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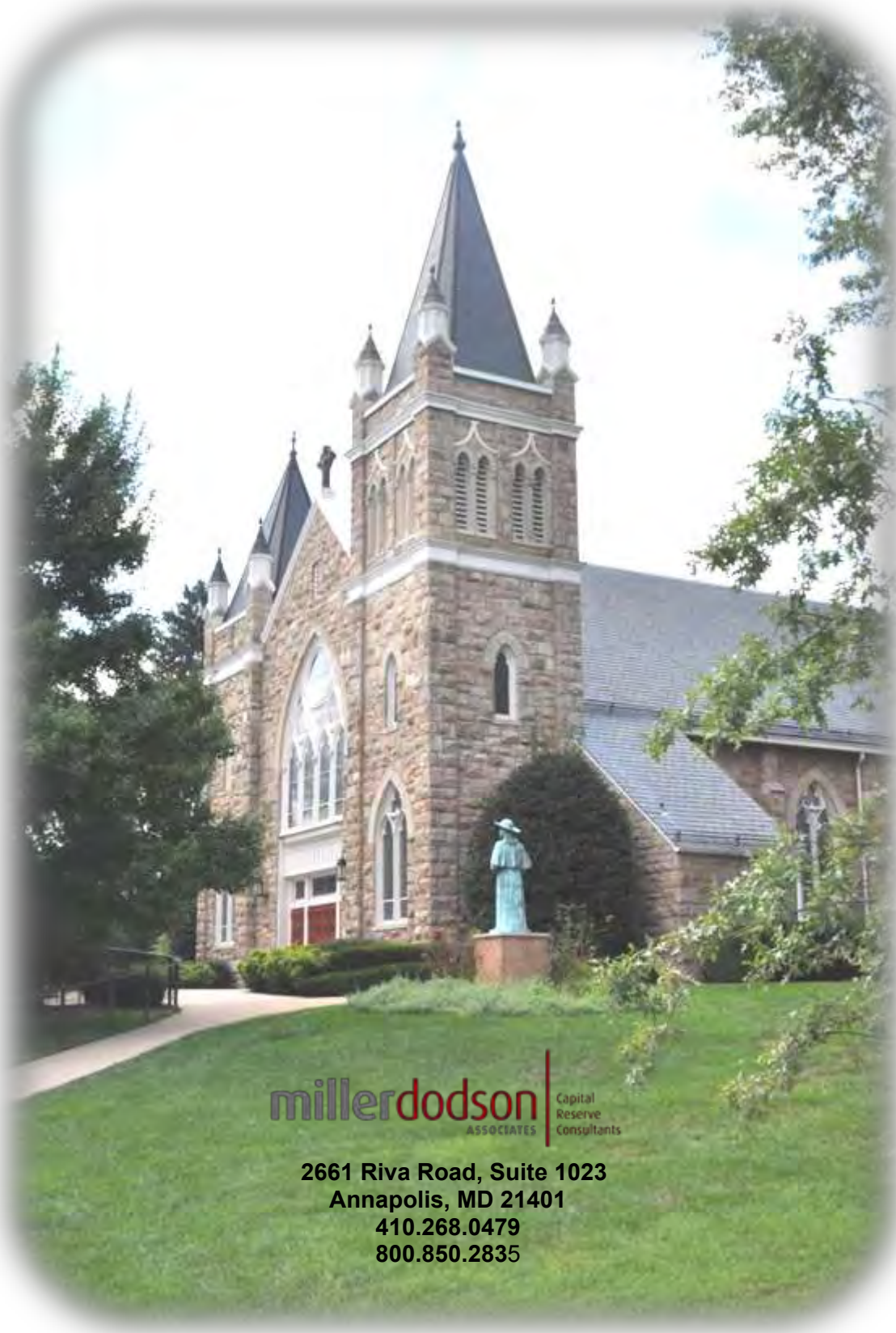
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SAMPLE RESERVE STUDY REPORT

St. John's Church and School



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Annapolis, MD 21401
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SAMPLE REPORT

Note: This sample report is based on an actual Replacement Reserve Study conducted for a real facility. Please note, however, that the name, location, results, and other identifying features of this report have been intentionally altered to suit the purpose of a sample and protect the confidentiality of the Client.

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REPLACEMENT RESERVE REPORT

ST. JOHN'S CHURCH AND SCHOOL

CHURCHTON, VIRGINIA



Description. St. John's Church and School is worship and educational facility located in Churchton, Virginia. The facility was constructed between 1959 and 2009. The survey examined the common elements of the property, including:

- Site components
- Sanctuary
- Convent
- Rectory, House of Ministries, and guest house
- School and Heller Hall
- Gymnasium

Level of Service. This study has been performed as a Level 1 Full Service Reserve Study as defined under the National Reserve Study Standards that have been adopted by the Community Associations Institute. As such, a complete inventory of components was established for the commonly owned elements of this facility based on information provided by the Facility Manager or by quantities that were developed from field measurement or takeoffs from to-scale drawings as performed by the Analyst. The condition of each inventory component was established by the Analyst, based on a visual inspection or review of provided historical data with a major repair or replacement cost for each also set. The included fund status and funding plan have been derived from analysis of this inventory.

Section A

Replacement Reserve Analysis

Executive Summary
Reserve Status & Funding Plan - A1
General Information - A2
Current Funding - A3
Cash Flow Method Funding - A4
Inflation Adjusted Funding - A5
Comments - A6

Section B

Replacement Reserve Inventory

Replacement Reserve Inventory
General information - B1
Replacement Reserve Inventory
Comments - B2
Schedule of Projected Replacements
and Exclusions - B3

Section C

Projected Annual Replacements

Projected Annual Replacements
General Information - C1
Reserve Analysis and Inventory Policies,
Procedures, and Administration - C2
Calendar of
Projected Annual Replacements - C2

Section D

Condition Assessment

Appendix

Accounting Summary - CF1
Component Method - CM1

Overview, Standard Terms, and Definitions
Video Answers to Frequently Asked Questions

Sample

To aid in the understanding of this report and its concepts and practices, on our web site, we have developed [videos](#) addressing frequently asked topics. In addition, there are posted [links](#) covering a variety of subjects under the resources page of our web site at mdareserves.com.

Purpose. The purpose of this Replacement Reserve Study is to provide St. John's Church and School (hereinafter called the Church) with an inventory of the common community facilities and infrastructure components that require periodic replacement. The Study includes a general view of the condition of these items and an effective financial plan to fund projected periodic replacements.

- **Inventory of Items Owned by the Church.** Section B lists the Projected Replacements of the commonly owned items that require periodic replacement using funding from Replacement Reserves. The Replacement Reserve Inventory also provides information about excluded items, which are items whose replacements are not scheduled for funding from Replacement Reserves.
- **Condition of Items Owned by the Church.** Section B includes our estimates of the normal economic life and the remaining economic life for the projected replacements. Section C provides a year-by-year listing of the projected replacements. Section D provides additional detail for items that are unique or deserving of attention because of their condition or the manner in which they have been treated in this study.
- **Financial Plan.** The Association has a fiduciary responsibility to protect the appearance, value, and safety of the property and it is therefore essential the Association have a financial plan that provides funding for the projected replacements. In conformance with American Institute of Certified Public Accountant guidelines, Section A, Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves by the Cash Flow Method. Section A, Replacement Reserve Analysis includes graphic and tabular presentations of the Association's current funding and the recommended funding based on the Cash Flow Method. An Executive Summary of these calculations is provided on Page A1. The alternative Component Method of funding is provided in the Appendix.

Basis. The data contained in this Replacement Reserve Study is based upon the following:

- The Request for Proposal submitted and executed by the Church.
- Miller - Dodson performed a visual evaluation on August 5, 2015 to determine a remaining useful life and replacement cost for the commonly owned elements of this facility.
- This study contains additional recommendations to address inflation for the Cash Flow Method only. For this recommendation, Miller - Dodson uses the Producers Price Index (PPI), which gauges inflation in manufacturing and construction. Please see page A5 for further details.

To-Scale Drawings. Site and building plans were not used in the development of this study. We recommend the Church assemble and maintain a library of site and building plans of the entire facility. Record drawings should be scanned into an electronic format for safe storage and ease of distribution. Upon request for a nominal fee, Miller - Dodson can provide scanning services.

Current Funding. This reserve study has been prepared for Fiscal Year 2014 covering the period from January 1, 2015 to December 31, 2015. The Replacement Reserves on deposit as of January 1, 2015 are reported to be \$250,000.00. The planned contribution for the fiscal year is \$100,000.

The balance and contribution figures have been supplied by the property management agent and confirmation or audit of these figures is beyond the scope of the study. For the purposes of this study, it is assumed that the annual contribution will be deposited at the end of each month.

Sample

Acknowledgement. Miller - Dodson Associates would like to acknowledge the assistance and input of the Facility Manager, who provided very helpful insight into the current operations of the property and guided us on a site tour.

Analyst's Credentials. Mr. James W. Dodson, Jr. holds a Bachelors Degree in Architectural Engineering from the University of Texas and a Masters Degree in Civil Engineering from Stanford University. He has attended the Program for Management Development at Harvard Graduate School of Business. Mr. Dodson has been a Registered Professional Engineer in the State of Texas from 1972 to 1994, and has managed construction projects up to \$100,000,000 in scope for a variety of private sector clients and government employers. He has been certified as a both a Professional Reserve Analyst by APRA and a Reserve Specialist by the CAI. He is a Principal for Miller - Dodson Associates, Inc. In this capacity, he has performed and supervised over 5,000 Reserve Studies for clients of Miller - Dodson Associates.

Respectfully submitted,



James W. Dodson, Jr. PRA, RS
Principal

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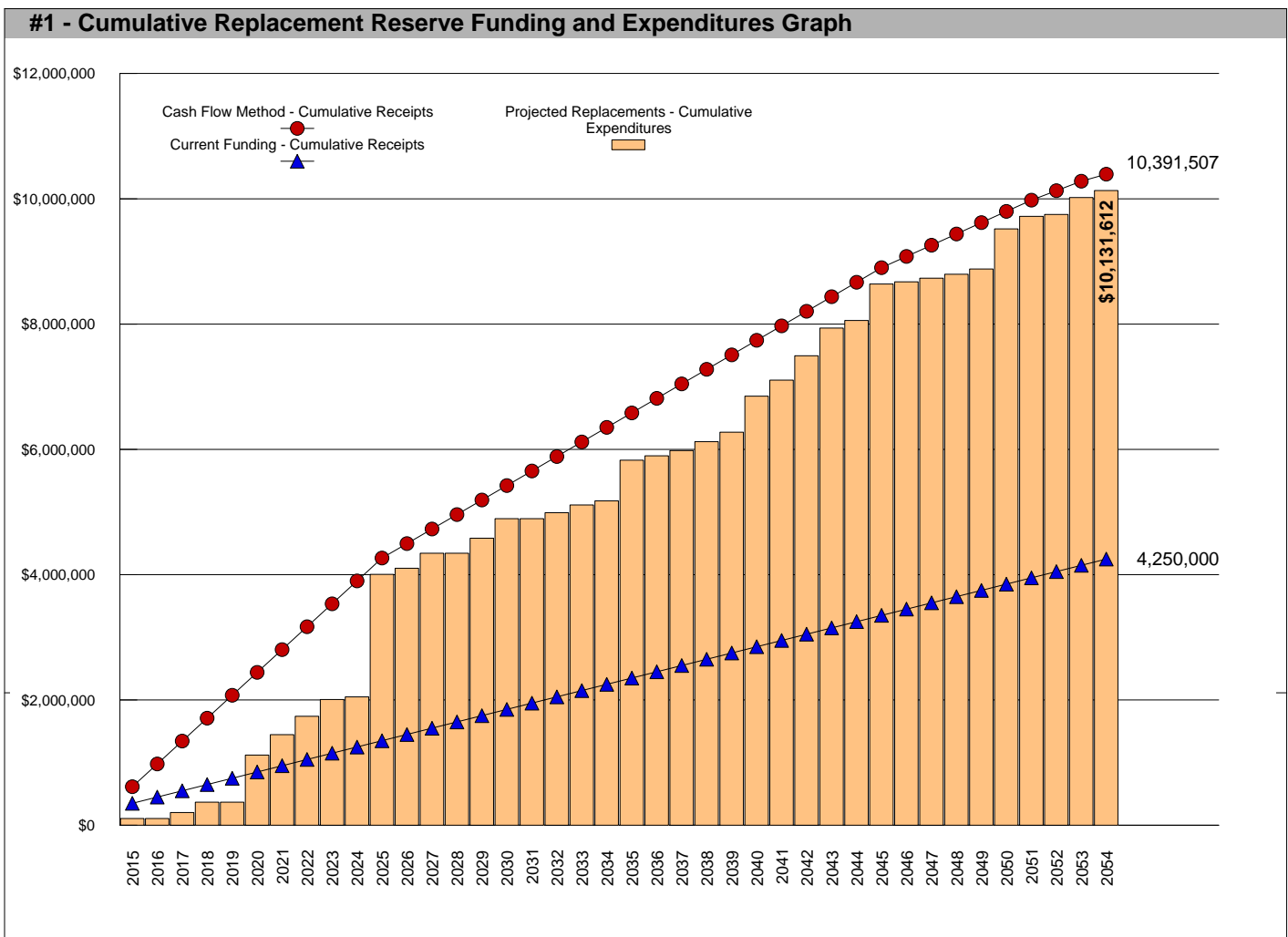
EXECUTIVE SUMMARY

The St John's Church and School Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 363 Projected Replacements identified in the Replacement Reserve Inventory.

\$364,991 RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2015

We recommend the Church adopt a Replacement Reserve Funding Plan based on the annual funding recommendation above. Inflation adjusted funding for subsequent years is shown on Page A5.

St John's Church and School reports a Starting Balance of \$250,000 and Annual Funding totaling \$100,000. Current funding is inadequate to fund the \$10,131,612 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period. See Page A3 for a more detailed evaluation.



The Current Funding Objective as calculated by the Component Method (Fully Funded) is \$2,612,294 making the reserve account 9.6% funded. See the Appendix for more information on this method.

Sample

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The St John's Church and School Replacement Reserve Analysis calculations of recommended funding of Replacement Reserves by the Cash Flow Method and the evaluation of the Current Funding are based upon the same Study Year, Study Period, Beginning Balance, Replacement Reserve Inventory and Level of Service.

2015 | STUDY YEAR

The Church reports that their accounting year begins on January 1, and the Study Year, the first year evaluated by the Replacement Reserve Analysis, begins on January 1, 2015.

40 Years | STUDY PERIOD

The Replacement Reserve Analysis evaluates the funding of Replacement Reserves over a 40-year Study Period.

\$250,000 | STARTING BALANCE

The Church reports Replacement Reserves on Deposit totaling \$250,000 at the start of the Study Year.

Level One | LEVEL OF SERVICE

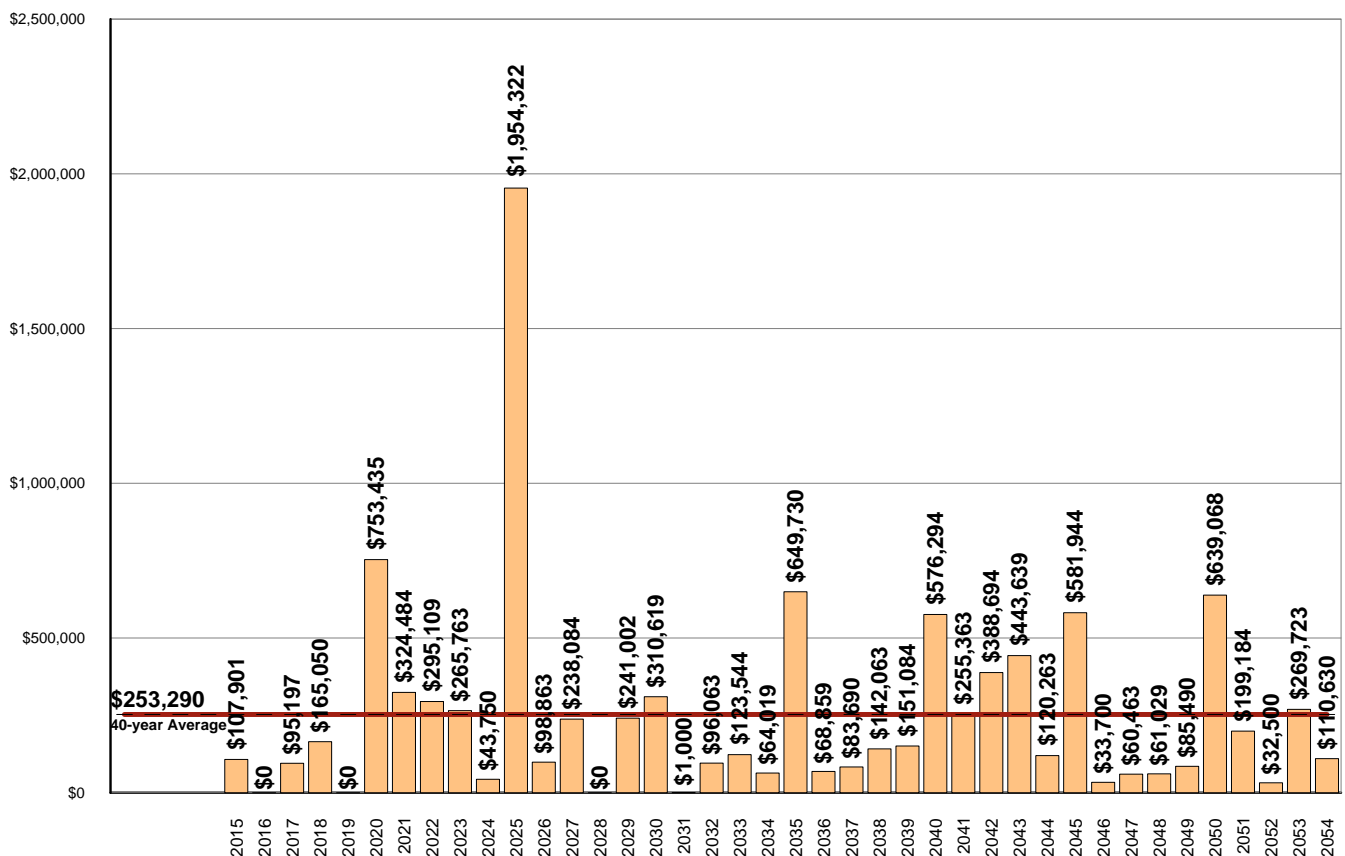
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level One Study, as defined by the Community Associations Institute (CAI).

\$10,131,612 | REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS

The St John's Church and School Replacement Reserve Inventory identifies 363 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be \$10,131,612 over the 40-year Study Period. The Projected Replacements are divided into 32 major categories starting on Page B3. Pages B1-B2 provide detailed information on the Replacement Reserve Inventory.

#2 - Annual Expenditures for Projected Replacements Graph

This graph shows annual expenditures for Projected Replacements over the 40-year Study Period. The red line shows the average annual expenditure of \$253,290. Section C provides a year by year Calendar of these expenditures.



Sample

UPDATING

UPDATING OF THE FUNDING PLAN

The Church has a responsibility to review the Funding Plan annually. The review should include a comparison and evaluation of actual reserve funding with recommended levels shown on Page A4 and A5. The Projected Replacements listed on Page C2 should be compared with any replacements accomplished and funded from Replacement Reserves. Discrepancies should be evaluated and if necessary, the Reserve Study should be updated or a new study commissioned. We recommend annual increases in replacement reserve funding to account for the impact of inflation. Inflation Adjusted Funding is discussed on Page A5.

UPDATING OF THE REPLACEMENT RESERVE STUDY

At a minimum, the Replacement Reserve Study should be professionally updated every three to five years or after completion of a major replacement project. Updating should also be considered if during the annual review of the Funding Plan, discrepancies are noted between projected and actual reserve funding or replacement costs. Updating may also be necessary if there is a meaningful discrepancy between the actual inflation rate and the inflation rate used for the Inflation Adjusted Funding of Replacement Reserves on Page A5.

ANNUAL EXPENDITURES AND CURRENT FUNDING

The annual expenditures that comprise the \$10,131,612 of Projected Expenditures over the 40-year Study Period and the impact of the Church continuing to fund Replacement Reserves at the current level are detailed in Table 3.

