



**RESERVE STUDY
FOR
GREENFIELD HEIGHTS HOMEOWNERS ASSOCIATION, INC**



**Management By:
Vision Community Management
16625 S Desert Foothills Pkwy
Phoenix, AZ 85048**

Prepared By:
FDReserve Studies, LLC
Goodyear, AZ 85338

September 27, 2017



EXECUTIVE SUMMARY

GREENFIELD HEIGHTS HOMEOWNERS ASSOCIATION, INC

September 27, 2017

Starting Reserve Balance 1/1/2018	\$58,098
Projected Fully Funded Reserve Balance 1/1/2018	\$147,286
Percent Fully Funded	39%
Annual Reserve Contribution	\$5,882

This study is based on the cash flow method of funding. This reserve analysis is based on an observation and assessment of the condition of the reserve fund based on a field assessment of the condition of the assets of the association, a projection of the useful life and remaining useful life of those assets, and the replacement costs for those assets. The financial information was provided by the association on the reserve fund balance and contribution to the fund. The general guideline used in our studies to determine whether the cost to replace or maintain an asset is paid from reserves or operations is if the replacement cost exceeds \$500 it is included in reserves. That can be modified at the direction of the Board.

Following are some key points relative to your study:

1. The study has a fiscal year beginning date of 1/1/2018.
2. The study reflects a beginning balance for the reserve fund of \$58,098 and an annual contribution of \$5,882. The financial information was provided by the association and was not audited. As reflected by the Current Assessment Funding Model Projection in the report, the reserve fund is underfunded. Reserve funds are generally considered to be in a healthy condition if the reserve balance is at or above 70% of the fully funded balance.
3. Because of the underfunded condition based on the Current Assessment Funding, an Alternate Funding Model was prepared and included in the report for consideration by the Association. The model suggests annual funding of \$30,000. With this funding alternative the reserve fund will reach a healthy balance in approximately seven years. Other funding alternatives can be prepared if desired by the Board. Note that the study includes a 3% inflation on costs based on current construction cost indexes so some increase in funding over time is recommended to stay even with cost increase from inflation.
4. This study should be compared with the operating budget to make sure there are no overlaps

or gaps of items in this study and in the operating budget.

5. The physical assessment of components was based on field reviews conducted on 6/23/2017. The field review consisted of on-site observations of common areas and facilities. No sampling or destructive testing was performed. The on-site observation is not a comprehensive quality inspection. Quantification of assets was accomplished with a combination of on-site measurements, aerial photos and information provided by the association.
6. The consultant has no other involvement with the association that could be considered a conflict of interest. To our knowledge, there are no material issues that have not been disclosed that would cause a distortion of the association's reserve fund.

TABLE OF CONTENTS
Greenfield Heights Homeowners Association

PART I • INFORMATION ABOUT YOUR RESERVE STUDY

Important Information	1-1
Introduction	1-2
Funding Options	1-2
Types of Reserve Studies	1-3
Developing a Component List	1-3
Operational Expenses	1-4
Reserve Expenses	1-4
Funding Methods	1-5
Funding Strategies	1-6
Distribution of Reserves	1-7
User’s Guide to Your Reserve Study	1-9
Definitions	1-9
Your Reserve Study is a Multi-Purpose Tool	1-13

PART II • RESERVE STUDY

Current Assessment Funding Model Summary	2-1
Current Assessment Funding Model Projection	2-2
Current Assessment Funding Model VS Fully Funded Chart	2-3
Alternate Funding Model Summary	2-4
Alternate Funding Model Projection	2-5
Alternate Funding Model VS Fully Funded	2-6
Annual Expenditure Detail	2-7
Detail Report by Group	2-13
Category Detail Index	2-39
Spread Sheet by Group	2-41

Important Information

The client shall have the right to reproduce and distribute copies of this report, or the information contained within, as may be required for compliance with all applicable regulations.

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

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

This reserve analysis study is a reflection of information provided to or assembled by the consultant for the associations use, not for the purpose of performing an audit, quality/forensic analyses or background checks of historical records. Information provided by the official representative of the association regarding financial, physical, quantity, or historical issues is deemed reliable by the consultant.

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

FDReserve Studies would like to thank you for using our services. We invite you to call us at any time, should you have questions, comments or need assistance. In addition, any of the parameters and estimates used in this study may be changed at your request, after which we will provide a revised study.

This reserve analysis is prepared under the supervision of William A. Schlimgen PE, a registered professional engineer in Arizona with more than 10 years of experience in preparation of reserve studies and more than 40 years of engineering management, design, inspection and construction management experience.

Part I

Document

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

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

Funding Options

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

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

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

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

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

The fourth option is to pass a "**special assessment**" to the membership in an amount required to cover the expenditure. When a special assessment is passed, the association has the authority and responsibility to collect the assessments, even by means of foreclosure, if necessary. However, an association considering a special assessment cannot guarantee that an assessment, when needed, will be passed. Consequently, the association cannot guarantee its ability to perform the required repairs or replacements

to those major components for which it is obligated when the need arises. Additionally, while relatively new communities require very little in the way of major “reserve” expenditures, associations reaching 12 to 15 years of age and older, find many components reaching the end of their effective useful lives. These required expenditures, all accruing at the same time, could be devastating to an association’s overall budget.

Types of Reserve Studies

Most reserve studies fit into one of three categories:

Full Reserve Study;

Update with site inspection; and

Update without site inspection.

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

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

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

The Reserve Study: A Physical and a Financial Analysis

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

Physical Analysis

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

Developing a Component List

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

Operational Expenses

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

Utilities:	Bank Service Charges	Accounting
Electricity	Dues & Publications	Reserve Study
Gas	Licenses, Permits & Fees	Repair Expenses:
Water	Insurance(s)	Tile Roof Repairs
Telephone	Services:	Equipment Repairs
Cable TV	Landscaping	Minor Concrete Repairs
Administrative:	Pool Maintenance	Operating Contingency
Supplies	Street Sweeping	

Reserve Expenses

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

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

Budgeting is Normally Excluded for:

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

Financial Analysis

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

Preparing the Reserve Study

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

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

Funding Methods

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

The cash flow method develops a reserve-funding plan where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve funding plans are tested against the actual anticipated schedule of reserve expenses until the desired funding goal is achieved. This method sets up a "window" in which all future anticipated replacement costs are computed, based upon the individual lives of the components under consideration. The Threshold and the Current Assessment funding models are based upon the cash flow method.

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

Funding Strategies

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

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

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

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

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

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

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

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

Component Funding Model Distribution of Accumulated Reserves

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

When calculating reserves based upon the component methodology, a beginning reserve balance must be

allocated for each of the individual components considered in the analysis, before the individual calculations can be completed. When this distribution is not available, or of sufficient detail, the following method is suggested for allocating reserves:

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

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

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

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

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

If, at the completion of this task, there are additional moneys that have not been distributed, the remaining reserves are then assigned, in ascending order, to a level equal to, but not exceeding, the current replacement cost for each component. If there are sufficient moneys available to fund all assets at their current replacement cost levels, then any excess funds are designated as such and are not factored into any of the report computations. If, at the end of this assignment process there are designated excess funds, they can be used to offset the monthly contribution requirements recommended, or used in any other manner the client may desire.

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

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

Funding Reserves

Three assessment and contribution figures are provided in the report, the “Monthly Reserve Assessment Required”, the “Average Net Monthly Interest Earned” contribution and the “Total Monthly Allocation

to Reserves.” The association should allocate the “Monthly Reserve Assessment Required” amount to reserves each month when the interest earned on the reserves is left in the reserve accounts as part of the contribution. Any interest earned on reserve deposits, must be left in reserves and only amounts set aside for taxes should be removed.

