	\$5,643																															
Kitchen Appliances	2	2	\$100.00	\$200	2013	\$1,206			\$211								\$263																			\$406	
<b>Buildings</b>																																					
Maintenance Building Roof	3	1344	\$3.97	\$5,336	2014	\$17,226					\$5,790																									\$11,436	
Maintenance Building Paint	3	1024	\$0.55	\$563	2014	\$3,328					\$611																										
Maintenance Building Siding	9	1024	\$3.88	\$3,973	2020	\$5,076									\$5,076																						
Maintenance Shed/Office	9	1	\$4,300.00	\$4,300	2020	\$14,964									\$5,494																					\$9,470	
Village Green Park Bathroom Roof	3	421	\$3.97	\$1,671	2014	\$5,396					\$1,814																									\$3,582	
Village Green Park Bathroom Exterior Paint	3	640	\$0.55	\$352	2014	\$2,719					\$382						\$450																			\$734	
Village Green Bathroom Interior Paint	1	960	\$0.37	\$355	2012	\$4,409		\$365				\$407									\$506					\$564										\$702	
<b>Inspection/Consultant Fees</b>																																					
Reserve Study Update	1	1	\$1,960.00	\$1,960	2012	\$63,422	\$1,960	\$2,014		\$2,127	\$2,186		\$2,308	\$2,372		\$2,504	\$2,573		\$2,717	\$2,792		\$2,949	\$3,030		\$3,200	\$3,288		\$3,472	\$3,568		\$3,767	\$3,871		\$4,088	\$4,201	\$4,436	
Reserve Study Update w/ Site Visit	3	1	\$3,430.00	\$3,430	2014	\$53,759			\$3,622				\$3,930			\$4,265			\$4,628			\$5,021			\$5,449			\$5,913			\$6,416			\$6,962			\$7,554
<b>(Services within this section are available through Western Architectural)</b>																																					
Total Expenditures		\$6,027,758					\$122,022	\$69,411	\$95,495	\$134,200	\$93,544	\$180,515	\$235,258	\$125,825	\$129,910	\$154,669	\$209,355	\$149,668	\$208,961	\$215,334	\$149,010	\$342,033	\$201,420	\$111,522	\$138,760	\$104,493	\$362,521	\$224,802	\$160,622	\$157,184	\$205,600	\$299,926	\$234,394	\$470,542	\$209,608	\$151,832	\$379,322
Recommended Reserve Contributions		\$150,000					\$150,000	\$154,140	\$158,394	\$162,766	\$167,258	\$171,875	\$176,618	\$181,493	\$186,502	\$191,650	\$196,939	\$202,375	\$207,960	\$213,700	\$219,598	\$225,659	\$231,887	\$238,287	\$244,864	\$251,622	\$258,567	\$265,703	\$273,037	\$280,573	\$288,317	\$296,274	\$304,451	\$312,854	\$321,489	\$330,362	\$339,480
Interest Rate on Reserves		1.00%					1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Ending Balance		\$524,114					\$552,092	\$643,189	\$713,149	\$749,132	\$831,075	\$830,659	\$779,739	\$843,761	\$909,357	\$955,801	\$952,819	\$1,015,581	\$1,024,726	\$1,033,323	\$1,114,950	\$1,008,561	\$1,049,419	\$1,187,946	\$1,306,991	\$1,468,661	\$1,378,354	\$1,433,448	\$1,561,322	\$1,701,558	\$1,802,118	\$1,816,451	\$1,905,373	\$1,765,162	\$1,895,813	\$2,095,087	\$2,075,797

### Annual Expenditures



## Funding Statistics

### Baseline Statement

Number of Residential Units	2180
Fiscal Year End	August 31
Fiscal Year Begin	September 1
Current Reserve Allocation (Annually)	\$250,000
From client-provided budget posted on HOA's website	
Current Reserve Allocation (Monthly per Unit)	\$9.56
Starting Reserve Account Balance	\$524,114

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

### Economic Variables

Projected Annual Inflation (%)	2.76%
Based on inflation history 1999-2009 by www.Inflationdata.com	
Reserve Account Interest Rate	1.00%
Estimated average interest rates	

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

### Recommended Reserve Contributions

Minimum Reserve Contribution (Annually)	\$150,000
Increase reserve contribution each year by current inflation rate. See the Funding Plan Summary for details	
Minimum Reserve Contribution (Monthly per unit)	\$5.73

The purpose of the Recommended Reserve Contributions section is to summarize the focal points of the reserve schedule. This section identifies changes from previous reserve contributions. Calculations within this section are based on the reserve schedule.