#3 - Table of Annual Expenditures and Current Funding Data - Years 1 through 40										
Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Starting Balance	\$250,000									
Projected Replacements	(\$107,901)		(\$95,197)	(\$165,050)		(\$753,435)	(\$324,484)	(\$295,109)	(\$265,763)	(\$43,750)
Annual Deposit	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
End of Year Balance	\$242,099	\$342,099	\$346,902	\$281,852	\$381,852	(\$271,583)	(\$496,067)	(\$691,176)	(\$856,939)	(\$800,689)
Cumulative Expenditures	(\$107,901)	(\$107,901)	(\$203,098)	(\$368,148)	(\$368,148)	(\$1,121,583)	(\$1,446,067)	(\$1,741,176)	(\$2,006,939)	(\$2,050,689)
Cumulative Receipts	\$350,000	\$450,000	\$550,000	\$650,000	\$750,000	\$850,000	\$950,000	\$1,050,000	\$1,150,000	\$1,250,000
Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Projected Replacements	(\$1,954,322)	(\$98,863)	(\$238,084)		(\$241,002)	(\$310,619)	(\$1,000)	(\$96,063)	(\$123,544)	(\$64,019)
Annual Deposit	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
End of Year Balance	(\$2,655,011)	(\$2,653,874)	(\$2,791,958)	(\$2,691,958)	(\$2,832,960)	(\$3,043,579)	(\$2,944,579)	(\$2,940,641)	(\$2,964,186)	(\$2,928,204)
Cumulative Expenditures	(\$4,005,011)	(\$4,103,874)	(\$4,341,958)	(\$4,341,958)	(\$4,582,960)	(\$4,893,579)	(\$4,894,579)	(\$4,990,641)	(\$5,114,186)	(\$5,178,204)
Cumulative Receipts	\$1,350,000	\$1,450,000	\$1,550,000	\$1,650,000	\$1,750,000	\$1,850,000	\$1,950,000	\$2,050,000	\$2,150,000	\$2,250,000
Year	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Projected Replacements	(\$649,730)	(\$68,859)	(\$83,690)	(\$142,063)	(\$151,084)	(\$576,294)	(\$255,363)	(\$388,694)	(\$443,639)	(\$120,263)
Annual Deposit	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
End of Year Balance	(\$3,477,934)	(\$3,446,793)	(\$3,430,483)	(\$3,472,546)	(\$3,523,630)	(\$3,999,924)	(\$4,155,287)	(\$4,443,981)	(\$4,787,619)	(\$4,807,882)
Cumulative Expenditures	(\$5,827,934)	(\$5,896,793)	(\$5,980,483)	(\$6,122,546)	(\$6,273,630)	(\$6,849,924)	(\$7,105,287)	(\$7,493,981)	(\$7,937,619)	(\$8,057,882)
Cumulative Receipts	\$2,350,000	\$2,450,000	\$2,550,000	\$2,650,000	\$2,750,000	\$2,850,000	\$2,950,000	\$3,050,000	\$3,150,000	\$3,250,000
Year	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
Projected Replacements	(\$581,944)	(\$33,700)	(\$60,463)	(\$61,029)	(\$85,490)	(\$639,068)	(\$199,184)	(\$32,500)	(\$269,723)	(\$110,630)
Annual Deposit	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
End of Year Balance	(\$5,289,826)	(\$5,223,526)	(\$5,183,989)	(\$5,145,017)	(\$5,130,507)	(\$5,669,575)	(\$5,768,760)	(\$5,701,260)	(\$5,870,982)	(\$5,881,612)
Cumulative Expenditures	(\$8,639,826)	(\$8,673,526)	(\$8,733,989)	(\$8,795,017)	(\$8,880,507)	(\$9,519,575)	(\$9,718,760)	(\$9,751,260)	(\$10,020,982)	(\$10,131,612)
Cumulative Receipts	\$3,350,000	\$3,450,000	\$3,550,000	\$3,650,000	\$3,750,000	\$3,850,000	\$3,950,000	\$4,050,000	\$4,150,000	\$4,250,000

EVALUATION OF CURRENT FUNDING

The evaluation of Current Funding (Starting Balance of \$250,000 & annual funding of \$100,000), is done in today's dollars with no adjustments for inflation or interest earned on Replacement Reserves. The evaluation assumes Replacement Reserves will only be used for the 363 Projected Replacements identified in the Replacement Reserve Inventory and that the Church will continue Annual Funding of \$100,000 throughout the 40-year Study Period.

Annual Funding of \$100,000 is approximately 27 percent of the \$364,991 recommended Annual Funding calculated by the Cash Flow Method for 2015, the Study Year.

Evaluation of the 363 Projected Replacements calculates an average annual expenditure over the next 40 years of \$253,290. Annual funding of \$100,000 is 39 percent of the average annual expenditure.

Our calculations identify funding shortfalls in 35 years of the Study Period with the initial shortfall in 2020. The largest shortfall, \$-5,881,612, occurs in 2044. All shortfalls can be seen and evaluated in Table 3 above.

In summary, Current Funding as reported by the Church and shown above, does not provide adequate funding for the \$10,131,612 of Projected Replacements scheduled in the Replacement Reserve Inventory over the Study Period.

Sample

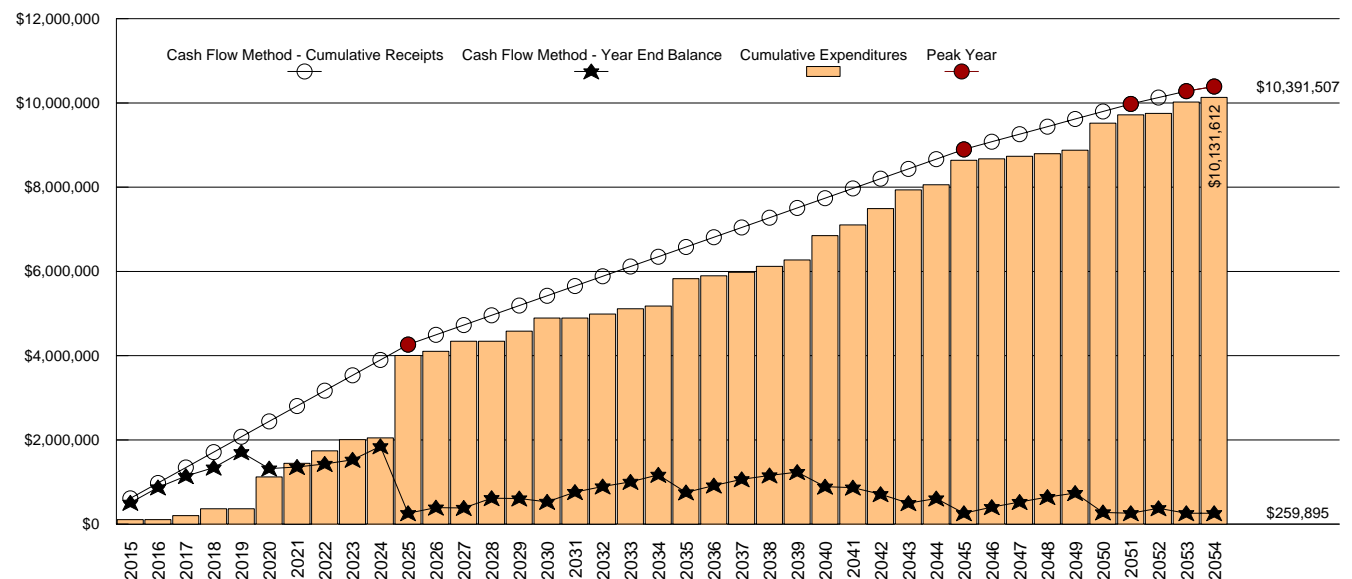
CASH FLOW METHOD FUNDING

\$364,991 RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2015

Recommended Replacement Reserve Funding has been calculated using the Cash Flow Method (also called the Straight Line or Threshold Method). This method calculates a constant annual funding between peaks in cumulative expenditures, while maintaining a Minimum Balance (threshold) in the Peak Years.

- **Peak Years.** The First Peak Year occurs in 2025 with Replacement Reserves on Deposit dropping to the Minimum Balance after the completion of \$4,005,011 of replacements from 2015 to 2025. Recommended funding declines from \$364,991 in 2025 to \$231,740 in 2026. Peak Years are identified in Chart 4 and Table 5.
- **Minimum Balance.** The calculations assume a Minimum Balance of \$259,895 in Replacement Reserves. This is approx. 12 months of average expenditures based on the \$253,290, 40-year average annual expenditure.
- **Cash Flow Method Study Period.** Cash Flow Method calculates funding for \$10,131,612 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2054 and in 2054, the end of year balance will always be the Minimum Balance.

#4 - Cash Flow Method - Graph of Cumulative Receipts and Expenditures - Years 1 through 40



#5 - Cash Flow Method - Table of Receipts & Expenditures - Years 1 through 40

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Starting Balance	\$250,000									
Projected Replacements	(\$107,901)		(\$95,197)	(\$165,050)		(\$753,435)	(\$324,484)	(\$295,109)	(\$265,763)	(\$43,750)
Annual Deposit	\$364,991	\$364,991	\$364,991	\$364,991	\$364,991	\$364,991	\$364,991	\$364,991	\$364,991	\$364,991
End of Year Balance	\$507,090	\$872,082	\$1,141,877	\$1,341,818	\$1,706,810	\$1,318,366	\$1,358,873	\$1,428,756	\$1,527,984	\$1,849,226
Cumulative Expenditures	\$107,901	\$107,901	\$203,098	\$368,148	\$368,148	\$1,121,583	\$1,446,067	\$1,741,176	\$2,006,939	\$2,050,689
Cumulative Receipts	\$614,991	\$979,983	\$1,344,974	\$1,709,966	\$2,074,957	\$2,439,949	\$2,804,940	\$3,169,932	\$3,534,923	\$3,899,915
Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Projected Replacements	(\$1,954,322)	(\$98,863)	(\$238,084)		(\$241,002)	(\$310,619)	(\$1,000)	(\$96,063)	(\$123,544)	(\$64,019)
Annual Deposit	\$364,991	\$231,740	\$231,740	\$231,740	\$231,740	\$231,740	\$231,740	\$231,740	\$231,740	\$231,741
End of Year Balance	\$259,895	\$392,772	\$386,428	\$618,168	\$608,906	\$530,028	\$760,768	\$896,446	\$1,004,642	\$1,172,364
Cumulative Expenditures	(\$4,005,011)	(\$4,103,874)	(\$4,341,958)	(\$4,341,958)	(\$4,582,960)	(\$4,893,579)	(\$4,894,579)	(\$4,990,641)	(\$5,114,186)	(\$5,178,204)
Cumulative Receipts	\$4,264,906	\$4,496,646	\$4,728,386	\$4,960,126	\$5,191,866	\$5,423,606	\$5,655,346	\$5,887,087	\$6,118,827	\$6,350,568
Year	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Projected Replacements	(\$649,730)	(\$68,859)	(\$83,690)	(\$142,063)	(\$151,084)	(\$576,294)	(\$255,363)	(\$388,694)	(\$443,639)	(\$120,263)
Annual Deposit	\$231,741	\$231,741	\$231,741	\$231,741	\$231,741	\$231,741	\$231,741	\$231,741	\$231,741	\$231,741
End of Year Balance	\$754,374	\$917,256	\$1,065,307	\$1,154,986	\$1,235,643	\$891,090	\$867,469	\$710,516	\$498,619	\$610,098
Cumulative Expenditures	(\$5,827,934)	(\$5,896,793)	(\$5,980,483)	(\$6,122,546)	(\$6,273,630)	(\$6,849,924)	(\$7,105,287)	(\$7,493,981)	(\$7,937,619)	(\$8,057,882)
Cumulative Receipts	\$6,582,309	\$6,814,050	\$7,045,791	\$7,277,532	\$7,509,273	\$7,741,014	\$7,972,755	\$8,204,497	\$8,436,238	\$8,667,980
Year	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
Projected Replacements	(\$581,944)	(\$33,700)	(\$60,463)	(\$61,029)	(\$85,490)	(\$639,068)	(\$199,184)	(\$32,500)	(\$269,723)	(\$110,630)
Annual Deposit	\$231,741	\$179,822	\$179,822	\$179,822	\$179,822	\$179,822	\$179,822	\$151,111	\$151,111	\$110,630
End of Year Balance	\$259,895	\$406,017	\$525,377	\$644,171	\$738,503	\$279,257	\$259,895	\$378,506	\$259,895	\$259,895
Cumulative Expenditures	(\$8,639,826)	(\$8,673,526)	(\$8,733,989)	(\$8,795,017)	(\$8,880,507)	(\$9,519,575)	(\$9,718,760)	(\$9,751,260)	(\$10,020,982)	(\$10,131,612)
Cumulative Receipts	\$8,899,721	\$9,079,543	\$9,259,366	\$9,439,188	\$9,619,010	\$9,798,833	\$9,978,655	\$10,129,766	\$10,280,877	\$10,391,507

Sample

INFLATION ADJUSTED FUNDING

The Cash Flow Method calculations on Page A4 have been done in today's dollars with no adjustment for inflation. At Miller + Dodson, we believe that long-term inflation forecasting is effective at demonstrating the power of compounding, not at calculating appropriate funding levels for Replacement Reserves. We have developed this proprietary model to estimate the short-term impact of inflation on Replacement Reserve funding.

\$364,991 2015 - CASH FLOW METHOD RECOMMENDED FUNDING

The 2015 Study Year calculations have been made using current replacement costs (see Page B2), modified by the Analyst for any project specific conditions.

\$383,698 2016 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2016 funding based on three assumptions;

- Replacement Reserves on Deposit totaling \$507,090 on January 1, 2016.
- All 2015 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than \$107,901.
- Construction Cost Inflation of 4.50 percent in 2015.

The \$383,698 inflation adjusted funding in 2016 is a 5.13 percent increase over the non-inflation adjusted 2016 funding of \$364,991.

\$405,418 2017 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2017 funding based on three assumptions;

- Replacement Reserves on Deposit totaling \$890,788 on January 1, 2017.
- No Expenditures from Replacement Reserves in 2016.

- Construction Cost Inflation of 4.50 percent in 2016.

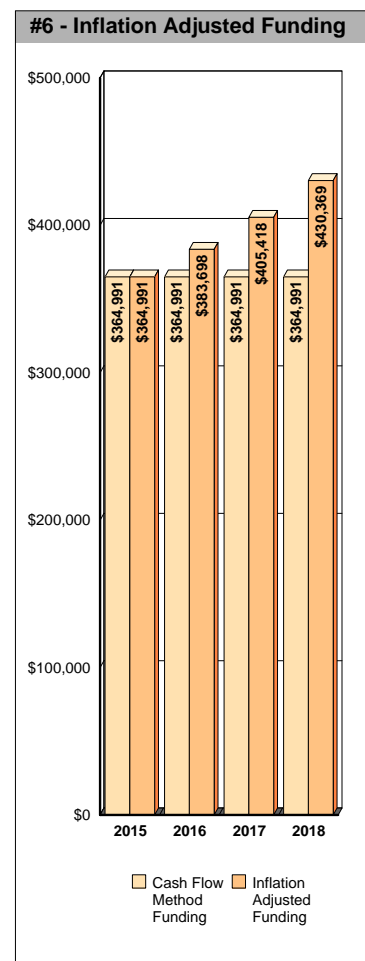
The \$405,418 inflation adjusted funding in 2017 is a 11.08 percent increase over the non-inflation adjusted 2017 funding of \$364,991.

\$430,369 2018 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2018 funding based on three assumptions;

- Replacement Reserves on Deposit totaling \$1,192,250 on January 1, 2018.
- All 2017 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than \$103,957.
- Construction Cost Inflation of 4.50 percent in 2017.

The \$430,369 inflation adjusted funding in 2018 is a 17.91 percent increase over the non-inflation adjusted funding of \$364,991.



YEAR FIVE & BEYOND

The inflation adjusted funding calculations outlined above are not intended to be a substitute for periodic evaluation of common elements by an experienced Reserve Analyst. Industry Standards, lender requirements, and many state and local statutes require a Replacement Reserve Study be professionally updated every 3 to 5 years.

INFLATION ADJUSTMENT

Prior to approving a budget based upon the 2016, 2017 and 2018 inflation adjusted funding calculations above, the 4.50 percent base rate of inflation used in our calculations should be compared to rates published by the Bureau of Labor Statistics. If there is a significant discrepancy (over 1 percent), contact Miller Dodson + Associates prior to using the Inflation Adjusted Funding.

INTEREST ON RESERVES

The recommended funding calculations do not account for interest earned on Replacement Reserves.

In 2015, based on a 1.00 percent interest rate, we estimate the Association may earn \$3,785 on an average balance of \$378,545, \$6,989 on an average balance of \$698,939 in 2016, and \$10,415 on \$1,041,519 in 2017. The Association may elect to attribute 100 percent of the earned interest to Reserves, resulting in a reduction in the 2015 funding from \$364,991 to \$361,206 (a 1.04 percent reduction), \$383,698 to \$376,709 in 2016 (a 1.82 percent reduction), and \$405,418 to \$395,003 in 2017 (a 2.57 percent reduction).

Sample

REPLACEMENT RESERVE STUDY - SUPPLEMENTAL COMMENTS

- The Cash Flow Method calculates the minimum annual funding necessary to prevent Replacement Reserves from dropping below the Minimum Balance. Failure to fund at least the recommended levels may result in funding not being available for the Projected Replacements listed in the Replacement Reserve Inventory.
- The accuracy of the Replacement Reserve Analysis is dependent upon expenditures from Replacement Reserves being made ONLY for the 363 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B1.

Sample

REPLACEMENT RESERVE INVENTORY GENERAL INFORMATION

St John's Church and School - Replacement Reserve Inventory identifies 392 items. Two types of items are identified, Projected Replacements and Excluded Items:

- **PROJECTED REPLACEMENTS.** 363 of the items are Projected Replacements and the periodic replacements of these items are scheduled for funding from Replacement Reserves. The Projected Replacements have an estimated one-time replacement cost of \$5,197,900. Replacements totaling \$8,057,882 are scheduled in the Replacement Reserve Inventory over the 30-year Study Period.

Projected Replacements are the replacement of commonly-owned physical assets that require periodic replacement and whose replacement is to be funded from Replacement Reserves.

- **EXCLUDED ITEMS.** 29 of the items are Excluded Items, and expenditures for these items are NOT scheduled for funding from Replacement Reserves. The accuracy of the calculations made in the Replacement Reserve Analysis is dependent on expenditures NOT being made for Excluded Items. The Excluded Items are listed in the Replacement Reserve Inventory to identify specific items and categories of items that are not to be funded from Replacement Reserves. There are multiple categories of items that are typically excluded from funding by Replacement Reserves, including but not limited to:

Tax Code. The United States Tax Code grants very favorable tax status to Replacement Reserves, conditioned on expenditures being made within certain guidelines. These guidelines typically exclude maintenance activities, minor repairs and capital improvements.

Value. Items with a replacement cost of less than \$1,000 and/or a normal economic life of less than 3 years are typically excluded from funding from Replacement Reserves. This exclusion should reflect Church policy on the administration of Replacement Reserves. If the Church has selected an alternative level, it will be noted in the Replacement Reserve Inventory - General Comments on Page B2.

Long-lived Items. Items that when properly maintained, can be assumed to have a life equal to the property as a whole, are typically excluded from the Replacement Reserve Inventory.

Unit improvements. Items owned by a single unit and where the items serve a single unit are generally assumed to be the responsibility of that unit, not the Church.

Other non-common improvements. Items owned by the local government, public and private utility companies, the United States Postal Service, Master Associations, state and local highway authorities, etc., may be installed on property that is owned by the Church. These types of items are generally not the responsibility of the Church and are excluded from the Replacement Reserve Inventory.

The rationale for the exclusion of an item from funding by Replacement Reserves is discussed in more detail in the 'Comments' sections of the Section B - Replacement Reserve Inventory.

- **CATEGORIES.** The 392 items included in the St John's Church and School Replacement Reserve Inventory are divided into 32 major categories. Each category is printed on a separate page, Pages B3 to B34.
- **LEVEL OF SERVICE.** This Replacement Reserve Inventory has been developed in compliance with the standards established for a Level One Study - Full Service, as defined by the National Reserve Study Standards, established in 1998 by Community Associations Institute, which states:

A Level I - Full Service Reserve Study includes the computation of complete component inventory information regarding commonly owned components provided by the Association, quantities derived from field measurements and/or quantity takeoffs from to-scale engineering drawings that may be made available. The condition of all components is ascertained from a visual inspection of each component by the analyst. The remaining economic life and the value of the components are provided based on these observations and the funding status and funding plan are then derived from analysis of this data.

Sample

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- **INVENTORY DATA.** Each of the 363 Projected Replacements listed in the Replacement Reserve Inventory includes the following data:

Item Number. The Item Number is assigned sequentially and is intended for identification purposes only.

Item Description. We have identified each item included in the Inventory. Additional information may be included in the Comments section at the bottom of each page of the Inventory.

Units. We have used standard abbreviations to identify the number of units including SF-square feet, LF-lineal feet, SY-square yard, LS-lump sum, EA-each, and PR-pair. Non-standard abbreviations are noted in the Comments section at the bottom of the page.