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

Users’ Guide to your Reserve Analysis Study

Part II of your report contains the reserve analysis study for your association. There are seven types of reports in the study as described below.

Report Summaries

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

Index Reports

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

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

Detail Reports

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

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

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

Projections

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

Definitions

Report I.D.

Includes the Report Date (example: November 15, 1992), Account Number (example: 9773), and Version (example: 1.0). Please use this information (displayed on the summary page) when referencing your report.

Budget Year Beginning/Ending

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

Number of Units and/or Phases

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

Inflation

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

Annual Assessment Increase

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

Investment Yield Before Taxes

The average interest rate anticipated by the association based upon its current investment practices.

Taxes on Interest Yield

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

Projected Reserve Balance

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

Percent Fully Funded

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

Phase Increment Detail and/or Age

Comments regarding aging of the components on the basis of construction date or date of acceptance by the association.

Monthly Assessment

The assessment to reserves required by the association each month.

Interest Contribution (After Taxes)

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

Total Monthly Allocation

The sum of the monthly assessment and interest contribution figures.

Group and Category

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

Percentage of Replacement or Repairs

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

Placed-In-Service Date

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

Estimated Useful Life

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

Adjustment to Useful Life

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

Estimated Remaining Life

This calculation is completed internally based upon the report's fiscal year date and the date the asset was

placed-in-service.

Replacement Year

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

Annual Fixed Reserves

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

Fixed Assessment

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

Salvage Value

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

One-Time Replacement

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

Current Replacement Cost

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

Future Replacement Cost

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

Component Inventory

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

A Multi-Purpose Tool

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

In addition, your reserve study serves a variety of useful purposes:

- Following the recommendations of a reserve study performed by a professional consultant can protect the Board of Directors in a community from personal liability concerning reserve components and reserve funding.
- A reserve analysis study is required by your accountant during the preparation of the association's annual audit.
- The reserve study is often requested by lending institutions during the process of loan applications, both for the community and, in many cases, the individual owners.
- Your Report is also a detailed inventory of the association's major assets and serves as a management tool for scheduling, coordinating and planning future repairs and replacements.
- Your Report is a tool that can assist the Board in fulfilling its legal and fiduciary obligations for maintaining the community in a state of good repair. If a community is operating on a special assessment basis, it cannot guarantee that an assessment, when needed, will be passed. Therefore, it cannot guarantee its ability to perform the required repairs or replacements to those major components for which the association is obligated.
- Since the reserve analysis study includes measurements and cost estimates of the client's assets, the detail reports may be used to evaluate the accuracy and price of contractor bids when assets are due to be repaired or replaced.
- The reserve study is an annual disclosure to the membership concerning the financial condition of the association, and may be used as a "consumers' guide" by prospective purchasers.

Greenfield Heights Homeowners Association
Mesa, AZ
Current Assessment Funding Model Summary

Report Date	September 27, 2017
Budget Year Beginning	January 01, 2018
Budget Year Ending	December 31, 2018
Total Units	58

<i>Report Parameters</i>	
Inflation	3.00%
Annual Assessment Increase	0.00%
Interest Rate on Reserve Deposit	0.00%
Tax Rate on Interest	30.00%
Contingency	3.00%
2018 Beginning Balance	\$58,098

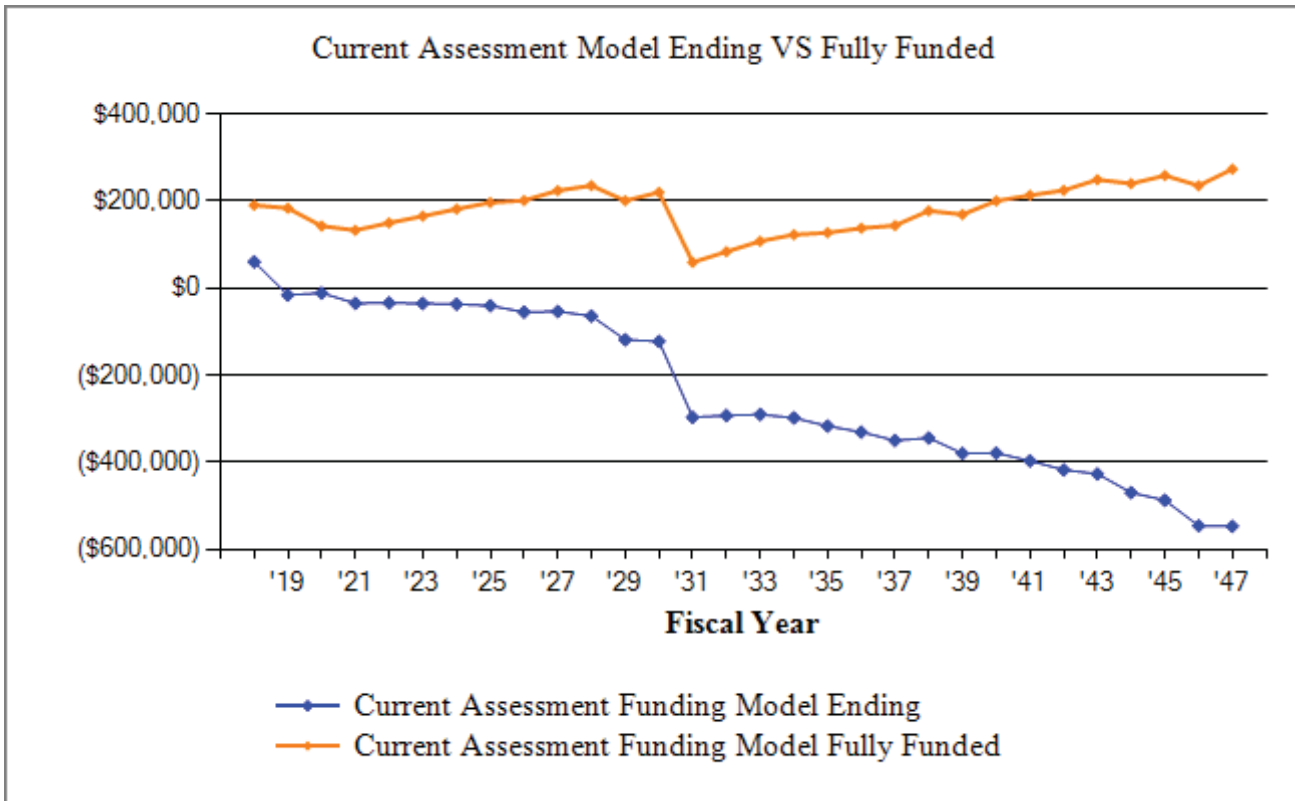
<i>Current Assessment Funding Model Summary of Calculations</i>	
Required Annual Contribution <i>\$101.41 per unit annually</i>	\$5,882.00
Average Net Annual Interest Earned	<hr/>
Total Annual Allocation to Reserves <i>\$101.41 per unit annually</i>	\$5,882.00

Greenfield Heights Homeowners Association
Mesa, AZ
Current Assessment Funding Model Projection