## Funding Plan Summary

Year #	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Year Date	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
<b>Ideal Reserve Account Balance</b>	\$463,905	\$465,905	\$544,061	\$594,321	\$610,834	\$674,089	\$638,632	\$575,638	\$646,409	\$706,961	\$761,606	\$760,619	\$838,080	\$847,717	\$681,392	\$646,235
<b>Actual Reserve Account Balance</b>	\$524,114	\$552,092	\$643,189	\$713,149	\$749,132	\$831,075	\$830,659	\$779,739	\$843,761	\$909,357	\$955,801	\$952,819	\$1,015,581	\$1,024,726	\$1,033,323	\$1,114,950
<b>Total Annual Deposit</b>	\$150,000	\$154,140	\$158,394	\$162,766	\$167,258	\$171,875	\$176,618	\$181,493	\$186,502	\$191,650	\$196,939	\$202,375	\$207,960	\$213,700	\$219,598	\$225,659
<b>Expenditures</b>	\$122,022	\$69,411	\$95,495	\$134,200	\$93,544	\$180,515	\$235,258	\$125,825	\$129,910	\$154,669	\$209,355	\$149,668	\$208,961	\$215,334	\$149,010	\$342,033
<b>Percent Funded</b>	<b>119%</b>	<b>118%</b>	<b>118%</b>	<b>120%</b>	<b>123%</b>	<b>123%</b>	<b>130%</b>	<b>135%</b>	<b>131%</b>	<b>129%</b>	<b>125%</b>	<b>125%</b>	<b>121%</b>	<b>121%</b>	<b>152%</b>	<b>173%</b>

Year #	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Year Date	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
<b>Ideal Reserve Account Balance</b>	\$508,826	\$529,369	\$630,026	\$711,443	\$838,110	\$713,103	\$735,081	\$822,971	\$920,416	\$977,828	\$956,705	\$1,019,463	\$1,031,669	\$1,118,693	\$1,271,723
<b>Actual Reserve Account Balance</b>	\$1,008,561	\$1,049,419	\$1,187,946	\$1,306,991	\$1,468,661	\$1,378,354	\$1,433,448	\$1,561,322	\$1,701,558	\$1,802,118	\$1,816,451	\$1,905,373	\$1,765,162	\$1,895,813	\$2,095,087
<b>Total Annual Deposit</b>	\$231,887	\$238,287	\$244,864	\$251,622	\$258,567	\$265,703	\$273,037	\$280,573	\$288,317	\$296,274	\$304,451	\$312,854	\$321,489	\$330,362	\$339,480
<b>Expenditures</b>	\$201,420	\$111,522	\$138,760	\$104,493	\$362,521	\$224,802	\$160,622	\$157,184	\$205,600	\$299,926	\$234,394	\$470,542	\$209,608	\$151,832	\$379,322
<b>Percent Funded</b>	<b>198%</b>	<b>198%</b>	<b>189%</b>	<b>184%</b>	<b>175%</b>	<b>193%</b>	<b>195%</b>	<b>190%</b>	<b>185%</b>	<b>184%</b>	<b>190%</b>	<b>187%</b>	<b>171%</b>	<b>169%</b>	<b>165%</b>

### Current Reserve Fund Status

The reserve account balance is currently in a **Strong** financial position. This condition indicates that in 2010, reserves are currently sufficient to adequately meet the financial needs necessary to maintain this property.