Number of Units. The methods used to develop the quantities are discussed in "Level of Service" above.

Unit Replacement Cost. We use four sources to develop the unit cost data shown in the Inventory; actual replacement cost data provided by the client, information provided by local contractors and suppliers, industry standard estimating manuals, and a cost database we have developed based upon our detailed interviews with contractors and service providers who are specialists in their respective lines of work.

Normal Economic Life (Yrs). The number of years that a new and properly installed item should be expected to remain in service.

Remaining Economic Life (Yrs). The estimated number of years before an item will need to be replaced. In "normal" conditions, this could be calculated by subtracting the age of the item from the Normal Economic Life of the item, but only rarely do physical assets age "normally". Some items may have longer or shorter lives depending on many factors such as environment, initial quality of the item, maintenance, etc.

Total Replacement Cost. This is calculated by multiplying the Unit Replacement Cost by the Number of Units.

Each of the 29 Excluded Items includes the Item Description, Units, and Number of Units. Many of the Excluded Items are listed as a 'Lump Sum' with a quantity of 1. For the Excluded Items, this indicates that all of the items identified by the 'Item Description' are excluded from funding by Replacement Reserves.

- **REVIEW OF EXPENDITURES.** This Replacement Reserve Study should be reviewed by an accounting professional representing the Church prior to implementation.
- **PARTIAL FUNDING.** Items may have been included in the Replacement Reserve Inventory at less than 100 percent of their full quantity and/or replacement cost. This is done on items that will never be replaced in their entirety, but which may require periodic replacements over an extended period of time. The assumptions that provide the basis for any partial funding are noted in the Comments section.
- **REMAINING ECONOMIC LIFE GREATER THAN 40 YEARS.** The calculations do not include funding for initial replacements beyond 40 years. These replacements are included in this Study for tracking and evaluation. They should be included for funding in future Studies, when they enter the 40-year window.

Sample

SITE COMPONENTS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
1	Pavement, mill and overlay	sf	87,475	\$1.90	18	10	\$166,203
2	Pavement, rejuvenator seal coat	sf	87,475	\$0.23	6	6	\$20,119
3	Parking bumpers	ea	6	\$250.00	18	10	\$1,500
4	Concrete curb and gutter (20% allowance)	ft	264	\$35.70	54	10	\$9,439
5	Concrete curb and gutter (20% allowance)	ft	264	\$35.70	54	28	\$9,439
6	Concrete curb and gutter (20% allowance)	ft	264	\$35.70	54	46	\$9,439
7	Concrete curb	ft	590	\$31.50	54	10	\$18,585
8	Asphalt curb	ft	140	\$4.20	18	10	\$588
9	Concrete flatwork (6%)	sf	657	\$9.00	60	none	\$5,915
10	Concrete flatwork (6%)	sf	657	\$9.00	60	6	\$5,915
11	Concrete flatwork (6%)	sf	657	\$9.00	60	12	\$5,915
12	Concrete flatwork (6%)	sf	657	\$9.00	60	18	\$5,915
13	Concrete flatwork (6%)	sf	657	\$9.00	60	24	\$5,915
14	Concrete flatwork (6%)	sf	657	\$9.00	60	30	\$5,915
15	Concrete flatwork (6%)	sf	657	\$9.00	60	36	\$5,915
16	Concrete flatwork (6%)	sf	657	\$9.00	60	42	\$5,915
17	Concrete flatwork (6%)	sf	657	\$9.00	60	48	\$5,915
18	Concrete flatwork (6%)	sf	657	\$9.00	60	54	\$5,915
SITE COMPONENTS - Replacement Costs - Subtotal							\$294,464

SITE COMPONENTS
COMMENTS

Sample

SITE COMPONENTS (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
19	Concrete site stairs (full set)	ea	1	\$1,200.00	30	25	\$1,200
20	Lamp post	ea	6	\$1,500.00	30	15	\$9,000
21	Lamp post head	ea	6	\$450.00	15	2	\$2,700
22	Brick retaining wall (25% re-set and repoint)	sf	104	\$9.50	10	5	\$988
23	Concrete retaining wall, replacement (at scho	ft	800	\$100.00	54	none	\$80,000
24	Concrete stairs (full set)	ea	1	\$1,800.00	30	none	\$1,800
25	Concrete retaining wall, replacement (at scho	ft	600	\$100.00	54	53	\$60,000
26	Concrete stairs (full set)	ea	2	\$1,800.00	30	30	\$3,600
27	Stone retaining, 10% re-set	sf	120	\$10.00	10	none	\$1,200
28	Stone retaining, replacement	sf	1,200	\$65.00	54	10	\$78,000
29	Wood privacy fence w/ gate	ft	50	\$80.00	10	10	\$4,000
30	8' Metal fencing, replacement	ft	830	\$80.00	30	20	\$66,400
31	8' Metal fencing (10% allowance)	ft	83	\$35.00	30	15	\$2,905
SITE COMPONENTS (CONT.) - Replacement Costs - Subtotal							\$311,793

SITE COMPONENTS (CONT.)
COMMENTS

Sample

SITE COMPONENTS (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
32	Metal railing (20% allowance)	lf	20	\$25.00	25	none	\$500
33	Metal railing (20% allowance)	lf	20	\$25.00	25	5	\$500
34	Metal railing (20% allowance)	lf	20	\$25.00	25	10	\$500
35	Metal railing (20% allowance)	lf	20	\$25.00	25	15	\$500
36	Metal railing (20% allowance)	lf	20	\$25.00	25	20	\$500
37	Wood sign	sf	16	\$100.00	10	10	\$1,600
38	Storm Water Management (allowance \$1,000/ ls		1	\$9,000.00	30	15	\$9,000
39	Foundation plantings (allowance)	ls	1	\$2,000.00	3	3	\$2,000
40	Tot lot, mulch	sf	12,750	\$0.35	3	2	\$4,463
41	Tot lot, playset	ea	4	\$4,500.00	10	5	\$18,000
42	Tot lot, jungle gym	ea	2	\$2,400.00	10	5	\$4,800
43	Tot lot, swing	ea	2	\$1,200.00	10	5	\$2,400
44	Tot lot, PTL border	ft	290	\$9.00	10	5	\$2,610
45	Tot lot, fence	ft	280	\$35.00	25	10	\$9,800
46	Genie lift	ea	1	\$18,000.00	10	10	\$18,000
SITE COMPONENTS (CONT.) - Replacement Costs - Subtotal							\$75,173

SITE COMPONENTS (CONT.)
COMMENTS

Sample

SANCTUARY
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
47	Slate shingle roofing	sf	16,500	\$15.20	60	10	\$250,800
48	Built-up roofing	sf	2,200	\$6.50	20	10	\$14,300
49	8" roof scuppers and downspouts	ft	770	\$16.00	30	10	\$12,320
50	Stone exterior repoint (10% allowance)	sf	1,811	\$15.00	25	10	\$27,168
51	Caulking (allowance)	ls	1	\$4,500.00	5	5	\$4,500
52	Exterior door (allowance)	ls	1	\$10,000.00	10	10	\$10,000
53	Windows (3' x 4')	ea	9	\$540.00	35	5	\$4,860
54	Windows (3' x 6')	ea	4	\$540.00	35	5	\$2,160
55	Windows (3' x 6')	ls	1	\$5,000.00	35	5	\$5,000
56	Stained glass restoration (allowance)	ls	1	\$100,000.00	100	38	\$100,000
57	Stained glass ventilators (allowance)	ls	1	\$10,000.00	10	10	\$10,000
58	Exterior building lights	ea	6	\$450.00	15	5	\$2,700

SANCTUARY - Replacement Costs - Subtotal \$443,808

SANCTUARY
COMMENTS

- For stained glass we have estimate an allowance for minimal replacements due to the sentimental value and art value included in the installations.
- The stained glass replaement value estimated at \$900,000 to \$1,100,000 based on industry standard cost for design, fabrication and installation.
- It is unlikely that the Church will elect to replace the stained glass in the lifetime of the Church and it is
- therefore a long life exclusion.

Sample

SANCTUARY (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
59	Interior painting (allowance)	ls	1	\$10,000.00	3	3	\$10,000
60	Organ, restoration (allowance)	ea	1	\$28,000.00	5	2	\$28,000
61	Pendant fixture, refurbish	ea	24	\$450.00	25	10	\$10,800
62	Private restroom, renovation	ea	2	\$2,602.00	25	10	\$5,204
63	Interior door (allowance)	ls	1	\$10,000.00	10	5	\$10,000
64	Exit sign	ea	8	\$125.00	25	10	\$1,000
65	Fire Alarm Control Panel	ea	1	\$10,200.00	20	5	\$10,200
66	Fire Alarm Booster Panel	ea	1	\$1,500.00	20	5	\$1,500
67	Water heater	ea	1	\$1,000.00	15	10	\$1,000
68	Electrical (allowance)	ea	1	\$5,000.00	15	15	\$5,000
SANCTUARY (CONT.) - Replacement Costs - Subtotal							\$82,704

SANCTUARY (CONT.)
COMMENTS

Sample

SANCTUARY (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
69	Exhaust fan (15,000 cfm)	ea	2	\$1,500.00	20	10	\$3,000
70	Fan/coil unit (120,000 btu)	ea	2	\$10,400.00	14	3	\$20,800
71	Condensing Unit (25 ton)	ea	1	\$20,800.00	24	3	\$20,800
72	Fan/coil unit (45,000 btu)	ea	2	\$6,500.00	24	3	\$13,000
73	Condensing Unit (15 ton)	ea	1	\$20,800.00	24	3	\$20,800
74	Fan/coil unit (45,000 btu)	ea	2	\$6,500.00	24	3	\$13,000
75	Compressor (2 ton)	ea	2	\$3,200.00	24	20	\$6,400
76	Fan/coil unit (45,000 btu)	ea	1	\$6,500.00	14	3	\$6,500
77	Compressor (3 ton)	ea	2	\$3,200.00	14	3	\$6,400
78	Boiler, (1,700 MBH)	ea	1	\$20,000.00	20	3	\$20,000
79	AHU (cfm)	ea	2	\$5,000.00	30	11	\$10,000

SANCTUARY (CONT.) - Replacement Costs - Subtotal \$140,700

SANCTUARY (CONT.)
COMMENTS

Sample

SANCTUARY (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
80	CCTV system	ea	1	\$2,850.00	15	10	\$2,850
81	A/V Design/Integration	ea	1	\$2,500.00	10	5	\$2,500
82	Wireless receiver	ea	1	\$450.00	10	5	\$450
83	Lapel microphone	ea	4	\$150.00	10	5	\$600
84	4 CH. mixer	ea	1	\$199.00	10	5	\$199
85	400 W power amp	ea	1	\$300.00	10	5	\$300
86	CD/MP3	ea	1	\$350.00	10	5	\$350
87	Power control	ea	1	\$250.00	10	5	\$250
88	Hearing aid system	ea	1	\$1,548.96	10	5	\$1,549
89	Cabling	ea	1	\$3,000.00	10	5	\$3,000
90	Wall mount speaker	ea	20	\$200.00	10	5	\$4,000
91	Loudspeaker	ea	2	\$800.00	10	5	\$1,600
92	Ceiling speaker	ea	6	\$200.00	10	5	\$1,200
93	DVR	ea	10	\$450.00	15	5	\$4,500
94	Hard drive	ea	1	\$400.00	15	5	\$400
95	Hearing aid adapter	ea	1	\$1,029.00	15	5	\$1,029

SANCTUARY (CONT.) - Replacement Costs - Subtotal \$24,777

SANCTUARY (CONT.)
COMMENTS

Sample

CONVENT
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
96	Built-up roof	sf	1,864	\$6.00	30	5	\$11,184
97	Membrane roof w/ insulation	sf	2,844	\$6.50	20	none	\$18,486
98	8" roof scuppers and downspouts	lf	595	\$16.00	30	15	\$9,520
99	Roof hatch	sf	16	\$105.00	35	5	\$1,680
100	Brick veneer repoint (10% allowance)	sf	955	\$9.00	25	5	\$8,595
101	Caulking (allowance)	ls	1	\$4,500.00	5	5	\$4,500
102	Exterior door (allowance)	ls	1	\$10,000.00	10	5	\$10,000
103	Exterior building lights	ea	2	\$200.00	5	5	\$400
104	Windows (4' x 6')	ea	37	\$1,080.00	35	10	\$39,960
105	Windows (18" x 3')	ea	2	\$200.00	35	10	\$400
106	Windows (24"X48") stained glass cover	ea	16	\$450.00	35	10	\$7,200

CONVENT - Replacement Costs - Subtotal \$111,925

CONVENT
COMMENTS

Sample

CONVENT (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
107	Renovation (phase 1)	sf	2,460	\$19.00	20	18	\$46,740
108	Renovation (phase 2)	sf	2,460	\$19.00	20	19	\$46,740
109	Renovation (phase 3)	sf	2,460	\$19.00	20	20	\$46,740
110	Piano, restoration (upright)	ea	2	\$2,500.00	10	10	\$5,000
111	Small restroom w/shower, renovation	ea	6	\$6,000.00	20	10	\$36,000
112	Interior door (allowance)	ls	1	\$10,000.00	10	10	\$10,000
113	Laundry room appliances	ls	1	\$2,000.00	10	10	\$2,000
114	Chapel (ceiling spot lighting)	ea	20	\$250.00	10	10	\$5,000
115	Chapel (sound system)	ea	1	\$3,550.00	10	10	\$3,550
116	Overhead doors	ea	1	\$2,500.00	25	10	\$2,500
117	Fire Alarm System	ls	1	\$10,200.00	20	5	\$10,200

CONVENT (CONT.) - Replacement Costs - Subtotal \$214,470

CONVENT (CONT.)
COMMENTS

Sample

CONVENT (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
118	Domestic water piping (allowance)	ls	1	\$4,000.00	10	10	\$4,000
119	Water heater (boiler)	ea	1	\$2,000.00	15	11	\$2,000
120	Boiler buddy	ea	1	\$2,000.00	14	11	\$2,000
121	Electrical	ea	1	\$5,000.00	15	10	\$5,000
122	Exhaust fan (15,000 cfm)	ea	2	\$1,500.00	20	10	\$3,000
123	Self-contained unit	ea	1	\$4,500.00	14	10	\$4,500
124	Fan/coil unit (45,000 btu)	ea	1	\$6,500.00	24	5	\$6,500
125	Compressor (3 ton)	ea	1	\$6,500.00	12	5	\$6,500
126	Fan/coil unit (45,000 btu)	ea	1	\$6,500.00	24	5	\$6,500
127	Compressor (3 ton)	ea	1	\$6,500.00	12	5	\$6,500
128	Fan/coil unit (45,000 btu)	ea	1	\$6,500.00	24	5	\$6,500
129	Compressor (3 ton)	ea	1	\$6,500.00	12	5	\$6,500
130	Fan/coil unit (30,000 btu)	ea	1	\$3,200.00	24	5	\$3,200
131	Compressor (2 ton)	ea	1	\$3,200.00	12	5	\$3,200
132	Boiler, (1,000 MBH)	ea	1	\$20,000.00	20	5	\$20,000

CONVENT (CONT.) - Replacement Costs - Subtotal \$85,900

CONVENT (CONT.)
COMMENTS

Sample

CONVENT (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
133	Countertop and Basin	ft	20	\$400.00	20	10	\$8,000
134	Kitchen flooring	sf	400	\$3.00	20	10	\$1,200
135	Refrigeration	ea	2	\$1,800.00	20	10	\$3,600
136	Wall cabinet	ft	15	\$300.00	20	10	\$4,500
137	Dishwasher	ea	1	\$800.00	20	10	\$800
138	Range/Oven	ea	1	\$800.00	20	10	\$800

CONVENT (CONT.) - Replacement Costs - Subtotal \$18,900

CONVENT (CONT.)
COMMENTS

Sample

SCHOOL
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
139	Slate shingle	sf	21,627	\$15.20	60	10	\$328,730
140	Membrane roof	sf	4,020	\$6.50	20	5	\$26,130
141	Gutters and downspouts (8")	lf	132	\$8.00	20	5	\$1,056
142	8" roof scuppers and downspouts	lf	700	\$16.00	30	15	\$11,200
143	Brick veneer repoint (10% allowance)	sf	1,400	\$15.00	25	10	\$21,000
144	Caulking (allowance)	ls	1	\$4,500.00	5	5	\$4,500
145	Exterior door (allowance)	ls	1	\$10,000.00	10	10	\$10,000
146	Wood trim (allowance)	ls	1	\$5,000.00	5	5	\$5,000
147	Windows (3' x 7')	ea	71	\$945.00	35	10	\$67,095
148	Glass block	sf	8	\$450.00	50	40	\$3,600
149	Windows (4' x 4')	ea	22	\$720.00	35	10	\$15,840
150	Exterior building lights	ea	2	\$200.00	15	5	\$400

SCHOOL - Replacement Costs - Subtotal \$494,551

SCHOOL
COMMENTS

Sample

SCHOOL (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
151	School/Classroom renovation (phase 1)	sf	12,500	\$19.00	20	5	\$237,500
152	School/Classroom renovation (phase 2)	sf	12,500	\$19.00	20	6	\$237,500
153	School/Classroom renovation (phase 3)	sf	12,500	\$19.00	20	7	\$237,500
154	School/Classroom renovation (phase 4)	sf	12,500	\$19.00	20	8	\$237,500
155	Blinds	ea	50	\$200.00	20	10	\$10,000
156	Teacher kitchenette renovation	ea	1	\$14,466.00	25	10	\$14,466
157	Private restroom, renovation	ea	2	\$2,602.00	25	10	\$5,204
158	Standard restroom, renovation	ea	2	\$10,000.00	25	10	\$20,000
159	Education restroom, renovation	ea	2	\$10,350.00	25	15	\$20,700
160	Music room flooring	sf	704	\$4.25	7	7	\$2,992
161	Music room ceiling	sf	704	\$4.25	7	7	\$2,992
162	Smoke detector	ea	14	\$250.00	25	10	\$3,500
163	Fire strobe	ea	2	\$125.00	25	10	\$250
164	Fire alarm pull	ea	10	\$125.00	25	10	\$1,250
165	Interior door (allowance)	ls	1	\$10,000.00	10	10	\$10,000
166	Exit sign	ea	6	\$125.00	25	10	\$750
167	Fire Alarm Control Annunciator Panel	ea	1	\$10,200.00	20	5	\$10,200
168	Fire Alarm Booster Panel	ea	1	\$1,500.00	20	5	\$1,500
SCHOOL (CONT.) - Replacement Costs - Subtotal							\$1,053,804

SCHOOL (CONT.)
COMMENTS

Sample

SCHOOL (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
169	Domestic water piping (allowance)	ls	1	\$4,000.00	10	10	\$4,000
170	Water heater	ea	1	\$8,500.00	15	5	\$8,500
171	Electrical (allowance)	ea	1	\$5,000.00	15	10	\$5,000
172	Exhaust fan (15,000 cfm)	ea	2	\$1,500.00	20	10	\$3,000
173	Fan/coil unit (75,000 btu)	ea	1	\$10,400.00	24	24	\$10,400
174	Compressor (5 ton)	ea	1	\$10,400.00	24	24	\$10,400
175	Fan/coil unit (30,000 btu)	ea	1	\$3,200.00	24	24	\$3,200
176	Compressor (2 ton)	ea	1	\$3,200.00	24	24	\$3,200
177	Fan/coil unit (20,000 btu)	ea	2	\$3,200.00	24	24	\$6,400
178	Compressor (1.5 ton)	ea	2	\$3,200.00	24	24	\$6,400
179	Fan/coil unit (60,000 btu)	ea	2	\$10,400.00	24	24	\$20,800
180	Carrier 50ss048	ea	2	\$6,500.00	12	12	\$13,000
181	Boiler Glycol system	ea	1	\$2,000.00	20	10	\$2,000
182	Boiler, (1,700 MBH)	ea	2	\$20,000.00	20	10	\$40,000
183	Water Heater	ea	2	\$8,500.00	14	11	\$17,000
184	Pass-thru fan/coil unit	ea	2	\$1,500.00	14	10	\$3,000
SCHOOL (CONT.) - Replacement Costs - Subtotal							\$156,300

SCHOOL (CONT.)
COMMENTS

Sample

SCHOOL (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
185	Accessibility lift	ea	1	\$20,000.00	15	5	\$20,000
186	Sump pump	ea	1	\$2,500.00	10	10	\$2,500
187	Access Control System (ACS)	ea	1	\$6,604.00	15	10	\$6,604
188	CCTV system	ea	1	\$2,850.00	15	10	\$2,850
189	Dumpster pad	sf	400	\$10.00	20	15	\$4,000
190	Cafeteria flooring	sf	1,250	\$3.00	30	15	\$3,750
191	Commercial refrigeration	ea	2	\$3,500.00	15	15	\$7,000
192	Cabinets and counter top	ft	20	\$450.00	30	15	\$9,000
193	Exhaust hood	sf	1	\$8,000.00	30	15	\$8,000
194	Ice machine	ea	1	\$3,500.00	15	15	\$3,500
195	Kitchen flooring	sf	800	\$3.00	30	15	\$2,400
196	Range	ea	1	\$10,000.00	20	15	\$10,000
197	Folding cafeteria table	ea	12	\$1,000.00	20	10	\$12,000
198	Food Warmer Box	ea	2	\$500.00	20	14	\$1,000

SCHOOL (CONT.) - Replacement Costs - Subtotal \$92,604

SCHOOL (CONT.)
COMMENTS

Sample

SCHOOL (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
199	Fan/coil unit, (18,000 btu) classroom	ea	14	\$3,500.00	24	12	\$49,000
200	Compressor (2.5 ton)	ea	2	\$3,200.00	24	5	\$6,400
201	Compressor (2.5 ton)	ea	2	\$3,200.00	24	5	\$6,400
202	Compressor (2.5 ton)	ea	1	\$3,200.00	24	5	\$3,200
203	Compressor (2 ton)	ea	2	\$3,200.00	24	5	\$6,400
204	Compressor (5 ton)	ea	3	\$10,400.00	24	5	\$31,200
205	Compressor (2 ton)	ea	3	\$3,200.00	24	5	\$9,600
206	Compressor (2 ton)	ea	1	\$3,200.00	24	5	\$3,200

SCHOOL (CONT.) - Replacement Costs - Subtotal \$115,400

SCHOOL (CONT.)
COMMENTS

Sample

HELLER HALL
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
207	Built-up roof	sf	6,860	\$6.50	20	2	\$44,590
208	8" Gutters and downspouts	lf	450	\$8.00	20	2	\$3,600
209	Roof hatch	sf	16	\$105.00	35	20	\$1,680
210	Brick veneer repoint (10% allowance)	sf	816	\$9.00	25	2	\$7,344
211	Caulking (allowance)	ls	1	\$4,500.00	5	2	\$4,500
212	Exterior door (allowance)	ls	1	\$10,000.00	10	10	\$10,000
213	Windows (4' x 8')	ea	8	\$1,440.00	35	10	\$11,520
214	Windows (3' x 8')	ea	46	\$1,080.00	35	10	\$49,680
215	Exterior building lights	ea	2	\$200.00	15	5	\$400
216	Blinds	ea	18	\$200.00	20	18	\$3,600
217	VCT	lf	5,236	\$3.30	14	5	\$17,279
218	Interior painting (allowance)	ls	1	\$10,000.00	3	3	\$10,000
219	Piano, restoration (upright)	ea	1	\$5,000.00	10	10	\$5,000
HELLER HALL - Replacement Costs - Subtotal							\$169,193

HELLER HALL
COMMENTS

Sample

HELLER HALL (CONT.)

PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
220	Private restroom, renovation	ea	1	\$2,602.00	25	10	\$2,602
221	Standard restroom, renovation	ea	2	\$10,000.00	25	10	\$20,000
222	Interior door (allowance)	ls	1	\$10,000.00	10	10	\$10,000
223	Auditorium (ceiling lighting)	ea	20	\$250.00	15	10	\$5,000
224	Exit sign	ea	4	\$125.00	25	10	\$500
225	Interior door (allowance)	ls	1	\$10,000.00	10	10	\$10,000
226	Ceiling speakers	ea	4	\$200.00	25	15	\$800
227	Domestic water piping (allowance)	ls	1	\$4,000.00	10	10	\$4,000
228	Water heater	ea	1	\$2,000.00	15	5	\$2,000
229	Electrical (allowance)	ea	1	\$5,000.00	15	15	\$5,000
230	Exhaust fan (15,000 cfm)	ea	2	\$1,500.00	14	8	\$3,000
231	Fan/coil unit (225,000 BTU)	ea	1	\$10,400.00	24	12	\$10,400
232	Compressor (15 ton)	ea	1	\$20,800.00	12	8	\$20,800
233	Fan/coil unit (45,000 BTU)	ea	8	\$6,500.00	24	23	\$52,000
234	Compressor (3 ton)	ea	8	\$6,500.00	12	11	\$52,000
235	Compressor (5 ton)	ea	1	\$10,400.00	12	11	\$10,400
HELLER HALL (CONT.) - Replacement Costs - Subtotal							\$208,502

HELLER HALL (CONT.)

COMMENTS

Sample

HELLER HALL (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
236	Boiler, (1,700 MBH)	ea	1	\$20,000.00	20	15	\$20,000
237	Water Heater	ea	1	\$1,000.00	30	11	\$1,000
238	A/V system	ea	1	\$13,397.96	10	10	\$13,398
239	A/V Design/Integration	ea	1	\$2,500.00	10	10	\$2,500
240	4 CH. mixer	ea	1	\$199.00	10	10	\$199
241	400 W power amp	ea	1	\$300.00	10	10	\$300
242	CD/MP3	ea	1	\$350.00	10	10	\$350
243	Power control	ea	1	\$250.00	10	10	\$250
244	Cabling	ea	1	\$3,000.00	10	10	\$3,000
245	Speakers	ea	8	\$200.00	10	10	\$1,600
246	Stackable chair (metal frame, plastic)	ea	80	\$48.00	10	10	\$3,840
247	6' round banquet table	ea	10	\$265.00	10	10	\$2,650
248	8' rectangle table	ea	10	\$190.00	10	10	\$1,900
249	Kitchen flooring	sf	728	\$3.00	20	14	\$2,184
250	Commercial Refrigeration	ea	1	\$3,200.00	20	14	\$3,200
251	Ice Machine	ea	1	\$1,500.00	20	14	\$1,500
252	Exhaust hood w/ suppression	ea	1	\$8,800.00	20	14	\$8,800
253	Cabinets and countertop	ft	20	\$400.00	20	14	\$8,000
254	Commercial Range	ea	1	\$10,000.00	20	14	\$10,000
HELLER HALL (CONT.) - Replacement Costs - Subtotal							\$84,671

HELLER HALL (CONT.)
COMMENTS

Sample

GYMNASIUM
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
255	Asphalt shingle	sf	18,862	\$4.25	25	10	\$80,164
256	Gutters and downspouts	lf	1,060	\$6.00	20	10	\$6,360
257	Brick veneer repoint (10% allowance)	sf	668	\$15.00	25	10	\$10,020
258	Caulking (allowance)	ls	1	\$4,500.00	5	5	\$4,500
259	Exterior door (allowance)	ls	1	\$10,000.00	10	10	\$10,000
260	Wood trim (allowance)	ls	1	\$5,000.00	5	5	\$5,000
261	Corrugated metal awning	sf	2,400	\$8.00	50	35	\$19,200
262	Windows (3' x 3')	ea	12	\$405.00	35	20	\$4,860
263	Windows (4' x 6')	ea	7	\$850.00	35	20	\$5,950
264	Windows (4' x 3')	ea	7	\$450.00	35	20	\$3,150
265	Windows (2' x 2')	ea	2	\$450.00	35	20	\$900
266	Exterior building lights, small	ea	2	\$125.00	15	5	\$250
267	Exterior building lights, large	ea	4	\$300.00	15	5	\$1,200
268	Walkway lights, recessed	ea	10	\$200.00	15	5	\$2,000

GYMNASIUM - Replacement Costs - Subtotal \$153,554

GYMNASIUM
COMMENTS

Sample

GYMNASIUM (CONT.)

PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
269	Conference Center, renovation	sf	1,400	\$19.00	20	5	\$26,600
270	Interior painting (allowance)	ls	1	\$10,000.00	3	3	\$10,000
271	Gymnasium flooring restoration	sf	7,000	\$0.50	3	3	\$3,500
272	Private restroom, renovation	ea	2	\$2,602.00	25	10	\$5,204
273	Standard restroom, renovation	ea	2	\$10,000.00	25	10	\$20,000
274	Shower room, tbd	ea	2	\$9,000.00	25	10	\$18,000
275	Interior door (allowance)	ls	1	\$10,000.00	10	10	\$10,000
276	Gymnasium (ceiling down light)	ea	32	\$450.00	10	10	\$14,400
277	Gymnasium (ceiling spot lighting)	ea	20	\$450.00	10	10	\$9,000
278	Emergency lights	ea	10	\$125.00	25	10	\$1,250
279	Exit sign	ea	10	\$125.00	25	10	\$1,250
280	Fire Alarm Control Panel	ea	1	\$10,200.00	20	5	\$10,200
281	Fire Alarm, booster panel	ea	1	\$1,500.00	20	5	\$1,500
282	Fire sprinkler compressor for dry pipe	ea	1	\$750.00	20	10	\$750
283	Fire sprinkler system (allowance)	ea	1	\$10,000.00	20	10	\$10,000
284	Smoke detector	ea	40	\$250.00	25	10	\$10,000
285	Fire strobe	ea	12	\$125.00	25	10	\$1,500
286	Fire alarm pull	ea	6	\$125.00	25	10	\$750
GYMNASIUM (CONT.) - Replacement Costs - Subtotal							\$153,904

GYMNASIUM (CONT.)

COMMENTS

Sample

GYMNASIUM (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
287	Emergency lights	ea	6	\$125.00	25	10	\$750
288	Domestic water piping (allowance)	ls	1	\$4,000.00	10	5	\$4,000
289	Water heater	ea	1	\$1,000.00	15	5	\$1,000
290	Exhaust fan (15,000 cfm)	ea	1	\$1,500.00	20	10	\$1,500
291	Electrical (allowance)	ls	1	\$5,000.00	15	5	\$5,000
292	Fan/coil unit (75,000 btu)	ea	2	\$10,400.00	24	14	\$20,800
293	Compressor (5 ton)	ea	2	\$10,400.00	24	14	\$20,800
294	Condensing Unit (25 ton)	ea	2	\$20,800.00	24	14	\$41,600
295	AHU w/ coil (200,000 btu)	ea	2	\$20,800.00	20	5	\$41,600
296	Unit Heater (150,000 btu)	ea	2	\$6,500.00	20	5	\$13,000
297	Water Heater	ea	1	\$800.00	15	5	\$800
298	Access Control System (ACS)	ea	1	\$6,604.00	15	5	\$6,604
299	Camera	ea	12	\$450.00	15	5	\$5,400
300	CCTV system	ea	1	\$2,850.00	15	5	\$2,850

GYMNASIUM (CONT.) - Replacement Costs - Subtotal \$165,704

GYMNASIUM (CONT.)
COMMENTS

Sample

GYMNASIUM (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
301	A/V system	ea	1	\$13,397.96	15	15	\$13,398
302	Projector and screen	ea	1	\$6,500.00	15	15	\$6,500
303	Folding table	ea	2	\$1,200.00	20	20	\$2,400
304	Bleachers	ft	160	\$400.00	20	20	\$64,000
305	Scoreboard system	ea	1	\$5,000.00	20	20	\$5,000
306	Concrete pad	sf	360	\$9.50	20	18	\$3,420

GYMNASIUM (CONT.) - Replacement Costs - Subtotal \$94,718

GYMNASIUM (CONT.)
COMMENTS

Sample

RECTORY
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
307	Asphalt shingle	sf	2,994	\$4.25	25	20	\$12,725
308	Garage, Asphalt shingle	sf	1,640	\$4.25	25	20	\$6,970
309	Built-up roof	sf	3,200	\$6.50	20	10	\$20,800
310	Gutters and downspouts	lf	321	\$6.00	20	14	\$1,926
311	Soffit, vinyl	sf	200	\$5.70	25	14	\$1,140
312	Siding, painted aluminum, restoration	sf	3,600	\$3.00	10	10	\$10,800
313	Garage door	ea	2	\$2,000.00	15	14	\$4,000
314	Windows (3' x 5')	ea	44	\$675.00	35	14	\$29,700
315	Carpet	sf	2,500	\$4.25	7	7	\$10,625
316	VCT	lf	1,000	\$3.30	14	14	\$3,300
317	Interior painting (allowance)	ls	1	\$4,000.00	3	3	\$4,000
318	Small restroom, renovation	ea	2	\$4,500.00	20	10	\$9,000
319	Wood flooring restoration	sf	500	\$0.50	3	3	\$250
320	Private restroom, renovation	ea	4	\$2,602.00	25	10	\$10,408

RECTORY - Replacement Costs - Subtotal \$125,644

RECTORY
COMMENTS

Sample

RECTORY (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
321	Fan/coil unit (45,000 btu)	ea	2	\$6,500.00	24	12	\$13,000
322	Compressor (3 ton)	ea	2	\$3,200.00	24	12	\$6,400
323	Fan/coil unit (30,000 btu)	ea	2	\$3,200.00	24	12	\$6,400
324	Compressor (2 ton)	ea	2	\$3,200.00	24	12	\$6,400
325	Fan/coil unit (75,000 btu)	ea	2	\$10,400.00	24	12	\$20,800
326	Compressor (5 ton)	ea	1	\$10,400.00	14	12	\$10,400
327	Boiler, (50 MBH)	ea	1	\$10,000.00	20	14	\$10,000
328	Water Heater	ea	1	\$8,500.00	15	15	\$8,500
329	Access Control System (ACS)	ea	1	\$6,604.00	15	10	\$6,604
330	CCTV system	ea	1	\$2,850.00	15	10	\$2,850
331	Countertop and Basin	ft	20	\$150.00	20	14	\$3,000
332	Kitchen flooring	sf	300	\$3.00	20	14	\$900
333	Refrigeration	ea	1	\$1,800.00	20	14	\$1,800
334	Enclosed base cabinet	ea	10	\$200.00	20	14	\$2,000
335	Dishwasher	ea	1	\$700.00	20	14	\$700
336	Range	ea	1	\$700.00	20	14	\$700

RECTORY (CONT.) - Replacement Costs - Subtotal \$100,454

RECTORY (CONT.)
COMMENTS

Sample

HOUSE OF MINISTRIES
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
337	Asphalt shingle	sf	2,563	\$4.25	25	20	\$10,893
338	Gutters and downspouts	lf	360	\$6.00	20	20	\$2,160
339	Soffit, vinyl	sf	220	\$5.70	25	20	\$1,254
340	Siding, vinyl	sf	3,520	\$5.70	25	20	\$20,064
341	Garage door	ea	2	\$2,000.00	25	20	\$4,000
342	Carpet	sf	2,000	\$4.25	7	7	\$8,500
343	Interior painting (allowance)	ls	1	\$4,000.00	3	3	\$4,000
344	Small restroom w/shower, renovation	ea	2	\$2,500.00	20	10	\$5,000
345	Emergency lights	ea	10	\$125.00	25	10	\$1,250
346	Water heater (80 gal.)	ea	1	\$2,500.00	15	5	\$2,500
347	Compressor (2 ton)	ea	1	\$3,200.00	24	23	\$3,200
348	Compressor (5 ton)	ea	2	\$10,400.00	24	14	\$20,800
349	Fan/coil unit (60,000 btu)	ea	2	\$6,500.00	14	6	\$13,000
350	Fan/coil unit (30,000 btu)	ea	1	\$3,200.00	14	6	\$3,200
351	Sump pump	ea	1	\$1,000.00	10	6	\$1,000

HOUSE OF MINISTRIES - Replacement Costs - Subtotal \$100,821

HOUSE OF MINISTRIES
COMMENTS

Sample

HOUSE OF MINISTRIES (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
352	Access Control System (ACS)	ea	1	\$6,604.00	15	10	\$6,604
353	CCTV system	ea	1	\$2,850.00	15	10	\$2,850
354	Kitchen flooring	sf	250	\$3.00	20	14	\$750
355	Commercial Refrigeration	ea	1	\$1,800.00	20	14	\$1,800
356	Cabinet and countertop	ft	20	\$250.00	20	14	\$5,000
357	Commercial Range	ea	1	\$750.00	20	14	\$750
358	ADA ramp	sf	240	\$22.00	20	14	\$5,280

HOUSE OF MINISTRIES (CONT.) - Replacement Costs - Subtotal \$23,034

HOUSE OF MINISTRIES (CONT.)
COMMENTS

Sample

MISC.
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
359	Allowance for Steeple Cross	ea	1	\$10,000.00	60	5	\$10,000
360	Allowance for Church Pew Restoration	ea	1	\$75,000.00	60	10	\$75,000
361	Guest house, asphalt shingle	sf	886	\$4.25	25	20	\$3,766
362	Guest house, gutters and downspouts	lf	120	\$6.00	20	10	\$720
363	Guest house, siding	lf	1,920	\$5.70	25	10	\$10,944

MISC. - Replacement Costs - Subtotal \$100,430

MISC.
COMMENTS

Sample

VALUATION EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Site lighting fixtures	ls	1				EXCLUDED
	Property identification signage	ls	1				EXCLUDED
	Miscellaneous signage	ls	1				EXCLUDED
	Bench	ls	1				EXCLUDED
	Picnic table	ls	1				EXCLUDED
	BBQ	ls	1				EXCLUDED
	Handrail	ls	1				EXCLUDED
	Window unit	ls	1				EXCLUDED

VALUATION EXCLUSIONS

COMMENTS

- Valuation Exclusions. For ease of administration of the Replacement Reserves and to reflect accurately how Replacement Reserves are administered, items with a dollar value less than \$1,000.00 have not been scheduled for funding from Replacement Reserves. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

Sample

LONG-LIFE EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Masonry features	ls	1				EXCLUDED
	Exterior brick veneer	ls	1				EXCLUDED
	Exterior stone veneer	ls	1				EXCLUDED
	Building foundation(s)	ls	1				EXCLUDED
	Concrete floor slabs (interior)	ls	1				EXCLUDED
	Wall, floor, & roof structure	ls	1				EXCLUDED
	Electrical wiring	ls	1				EXCLUDED
	Baseboard heat units	ls	1				EXCLUDED
	Furniture	ls	1				EXCLUDED
	Terrazzo flooring	ls	1				EXCLUDED
	Tlle flooring	ls	1				EXCLUDED
	Bell tower	ls	1				EXCLUDED
	Sanctuary doors	ls	1				EXCLUDED
	Masonry fascia	ls	1				EXCLUDED
	Break metal trim	ls	1				EXCLUDED

LONG-LIFE EXCLUSIONS

COMMENTS

- Long Life Exclusions. Components that when properly maintained, can be assumed to have a life equal to the property as a whole, are normally excluded from the Replacement Reserve Inventory. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- Exterior masonry is generally assumed to have an unlimited economic life but periodic repointing is required and we have included this for funding in the Replacement Reserve Inventory.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

Sample

UTILITY EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Primary electric feeds	ls	1				EXCLUDED
	Electric transformers	ls	1				EXCLUDED
	Cable TV systems and structures	ls	1				EXCLUDED
	Telephone cables and structures	ls	1				EXCLUDED
	Site lighting	ls	1				EXCLUDED
	Gas mains and meters	ls	1				EXCLUDED
	Water mains and meters	ls	1				EXCLUDED
	Sanitary sewers	ls	1				EXCLUDED

UTILITY EXCLUSIONS

COMMENTS

- Utility Exclusions. Many improvements owned by utility companies are on property owned by the Association. We have assumed that repair, maintenance, and replacements of these components will be done at the expense of the appropriate utility company. Examples of items excluded from funding Replacement Reserves by this standard are listed above.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

Sample

MAINTENANCE AND REPAIR EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Cleaning of asphalt pavement	ls	1				EXCLUDED
	Crack sealing of asphalt pavement	ls	1				EXCLUDED
	Painting of curbs	ls	1				EXCLUDED
	Striping of parking spaces	ls	1				EXCLUDED
	Numbering of parking spaces	ls	1				EXCLUDED
	Landscaping and site grading	ls	1				EXCLUDED

MAINTENANCE AND REPAIR EXCLUSIONS

COMMENTS

- Maintenance activities, one-time-only repairs, and capital improvements. These activities are NOT appropriately funded from Replacement Reserves. The inclusion of such component in the Replacement Reserve Inventory could jeopardize the special tax status of ALL Replacement Reserves, exposing the Association to significant tax liabilities. We recommend that the Board of Directors discuss these exclusions and Revenue Ruling 75-370 with a Certified Public Accountant.
- Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

Sample

PROJECTED ANNUAL REPLACEMENTS GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 363 Projected Replacements in the St John's Church and School Replacement Reserve Inventory whose replacement is scheduled to be funded from Replacement Reserves are broken down on a year-by-year basis, beginning on Page C2.