Beginning Balance: \$58,098

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2018	254,623	5,882		3,500	60,480	190,658	32%
2019	262,262	5,882		81,849	-15,487	183,817	-8%
2020	212,841	5,882		1,273	-10,878	142,898	-8%
2021	219,226	5,882		29,786	-34,782	133,091	-26%
2022	225,803	5,882		4,845	-33,745	150,000	-22%
2023	232,577	5,882		7,130	-34,992	165,532	-21%
2024	239,554	5,882		7,475	-36,585	181,722	-20%
2025	246,741	5,882		9,476	-40,179	196,847	-20%
2026	254,143	5,882		20,661	-54,958	201,476	-27%
2027	261,768	5,882		4,306	-53,382	224,230	-24%
2028	269,621	5,882		16,225	-63,725	235,650	-27%
2029	277,709	5,882		60,546	-118,390	201,006	-59%
2030	286,040	5,882		9,481	-121,989	220,225	-55%
2031	294,622	5,882		180,285	-296,391	59,349	-499%
2032	303,460	5,882		1,815	-292,325	83,874	-349%
2033	312,564	5,882		3,583	-290,026	107,998	-269%
2034	321,941	5,882		13,584	-297,728	122,988	-242%
2035	331,599	5,882		24,740	-316,586	127,368	-249%
2036	341,547	5,882		19,765	-330,469	137,970	-240%
2037	351,794	5,882		25,137	-349,723	144,020	-243%
2038	362,347	5,882			-343,841	177,800	-193%
2039	373,218	5,882		41,596	-379,555	169,309	-224%
2040	384,414	5,882		4,800	-378,473	200,546	-189%
2041	395,947	5,882		23,900	-396,491	213,375	-186%
2042	407,825	5,882		26,565	-417,174	224,726	-186%
2043	420,060	5,882		15,295	-426,587	249,379	-171%
2044	432,662	5,882		48,761	-469,466	240,260	-195%
2045	445,642	5,882		23,501	-487,085	258,745	-188%
2046	459,011	5,882		64,325	-545,528	235,523	-232%
2047	472,781	5,882		7,070	-546,716	273,520	-200%

Greenfield Heights Homeowners Association
Mesa, AZ
Current Assessment Funding Model VS Fully Funded Chart



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

Greenfield Heights Homeowners Association

Mesa, AZ

Alternate Funding Model Summary

Report Date	September 27, 2017
Budget Year Beginning	January 01, 2018
Budget Year Ending	December 31, 2018
Total Units	58

<i>Report Parameters</i>	
Inflation	3.00%
Interest Rate on Reserve Deposit	0.00%
Tax Rate on Interest	30.00%
2018 Beginning Balance	\$58,098

The alternate funding is based on annual funding of \$30,000 to the reserve fund.

Alternate Funding Model Summary of Calculations

Required Annual Contribution	\$30,000.00
<i>\$517.24 per unit annually</i>	
Average Net Annual Interest Earned	
Total Annual Allocation to Reserves	\$30,000.00
<i>\$517.24 per unit annually</i>	

Greenfield Heights Homeowners Association

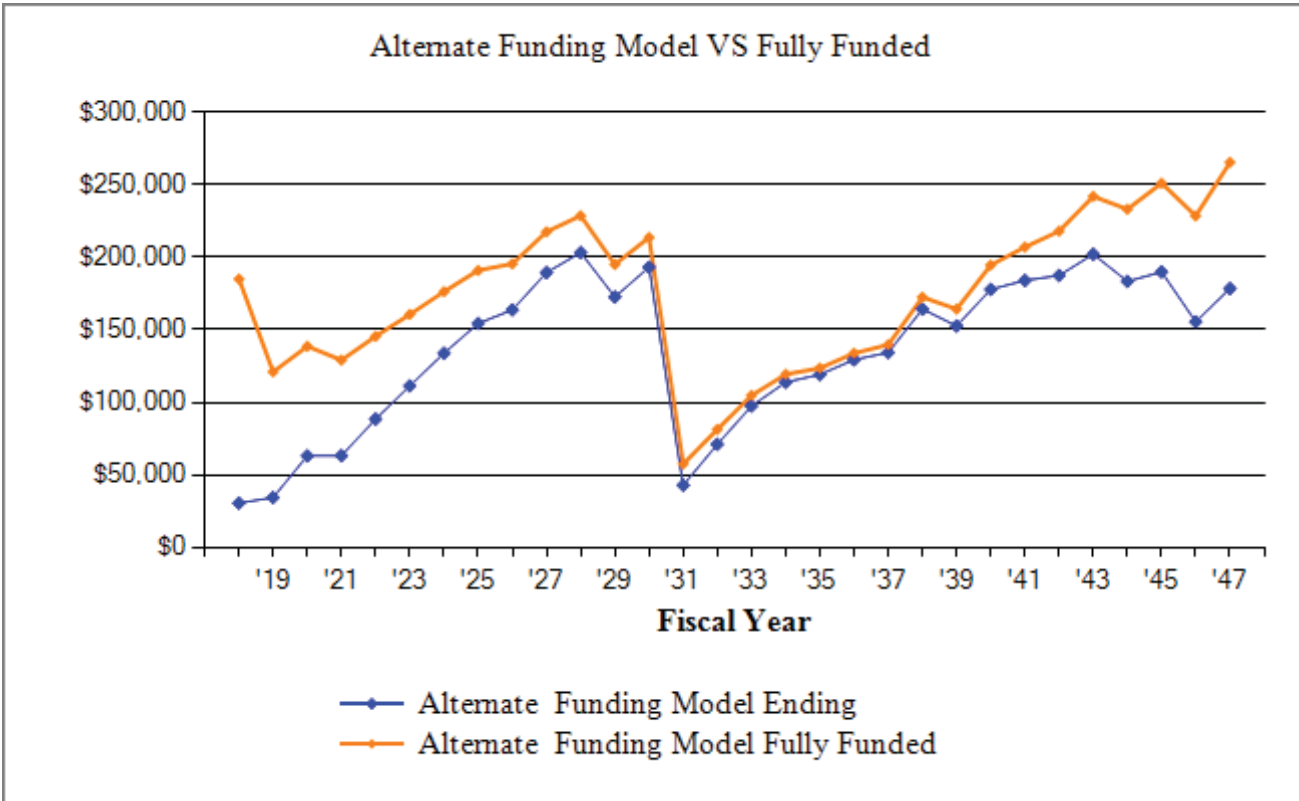
Mesa, AZ

Alternate Funding Model Projection

Beginning Balance: \$58,098

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2018	254,623	30,000		57,500	30,598	184,938	17%
2019	206,642	30,000		26,229	34,369	121,014	28%
2020	212,841	30,000		1,273	63,096	138,611	46%
2021	219,226	30,000		29,786	63,310	129,099	49%
2022	225,803	30,000		4,845	88,465	145,500	61%
2023	232,577	30,000		7,130	111,336	160,566	69%
2024	239,554	30,000		7,475	133,861	176,270	76%
2025	246,741	30,000		9,476	154,385	190,941	81%
2026	254,143	30,000		20,661	163,724	195,432	84%
2027	261,768	30,000		4,306	189,418	217,504	87%
2028	269,621	30,000		16,225	203,193	228,580	89%
2029	277,709	30,000		60,546	172,646	194,976	89%
2030	286,040	30,000		9,481	193,165	213,618	90%
2031	294,622	30,000		180,285	42,881	57,568	74%
2032	303,460	30,000		1,815	71,065	81,358	87%
2033	312,564	30,000		3,583	97,482	104,758	93%
2034	321,941	30,000		13,584	113,898	119,299	95%
2035	331,599	30,000		24,740	119,158	123,547	96%
2036	341,547	30,000		19,765	129,393	133,831	97%
2037	351,794	30,000		25,137	134,257	139,699	96%
2038	362,347	30,000			164,257	172,466	95%
2039	373,218	30,000		41,596	152,661	164,230	93%
2040	384,414	30,000		4,800	177,861	194,529	91%
2041	395,947	30,000		23,900	183,961	206,974	89%
2042	407,825	30,000		26,565	187,396	217,984	86%
2043	420,060	30,000		15,295	202,101	241,898	84%
2044	432,662	30,000		48,761	183,340	233,053	79%
2045	445,642	30,000		23,501	189,839	250,983	76%
2046	459,011	30,000		64,325	155,514	228,457	68%
2047	472,781	30,000		7,070	178,444	265,314	67%

Greenfield Heights Homeowners Association
Mesa, AZ
Alternate Funding Model VS Fully Funded



The Alternate Funding Model is based on an alternate funding program. Because it is calculated using the alternate funding, it will give the accurate projection of how well the association is funded for the next 30 years of planned reserve expenditures using an alternate funding program.