### Measure of Strength for Reserve Funding Plan

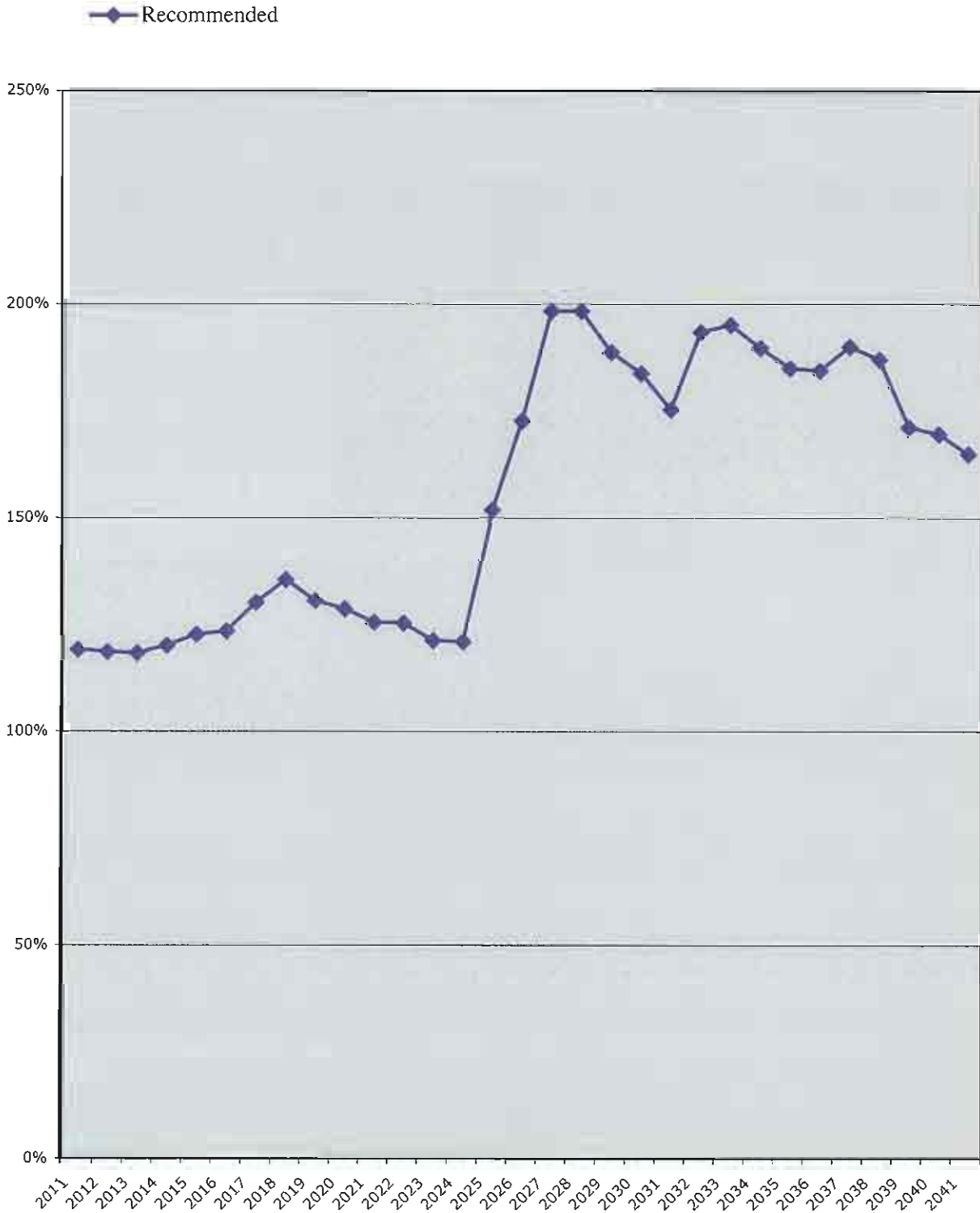
**0% - 30% Funded** is a weak financial position. Reserve accounts which fall into this category are subject to special assessment charges and deferred maintenance which may harm the property value and building performance. If the reserve account is in this position, immediate action should be taken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

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

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

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

## Percent Funded



## Terms and Definitions

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

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

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

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

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

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

**CURRENT REPLACEMENT COST:** See “Replacement Cost.”

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

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



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

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

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

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

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

Baseline Funding: Establishing a Reserve funding goal of keeping the Reserve cash balance above zero.

Full Funding: Setting a Reserve funding goal of attaining and maintaining Reserves at or near 100% funded.

Statutory Funding: Establishing a Reserve funding goal of setting aside the specific minimum amount of Reserves required by local statutes.

Threshold Funding: Establishing a Reserve funding goal of keeping the Reserve balance above a specified dollar or Percent Funded amount. Depending on the threshold, this may be more or less conservative than “Fully Funding.”

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

**FUNDING PRINCIPLES:**

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

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

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

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

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

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

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

**RESERVE PROVIDER:** An individual that prepares Reserve Studies.

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

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

1. The regular and continuous absence from principal office premises from which professional services are rendered; expect for performance of field work or presence in a field office maintained exclusively for a specific project;
2. The failure to personally inspect or review the work of subordinate where necessary and appropriate;
  
3. The rendering of a limited, cursory or perfunctory review of plans or projects in lieu of an appropriate detailed review;
4. The failure to personally be available on a reasonable basis or with adequate advance notice for consultation and inspection where circumstances require personal availability.

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

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

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