REPLACEMENT RESERVE ANALYSIS AND INVENTORY POLICIES, PROCEDURES, AND ADMINISTRATION

- **REVISIONS.** Revisions will be made to the Replacement Reserve Analysis and Replacement Reserve Inventory in accordance with the written instructions of the Board of Directors. No additional charge is incurred for the first revision, if requested in writing within three months of the date of the Replacement Reserve Study. It is our policy to provide revisions in electronic (Adobe PDF) format only.
- **TAX CODE.** The United States Tax Code grants favorable tax status to a common interest development (CID) meeting certain guidelines for their Replacement Reserve. If a CID files their taxes as a 'Corporation' on Form 1120 (IRC Section 277), these guidelines typically require maintenance activities, partial replacements, minor replacements, capital improvements, and one-time only replacements to be excluded from Reserves. A CID cannot co-mingle planning for maintenance activities with capital replacement activities in the Reserves (Revenue Ruling 75-370). Funds for maintenance activities and capital replacements activities must be held in separate accounts. If a CID files taxes as an "Exempt Homeowners Association" using Form 1120H (IRC Section 528), the CID does not have to segregate these activities. However, because the CID may elect to change their method of filing from year to year within the Study Period, we advise using the more restrictive approach. We further recommend that the CID consult with their Accountant and consider creating separate and independent accounts and reserves for large maintenance items, such as painting.
- **CONFLICT OF INTEREST.** Neither Miller - Dodson Associates nor the Reserve Analyst has any prior or existing relationship with this Church which would represent a real or perceived conflict of interest.
- **RELIANCE ON DATA PROVIDED BY THE CLIENT.** Information provided by an official representative of the Church regarding financial, physical conditions, quality, or historical issues is deemed reliable.
- **INTENT.** This Replacement Reserve Study is a reflection of the information provided by the Church and the visual evaluations of the Analyst. It has been prepared for the sole use of the Church and is not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records.
- **PREVIOUS REPLACEMENTS.** Information provided to Miller - Dodson Associates regarding prior replacements is considered to be accurate and reliable. Our visual evaluation is not a project audit or quality inspection.
- **EXPERIENCE WITH FUTURE REPLACEMENTS.** The Calendar of Annual Projected Replacements, lists replacements we have projected to occur over the next thirty years, begins on Page C2. Actual experience in replacing the items may differ significantly from the cost estimates and time frames shown because of conditions beyond our control. These differences may be caused by maintenance practices, inflation, variations in pricing and market conditions, future technological developments, regulatory actions, acts of God, and luck. Some items may function normally during our visual evaluation and then fail without notice.
- **REVIEW OF THE REPLACEMENT RESERVE STUDY.** For this study to be effective, it should be reviewed by the St John's Church and School Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Church.

Sample

PROJECTED REPLACEMENTS - STUDY YEAR - 2015

#	Description	\$
9	Concrete flatwork (6%)	\$5,915
23	Concrete retaining wall, repl	\$80,000
24	Concrete stairs (full set)	\$1,800
27	Stone retaining, 10% re-set	\$1,200
32	Metal railing (20% allowance	\$500
97	Membrane roof w/ insulation	\$18,486

Sample

YEAR 2 - PROJECTED REPLACEMENTS - 2016

[illegible]

Sample

YEAR 3 - PROJECTED REPLACEMENTS - 2017

#	Description	\$
21	Lamp post head	\$2,700
40	Tot lot, mulch	\$4,463
60	Organ, restoration (allowanc	\$28,000
207	Built-up roof	\$44,590
208	8" Gutters and downspouts	\$3,600
210	Brick veneer repoint (10% al	\$7,344
211	Caulking (allowance)	\$4,500

Sample

YEAR 4 - PROJECTED REPLACEMENTS - 2018

[illegible]

Sample

YEAR 5 - PROJECTED REPLACEMENTS - 2019

[illegible]

Sample

YEAR 6 - PROJECTED REPLACEMENTS - 2020

#	Description	\$	#	Description	\$	#	Description	\$
22	Brick retaining wall (25% re-	\$988	217	VCT	\$17,279			
33	Metal railing (20% allowance)	\$500	228	Water heater	\$2,000			
40	Tot lot, mulch	\$4,463	258	Caulking (allowance)	\$4,500			
41	Tot lot, playset	\$18,000	260	Wood trim (allowance)	\$5,000			
42	Tot lot, jungle gym	\$4,800	266	Exterior building lights, smal	\$250			
43	Tot lot, swing	\$2,400	267	Exterior building lights, large	\$1,200			
44	Tot lot, PTL border	\$2,610	268	Walkway lights, recessed	\$2,000			
51	Caulking (allowance)	\$4,500	269	Conference Center, renovati	\$26,600			
53	Windows (3' x 4')	\$4,860	280	Fire Alarm Control Panel	\$10,200			
54	Windows (3' x 6')	\$2,160	281	Fire Alarm, booster panel	\$1,500			
55	Windows (3' x 6')	\$5,000	288	Domestic water piping (allow	\$4,000			
58	Exterior building lights	\$2,700	289	Water heater	\$1,000			
63	Interior door (allowance)	\$10,000	291	Electrical (allowance)	\$5,000			
65	Fire Alarm Control Panel	\$10,200	295	AHU w/ coil (200,000 btu)	\$41,600			
66	Fire Alarm Booster Panel	\$1,500	296	Unit Heater (150,000 btu)	\$13,000			
81	A/V Design/Integration	\$2,500	297	Water Heater	\$800			
82	Wireless receiver	\$450	298	Access Control System (AC)	\$6,604			
83	Lapel microphone	\$600	299	Camera	\$5,400			
84	4 CH. mixer	\$199	300	CCTV system	\$2,850			
85	400 W power amp	\$300	346	Water heater (80 gal.)	\$2,500			
86	CD/MP3	\$350	359	Allowance for Steeple Cross	\$10,000			
87	Power control	\$250						
88	Hearing aid system	\$1,549						
89	Cabling	\$3,000						
90	Wall mount speaker	\$4,000						
91	Loudspeaker	\$1,600						
92	Ceiling speaker	\$1,200						
93	DVR	\$4,500						
94	Hard drive	\$400						
95	Hearing aid adapter	\$1,029						
96	Built-up roof	\$11,184						
99	Roof hatch	\$1,680						
100	Brick veneer repoint (10% al	\$8,595						
101	Caulking (allowance)	\$4,500						
102	Exterior door (allowance)	\$10,000						
103	Exterior building lights	\$400						
117	Fire Alarm System	\$10,200						
124	Fan/coil unit (45,000 btu)	\$6,500						
125	Compressor (3 ton)	\$6,500						
126	Fan/coil unit (45,000 btu)	\$6,500						
127	Compressor (3 ton)	\$6,500						
128	Fan/coil unit (45,000 btu)	\$6,500						
129	Compressor (3 ton)	\$6,500						
130	Fan/coil unit (30,000 btu)	\$3,200						
131	Compressor (2 ton)	\$3,200						
132	Boiler, (1,000 MBH)	\$20,000						
140	Membrane roof	\$26,130						
141	Gutters and downspouts (8"	\$1,056						
144	Caulking (allowance)	\$4,500						
146	Wood trim (allowance)	\$5,000						
150	Exterior building lights	\$400						
151	School/Classroom renovatio	\$237,500						
167	Fire Alarm Control Annuncia	\$10,200						
168	Fire Alarm Booster Panel	\$1,500						
170	Water heater	\$8,500						
185	Accessibility lift	\$20,000						
200	Compressor (2.5 ton)	\$6,400						
201	Compressor (2.5 ton)	\$6,400						
202	Compressor (2.5 ton)	\$3,200						
203	Compressor (2 ton)	\$6,400						
204	Compressor (5 ton)	\$31,200						
205	Compressor (2 ton)	\$9,600						
206	Compressor (2 ton)	\$3,200						
215	Exterior building lights	\$400						
						Total Scheduled Replacements		\$753,435

Sample

YEAR 7 - PROJECTED REPLACEMENTS - 2021

[illegible]

Sample

YEAR 8 - PROJECTED REPLACEMENTS - 2022

[illegible]

Sample

YEAR 9 - PROJECTED REPLACEMENTS - 2023

#	Description	\$
40	Tot lot, mulch	\$4,463
154	School/Classroom renovatio	\$237,500
230	Exhaust fan (15,000 cfm)	\$3,000
232	Compressor (15 ton)	\$20,800

#	Description	\$
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#	Description	\$
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Total Scheduled Replacements \$265,763

Sample

YEAR 10 - PROJECTED REPLACEMENTS - 2024

[illegible]

Sample

YEAR 11 - PROJECTED REPLACEMENTS - 2025

#	Description	\$	#	Description	\$	#	Description	\$
1	Pavement, mill and overlay	\$166,203	171	Electrical (allowance)	\$5,000	363	Guest house, siding	\$10,944
3	Parking bumpers	\$1,500	172	Exhaust fan (15,000 cfm)	\$3,000			
4	Concrete curb and gutter (20' x 4')	\$9,439	181	Boiler Glycol system	\$2,000			
7	Concrete curb	\$18,585	182	Boiler, (1,700 MBH)	\$40,000			
8	Asphalt curb	\$588	184	Pass-thru fan/coil unit	\$3,000			
27	Stone retaining, 10% re-set	\$1,200	186	Sump pump	\$2,500			
28	Stone retaining, replacement	\$78,000	187	Access Control System (AC)	\$6,604			
29	Wood privacy fence w/ gate	\$4,000	188	CCTV system	\$2,850			
34	Metal railing (20% allowance)	\$500	197	Folding cafeteria table	\$12,000			
37	Wood sign	\$1,600	212	Exterior door (allowance)	\$10,000			
45	Tot lot, fence	\$9,800	213	Windows (4' x 8')	\$11,520			
46	Genie lift	\$18,000	214	Windows (3' x 8')	\$49,680			
47	Slate shingle roofing	\$250,800	219	Piano, restoration (upright)	\$5,000			
48	Built-up roofing	\$14,300	220	Private restroom, renovation	\$2,602			
49	8" roof scuppers and downs	\$12,320	221	Standard restroom, renovation	\$20,000			
50	Stone exterior repoint (10% allowance)	\$27,168	222	Interior door (allowance)	\$10,000			
51	Caulking (allowance)	\$4,500	223	Auditorium (ceiling lighting)	\$5,000			
52	Exterior door (allowance)	\$10,000	224	Exit sign	\$500			
57	Stained glass ventilators (all)	\$10,000	225	Interior door (allowance)	\$10,000			
61	Pendant fixture, refurbish	\$10,800	227	Domestic water piping (allowance)	\$4,000			
62	Private restroom, renovation	\$5,204	238	A/V system	\$13,398			
64	Exit sign	\$1,000	239	A/V Design/Integration	\$2,500			
67	Water heater	\$1,000	240	4 CH. mixer	\$199			
69	Exhaust fan (15,000 cfm)	\$3,000	241	400 W power amp	\$300			
80	CCTV system	\$2,850	242	CD/MP3	\$350			
101	Caulking (allowance)	\$4,500	243	Power control	\$250			
103	Exterior building lights	\$400	244	Cabling	\$3,000			
104	Windows (4' x 6')	\$39,960	245	Speakers	\$1,600			
105	Windows (18" x 3')	\$400	246	Stackable chair (metal frame)	\$3,840			
106	Windows (24"X48") stained	\$7,200	247	6' round banquet table	\$2,650			
110	Piano, restoration (upright)	\$5,000	248	8' rectangle table	\$1,900			
111	Small restroom w/shower, replacement	\$36,000	255	Asphalt shingle	\$80,164			
112	Interior door (allowance)	\$10,000	256	Gutters and downspouts	\$6,360			
113	Laundry room appliances	\$2,000	257	Brick veneer repoint (10% allowance)	\$10,020			
114	Chapel (ceiling spot lighting)	\$5,000	258	Caulking (allowance)	\$4,500			
115	Chapel (sound system)	\$3,550	259	Exterior door (allowance)	\$10,000			
116	Overhead doors	\$2,500	260	Wood trim (allowance)	\$5,000			
118	Domestic water piping (allowance)	\$4,000	272	Private restroom, renovation	\$5,204			
121	Electrical	\$5,000	273	Standard restroom, renovation	\$20,000			
122	Exhaust fan (15,000 cfm)	\$3,000	274	Shower room, tbd	\$18,000			
123	Self-contained unit	\$4,500	275	Interior door (allowance)	\$10,000			
133	Countertop and Basin	\$8,000	276	Gymnasium (ceiling down lighting)	\$14,400			
134	Kitchen flooring	\$1,200	277	Gymnasium (ceiling spot lighting)	\$9,000			
135	Refrigeration	\$3,600	278	Emergency lights	\$1,250			
136	Wall cabinet	\$4,500	279	Exit sign	\$1,250			
137	Dishwasher	\$800	282	Fire sprinkler compressor foot	\$750			
138	Range/Oven	\$800	283	Fire sprinkler system (allowance)	\$10,000			
139	Slate shingle	\$328,730	284	Smoke detector	\$10,000			
143	Brick veneer repoint (10% allowance)	\$21,000	285	Fire strobe	\$1,500			
144	Caulking (allowance)	\$4,500	286	Fire alarm pull	\$750			
145	Exterior door (allowance)	\$10,000	287	Emergency lights	\$750			
146	Wood trim (allowance)	\$5,000	290	Exhaust fan (15,000 cfm)	\$1,500			
147	Windows (3' x 7')	\$67,095	309	Built-up roof	\$20,800			
149	Windows (4' x 4')	\$15,840	312	Siding, painted aluminum, replacement	\$10,800			
155	Blinds	\$10,000	318	Small restroom, renovation	\$9,000			
156	Teacher kitchenette renovation	\$14,466	320	Private restroom, renovation	\$10,408			
157	Private restroom, renovation	\$5,204	329	Access Control System (AC)	\$6,604			
158	Standard restroom, renovation	\$20,000	330	CCTV system	\$2,850			
162	Smoke detector	\$3,500	344	Small restroom w/shower, replacement	\$5,000			
163	Fire strobe	\$250	345	Emergency lights	\$1,250			
164	Fire alarm pull	\$1,250	352	Access Control System (AC)	\$6,604			
165	Interior door (allowance)	\$10,000	353	CCTV system	\$2,850			
166	Exit sign	\$750	360	Allowance for Church Pew Funds	\$75,000			
169	Domestic water piping (allowance)	\$4,000	362	Guest house, gutters and downspouts	\$720			
Total Scheduled Replacements								\$1,954,322

Sample

YEAR 12 - PROJECTED REPLACEMENTS - 2026

#	Description	\$
40	Tot lot, mulch	\$4,463
79	AHU (cfm)	\$10,000
119	Water heater (boiler)	\$2,000
120	Boiler buddy	\$2,000
183	Water Heater	\$17,000
234	Compressor (3 ton)	\$52,000
235	Compressor (5 ton)	\$10,400
237	Water Heater	\$1,000

Sample

YEAR 13 - PROJECTED REPLACEMENTS - 2027

#	Description	\$
2	Pavement, rejuvenator seal	\$20,119
11	Concrete flatwork (6%)	\$5,915
39	Foundation plantings (allowance)	\$2,000
59	Interior painting (allowance)	\$10,000
60	Organ, restoration (allowance)	\$28,000
180	Carrier 50ss048	\$13,000
199	Fan/coil unit, (18,000 btu) cl	\$49,000
211	Caulking (allowance)	\$4,500
218	Interior painting (allowance)	\$10,000
231	Fan/coil unit (225,000 BTU)	\$10,400
270	Interior painting (allowance)	\$10,000
271	Gymnasium flooring restorat	\$3,500
317	Interior painting (allowance)	\$4,000
319	Wood flooring restoration	\$250
321	Fan/coil unit (45,000 btu)	\$13,000
322	Compressor (3 ton)	\$6,400
323	Fan/coil unit (30,000 btu)	\$6,400
324	Compressor (2 ton)	\$6,400
325	Fan/coil unit (75,000 btu)	\$20,800
326	Compressor (5 ton)	\$10,400
343	Interior painting (allowance)	\$4,000

Sample

YEAR 14 - PROJECTED REPLACEMENTS - 2028

[illegible]

Sample

YEAR 15 - PROJECTED REPLACEMENTS - 2029

#	Description	\$	#	Description	\$	#	Description	\$
40	Tot lot, mulch	\$4,463						
160	Music room flooring	\$2,992						
161	Music room ceiling	\$2,992						
198	Food Warmer Box	\$1,000						
249	Kitchen flooring	\$2,184						
250	Commercial Refrigeration	\$3,200						
251	Ice Machine	\$1,500						
252	Exhaust hood w/ suppressio	\$8,800						
253	Cabinets and countertop	\$8,000						
254	Commercial Range	\$10,000						
292	Fan/coil unit (75,000 btu)	\$20,800						
293	Compressor (5 ton)	\$20,800						
294	Condensing Unit (25 ton)	\$41,600						
310	Gutters and downspouts	\$1,926						
311	Soffit, vinyl	\$1,140						
313	Garage door	\$4,000						
314	Windows (3' x 5')	\$29,700						
315	Carpet	\$10,625						
316	VCT	\$3,300						
327	Boiler, (50 MBH)	\$10,000						
331	Countertop and Basin	\$3,000						
332	Kitchen flooring	\$900						
333	Refrigeration	\$1,800						
334	Enclosed base cabinet	\$2,000						
335	Dishwasher	\$700						
336	Range	\$700						
342	Carpet	\$8,500						
348	Compressor (5 ton)	\$20,800						
354	Kitchen flooring	\$750						
355	Commercial Refrigeration	\$1,800						
356	Cabinet and countertop	\$5,000						
357	Commercial Range	\$750						
358	ADA ramp	\$5,280						
						</		

YEAR 16 - PROJECTED REPLACEMENTS - 2030

#	Description	\$	#	Description	\$	#	Description	\$
20	Lamp post	\$9,000						
22	Brick retaining wall (25% re-	\$988						
31	8' Metal fencing (10% allowa	\$2,905						
35	Metal railing (20% allowance	\$500						
38	Storm Water Management (i	\$9,000						
39	Foundation plantings (allowa	\$2,000						
41	Tot lot, playset	\$18,000						
42	Tot lot, jungle gym	\$4,800						
43	Tot lot, swing	\$2,400						
44	Tot lot, PTL border	\$2,610						
51	Caulking (allowance)	\$4,500						
59	Interior painting (allowance)	\$10,000						
63	Interior door (allowance)	\$10,000						
68	Electrical (allowance)	\$5,000						
81	A/V Design/Integration	\$2,500						
82	Wireless receiver	\$450						
83	Lapel microphone	\$600						
84	4 CH. mixer	\$199						
85	400 W power amp	\$300						
86	CD/MP3	\$350						
87	Power control	\$250						
88	Hearing aid system	\$1,549						
89	Cabling	\$3,000						
90	Wall mount speaker	\$4,000						
91	Loudspeaker	\$1,600						
92	Ceiling speaker	\$1,200						
98	8" roof scuppers and downs	\$9,520						
101	Caulking (allowance)	\$4,500						
102	Exterior door (allowance)	\$10,000						
103	Exterior building lights	\$400						
142	8" roof scuppers and downs	\$11,200						
144	Caulking (allowance)	\$4,500						
146	Wood trim (allowance)	\$5,000						
159	Education restroom, renovat	\$20,700						
189	Dumpster pad	\$4,000						
190	Cafeteria flooring	\$3,750						
191	Commercial refrigeration	\$7,000						
192	Cabinets and counter top	\$9,000						
193	Exhaust hood	\$8,000						
194	Ice machine	\$3,500						
195	Kitchen flooring	\$2,400						
196	Range	\$10,000						
218	Interior painting (allowance)	\$10,000						
226	Ceiling speakers	\$800						
229	Electrical (allowance)	\$5,000						
236	Boiler, (1,700 MBH)	\$20,000						
258	Caulking (allowance)	\$4,500						
260	Wood trim (allowance)	\$5,000						
270	Interior painting (allowance)	\$10,000						
271	Gymnasium flooring restorat	\$3,500						
288	Domestic water piping (allow	\$4,000						
301	A/V system	\$13,398						
302	Projector and screen	\$6,500						
317	Interior painting (allowance)	\$4,000						
319	Wood flooring restoration	\$250						
328	Water Heater	\$8,500						
343	Interior painting (allowance)	\$4,000						
						Total Scheduled Replacements		
						\$310,619		

Sample

YEAR 17 - PROJECTED REPLACEMENTS - 2031

#	Description	\$
351	Sump pump	\$1,000

Sample

YEAR 18 - PROJECTED REPLACEMENTS - 2032

#	Description	\$
21	Lamp post head	\$2,700
40	Tot lot, mulch	\$4,463
60	Organ, restoration (allowanc	\$28,000
70	Fan/coil unit (120,000 btu)	\$20,800
76	Fan/coil unit (45,000 btu)	\$6,500
77	Compressor (3 ton)	\$6,400
125	Compressor (3 ton)	\$6,500
127	Compressor (3 ton)	\$6,500
129	Compressor (3 ton)	\$6,500
131	Compressor (2 ton)	\$3,200
211	Caulking (allowance)	\$4,500