Greenfield Heights Homeowners Association
Mesa, AZ
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2018	
Access Phone - Replace	3,500
Total for 2018	\$3,500
Replacement Year 2019	
Asphalt-Repair	55,620
Backflow Preventers - Replace	618
Concrete - Repair	2,060
Gate Operators - Replace	14,420
Granite - Replace	1,344
Spa Pump & Motor - Replace	1,030
Tomar - Replace	1,545
Wrought Iron - Paint	2,132
Wrought Iron - Replace	3,080
Total for 2019	\$81,849
Replacement Year 2020	
Spa Pump & Motor - Replace	1,273
Total for 2020	\$1,273
Replacement Year 2021	
Asphalt - Surface Treatment	10,455
Concrete - Repair	2,185
Masonry Walls - Paint	6,425
Masonry Walls - Repair	4,819
Pool Heater - Replace	3,169
Spa Heater - Replace	2,404
Water Heater - Replace	328
Total for 2021	\$29,786
Replacement Year 2022	
Granite - Replace	1,469
Pool Furniture - Replace	3,377
Total for 2022	\$4,845
Replacement Year 2023	
Concrete - Repair	2,319

Greenfield Heights Homeowners Association
Mesa, AZ
Annual Expenditure Detail

Description	Expenditures
<i>Replacement Year 2023 continued...</i>	
Pool & Spa Deck - Recoat	3,652
Spa Pump & Motor - Replace	1,159
Total for 2023	\$7,130
Replacement Year 2024	
Spa Pump & Motor - Replace	1,433
Wrought Iron - Paint	2,472
Wrought Iron - Replace	3,570
Total for 2024	\$7,475
Replacement Year 2025	
Concrete - Repair	2,460
Granite - Replace	1,605
Irrigation Controller - Replace	2,952
Pool Filter - Replace	1,230
Spa Filter - Replace	1,230
Total for 2025	\$9,476
Replacement Year 2026	
Flagpole - Replace	1,013
Mailboxes - Replace	7,727
Masonry Walls - Repair	5,586
Monument - Replace	3,800
Restroom - Remodel	2,534
Total for 2026	\$20,661
Replacement Year 2027	
Concrete - Repair	2,610
Spa Pump & Motor - Replace	1,305
Water Heater - Replace	391
Total for 2027	\$4,306
Replacement Year 2028	
Asphalt - Surface Treatment	12,859
Granite - Replace	1,754
Spa Pump & Motor - Replace	1,613
Total for 2028	\$16,225

Greenfield Heights Homeowners Association
Mesa, AZ
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2029	
Concrete - Repair	2,768
Gate Operators - Replace	19,379
Masonry Walls - Paint	8,139
Pool & Spa - Resurface	18,272
Pool Furniture - Replace	4,153
Pool Pump & Motor - Replace	831
Wrought Iron - Paint	2,865
Wrought Iron - Replace	4,139
Total for 2029	\$60,546
Replacement Year 2030	
Access Phone - Replace	4,990
Pool & Spa Deck - Recoat	4,491
Total for 2030	\$9,481
Replacement Year 2031	
Asphalt - Overlay	131,727
Concrete - Repair	2,937
Granite - Replace	1,916
Masonry Walls - Repair	6,476
Pool & Spa Deck - Resurface	18,357
Pool Heater - Replace	4,259
Ramada Roof Underlayment - Replace	2,056
Restroom Roof Underlayment - Replace	514
Spa Heater - Replace	3,231
Spa Pump & Motor - Replace	1,469
Vehicle Gates - Replace	7,343
Total for 2031	\$180,285
Replacement Year 2032	
Spa Pump & Motor - Replace	1,815
Total for 2032	\$1,815
Replacement Year 2033	
Concrete - Repair	3,116
Water Heater - Replace	467
Total for 2033	\$3,583

Greenfield Heights Homeowners Association
Mesa, AZ
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2034	
Backflow Preventers - Replace	963
Granite - Replace	2,094
Tomar - Replace	2,407
Wrought Iron - Paint	3,322
Wrought Iron - Replace	4,798
Total for 2034	\$13,584
Replacement Year 2035	
Asphalt - Surface Treatment	15,814
Concrete - Repair	3,306
Irrigation Controller - Replace	3,967
Spa Pump & Motor - Replace	1,653
Total for 2035	\$24,740
Replacement Year 2036	
Masonry Walls - Repair	7,508
Monument - Replace	5,107
Pool Furniture - Replace	5,107
Spa Pump & Motor - Replace	2,043
Total for 2036	\$19,765
Replacement Year 2037	
Concrete - Repair	3,507
Granite - Replace	2,288
Masonry Walls - Paint	10,311
Pool & Spa Deck - Recoat	5,524
Pool Filter - Replace	1,754
Spa Filter - Replace	1,754
Total for 2037	\$25,137
<i>No Replacement in 2038</i>	
Replacement Year 2039	
Concrete - Repair	3,721
Gate Operators - Replace	26,044
Spa Pump & Motor - Replace	1,860

Greenfield Heights Homeowners Association
Mesa, AZ
Annual Expenditure Detail

Description	Expenditures
<i>Replacement Year 2039 continued...</i>	
Water Heater - Replace	558
Wrought Iron - Paint	3,851
Wrought Iron - Replace	5,562
Total for 2039	\$41,596
Replacement Year 2040	
Granite - Replace	2,501
Spa Pump & Motor - Replace	2,299
Total for 2040	\$4,800
Replacement Year 2041	
Concrete - Repair	3,947
Masonry Walls - Repair	8,704
Pool Heater - Replace	5,723
Pool Pump & Motor - Replace	1,184
Spa Heater - Replace	4,342
Total for 2041	\$23,900
Replacement Year 2042	
Access Phone - Replace	7,115
Asphalt - Surface Treatment	19,450
Total for 2042	\$26,565
Replacement Year 2043	
Concrete - Repair	4,188
Granite - Replace	2,732
Pool Furniture - Replace	6,281
Spa Pump & Motor - Replace	2,094
Total for 2043	\$15,295
Replacement Year 2044	
Pool & Spa - Resurface	28,467
Pool & Spa Deck - Recoat	6,793
Spa Pump & Motor - Replace	2,588
Wrought Iron - Paint	4,464
Wrought Iron - Replace	6,448
Total for 2044	\$48,761

Greenfield Heights Homeowners Association
Mesa, AZ
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2045	
Concrete - Repair	4,443
Irrigation Controller - Replace	5,331
Masonry Walls - Paint	13,061
Water Heater - Replace	666
Total for 2045	\$23,501
 Replacement Year 2046	
Flagpole - Replace	1,830
Granite - Replace	2,986
Mailboxes - Replace	13,956
Masonry Walls - Repair	10,090
Monument - Replace	6,864
Pool & Spa Deck - Resurface	28,599
Total for 2046	\$64,325
 Replacement Year 2047	
Concrete - Repair	4,713
Spa Pump & Motor - Replace	2,357
Total for 2047	\$7,070

Greenfield Heights Homeowners Association

Mesa, AZ

Detail Report by Group

Pool & Spa - Resurface

		1 LS	@ \$13,200.00
Asset ID	1004	Asset Cost	\$13,200.00
	Pool & Spa	Percent Replacement	100%
	Recreation/Pool	Future Cost	\$18,271.89
Placed in Service	November 2014	Assigned Reserves	<i>none</i>
Useful Life	15		
Replacement Year	2029	Annual Assessment	\$159.12
Remaining Life	11	Interest Contribution	
		Reserve Allocation	<u>\$159.12</u>



Good condition. Coral Pools out of Tempe, AZ on 11/4/2014 pool and spa resurface for \$13,201. Included all repairs, covers and tile replacement as needed.

Pool & Spa Deck - Recoat

		2,100 SF	@ \$1.50
Asset ID	1002	Asset Cost	\$3,150.00
	Pool & Spa	Percent Replacement	100%
	Recreation/Pool	Future Cost	\$3,651.71
Placed in Service	September 2016	Assigned Reserves	<i>none</i>
Useful Life	7		
Replacement Year	2023	Annual Assessment	\$69.96
Remaining Life	5	Interest Contribution	
		Reserve Allocation	<u>\$69.96</u>

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Pool & Spa Deck - Recoat continued...



Good condition. Needs clean and seal.

Pool & Spa Deck - Resurface		1 LS	@ \$12,500.00
Asset ID	1001	Asset Cost	\$12,500.00
	Pool & Spa Recreation/Pool	Percent Replacement	100%
		Future Cost	\$18,356.67
Placed in Service	April 2016	Assigned Reserves	<i>none</i>
Useful Life	15		
Replacement Year	2031	Annual Assessment	\$135.27
Remaining Life	13	Interest Contribution	
		Reserve Allocation	<u>\$135.27</u>



Good condition. Approximate 2,100 sf of deck.

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Pool Filter - Replace		1 EA	@ \$1,000.00
Asset ID	1010	Asset Cost	\$1,000.00
	Pool & Spa Equipment	Percent Replacement	100%
Placed in Service	September 2013	Future Cost	\$1,229.87
Useful Life	12	Assigned Reserves	<i>none</i>
Replacement Year	2025	Annual Assessment	\$16.83
Remaining Life	7	Interest Contribution	
		Reserve Allocation	\$16.83



Hayward sand filter S311SKV. Sand replaced and repairs 6/2017.

Pool Furniture - Replace		1 LS	@ \$3,000.00
Asset ID	1014	Asset Cost	\$3,000.00
	Pool & Spa Recreation/Pool	Percent Replacement	100%
Placed in Service	September 2015	Future Cost	\$3,376.53
Useful Life	7	Assigned Reserves	<i>none</i>
Replacement Year	2022	Annual Assessment	\$80.86
Remaining Life	4	Interest Contribution	
		Reserve Allocation	\$80.86

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Pool Furniture - Replace continued...



Fair condition. Currently have 1 wrought iron table with 4 matching chairs. 3 plastic lounge chairs and 4 strap lounge chairs. Asset is for \$3000 every 4 years for replacement as needed.

Pool Heater - Replace

		1 EA	@ \$2,900.00
Asset ID	1005	Asset Cost	\$2,900.00
	Pool & Spa Equipment	Percent Replacement	100%
Placed in Service	September 2011	Future Cost	\$3,168.91
Useful Life	10	Assigned Reserves	<i>none</i>
Replacement Year	2021	Annual Assessment	\$101.19
Remaining Life	3	Interest Contribution	
		Reserve Allocation	<u>\$101.19</u>



Raypak 400,000 BTU gas heater.

Greenfield Heights Homeowners Association

Mesa, AZ

Detail Report by Group

Pool Pump & Motor - Replace

		1 EA	@ \$600.00
Asset ID	1007	Asset Cost	\$600.00
	Pool & Spa	Percent Replacement	100%
	Equipment	Future Cost	\$830.54
Placed in Service	August 2017	Assigned Reserves	<i>none</i>
Useful Life	12		
Replacement Year	2029	Annual Assessment	\$7.23
Remaining Life	11	Interest Contribution	
		Reserve Allocation	<u>\$7.23</u>



New motor installed 8/2017 for \$580.

Ramada Roof Underlayment - Replace

		400 SF	@ \$3.50
Asset ID	1033	Asset Cost	\$1,400.00
	Pool & Spa	Percent Replacement	100%
	Roofing	Future Cost	\$2,055.95
Placed in Service	September 2001	Assigned Reserves	<i>none</i>
Useful Life	30		
Replacement Year	2031	Annual Assessment	\$15.15
Remaining Life	13	Interest Contribution	
		Reserve Allocation	<u>\$15.15</u>

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Ramada Roof Underlayment - Replace continued...



Good condition.

Restroom - Remodel		1 EA	@ \$2,000.00
Asset ID	1035	Asset Cost	\$2,000.00
	Pool & Spa	Percent Replacement	100%
	Building Components	Future Cost	\$2,533.54
Placed in Service	September 2001	Assigned Reserves	<i>none</i>
Useful Life	25		
Replacement Year	2026	Annual Assessment	\$30.34
Remaining Life	8	Interest Contribution	
		Reserve Allocation	<u>\$30.34</u>



Fair condition.

Greenfield Heights Homeowners Association

Mesa, AZ

Detail Report by Group

Restroom Roof Underlayment - Replace

		100 SF	@ \$3.50
Asset ID	1034	Asset Cost	\$350.00
	Pool & Spa	Percent Replacement	100%
	Roofing	Future Cost	\$513.99
Placed in Service	September 2001	Assigned Reserves	<i>none</i>
Useful Life	30		
Replacement Year	2031	Annual Assessment	\$3.79
Remaining Life	13	Interest Contribution	
		Reserve Allocation	<u>\$3.79</u>



Good condition.

Spa Filter - Replace

		1 EA	@ \$1,000.00
Asset ID	1011	Asset Cost	\$1,000.00
	Pool & Spa	Percent Replacement	100%
	Equipment	Future Cost	\$1,229.87
Placed in Service	December 2013	Assigned Reserves	<i>none</i>
Useful Life	12		
Replacement Year	2025	Annual Assessment	\$16.83
Remaining Life	7	Interest Contribution	
		Reserve Allocation	<u>\$16.83</u>

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Spa Filter - Replace continued...



Hayward sand filter 4.95 SF.

Spa Heater - Replace		1 EA	@ \$2,200.00
Asset ID	1006	Asset Cost	\$2,200.00
	Pool & Spa Equipment	Percent Replacement	100%
		Future Cost	\$2,404.00
Placed in Service	September 2011	Assigned Reserves	<i>none</i>
Useful Life	10		
Replacement Year	2021	Annual Assessment	\$76.76
Remaining Life	3	Interest Contribution	
		Reserve Allocation	<u>\$76.76</u>



Raypak 250,000 BTU gas heater.

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Spa Pump & Motor - Replace		1 EA	@ \$1,000.00
Asset ID	1009	Asset Cost	\$1,000.00
	Pool & Spa Equipment	Percent Replacement	100%
		Future Cost	\$1,030.00
Placed in Service	September 2011	Assigned Reserves	\$800.00
Useful Life	4		
Replacement Year	Deferred 2019	Annual Assessment	\$22.03
Remaining Life	1	Interest Contribution	
		Reserve Allocation	<u>\$22.03</u>



1 HP. The actual date this item was "placed in service" was not available. For budgeting purposes, we have estimated this date based upon its present condition and after speaking to MEH/Poolwerx Union Hills.

Spa Pump & Motor - Replace		1 EA	@ \$1,200.00
Asset ID	1008	Asset Cost	\$1,200.00
	Pool & Spa Equipment	Percent Replacement	100%
		Future Cost	\$1,273.08
Placed in Service	December 2016	Assigned Reserves	\$600.00
Useful Life	4		
Replacement Year	2020	Annual Assessment	\$32.24
Remaining Life	2	Interest Contribution	
		Reserve Allocation	<u>\$32.24</u>

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Spa Pump & Motor - Replace continued...