Sample

YEAR 19 - PROJECTED REPLACEMENTS - 2033

#	Description	\$
2	Pavement, rejuvenator seal	\$20,119
12	Concrete flatwork (6%)	\$5,915
39	Foundation plantings (allowance)	\$2,000
59	Interior painting (allowance)	\$10,000
107	Renovation (phase 1)	\$46,740
216	Blinds	\$3,600
218	Interior painting (allowance)	\$10,000
270	Interior painting (allowance)	\$10,000
271	Gymnasium flooring restoration	\$3,500
306	Concrete pad	\$3,420
317	Interior painting (allowance)	\$4,000
319	Wood flooring restoration	\$250
343	Interior painting (allowance)	\$4,000

Sample

YEAR 20 - PROJECTED REPLACEMENTS - 2034

#	Description	\$
108	Renovation (phase 2)	\$46,740
217	VCT	\$17,279

#	Description	\$
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#	Description	\$
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Total Scheduled Replacements \$64,019

Sample

YEAR 21 - PROJECTED REPLACEMENTS - 2035

#	Description	\$	#	Description	\$	#	Description	\$
27	Stone retaining, 10% re-set	\$1,200	275	Interior door (allowance)	\$10,000			
29	Wood privacy fence w/ gate	\$4,000	276	Gymnasium (ceiling down li	\$14,400			
30	8' Metal fencing, replacemer	\$66,400	277	Gymnasium (ceiling spot lig	\$9,000			
36	Metal railing (20% allowance	\$500	289	Water heater	\$1,000			
37	Wood sign	\$1,600	291	Electrical (allowance)	\$5,000			
40	Tot lot, mulch	\$4,463	297	Water Heater	\$800			
46	Genie lift	\$18,000	298	Access Control System (AC:	\$6,604			
51	Caulking (allowance)	\$4,500	299	Camera	\$5,400			
52	Exterior door (allowance)	\$10,000	300	CCTV system	\$2,850			
57	Stained glass ventilators (all	\$10,000	303	Folding table	\$2,400			
58	Exterior building lights	\$2,700	304	Bleachers	\$64,000			
75	Compressor (2 ton)	\$6,400	305	Scoreboard system	\$5,000			
93	DVR	\$4,500	307	Asphalt shingle	\$12,725			
94	Hard drive	\$400	308	Garage, Asphalt shingle	\$6,970			
95	Hearing aid adapter	\$1,029	312	Siding, painted aluminum, re	\$10,800			
97	Membrane roof w/ insulation	\$18,486	337	Asphalt shingle	\$10,893			
101	Caulking (allowance)	\$4,500	338	Gutters and downspouts	\$2,160			
103	Exterior building lights	\$400	339	Soffit, vinyl	\$1,254			
109	Renovation (phase 3)	\$46,740	340	Siding, vinyl	\$20,064			
110	Piano, restoration (upright)	\$5,000	341	Garage door	\$4,000			
112	Interior door (allowance)	\$10,000	346	Water heater (80 gal.)	\$2,500			
113	Laundry room appliances	\$2,000	349	Fan/coil unit (60,000 btu)	\$13,000			
114	Chapel (ceiling spot lighting)	\$5,000	350	Fan/coil unit (30,000 btu)	\$3,200			
115	Chapel (sound system)	\$3,550	361	Guest house, asphalt shingl	\$3,766			
118	Domestic water piping (allow	\$4,000						
144	Caulking (allowance)	\$4,500						
145	Exterior door (allowance)	\$10,000						
146	Wood trim (allowance)	\$5,000						
150	Exterior building lights	\$400						
165	Interior door (allowance)	\$10,000						
169	Domestic water piping (allow	\$4,000						
170	Water heater	\$8,500						
185	Accessibility lift	\$20,000						
186	Sump pump	\$2,500						
209	Roof hatch	\$1,680						
212	Exterior door (allowance)	\$10,000						
215	Exterior building lights	\$400						
219	Piano, restoration (upright)	\$5,000						
222	Interior door (allowance)	\$10,000						
225	Interior door (allowance)	\$10,000						
227	Domestic water piping (allow	\$4,000						
228	Water heater	\$2,000						
232	Compressor (15 ton)	\$20,800						
238	A/V system	\$13,398						
239	A/V Design/Integration	\$2,500						
240	4 CH. mixer	\$199						
241	400 W power amp	\$300						
242	CD/MP3	\$350						
243	Power control	\$250						
244	Cabling	\$3,000						
245	Speakers	\$1,600						
246	Stackable chair (metal frame	\$3,840						
247	6' round banquet table	\$2,650						
248	8' rectangle table	\$1,900						
258	Caulking (allowance)	\$4,500						
259	Exterior door (allowance)	\$10,000						
260	Wood trim (allowance)	\$5,000						
262	Windows (3' x 3')	\$4,860						
263	Windows (4' x 6')	\$5,950						
264	Windows (4' x 3')	\$3,150						
265	Windows (2' x 2')	\$900						
266	Exterior building lights, smal	\$250						
267	Exterior building lights, large	\$1,200						
268	Walkway lights, recessed	\$2,000						
						Total Scheduled Replacements		\$649,730

Sample

YEAR 22 - PROJECTED REPLACEMENTS - 2036

#	Description	\$
39	Foundation plantings (allowance)	\$2,000
59	Interior painting (allowance)	\$10,000
160	Music room flooring	\$2,992
161	Music room ceiling	\$2,992
218	Interior painting (allowance)	\$10,000
270	Interior painting (allowance)	\$10,000
271	Gymnasium flooring restorat	\$3,500
315	Carpet	\$10,625
317	Interior painting (allowance)	\$4,000
319	Wood flooring restoration	\$250
342	Carpet	\$8,500
343	Interior painting (allowance)	\$4,000

Sample

YEAR 23 - PROJECTED REPLACEMENTS - 2037

#	Description	\$
60	Organ, restoration (allowanc	\$28,000
207	Built-up roof	\$44,590
208	8" Gutters and downspouts	\$3,600
211	Caulking (allowance)	\$4,500
230	Exhaust fan (15,000 cfm)	\$3,000

#	Description	\$
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#	Description	\$
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Total Scheduled Replacements \$83,690

Sample

YEAR 24 - PROJECTED REPLACEMENTS - 2038

[illegible]

Sample

YEAR 25 - PROJECTED REPLACEMENTS - 2039

#	Description	\$	#	Description	\$	#	Description	\$
2	Pavement, rejuvenator seal	\$20,119						
13	Concrete flatwork (6%)	\$5,915						
39	Foundation plantings (allowance)	\$2,000						
59	Interior painting (allowance)	\$10,000						
123	Self-contained unit	\$4,500						
173	Fan/coil unit (75,000 btu)	\$10,400						
174	Compressor (5 ton)	\$10,400						
175	Fan/coil unit (30,000 btu)	\$3,200						
176	Compressor (2 ton)	\$3,200						
177	Fan/coil unit (20,000 btu)	\$6,400						
178	Compressor (1.5 ton)	\$6,400						
179	Fan/coil unit (60,000 btu)	\$20,800						
180	Carrier 50ss048	\$13,000						
184	Pass-thru fan/coil unit	\$3,000						
218	Interior painting (allowance)	\$10,000						
270	Interior painting (allowance)	\$10,000						
271	Gymnasium flooring restoration	\$3,500						
317	Interior painting (allowance)	\$4,000						
319	Wood flooring restoration	\$250						
343	Interior painting (allowance)	\$4,000						

YEAR 26 - PROJECTED REPLACEMENTS - 2040

#	Description	\$	#	Description	\$	#	Description	\$	
19	Concrete site stairs (full set)	\$1,200							
22	Brick retaining wall (25% re-	\$988							
32	Metal railing (20% allowance)	\$500							
41	Tot lot, playset	\$18,000							
42	Tot lot, jungle gym	\$4,800							
43	Tot lot, swing	\$2,400							
44	Tot lot, PTL border	\$2,610							
51	Caulking (allowance)	\$4,500							
63	Interior door (allowance)	\$10,000							
65	Fire Alarm Control Panel	\$10,200							
66	Fire Alarm Booster Panel	\$1,500							
67	Water heater	\$1,000							
80	CCTV system	\$2,850							
81	A/V Design/Integration	\$2,500							
82	Wireless receiver	\$450							
83	Lapel microphone	\$600							
84	4 CH. mixer	\$199							
85	400 W power amp	\$300							
86	CD/MP3	\$350							
87	Power control	\$250							
88	Hearing aid system	\$1,549							
89	Cabling	\$3,000							
90	Wall mount speaker	\$4,000							
91	Loudspeaker	\$1,600							
92	Ceiling speaker	\$1,200							
101	Caulking (allowance)	\$4,500							
102	Exterior door (allowance)	\$10,000							
103	Exterior building lights	\$400							
117	Fire Alarm System	\$10,200							
120	Boiler buddy	\$2,000							
121	Electrical	\$5,000							
132	Boiler, (1,000 MBH)	\$20,000							
140	Membrane roof	\$26,130							
141	Gutters and downspouts (8"	\$1,056							
144	Caulking (allowance)	\$4,500							
146	Wood trim (allowance)	\$5,000							
151	School/Classroom renovatio	\$237,500							
167	Fire Alarm Control Annuncia	\$10,200							
168	Fire Alarm Booster Panel	\$1,500							
171	Electrical (allowance)	\$5,000							
183	Water Heater	\$17,000							
187	Access Control System (AC:	\$6,604							
188	CCTV system	\$2,850							
223	Auditorium (ceiling lighting)	\$5,000							
258	Caulking (allowance)	\$4,500							
260	Wood trim (allowance)	\$5,000							
269	Conference Center, renovati	\$26,600							
280	Fire Alarm Control Panel	\$10,200							
281	Fire Alarm, booster panel	\$1,500							
288	Domestic water piping (allow	\$4,000							
295	AHU w/ coil (200,000 btu)	\$41,600							
296	Unit Heater (150,000 btu)	\$13,000							
329	Access Control System (AC:	\$6,604							
330	CCTV system	\$2,850							
352	Access Control System (AC:	\$6,604							
353	CCTV system	\$2,850							
						Total Scheduled Replacements			\$576,294

Sample

YEAR 27 - PROJECTED REPLACEMENTS - 2041

#	Description	\$
40	Tot lot, mulch	\$4,463
119	Water heater (boiler)	\$2,000
152	School/Classroom renovatio	\$237,500
326	Compressor (5 ton)	\$10,400
351	Sump pump	\$1,000

Sample

YEAR 28 - PROJECTED REPLACEMENTS - 2042

[illegible]

Sample

YEAR 29 - PROJECTED REPLACEMENTS - 2043

#	Description	\$
1	Pavement, mill and overlay	\$166,203
3	Parking bumpers	\$1,500
5	Concrete curb and gutter (2'	\$9,439
8	Asphalt curb	\$588
154	School/Classroom renovatio	\$237,500
160	Music room flooring	\$2,992
161	Music room ceiling	\$2,992
315	Carpet	\$10,625
316	VCT	\$3,300
342	Carpet	\$8,500

Sample

YEAR 30 - PROJECTED REPLACEMENTS - 2044

#	Description	\$
40	Tot lot, mulch	\$4,463
124	Fan/coil unit (45,000 btu)	\$6,500
125	Compressor (3 ton)	\$6,500
126	Fan/coil unit (45,000 btu)	\$6,500
127	Compressor (3 ton)	\$6,500
128	Fan/coil unit (45,000 btu)	\$6,500
129	Compressor (3 ton)	\$6,500
130	Fan/coil unit (30,000 btu)	\$3,200
131	Compressor (2 ton)	\$3,200
200	Compressor (2.5 ton)	\$6,400
201	Compressor (2.5 ton)	\$6,400
202	Compressor (2.5 ton)	\$3,200
203	Compressor (2 ton)	\$6,400
204	Compressor (5 ton)	\$31,200
205	Compressor (2 ton)	\$9,600
206	Compressor (2 ton)	\$3,200
313	Garage door	\$4,000

Sample

YEAR 31 - PROJECTED REPLACEMENTS - 2045

#	Description	\$	#	Description	\$	#	Description	\$
2	Pavement, rejuvenator seal	\$20,119	248	8' rectangle table	\$1,900			
14	Concrete flatwork (6%)	\$5,915	256	Gutters and downspouts	\$6,360			
24	Concrete stairs (full set)	\$1,800	258	Caulking (allowance)	\$4,500			
26	Concrete stairs (full set)	\$3,600	259	Exterior door (allowance)	\$10,000			
27	Stone retaining, 10% re-set	\$1,200	260	Wood trim (allowance)	\$5,000			
29	Wood privacy fence w/ gate	\$4,000	270	Interior painting (allowance)	\$10,000			
33	Metal railing (20% allowance)	\$500	271	Gymnasium flooring restorat	\$3,500			
37	Wood sign	\$1,600	275	Interior door (allowance)	\$10,000			
39	Foundation plantings (allowa	\$2,000	276	Gymnasium (ceiling down li	\$14,400			
46	Genie lift	\$18,000	277	Gymnasium (ceiling spot lig	\$9,000			
48	Built-up roofing	\$14,300	282	Fire sprinkler compressor fo	\$750			
51	Caulking (allowance)	\$4,500	283	Fire sprinkler system (allowa	\$10,000			
52	Exterior door (allowance)	\$10,000	290	Exhaust fan (15,000 cfm)	\$1,500			
57	Stained glass ventilators (all	\$10,000	301	A/V system	\$13,398			
59	Interior painting (allowance)	\$10,000	302	Projector and screen	\$6,500			
68	Electrical (allowance)	\$5,000	309	Built-up roof	\$20,800			
69	Exhaust fan (15,000 cfm)	\$3,000	312	Siding, painted aluminum, re	\$10,800			
100	Brick veneer repoint (10% al	\$8,595	317	Interior painting (allowance)	\$4,000			
101	Caulking (allowance)	\$4,500	318	Small restroom, renovation	\$9,000			
103	Exterior building lights	\$400	319	Wood flooring restoration	\$250			
110	Piano, restoration (upright)	\$5,000	328	Water Heater	\$8,500			
111	Small restroom w/shower, re	\$36,000	343	Interior painting (allowance)	\$4,000			
112	Interior door (allowance)	\$10,000	344	Small restroom w/shower, re	\$5,000			
113	Laundry room appliances	\$2,000	362	Guest house, gutters and dc	\$720			
114	Chapel (ceiling spot lighting)	\$5,000						
115	Chapel (sound system)	\$3,550						
118	Domestic water piping (allow	\$4,000						
122	Exhaust fan (15,000 cfm)	\$3,000						
133	Countertop and Basin	\$8,000						
134	Kitchen flooring	\$1,200						
135	Refrigeration	\$3,600						
136	Wall cabinet	\$4,500						
137	Dishwasher	\$800						
138	Range/Oven	\$800						
144	Caulking (allowance)	\$4,500						
145	Exterior door (allowance)	\$10,000						
146	Wood trim (allowance)	\$5,000						
155	Blinds	\$10,000						
165	Interior door (allowance)	\$10,000						
169	Domestic water piping (allow	\$4,000						
172	Exhaust fan (15,000 cfm)	\$3,000						
181	Boiler Glycol system	\$2,000						
182	Boiler, (1,700 MBH)	\$40,000						
186	Sump pump	\$2,500						
191	Commercial refrigeration	\$7,000						
194	Ice machine	\$3,500						
197	Folding cafeteria table	\$12,000						
212	Exterior door (allowance)	\$10,000						
218	Interior painting (allowance)	\$10,000						
219	Piano, restoration (upright)	\$5,000						
222	Interior door (allowance)	\$10,000						
225	Interior door (allowance)	\$10,000						
227	Domestic water piping (allow	\$4,000						
229	Electrical (allowance)	\$5,000						
238	A/V system	\$13,398						
239	A/V Design/Integration	\$2,500						
240	4 CH. mixer	\$199						
241	400 W power amp	\$300						
242	CD/MP3	\$350						
243	Power control	\$250						
244	Cabling	\$3,000						
245	Speakers	\$1,600						
246	Stackable chair (metal frame	\$3,840						
247	6' round banquet table	\$2,650						
						Total Scheduled Replacements		\$581,944

Sample

YEAR 32 - PROJECTED REPLACEMENTS - 2046

#	Description	\$
70	Fan/coil unit (120,000 btu)	\$20,800
76	Fan/coil unit (45,000 btu)	\$6,500
77	Compressor (3 ton)	\$6,400

Sample

YEAR 33 - PROJECTED REPLACEMENTS - 2047

[illegible]

Sample

YEAR 34 - PROJECTED REPLACEMENTS - 2048

#	Description	\$
39	Foundation plantings (allowance)	\$2,000
59	Interior painting (allowance)	\$10,000
217	VCT	\$17,279
218	Interior painting (allowance)	\$10,000
270	Interior painting (allowance)	\$10,000
271	Gymnasium flooring restoration	\$3,500
317	Interior painting (allowance)	\$4,000
319	Wood flooring restoration	\$250
343	Interior painting (allowance)	\$4,000

Sample

YEAR 35 - PROJECTED REPLACEMENTS - 2049

[illegible]

Sample

YEAR 36 - PROJECTED REPLACEMENTS - 2050

#	Description	\$	#	Description	\$	#	Description	\$
22	Brick retaining wall (25% re-	\$988	261	Corrugated metal awning	\$19,200			
34	Metal railing (20% allowance)	\$500	266	Exterior building lights, smal	\$250			
40	Tot lot, mulch	\$4,463	267	Exterior building lights, large	\$1,200			
41	Tot lot, playset	\$18,000	268	Walkway lights, recessed	\$2,000			
42	Tot lot, jungle gym	\$4,800	272	Private restroom, renovation	\$5,204			
43	Tot lot, swing	\$2,400	273	Standard restroom, renovati	\$20,000			
44	Tot lot, PTL border	\$2,610	274	Shower room, tbd	\$18,000			
45	Tot lot, fence	\$9,800	278	Emergency lights	\$1,250			
50	Stone exterior repoint (10%	\$27,168	279	Exit sign	\$1,250			
51	Caulking (allowance)	\$4,500	284	Smoke detector	\$10,000			
58	Exterior building lights	\$2,700	285	Fire strobe	\$1,500			
61	Pendant fixture, refurbish	\$10,800	286	Fire alarm pull	\$750			
62	Private restroom, renovation	\$5,204	287	Emergency lights	\$750			
63	Interior door (allowance)	\$10,000	288	Domestic water piping (allow	\$4,000			
64	Exit sign	\$1,000	289	Water heater	\$1,000			
81	A/V Design/Integration	\$2,500	291	Electrical (allowance)	\$5,000			
82	Wireless receiver	\$450	297	Water Heater	\$800			
83	Lapel microphone	\$600	298	Access Control System (AC:	\$6,604			
84	4 CH. mixer	\$199	299	Camera	\$5,400			
85	400 W power amp	\$300	300	CCTV system	\$2,850			
86	CD/MP3	\$350	315	Carpet	\$10,625			
87	Power control	\$250	320	Private restroom, renovation	\$10,408			
88	Hearing aid system	\$1,549	342	Carpet	\$8,500			
89	Cabling	\$3,000	345	Emergency lights	\$1,250			
90	Wall mount speaker	\$4,000	346	Water heater (80 gal.)	\$2,500			
91	Loudspeaker	\$1,600	363	Guest house, siding	\$10,944			
92	Ceiling speaker	\$1,200						
93	DVR	\$4,500						
94	Hard drive	\$400						
95	Hearing aid adapter	\$1,029						
96	Built-up roof	\$11,184						
101	Caulking (allowance)	\$4,500						
102	Exterior door (allowance)	\$10,000						
103	Exterior building lights	\$400						
116	Overhead doors	\$2,500						
143	Brick veneer repoint (10% al	\$21,000						
144	Caulking (allowance)	\$4,500						
146	Wood trim (allowance)	\$5,000						
150	Exterior building lights	\$400						
156	Teacher kitchenette renovat	\$14,466						
157	Private restroom, renovation	\$5,204						
158	Standard restroom, renovati	\$20,000						
160	Music room flooring	\$2,992						
161	Music room ceiling	\$2,992						
162	Smoke detector	\$3,500						
163	Fire strobe	\$250						
164	Fire alarm pull	\$1,250						
166	Exit sign	\$750						
170	Water heater	\$8,500						
185	Accessibility lift	\$20,000						
189	Dumpster pad	\$4,000						
196	Range	\$10,000						
215	Exterior building lights	\$400						
220	Private restroom, renovation	\$2,602						
221	Standard restroom, renovati	\$20,000						
224	Exit sign	\$500						
228	Water heater	\$2,000						
234	Compressor (3 ton)	\$52,000						
235	Compressor (5 ton)	\$10,400						
236	Boiler, (1,700 MBH)	\$20,000						
255	Asphalt shingle	\$80,164						
257	Brick veneer repoint (10% al	\$10,020						
258	Caulking (allowance)	\$4,500						
260	Wood trim (allowance)	\$5,000						
						Total Scheduled Replacements		\$639,068