2 HP.

Water Heater - Replace		1 EA	@ \$300.00
Asset ID	1012	Asset Cost	\$300.00
	Pool & Spa Equipment	Percent Replacement	100%
Placed in Service	September 2007	Future Cost	\$327.82
Useful Life	6	Assigned Reserves	<i>none</i>
Adjustment	8	Annual Assessment	\$10.47
Replacement Year	2021	Interest Contribution	
Remaining Life	3	Reserve Allocation	\$10.47



12 gallon water heater. The actual date this item was "placed in service" was not available. For budgeting purposes, we have estimated this date based upon its present condition. Useful life extended due to infrequent use.

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Pool & Spa - Total Current Cost	\$45,800
Assigned Reserves	\$1,400
Fully Funded Reserves	\$15,813

Greenfield Heights Homeowners Association

Mesa, AZ

Detail Report by Group

Asphalt - Overlay

		59,800 SF	@ \$1.50
Asset ID	1016	Asset Cost	\$89,700.00
	Streets	Percent Replacement	100%
	Asphalt	Future Cost	\$131,727.47
Placed in Service	September 2001	Assigned Reserves	<i>none</i>
Useful Life	30		
Replacement Year	2031	Annual Assessment	\$970.68
Remaining Life	13	Interest Contribution	
		Reserve Allocation	<u>\$970.68</u>



The pavement surface is approximately 2" below the edge of the curb which probably causing some vehicles to scrape the back of the curb when entering and exiting the driveway. The fix would be to 1.) add a lane (6' to 8') of pavement along the curb to provide a ramp or 2.) overlay the entire street after making repairs as addressed in the component for pavement repairs.

This component establishes a budget of overlaying the entire street at the end of it's projected useful life. If the Association would like do either of the two options noted above, the study can be modified to reflect the selected option.

Asphalt - Surface Treatment

		59,800 SF	@ \$0.16
Asset ID	1015	Asset Cost	\$9,568.00
	Streets	Percent Replacement	100%
	Asphalt	Future Cost	\$10,455.21
Placed in Service	August 2014	Assigned Reserves	\$3,230.29
Useful Life	7		
Replacement Year	2021	Annual Assessment	\$230.70
Remaining Life	3	Interest Contribution	
		Reserve Allocation	<u>\$230.70</u>

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Asphalt - Surface Treatment continued...



High density mineral bond (HA 5) applied by Holbrook Asphalt near 7/1/2014. HA5 is a surface treatment and has little if any impact on curing structural deficiencies. Approximatley, 59,800 sf of asphalt.

Asphalt-Repair		6,000 SF	@ \$9.00
Asset ID	1037	Asset Cost	\$54,000.00
	Streets	Percent Replacement	100%
	Asphalt	Future Cost	\$55,620.00
Placed in Service	December 2017	Assigned Reserves	\$27,000.00
Useful Life	1		
Replacement Year	Deferred 2019	Annual Assessment	\$2,741.65
Remaining Life	1	Interest Contribution	
		Reserve Allocation	<u>\$2,741.65</u>



Based on visual inspection during the reserve study site visit, it is estimated that 10% to 15% of the pavement has failed based on the alligator cracking that is present. Some of the previous repair areas have also failed indicating that the repair work did not fix the problem. An overlay will not fix this problem. This component establishes a very rough budget for repair work however the total scope of the repair work is unknown without investigating and determining the cause of the failure. It is recommended that some coring of the failed areas be done so that

Greenfield Heights Homeowners Association

Mesa, AZ

Detail Report by Group

Asphalt-Repair continued...

a proper fix can be designed to develop a scope of work and cost for the repair work.

Stamped Concrete - Repair

Asset ID	1036	1 LS	
Streets	Streets	Asset Cost	
Grounds Components	September 2001	Percent Replacement	100%
Placed in Service		Future Cost	
No Useful Life		Assigned Reserves	<i>none</i>
		Annual Assessment	No Assessment
		Interest Contribution	
		Allocation	



Should last lifetime of community.

Streets - Total Current Cost	\$153,268
Assigned Reserves	\$30,230
Fully Funded Reserves	\$83,297

Greenfield Heights Homeowners Association

Mesa, AZ

Detail Report by Group

Access Phone - Replace

		1 EA	@ \$3,500.00
Asset ID	1017	Asset Cost	\$3,500.00
	Grounds	Percent Replacement	100%
	Equipment	Future Cost	\$3,500.00
Placed in Service	September 2001	Assigned Reserves	\$3,500.00
Useful Life	12		
Replacement Year	2018	Annual Assessment	No Assessment
Remaining Life	0	Interest Contribution	
		Reserve Allocation	



Door King.

Backflow Preventers - Replace

		1 LS	@ \$600.00
Asset ID	1026	Asset Cost	\$600.00
	Grounds	Percent Replacement	100%
	Equipment	Future Cost	\$618.00
Placed in Service	September 2001	Assigned Reserves	\$562.50
Useful Life	15		
Replacement Year	Deferred 2019	Annual Assessment	\$5.32
Remaining Life	1	Interest Contribution	
		Reserve Allocation	<u>\$5.32</u>

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Backflow Preventers - Replace continued...



1 - Febco 1 1/2" 825 YA & 1 - Febco 1" 825 YA.

Concrete - Repair		1 LS	@ \$2,000.00
Asset ID	1031	Asset Cost	\$2,000.00
	Grounds	Percent Replacement	100%
	Grounds Components	Future Cost	\$2,060.00
Placed in Service	September 2001	Assigned Reserves	\$1,333.33
Useful Life	2		
Replacement Year	Deferred 2019	Annual Assessment	\$69.61
Remaining Life	1	Interest Contribution	
		Reserve Allocation	<u>\$69.61</u>



Good condition. This component is set for \$2000 every 5 years for replacement and repairs including trip hazzards.

Greenfield Heights Homeowners Association

Mesa, AZ

Detail Report by Group

Flagpole - Replace

Asset ID	1030	1 EA	@ \$800.00
	Grounds	Asset Cost	\$800.00
	Grounds Components	Percent Replacement	100%
Placed in Service	September 2001	Future Cost	\$1,013.42
Useful Life	20	Assigned Reserves	<i>none</i>
Adjustment	5	Annual Assessment	\$12.13
Replacement Year	2026	Interest Contribution	
Remaining Life	8	Reserve Allocation	<u>\$12.13</u>



Good condition.

Gate Operators - Replace

Asset ID	1018	4 EA	@ \$3,500.00
	Grounds	Asset Cost	\$14,000.00
	Equipment	Percent Replacement	100%
Placed in Service	September 2005	Future Cost	\$14,420.00
Useful Life	10	Assigned Reserves	\$12,727.27
Replacement Year	Deferred 2019	Annual Assessment	\$162.15
Remaining Life	1	Interest Contribution	
		Reserve Allocation	<u>\$162.15</u>

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Gate Operators - Replace continued...



Working condition. Chamberlain Elite Model CSW200ULDC.

Granite - Replace		72 Ton	@ \$72.50
Asset ID	1025	Asset Cost	\$1,305.00
Grounds		Percent Replacement	25%
Grounds Components		Future Cost	\$1,344.15
Placed in Service	September 2001	Assigned Reserves	\$978.75
Useful Life	3		
Replacement Year	Deferred 2019	Annual Assessment	\$35.00
Remaining Life	1	Interest Contribution	
		Reserve Allocation	\$35.00



Component is for 25% of 72 tons of granite replaced every 3 years.