Sample

YEAR 37 - PROJECTED REPLACEMENTS - 2051

#	Description	\$	#	Description	\$	#	Description	\$
2	Pavement, rejuvenator seal	\$20,119						
15	Concrete flatwork (6%)	\$5,915						
39	Foundation plantings (allowa	\$2,000						
59	Interior painting (allowance)	\$10,000						
180	Carrier 50ss048	\$13,000						
199	Fan/coil unit, (18,000 btu) cl	\$49,000						
218	Interior painting (allowance)	\$10,000						
230	Exhaust fan (15,000 cfm)	\$3,000						
231	Fan/coil unit (225,000 BTU)	\$10,400						
270	Interior painting (allowance)	\$10,000						
271	Gymnasium flooring restorat	\$3,500						
317	Interior painting (allowance)	\$4,000						
319	Wood flooring restoration	\$250						
321	Fan/coil unit (45,000 btu)	\$13,000						
322	Compressor (3 ton)	\$6,400						
323	Fan/coil unit (30,000 btu)	\$6,400						
324	Compressor (2 ton)	\$6,400						
325	Fan/coil unit (75,000 btu)	\$20,800						
343	Interior painting (allowance)	\$4,000						
351	Sump pump	\$1,000						
					</			

YEAR 38 - PROJECTED REPLACEMENTS - 2052

#	Description	\$
60	Organ, restoration (allowanc	\$28,000
211	Caulking (allowance)	\$4,500

#	Description	\$
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#	Description	\$
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Total Scheduled Replacements \$32,500

Sample

YEAR 39 - PROJECTED REPLACEMENTS - 2053

#	Description	\$
40	Tot lot, mulch	\$4,463
56	Stained glass restoration (al	\$100,000
107	Renovation (phase 1)	\$46,740
123	Self-contained unit	\$4,500
184	Pass-thru fan/coil unit	\$3,000
216	Blinds	\$3,600
292	Fan/coil unit (75,000 btu)	\$20,800
293	Compressor (5 ton)	\$20,800
294	Condensing Unit (25 ton)	\$41,600
306	Concrete pad	\$3,420
348	Compressor (5 ton)	\$20,800

Sample

YEAR 40 - PROJECTED REPLACEMENTS - 2054

#	Description	\$
39	Foundation plantings (allowance)	\$2,000
59	Interior painting (allowance)	\$10,000
108	Renovation (phase 2)	\$46,740
120	Boiler buddy	\$2,000
183	Water Heater	\$17,000
218	Interior painting (allowance)	\$10,000
270	Interior painting (allowance)	\$10,000
271	Gymnasium flooring restoration	\$3,500
311	Soffit, vinyl	\$1,140
317	Interior painting (allowance)	\$4,000
319	Wood flooring restoration	\$250
343	Interior painting (allowance)	\$4,000

Sample

Intentionally Left Blank

Sample

CONDITION ASSESSMENT

General Comments. Miller - Dodson Associates conducted a Reserve Study at St. John's Church and School in August 2015. St. John's Church and School is in generally good condition for a facility constructed from 1959 to 2009. A review of the Replacement Reserve Inventory will show that we are anticipating most of the components achieving their normal economic lives.

The following comments pertain to the larger, more significant components in the Replacement Reserve Inventory and to those items that are unique or deserving of attention because of their condition or the manner in which they have been treated in the Replacement Reserve Analysis or Inventory.

General Condition Statements.

Excellent. 100% to 90% of Normal Economic Life expected, with no appreciable wear or defects.

Good. 90% to 60% of Normal Economic Life expected, minor wear or cosmetic defects found. Normal maintenance should be expected. If performed properly, normal maintenance may increase the useful life of a component. Otherwise, the component is wearing normally.

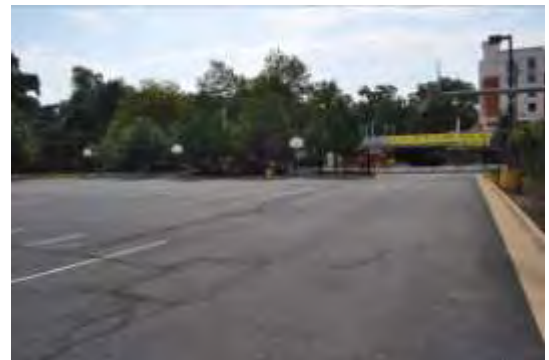
Fair. 60% to 30% of Normal Economic Life expected, moderate wear with defects found. Repair actions should be taken to extend the life of the component or to correct repairable defects and distress. Otherwise, the component is wearing normally.

Marginal. 30% to 10% of Normal Economic Life expected, with moderate to significant wear or distress found. Repair actions are expected to be cost effective for localized issues, but normal wear and use are evident. The component is reaching the end of the Normal Economic Life.

Poor. 10% to 0% of Normal Economic Life expected, with significant distress and wear. Left unattended, additional damage to underlying structures is likely to occur. Further maintenance is unlikely to be cost effective.

SITE COMPONENTS

Asphalt Pavement. The Church is responsible for the parking areas, and paths within the facility. In general, the Church's asphalt pavements are in good condition.



The Church maintains an inventory of asphalt pavement along the following streets and areas:

• Gymnasium Parking	18,000	sf
• School Parking	27,000	sf
• Heller Hall Parking	28,800	sf
• Rectory Parking	9,100	sf

Sample

- | | | |
|-------------------------------|-------|----|
| • Convent Parking | 1,575 | sf |
| • House of Ministries Parking | 3,000 | sf |

As a rule of thumb, asphalt should be overlaid when approximately 5% of the surface area is cracked or otherwise deteriorated. The normal service life of asphalt pavement is typically 18 to 20 years.

In order to maintain the condition of the pavement throughout the community and to ensure the longest life of the asphalt, we recommend a systematic and comprehensive maintenance program that includes:

- **Cleaning.** Long-term exposure to oil or gas breaks down asphalt. Because this asphalt pavement is generally not used for long-term parking, it is unlikely that frequent cleaning will be necessary. When necessary, spill areas should be cleaned or patched if deterioration has penetrated the asphalt. This is a maintenance activity, and we have assumed that it will not be funded from Reserves.
- **Crack Repair.** All cracks should be repaired with an appropriate compound to prevent water infiltration through the asphalt into the base. This repair should be done annually. Crack repair is normally considered a maintenance activity and is not funded from Reserves. Areas of extensive cracking or deterioration that cannot be made watertight should be cut out and patched.
- **Seal Coating.** The asphalt should be seal coated every five to seven years. For this maintenance, activity to be effective in extending the life of the asphalt, cleaning and crack repair should be performed first.

The pricing used is based on recent contracts for a two-inch overlay, which reflects the current local market for this work.

For seal coating, several different products are available. The older, more traditional seal coating products are simply paints. They coat the surface of the asphalt and they are minimally effective. However, the newer coating materials, such as those from Total Asphalt Management, Asphalt Restoration Technologies, Inc., and others, are penetrating. They are engineered, so to speak, to 'remoisturize' the pavement. Asphalt pavement is intended to be flexible. Over time, the volatile chemicals in the pavement dry, the pavement becomes brittle, and degradation follows in the forms of cracking and potholes. Remoisturizing the pavement can return its flexibility and extend the life of the pavement.

Lastly, the resource links provided on our website may provide insight into the general terms and concerns, including maintenance related advantages and disadvantages, which may help the Church better manage the asphalt pavements throughout the community: <http://mdareserves.com/resources/links/site-components>.

Concrete Work. The concrete work includes the community curbs, sidewalks, leadwalks, stairs, stoops, and other flatwork. We have modeled for curb replacement when the asphalt pavement is overlaid. The overall condition of the concrete work is good.



The standards we use for recommending replacement are as follows:

Sample

- Trip hazard, ½ inch height difference.
- Severe cracking.
- Severe spalling and scale.
- Uneven riser heights on steps.
- Steps with risers in excess of 8¼ inches.

Because it is highly unlikely that all of the concrete components will fail and require replacement in the period of the study, we have programmed funds for the replacement of these inventories and spread the funds over an extended timeframe to reflect the incremental nature of this work.

The relevant links on our web site may provide useful information related to concrete terminology, maintenance, and repair. Please see <http://mdareserves.com/resources/links/site-components>.

Site Lighting. The Church is responsible for the operation of the facility's site lights, and there are poled streetlights, and building mounted lights. The lighting system was not on at the time of our site visit. We understand that the lighting system is in operating condition.



This study assumes replacement of the light fixtures every 15 to 20 years, and pole replacement every 30 to 40 years. When the light poles are replaced, we assume that the underground wiring will also be replaced.

When a whole-scale lighting replacement project is called for, we recommend consulting with a lighting design expert. Many municipalities have design codes, guidelines, and restrictions when it comes to exterior illumination.

In addition, new technology such LED and LIFI among others should be evaluated when considering replacement.

Retaining Walls. The Church maintains masonry, poured concrete and stone retaining walls. The retaining walls are in mixed condition relative to the age of the installation.



Sample

Retaining walls in general are designed to provide slope stabilization and soil retention by means of a structural system. Typically, walls that are three feet high or more require some level of design.

Movement and displacement of any retaining wall is a sign of general settlement or failure. This typically is in the form of leaning and bowing, and can involve the entire wall or localized sections of the wall. Typically, these types of movements are gradual and may require the replacement of the wall. Movement of retaining walls located near other buildings or structures may negatively affect the stability of the adjacent structure. These conditions can become extremely costly if not properly identified, monitored, and addressed.

Brick, stone, concrete block masonry walls can have an extended useful life of 40 years or more, and if stable, may only require periodic repointing and localized repair. Repoint is the process of raking out defective masonry joints and tooling in new mortar into the joints. Properly mortared and tooled joints will repel the weather and keep water from penetrating the wall. Siloxane or other breathable sealants should be considered to provide additional protection to the wall from water penetration. This study assumes that repointing will be performed incrementally as needed.

Poured concrete retaining walls can have an extended useful life of 60 years or more, and if stable, may only require periodic localized repair. Siloxane or other breathable sealants should be considered to provide additional protection to the wall from water penetration. This study assumes that concrete repairs will be performed incrementally as needed.

When and if it becomes necessary to replace these walls, we recommend the Church consider one of the segmental block retaining wall systems. These systems are very low maintenance. If over time the wall experiences movement, sections of the walls can be re-stacked at a very small portion of the cost of a new wall. Segmental block retaining walls can have a service life of 80 years or more. As a general source of information about retaining walls, we offer several links from our website at <http://mdareserves.com/resources/links/site-components>.

Retaining wall replacement can be costly, and early planning on the part of the Church can help to reduce the impact of this work on the community's budget in the future. We therefore recommend having a Professional Engineer inspect the walls and develop preliminary replacement alternatives and recommendations based on the site conditions, replacement costs, and recommended replacement wall types. This information can then be incorporated into future updates to the Reserve Study.

Fencing. The Church maintains metal fencing that is in generally good condition. Fencing systems have a large number of configurations and finishes that can usually be repaired as a maintenance activity by replacing individual components as they become damaged or weathered.



Protection from string machine damage during lawn maintenance can extend the useful life of some fence types. Protection from this type of damage is typically provided by applying herbicides around post bases or installing protective sheathing.

Sample

Chain link fencing can have a useful life of 40 years or more. Periodic weed control may be required to protect and maintain the fence.

For more information on fencing, visit our [website link](#) to the American Fence Association.

Fence posts can have an extended useful life if these simple maintenance activities are performed. If left unattended, the pressure from expansive post rust can crack and damage the supporting material.

Storm Water Management. Storm water can be problematic in areas with high runoff water or dramatic changes in elevation. Typically, the majority of storm water management systems are maintained by the county or municipality. This study attempts to include the portions of the system are considered common property. The share line between municipality and community responsibility is often obscure and subject to the judgment of the county authority.



Storm water management components include the entire network of underground piping, runoff beds, swales, drains, French drains, curb inlets, drop inlets, and site grading. Many installations have a service life equal to or greater to the life of the life of the community and will not require replacement.

Various authorities are involved with and have oversight of runoff water. There are historic, newly developed, and ongoing improvements in protection of the water table. Regulations on runoff water are established to reduce sediment in the watershed, eliminate contamination of the water table, and retain freshwater within the watershed. Sanctions on tributaries will expand upstream to all possible sources of collection. Communities are responsible for the volume of water produced within their boundaries until it reaches the end of the watershed.

We have included an allowance for storm water management. This allowance is for situations where systems fail or do not meet current code and require replacement. This study includes a review of the visible storm water management components that are considered common and observations of system failure when evident.

Thorough review of engineering plans, codes, system functioning, and applicable regulations was not performed as part of this study. Our estimate considers likely replacements and practical cost from communities of similar size and complexity. Inspection and evaluation of underground lines and structures is beyond the scope of work for this study.

Additional information is available on our website at:

<http://mdareserves.com/resources/links/site-components>

Tot Lots. The facility maintains two tot lots. These tot lots include play structures, miscellaneous play equipment, and a wood chip surface. The facility facilities are in generally good condition.



The safety of each individual piece of playground equipment as well as the layout of the entire play area should be considered when evaluating a playground for safety. The installation and maintenance of the protective surfacing under and around all equipment is crucial. Please note that the evaluation of the equipment and these facilities for safety is beyond the scope of this work.

Information for playground design and safety can be found in the "Public Playground Safety Handbook", U.S. Consumer Product Safety Commission (Pub Number 325). For a link to this handbook, please see our web site at www.mdarestores.com/resources/links/recreation.

Our estimates for playground equipment are based on comparing photos of the existing equipment with equipment of a similar size in manufacturers' catalogs. We use the pricing that is quoted by manufacturers for comparable equipment and add 30% for the disposal of the old equipment and installation of new equipment.

BUILDING EXTERIORS

Building Roofing. The buildings are roofed in asphalt, slate, and flat roofing systems that are in generally mixed condition based on the age of the installation.



Asphalt shingle roofs can have a useful life of 20 to 50 years depending on the weight and quality of the shingle. Weathered, curled, and missing shingles are all indications that the shingles may be nearing the end of their useful life.

Slate shingle roofing can have an extended useful life of 100 years or more. Failures with slate roofs are primarily from the use of improper fasteners, damage from improper access to the roof, and physical damage from primarily hail. The metalwork including flashings and valleys will need to be replaced, and we assume that this work will be required every 30 years.

Flat roofing systems can have a variety of configurations that will greatly affect the cost of replacement including insulation, ballast, the height of the building, and the density of installed mechanical equipment. Flat roofing systems typically have a useful life of 15 to 25 years.

Sample

Access to all the roofing was not provided at the time of inspection. Where access was limited, the roofing was observed from the ground.

Annual inspections are recommended, with cleaning, repair, and mitigation of vegetation performed as needed. Access, inspection, and repair work should be performed by contractors and personnel with the appropriate access equipment who are experienced in the types of roofing used for the facility.

For additional information on roofs and roof maintenance, please see the appropriate links on our web site at <http://mdareserves.com/resources/links/building-exterior>.

Gutters and Downspouts. The buildings have has aluminum gutters and downspouts. The gutters and downspouts are in good condition.

A gutter and downspout system will remove rainwater from the area of the building roof, siding, and foundation. This will protect building's exterior surfaces from water damage. Gutters should run the full length of all drip edges of the building roof. Even with full gutters, it is important to inspection the function of the gutters during heavy rain to identify any deficiencies. It may be necessary to periodically adjust the slope of sections, repair connections, replace hangers, and install shrouds to the gutters. Downspouts should be securely attached to the side of the structure. Any broken straps should be replaced. The area of the outlet should be inspected to promote run-off in the desired direction. Long straight runs should have an elbow at the bottom. Splash blocks should be installed to fray the water out-letting from the downspout.

It is recommended that all gutters be cleaned at least twice each year. If there are a large number of trees located close to a building, consider installing a gutter debris shield that will let water into the gutters but will filter out leaves, twigs, and other debris.



Siding and Trim. The exteriors of the buildings are clad in wood, vinyl, and masonry siding and trim. The siding and trim materials are in generally good condition.



Wooden exterior materials are typically repaired as needed during normal painting cycles. Painting cycles for wooden exteriors vary between five and ten years depending on the grade of wood and the quality of the

Sample

materials and finish work. In this study, we have modeled for incremental wood material replacement to coincide with the painting cycle of the facility.

Vinyl siding and trim can have an extended useful life if not damaged by impact, heat, or other physical reasons. However, the coatings and finishes typically have a useful life and over time begin to weather, chalk, and show their age. For these reasons, we have modeled for the replacement of the siding and trim every 25 years.

Brick masonry is used as the main exterior cladding of the building. As masonry weathers, the mortar joints will become damaged by water penetration. As additional water gains access to the joints, repeated freeze-thaw cycles gradually increase the damage to the mortar joints. If allowed to progress, even the masonry units such as brick, block, and stone can have their surfaces affected and masonry units can become loose.

In general, masonry is considered a long-life item and is therefore excluded from reserve funding. However, because weather and other conditions result in the slow deterioration of the mortar in masonry joints, we have included funding in this study for repointing. Repointing is the process of raking and cutting out damaged sections of mortar and replacing them with new mortar.

Periodic repointing and local replacement of damaged masonry units will limit the damage done by moisture penetration. For this study, we assume that 10% of the masonry will require repointing every 10 years after approximately 30 years. For additional information about masonry and repointing, please view the relevant links at <http://mdareserves.com/resources/links/building-exterior>.

Windows and Doors. The Church is responsible for the common windows and exterior doors of the facility and the individual owners are responsible for the windows and doors attributed to their unit.

The Church is responsible for all of the windows and exterior doors of the facility. The windows and doors are in generally good condition.



Window and door units play an integral part in a facility's overall comfort, efficiency, and energy use. The quality of the installed units and the care taken in their installation and maintenance are major factors in their effectiveness and useful life. These units can have a useful life of 20 to 35 years or more depending on their use and other factors mentioned above.

In general, we recommend coordinating the replacement of these units with other exterior work, such as siding and roof replacements. The weather tightness of the building envelope often requires transitional flashing and caulking that should be performed in coordination with each other. Warranties and advantages in 'economy of scale' can often result in lower overall replacement costs and results that are more reliable. Lastly, coordinated replacements offer the opportunity to correct initial construction defects and improve the effectiveness of details with improved construction techniques and materials.

For more information, please see our links at <http://mdareserves.com/resources/links/building-exterior>.

BUILDING INTERIORS

Building Interiors. The Church maintains the lobbies, halls, classrooms, residences, offices, and meeting area that are in generally good condition.



We have assumed that the Church will want to maintain these areas in a commercially acceptable condition. Typically, replacement cycles for common interior spaces vary between 5 to 10 years depending on the aesthetic tastes of the Church, usage, and construction. Material selection and the community's preferences are the major factors in setting the reserve components for items such as refurnishing and interior refurbishment. The Church will need to establish these cycles as these facilities age. Maintaining historical records and incorporating these trends and preferences into a future Reserve Study update is the best way to adjust for these cycles.

MECHANICAL & ELECTRICAL

Split and Package HVAC Systems. The heating ventilation and air conditioning (HVAC) of the facility are reported to be in good operating condition. Detailed inspection and testing of these systems is beyond the scope of this study.



The Church maintains a number of HVAC systems that use the refrigerant known as R22. This refrigerant will be phased out of production by the year 2030 and was generally phased out of use in new systems in 2010.

See the EPA, HCFC Phase-out Schedule on our website at <http://mdareserves.com/resources/links/building-system>. Since most of the community's AC systems rely on the old R22 refrigerant, we assume that the HVAC replacement will include upgrading to the new refrigerant, which is likely to require the replacement of the entire system, including the compressor, coil, and line-set.

The Church maintains a number of HVAC systems that use one of the new generation refrigerants. Unlike the old R22 refrigerant, the new refrigerants are expected to be available throughout the period of this study. However, the operating pressure for new refrigerant systems is approximately twice as high as older systems.

Many of the standard components have not been redesigned for these higher pressures, including the coils, which generally fail due to metal fatigue.

Even though manufacturers continue to predict 15 to 20-year life cycles for HVAC equipment that use these new refrigerants, this is not proven by historical data. We therefore recommend anticipating a normal economic life of 15 years for all HVAC equipment that uses pressurized refrigerants of these types.

In addition, the Church maintains air handlers/furnaces throughout the facility, and these components can have a useful life of 20 to 40 years. With fan, motor, and coil replacements performed as needed, the casings of these systems can last significantly longer.