Greenfield Heights Homeowners Association

Mesa, AZ

Detail Report by Group

Irrigation Controller - Replace

		1 EA	@ \$2,400.00
Asset ID	1027	Asset Cost	\$2,400.00
	Grounds	Percent Replacement	100%
	Equipment	Future Cost	\$2,951.70
Placed in Service	December 2015	Assigned Reserves	<i>none</i>
Useful Life	10		
Replacement Year	2025	Annual Assessment	\$40.39
Remaining Life	7	Interest Contribution	
		Reserve Allocation	<u>\$40.39</u>



Rainbird 24 valve. The actual month and year this item was "placed in service" was not available so for budgeting purposes we have placed it at 12/2015.

Mailboxes - Replace

		61 EA	@ \$100.00
Asset ID	1029	Asset Cost	\$6,100.00
	Grounds	Percent Replacement	100%
	Mailboxes	Future Cost	\$7,727.30
Placed in Service	September 2001	Assigned Reserves	<i>none</i>
Useful Life	20		
Adjustment	5	Annual Assessment	\$92.53
Replacement Year	2026	Interest Contribution	
Remaining Life	8	Reserve Allocation	<u>\$92.53</u>

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Mailboxes - Replace continued...



58 letter and 3 package boxes.

Masonry Walls - Paint		9,800 SF	@ \$0.60
Asset ID	1021	Asset Cost	\$5,880.00
	Grounds Painting	Percent Replacement	100%
Placed in Service	September 2001	Future Cost	\$6,425.23
Useful Life	8	Assigned Reserves	<i>none</i>
Adjustment	12	Annual Assessment	\$205.17
Replacement Year	2021	Interest Contribution	
Remaining Life	3	Reserve Allocation	<u>\$205.17</u>



Good to fair condition. The useful life of this asset has been extended due to its present condition.

Greenfield Heights Homeowners Association

Mesa, AZ

Detail Report by Group

Masonry Walls - Repair

		9,800 SF	@ \$9.00
Asset ID	1022	Asset Cost	\$4,410.00
	Grounds	Percent Replacement	5%
	Fence/Walls	Future Cost	\$4,818.93
Placed in Service	September 2001	Assigned Reserves	<i>none</i>
Useful Life	5		
Adjustment	15	Annual Assessment	\$153.88
Replacement Year	2021	Interest Contribution	
Remaining Life	3	Reserve Allocation	<u>\$153.88</u>



Fair to poor condition. Component is for repairing 5% of masonry walls every 5 years. Generally the walls are in good condition except for some areas of settlement that has resulted in step cracking.

Monument - Replace

		1 LS	@ \$3,000.00
Asset ID	1013	Asset Cost	\$3,000.00
	Grounds	Percent Replacement	100%
	Roofing	Future Cost	\$3,800.31
Placed in Service	September 2001	Assigned Reserves	<i>none</i>
Useful Life	10		
Adjustment	15	Annual Assessment	\$45.51
Replacement Year	2026	Interest Contribution	
Remaining Life	8	Reserve Allocation	<u>\$45.51</u>

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Monument - Replace continued...



Good condition. 2 sided, plastic coated letters approximately 9" high with 34 letters in total on concrete painted block approximately 20' X 6' in need of paint. Paint pricing included with wall painting. Useful life increased due to condition.

Sump Pumps - Replace

Asset ID	1032	2 EA	
	Grounds	Asset Cost	
	Equipment	Percent Replacement	100%
Placed in Service	September 2001	Future Cost	
No Useful Life		Assigned Reserves	<i>none</i>
		Annual Assessment	No Assessment
		Interest Contribution	



Retention basin sump pumps. No information on equipment, should be inspected every 2 years. We can update the study if an inspection is performed. HydroVac cleaned on 4/2017 by Torrent Resources.

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Tomar - Replace

		1 EA	@ \$1,500.00
Asset ID	1028	Asset Cost	\$1,500.00
	Grounds	Percent Replacement	100%
	Equipment	Future Cost	\$1,545.00
Placed in Service	September 2001	Assigned Reserves	\$1,406.25
Useful Life	15		
Replacement Year	Deferred 2019	Annual Assessment	\$13.29
Remaining Life	1	Interest Contribution	
		Reserve Allocation	<u>\$13.29</u>



Solar powered.

Vehicle Gates - Replace

		1 LS	@ \$5,000.00
Asset ID	1023	Asset Cost	\$5,000.00
	Grounds	Percent Replacement	100%
	Fence/Walls	Future Cost	\$7,342.67
Placed in Service	September 2001	Assigned Reserves	<i>none</i>
Useful Life	30		
Replacement Year	2031	Annual Assessment	\$54.11
Remaining Life	13	Interest Contribution	
		Reserve Allocation	<u>\$54.11</u>

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Vehicle Gates - Replace continued...



Good condition. 4 vehicle entry/exit gates approximately 10' long X 5.5' high. Future updates should continue to access condition of gates and make adjustments as necessary.

Wrought Iron - Paint

		2,300 SF	@ \$0.90
Asset ID	1019	Asset Cost	\$2,070.00
	Grounds	Percent Replacement	100%
	Painting	Future Cost	\$2,132.10
Placed in Service	September 2001	Assigned Reserves	\$1,725.00
Useful Life	5		
Replacement Year	Deferred 2019	Annual Assessment	\$39.00
Remaining Life	1	Interest Contribution	
		Reserve Allocation	\$39.00



Poor condition. Needs repair and paint.

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Wrought Iron - Replace

		2,300 SF	@ \$26.00
Asset ID	1020	Asset Cost	\$2,990.00
	Grounds	Percent Replacement	5%
	Fence/Walls	Future Cost	\$3,079.70
Placed in Service	September 2001	Assigned Reserves	\$2,491.67
Useful Life	5		
Replacement Year	Deferred 2019	Annual Assessment	\$56.33
Remaining Life	1	Interest Contribution	
		Reserve Allocation	<u>\$56.33</u>



Component is for replacing 5% of the wrought iron fencing every 5 years . Some block columns have moved and fence has become unattached from columns in addition to rusting.

Grounds - Total Current Cost	\$55,555
Assigned Reserves	\$24,725
Fully Funded Reserves	\$43,757

Greenfield Heights Homeowners Association
Mesa, AZ
Detail Report by Group

Detail Report Summary

Total of All Assets

Assigned Reserves	\$56,355.06
Annual Contribution	\$5,705.54
Annual Interest	
Annual Allocation	\$5,705.54

Contingency at 3.00%

Assigned Reserves	\$1,742.94
Annual Contribution	\$176.46
Annual Interest	
Annual Allocation	\$176.46

Grand Total

Assigned Reserves	\$58,098.00
Annual Contribution	\$5,882.00
Annual Interest	
Annual Allocation	\$5,882.00

Greenfield Heights Homeowners Association

Mesa, AZ

Category Detail Index

Asset ID	Description	Replacement	Page
Pool & Spa			
1004	Pool & Spa - Resurface	2029	2-13
1002	Pool & Spa Deck - Recoat	2023	2-13
1001	Pool & Spa Deck - Resurface	2031	2-14
1010	Pool Filter - Replace	2025	2-15
1014	Pool Furniture - Replace	2022	2-15
1005	Pool Heater - Replace	2021	2-16
1007	Pool Pump & Motor - Replace	2029	2-17
1033	Ramada Roof Underlayment - Replace	2031	2-17
1035	Restroom - Remodel	2026	2-18
1034	Restroom Roof Underlayment - Replace	2031	2-19
1011	Spa Filter - Replace	2025	2-19
1006	Spa Heater - Replace	2021	2-20
1009	Spa Pump & Motor - Replace	2019	2-21
1008	Spa Pump & Motor - Replace	2020	2-21
1012	Water Heater - Replace	2021	2-22
Streets			
1016	Asphalt - Overlay	2031	2-24
1015	Asphalt - Surface Treatment	2021	2-24
1037	Asphalt-Repair	2019	2-25
1036	Stamped Concrete - Repair	Unfunded	2-26
Grounds			
1017	Access Phone - Replace	2018	2-27
1026	Backflow Preventers - Replace	2019	2-27
1031	Concrete - Repair	2019	2-28
1030	Flagpole - Replace	2026	2-29
1018	Gate Operators - Replace	2019	2-29
1025	Granite - Replace	2019	2-30
1027	Irrigation Controller - Replace	2025	2-31
1029	Mailboxes - Replace	2026	2-31
1021	Masonry Walls - Paint	2021	2-32
1022	Masonry Walls - Repair	2021	2-33
1013	Monument - Replace	2026	2-33
1032	Sump Pumps - Replace	Unfunded	2-34
1028	Tomar - Replace	2019	2-35

Greenfield Heights Homeowners Association
Mesa, AZ
Category Detail Index

Asset ID	Description	Replacement	Page
<i>Grounds Continued...</i>			
1023	Vehicle Gates - Replace	2031	2-35
1019	Wrought Iron - Paint	2019	2-36
1020	Wrought Iron - Replace	2019	2-37
	Total Funded Assets	33	
	Total Unfunded Assets	<u>2</u>	
	Total Assets	35	

Greenfield Heights Homeowners Association
Mesa, AZ

Spread Sheet by Group

Description	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Pool & Spa										
Pool & Spa - Resurface						3,652				
Pool & Spa Deck - Recoat										
Pool & Spa Deck - Resurface								1,230		
Pool Filter - Replace					3,377					
Pool Furniture - Replace				3,169						
Pool Heater - Replace										
Pool Pump & Motor - Replace										
Ramada Roof Underlayment - Replace									2,534	
Restroom - Remodel										
Restroom Roof Underlayment - Replace								1,230		
Spa Filter - Replace				2,404						
Spa Heater - Replace										
Spa Pump & Motor - Replace	1,030					1,159				1,305
Spa Pump & Motor - Replace			1,273				1,433			
Water Heater - Replace				328						391
Pool & Spa Total:	1,030	1,030	1,273	5,901	3,377	4,811	1,433	2,460	2,534	1,696
Streets										
Asphalt - Overlay										
Asphalt - Surface Treatment				10,455						
Asphalt-Repair										
Stamped Concrete - Repair		55,620								
Streets Total:		55,620		10,455						
Grounds										
Access Phone - Replace	3,500									
Backflow Preventers - Replace		618								
Concrete - Repair		2,060		2,185		2,319		2,460	1,013	2,610
Flagpole - Replace										
Gate Operators - Replace		14,420								
Granite - Replace		1,344			1,469			1,605		2,952
Irrigation Controller - Replace										

Greenfield Heights Homeowners Association
Mesa, AZ

Spread Sheet by Group

Description	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
<i>Grounds continued...</i>										
Mailboxes - Replace				6,425					7,727	
Masonry Walls - Paint			4,819						5,586	
Masonry Walls - Repair									3,800	
Monument - Replace										
Sump Pumps - Replace										
Tomar - Replace		1,545								
Vehicle Gates - Replace		2,132					2,472			
Wrought Iron - Paint		3,080					3,570			
Wrought Iron - Replace										
Grounds Total:	3,500	25,199		13,430	1,469	2,319	6,042	7,016	18,127	2,610
Year Total:	3,500	81,849	1,273	29,786	4,845	7,130	7,475	9,476	20,661	4,306

Greenfield Heights Homeowners Association
Mesa, AZ

Spread Sheet by Group

Description	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Pool & Spa										
Pool & Spa - Resurface		18,272								5,524
Pool & Spa Deck - Recoat			4,491	18,357						1,754
Pool & Spa Deck - Resurface									5,107	
Pool Filter - Replace										
Pool Furniture - Replace		4,153		4,259						
Pool Heater - Replace										
Pool Pump & Motor - Replace		831		2,056						
Ramada Roof Underlayment - Replace										
Restroom - Remodel										
Restroom Roof Underlayment - Replace				514						1,754
Spa Filter - Replace										
Spa Heater - Replace				3,231						
Spa Pump & Motor - Replace				1,469				1,653		
Spa Pump & Motor - Replace	1,613				1,815				2,043	
Water Heater - Replace						467				
Pool & Spa Total:	1,613	23,255	4,491	29,885	1,815	467		1,653	7,150	9,031
Streets										
Asphalt - Overlay				131,727						
Asphalt - Surface Treatment	12,859							15,814		
Asphalt-Repair										
Stamped Concrete - Repair										
Streets Total:	12,859			131,727				15,814		
Grounds										
Access Phone - Replace			4,990							
Backflow Preventers - Replace							963			
Concrete - Repair		2,768		2,937				3,306		3,507
Flagpole - Replace						3,116				
Gate Operators - Replace		19,379								
Granite - Replace	1,754			1,916			2,094			2,288
Irrigation Controller - Replace								3,967		

Greenfield Heights Homeowners Association
Mesa, AZ

Spread Sheet by Group

Description	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
<i>Grounds continued...</i>										
Mailboxes - Replace		8,139								10,311
Masonry Walls - Paint				6,476					7,508	
Masonry Walls - Repair									5,107	
Monument - Replace										
Sump Pumps - Replace							2,407			
Tomar - Replace				7,343						
Vehicle Gates - Replace		2,865					3,322			
Wrought Iron - Paint		4,139					4,798			
Wrought Iron - Replace										
Grounds Total:	1,754	37,291	4,990	18,672		3,116	13,584	7,273	12,615	16,106
Year Total:	16,225	60,546	9,481	180,285	1,815	3,583	13,584	24,740	19,765	25,137

Greenfield Heights Homeowners Association
Mesa, AZ

Spread Sheet by Group

Description	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
Pool & Spa										
Pool & Spa - Resurface							28,467			
Pool & Spa Deck - Recoat							6,793			
Pool & Spa Deck - Resurface									28,599	
Pool Filter - Replace										
Pool Furniture - Replace				5,723		6,281				
Pool Heater - Replace				1,184						
Pool Pump & Motor - Replace										
Ramada Roof Underlayment - Replace										
Restroom - Remodel										
Restroom Roof Underlayment - Replace										
Spa Filter - Replace				4,342						
Spa Heater - Replace						2,094				2,357
Spa Pump & Motor - Replace		1,860					2,588			
Spa Pump & Motor - Replace			2,299							
Water Heater - Replace		558						666		
Pool & Spa Total:	2,418	2,299	2,299	11,249	19,450	8,375	37,848	666	28,599	2,357
Streets										
Asphalt - Overlay										
Asphalt - Surface Treatment					19,450					
Asphalt-Repair										
Stamped Concrete - Repair										
Streets Total:					19,450					
Grounds										
Access Phone - Replace					7,115					
Backflow Preventers - Replace										
Concrete - Repair		3,721		3,947		4,188		4,443	1,830	4,713
Flagpole - Replace										
Gate Operators - Replace		26,044								
Granite - Replace			2,501			2,732				
Irrigation Controller - Replace								5,331		

Greenfield Heights Homeowners Association
Mesa, AZ

Spread Sheet by Group

Description	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
<i>Grounds continued...</i>										
Mailboxes - Replace								13,061	13,956	
Masonry Walls - Paint									10,090	
Masonry Walls - Repair			8,704						6,864	
Monument - Replace										
Sump Pumps - Replace										
Tomar - Replace										
Vehicle Gates - Replace							4,464			
Wrought Iron - Paint		3,851					6,448			
Wrought Iron - Replace		5,562								
Grounds Total:	39,178	2,501	12,651	7,115	6,920	10,912	22,835	35,726	4,713	
Year Total:	41,596	4,800	23,900	26,565	15,295	48,761	23,501	64,325	7,070	