As is the case with most equipment, to achieve a maximum useful economic life, proper maintenance is essential. In some cases, proper and proactive maintenance can greatly extend the useful life of these components.

Building Electrical Service. The electrical systems of the buildings are reported to be operating normally.



Other than transformers and meters and if protected from water damage or overloading, interior electrical systems within a building, including feed lines and switch gear, are considered long-life components, and unless otherwise noted, are excluded from this study.

In order to maintain this equipment properly, periodic tightening of all connections is recommended every three to five years. Insurance policies in some cases may have specific requirements regarding the tightening of electrical connections. It is also recommended that outlets, sockets, switches, and minor fixtures be replaced at a maximum of every 30 years.

Replacement of these smaller components, unless otherwise identified, is considered incidental to refurbishment or is considered a Valuation Exclusion.

This Condition Assessment is based upon our visual survey of the property. The sole purpose of the visual survey was an evaluation of the common elements of the property to ascertain the remaining useful life and the replacement costs of these common elements. Our evaluation assumed that all components met building code requirements in force at the time of construction. Our visual survey was conducted with care by experienced persons, but no warranty or guarantee is expressed or implied.

End of Condition Assessment

Sample

CASH FLOW METHOD ACCOUNTING SUMMARY

This St John's Church and School - Cash Flow Method Accounting Summary is an attachment to the St John's Church and School - Replacement Reserve Study dated August 5, 2015 and is for use by accounting and reserve professionals experienced in Church funding and accounting principles. This Summary consists of four reports, the 2015, 2016, and 2017 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2015, 2016, and 2017. Each of the 363 Projected Replacements listed in the St John's Church and School Replacement Reserve Inventory has been assigned to one of 28 categories. The following information is summarized by category in each report:
 - Normal Economic Life and Remaining Economic Life of the Projected Replacements.
 - Cost of all Scheduled Replacements in each category.
 - Replacement Reserves on Deposit allocated to the category at the beginning and end of the report period.
 - Cost of Projected Replacements in the report period.
 - Recommended Replacement Reserve Funding allocated to the category during the report period as calculated by the Cash Flow Method.
- THREE-YEAR REPLACEMENT FUNDING REPORT. This report details the allocation of the \$250,000 Beginning Balance (at the start of the Study Year) and the \$1,094,974 of additional Replacement Reserve Funding in 2015 through 2017 (as calculated in the Replacement Reserve Analysis) to each of the 363 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made using Chronological Allocation, a method developed by Miller Dodson Associates, Inc., and discussed below. The calculated data includes:
 - Identification and estimated cost of each Projected Replacement scheduled in years 2015 through 2017.
 - Allocation of the \$250,000 Beginning Balance to the Projected Replacements by Chronological Allocation.
 - Allocation of the \$1,094,974 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2015 through 2017, by Chronological Allocation.
- CHRONOLOGICAL ALLOCATION. Chronological Allocation assigns Replacement Reserves to Projected Replacements on a "first come, first serve" basis in keeping with the basic philosophy of the Cash Flow Method. The Chronological Allocation methodology is outlined below.
 - The first step is the allocation of the \$250,000 Beginning Balance to the Projected Replacements in the Study Year. Remaining unallocated funds are next allocated to the Projected Replacements in subsequent years in chronological order until the total of Projected Replacements in the next year is greater than the unallocated funds. Projected Replacements in this year are partially funded with each replacement receiving percentage funding. The percentage of funding is calculated by dividing the unallocated funds by the total of Projected Replacements in the partially funded year.

At St John's Church and School the Beginning Balance funds all Scheduled Replacements in the Study Year through 2017 and provides partial funding (28%) of replacements scheduled in 2018.
 - The next step is the allocation of the \$364,991 of 2015 Cash Flow Method Reserve Funding calculated in the Replacement Reserve Analysis. These funds are first allocated to fund the partially funded Projected Replacements and then to subsequent years in chronological order as outlined above.

At St John's Church and School the Beginning Balance and the 2015 Replacement Reserve Funding, funds replacements through 2019 and partial funds (32.8%) replacements in 2020.
 - Allocations of the 2016 and 2017 Reserve Funding are done using the same methodology.
 - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

Sample

2015 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 363 Projected Replacements included in the St John's Church and School Replacement Reserve Inventory has been assigned to one of the 28 categories listed in TABLE CF1 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- A Beginning Balance of \$250,000 as of the first day of the Study Year, January 1, 2015.
- Total reserve funding (including the Beginning Balance) of \$614,991 in the Study Year.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2015 being accomplished in 2015 at a cost of \$107,901.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2015 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF1							
CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2015 BEGINNING BALANCE	2015 RESERVE FUNDING	2015 PROJECTED REPLACEMENTS	2015 END OF YEAR BALANCE
SITE COMPONENTS	6 to 60 years	0 to 54 years	\$294,464	\$5,915		(\$5,915)	
SITE COMPONENTS (CONT.)	10 to 54 years	0 to 53 years	\$311,793	\$85,700	\$324	(\$83,000)	\$3,024
SITE COMPONENTS (CONT.)	3 to 30 years	0 to 20 years	\$75,173	\$5,531	\$12,169	(\$500)	\$17,200
SANCTUARY	5 to 100 years	5 to 38 years	\$443,808		\$6,297		\$6,297
SANCTUARY (CONT.)	3 to 25 years	2 to 15 years	\$82,704	\$30,842	\$14,268		\$45,109
SANCTUARY (CONT.)	14 to 30 years	3 to 20 years	\$140,700	\$34,470	\$86,830		\$121,300
SANCTUARY (CONT.)	10 to 15 years	5 to 10 years	\$24,777		\$7,184		\$7,184
CONVENT	5 to 35 years	0 to 15 years	\$111,925	\$18,486	\$11,912	(\$18,486)	\$11,912
CONVENT (CONT.)	10 to 25 years	5 to 20 years	\$214,470		\$3,342		\$3,342
CONVENT (CONT.)	10 to 24 years	5 to 11 years	\$85,900		\$21,427		\$21,427
CONVENT (CONT.)	20 years	10 years	\$18,900				
SCHOOL	5 to 60 years	5 to 40 years	\$494,551		\$12,150		\$12,150
SCHOOL (CONT.)	7 to 25 years	5 to 15 years	\$1,053,804		\$81,644		\$81,644
SCHOOL (CONT.)	10 to 24 years	5 to 24 years	\$156,300		\$2,785		\$2,785
SCHOOL (CONT.)	10 to 30 years	5 to 15 years	\$92,604		\$6,552		\$6,552
SCHOOL (CONT.)	24 years	5 to 12 years	\$115,400		\$21,754		\$21,754
HELLER HALL	3 to 35 years	2 to 20 years	\$169,193	\$62,876	\$12,950		\$75,826
HELLER HALL (CONT.)	10 to 25 years	5 to 23 years	\$208,502		\$655		\$655
HELLER HALL (CONT.)	10 to 30 years	10 to 15 years	\$84,671				
GYMNASIUM	5 to 50 years	5 to 35 years	\$153,554		\$4,243		\$4,243
GYMNASIUM (CONT.)	3 to 25 years	3 to 10 years	\$153,904	\$3,836	\$22,212		\$26,048
GYMNASIUM (CONT.)	10 to 25 years	5 to 14 years	\$165,704		\$26,293		\$26,293
GYMNASIUM (CONT.)	15 to 20 years	15 to 20 years	\$94,718				
RECTORY	3 to 35 years	3 to 20 years	\$125,644	\$1,208	\$3,042		\$4,250
RECTORY (CONT.)	14 to 24 years	10 to 15 years	\$100,454				
HOUSE OF MINISTRIES	3 to 25 years	3 to 23 years	\$100,821	\$1,137	\$3,682		\$4,819
HOUSE OF MINISTRIES (CONT.)	15 to 20 years	10 to 14 years	\$23,034				
MISC.	20 to 60 years	5 to 20 years	\$100,430		\$3,276		\$3,276

Sample

2016 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 363 Projected Replacements included in the St John's Church and School Replacement Reserve Inventory has been assigned to one of the 28 categories listed in TABLE CF2 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$507,090 on January 1, 2016.
- Total reserve funding (including the Beginning Balance) of \$979,983 from 2015 through 2016.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2016 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF2							
CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2016 BEGINNING BALANCE	2016 RESERVE FUNDING	2016 PROJECTED REPLACEMENTS	2016 END OF YEAR BALANCE
SITE COMPONENTS	6 to 60 years	5 to 59 years	\$294,464				
SITE COMPONENTS (CONT.)	10 to 54 years	1 to 53 years	\$311,793	\$3,024	\$479		\$3,502
SITE COMPONENTS (CONT.)	3 to 30 years	1 to 24 years	\$75,173	\$17,200	\$15,876		\$33,076
SANCTUARY	5 to 100 years	4 to 37 years	\$443,808	\$6,297	\$9,311		\$15,608
SANCTUARY (CONT.)	3 to 25 years	1 to 14 years	\$82,704	\$45,109	\$10,512		\$55,622
SANCTUARY (CONT.)	14 to 30 years	2 to 19 years	\$140,700	\$121,300			\$121,300
SANCTUARY (CONT.)	10 to 15 years	4 to 9 years	\$24,777	\$7,184	\$10,622		\$17,806
CONVENT	5 to 35 years	4 to 19 years	\$111,925	\$11,912	\$17,614		\$29,526
CONVENT (CONT.)	10 to 25 years	4 to 19 years	\$214,470	\$3,342	\$4,941		\$8,283
CONVENT (CONT.)	10 to 24 years	4 to 10 years	\$85,900	\$21,427	\$31,682		\$53,109
CONVENT (CONT.)	20 years	9 years	\$18,900				
SCHOOL	5 to 60 years	4 to 39 years	\$494,551	\$12,150	\$17,966		\$30,116
SCHOOL (CONT.)	7 to 25 years	4 to 14 years	\$1,053,804	\$81,644	\$120,722		\$202,366
SCHOOL (CONT.)	10 to 24 years	4 to 23 years	\$156,300	\$2,785	\$4,118		\$6,903
SCHOOL (CONT.)	10 to 30 years	4 to 14 years	\$92,604	\$6,552	\$9,689		\$16,241
SCHOOL (CONT.)	24 years	4 to 11 years	\$115,400	\$21,754	\$32,167		\$53,921
HELLER HALL	3 to 35 years	1 to 19 years	\$169,193	\$75,826	\$8,564		\$84,390
HELLER HALL (CONT.)	10 to 25 years	4 to 22 years	\$208,502	\$655	\$969		\$1,624
HELLER HALL (CONT.)	10 to 30 years	9 to 14 years	\$84,671				
GYMNASIUM	5 to 50 years	4 to 34 years	\$153,554	\$4,243	\$6,273		\$10,516
GYMNASIUM (CONT.)	3 to 25 years	2 to 9 years	\$153,904	\$26,048	\$18,554		\$44,602
GYMNASIUM (CONT.)	10 to 25 years	4 to 13 years	\$165,704	\$26,293	\$38,878		\$65,171
GYMNASIUM (CONT.)	15 to 20 years	14 to 19 years	\$94,718				
RECTORY	3 to 35 years	2 to 19 years	\$125,644	\$4,250			\$4,250
RECTORY (CONT.)	14 to 24 years	9 to 14 years	\$100,454				
HOUSE OF MINISTRIES	3 to 25 years	2 to 22 years	\$100,821	\$4,819	\$1,211		\$6,030
HOUSE OF MINISTRIES (CONT.)	15 to 20 years	9 to 13 years	\$23,034				
MISC.	20 to 60 years	4 to 19 years	\$100,430	\$3,276	\$4,844		\$8,121

Sample

2017 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 363 Projected Replacements included in the St John's Church and School Replacement Reserve Inventory has been assigned to one of the 28 categories listed in TABLE CF3 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$872,082 on January 1, 2017.
- Total Replacement Reserve funding (including the Beginning Balance) of \$1,344,974 from 2015 to 2017.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2017 being accomplished in 2017 at a cost of \$95,197.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2017 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF3							
CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2017 BEGINNING BALANCE	2017 RESERVE FUNDING	2017 PROJECTED REPLACEMENTS	2017 END OF YEAR BALANCE
SITE COMPONENTS	6 to 60 years	4 to 58 years	\$294,464		\$17,923		\$17,923
SITE COMPONENTS (CONT.)	10 to 54 years	0 to 52 years	\$311,793	\$3,502	\$186	(\$2,700)	\$988
SITE COMPONENTS (CONT.)	3 to 30 years	0 to 23 years	\$75,173	\$33,076	\$7,536	(\$4,463)	\$36,149
SANCTUARY	5 to 100 years	3 to 36 years	\$443,808	\$15,608	\$3,612		\$19,220
SANCTUARY (CONT.)	3 to 25 years	0 to 13 years	\$82,704	\$55,622	\$10,963	(\$28,000)	\$38,585
SANCTUARY (CONT.)	14 to 30 years	1 to 18 years	\$140,700	\$121,300	(\$0)		\$121,300
SANCTUARY (CONT.)	10 to 15 years	3 to 8 years	\$24,777	\$17,806	\$4,121		\$21,927
CONVENT	5 to 35 years	3 to 18 years	\$111,925	\$29,526	\$6,833		\$36,359
CONVENT (CONT.)	10 to 25 years	3 to 18 years	\$214,470	\$8,283	\$1,917		\$10,200
CONVENT (CONT.)	10 to 24 years	3 to 9 years	\$85,900	\$53,109	\$12,291		\$65,400
CONVENT (CONT.)	20 years	8 years	\$18,900				
SCHOOL	5 to 60 years	3 to 38 years	\$494,551	\$30,116	\$6,970		\$37,086
SCHOOL (CONT.)	7 to 25 years	3 to 13 years	\$1,053,804	\$202,366	\$210,341		\$412,707
SCHOOL (CONT.)	10 to 24 years	3 to 22 years	\$156,300	\$6,903	\$1,597		\$8,500
SCHOOL (CONT.)	10 to 30 years	3 to 13 years	\$92,604	\$16,241	\$3,759		\$20,000
SCHOOL (CONT.)	24 years	3 to 10 years	\$115,400	\$53,921	\$12,479		\$66,400
HELLER HALL	3 to 35 years	0 to 18 years	\$169,193	\$84,390	\$10,207	(\$60,034)	\$34,563
HELLER HALL (CONT.)	10 to 25 years	3 to 21 years	\$208,502	\$1,624	\$376		\$2,000
HELLER HALL (CONT.)	10 to 30 years	8 to 13 years	\$84,671				
GYMNASIUM	5 to 50 years	3 to 33 years	\$153,554	\$10,516	\$2,434		\$12,950
GYMNASIUM (CONT.)	3 to 25 years	1 to 8 years	\$153,904	\$44,602	\$16,492		\$61,094
GYMNASIUM (CONT.)	10 to 25 years	3 to 12 years	\$165,704	\$65,171	\$15,083		\$80,254
GYMNASIUM (CONT.)	15 to 20 years	13 to 18 years	\$94,718				
RECTORY	3 to 35 years	1 to 18 years	\$125,644	\$4,250	\$2,926		\$7,176
RECTORY (CONT.)	14 to 24 years	8 to 13 years	\$100,454				
HOUSE OF MINISTRIES	3 to 25 years	1 to 21 years	\$100,821	\$6,030	\$15,065		\$21,095
HOUSE OF MINISTRIES (CONT.)	15 to 20 years	8 to 12 years	\$23,034				
MISC.	20 to 60 years	3 to 18 years	\$100,430	\$8,121	\$1,879		\$10,000

Sample

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CF4 below details the allocation of the \$250,000 Beginning Balance, as reported by the Association and the \$1,094,974 of Replacement Reserve Funding calculated by the Cash Flow Method from 2015 to 2017, to the 363 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made by Chronological Allocation, a method developed by Miller Dodson Associates, Inc., and outlined on Page CF1.

The accuracy of the allocations is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$250,000 on January 1, 2015.
- Replacement Reserves on Deposit totaling \$507,090 on January 1, 2016.
- Replacement Reserves on Deposit totaling \$872,082 on January 1, 2017.
- Total Replacement Reserve funding (including the Beginning Balance) of \$1,344,974 from 2015 to 2017.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory from 2015 to 2017 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of \$203,098.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates, Inc., to arrange for an update of the Replacement Reserve Study.

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CF4												
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
SITE COMPONENTS												
1	Pavement, mill and overlay	166,203										
2	Pavement, rejuvenator seal coat	20,119								13,851		13,851
3	Parking bumpers	1,500										
4	Concrete curb and gutter (20% allowance)	9,439										
5	Concrete curb and gutter (20% allowance)	9,439										
6	Concrete curb and gutter (20% allowance)	9,439										
7	Concrete curb	18,585										
8	Asphalt curb	588										
9	Concrete flatwork (6%)	5,915	5,915		(5,915)							
10	Concrete flatwork (6%)	5,915								4,072		4,072
11	Concrete flatwork (6%)	5,915										
12	Concrete flatwork (6%)	5,915										
13	Concrete flatwork (6%)	5,915										
14	Concrete flatwork (6%)	5,915										
15	Concrete flatwork (6%)	5,915										
16	Concrete flatwork (6%)	5,915										
17	Concrete flatwork (6%)	5,915										
18	Concrete flatwork (6%)	5,915										
SITE COMPONENTS (CONT.)												
19	Concrete site stairs (full set)	1,200										
20	Lamp post	9,000										
21	Lamp post head	2,700	2,700			2,700			2,700		(2,700)	
22	Brick retaining wall (25% re-set and replacement)	988		324		324	479		802	186		988
23	Concrete retaining wall, replacement (10% allowance)	80,000	80,000		(80,000)							
24	Concrete stairs (full set)	1,800	1,800		(1,800)							
25	Concrete retaining wall, replacement (10% allowance)	60,000										
26	Concrete stairs (full set)	3,600										
27	Stone retaining, 10% re-set	1,200	1,200		(1,200)							
28	Stone retaining, replacement	78,000										
29	Wood privacy fence w/ gate	4,000										
30	8' Metal fencing, replacement	66,400										
31	8' Metal fencing (10% allowance)	2,905										
SITE COMPONENTS (CONT.)												
32	Metal railing (20% allowance)	500	500		(500)							
33	Metal railing (20% allowance)	500		164		164	242		406	94		500
34	Metal railing (20% allowance)	500										
35	Metal railing (20% allowance)	500										
36	Metal railing (20% allowance)	500										
37	Wood sign	1,600										
38	Storm Water Management (allowance)	9,000										
39	Foundation plantings (allowance)	2,000	568	1,432		2,000			2,000	1,377		3,377

Sample

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CF4 cont'd

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
40	Tot lot, mulch	4,463	4,463	1,462		5,925	2,162		8,086	839	(4,463)	4,463
41	Tot lot, playset	18,000		5,897		5,897	8,720		14,617	3,383		18,000
42	Tot lot, jungle gym	4,800		1,573		1,573	2,325		3,898	902		4,800
43	Tot lot, swing	2,400		786		786	1,163		1,949	451		2,400
44	Tot lot, PTL border	2,610		855		855	1,264		2,119	491		2,610
45	Tot lot, fence	9,800										
46	Genie lift	18,000										
SANCTUARY												
47	Slate shingle roofing	250,800										
48	Built-up roofing	14,300										
49	8" roof scuppers and downspouts	12,320										
50	Stone exterior repoint (10% allowance)	27,168										
51	Caulking (allowance)	4,500		1,474		1,474	2,180		3,654	846		4,500
52	Exterior door (allowance)	10,000										
53	Windows (3' x 4')	4,860		1,592		1,592	2,354		3,947	913		4,860
54	Windows (3' x 6')	2,160		708		708	1,046		1,754	406		2,160
55	Windows (3' x 6')	5,000		1,638		1,638	2,422		4,060	940		5,000
56	Stained glass restoration (allowance)	100,000										
57	Stained glass ventilators (allowance)	10,000										
58	Exterior building lights	2,700		885		885	1,308		2,193	507		2,700
SANCTUARY (CONT.)												
59	Interior painting (allowance)	10,000	2,842	7,158		10,000			10,000	6,885		16,885
60	Organ, restoration (allowance)	28,000	28,000			28,000			28,000		(28,000)	
61	Pendant fixture, refurbish	10,800										
62	Private restroom, renovation	5,204										
63	Interior door (allowance)	10,000		3,276		3,276	4,844		8,121	1,879		10,000
64	Exit sign	1,000										
65	Fire Alarm Control Panel	10,200		3,342		3,342	4,941		8,283	1,917		10,200
66	Fire Alarm Booster Panel	1,500		491		491	727		1,218	282		1,500
67	Water heater	1,000										
68	Electrical (allowance)	5,000										
SANCTUARY (CONT.)												
69	Exhaust fan (15,000 cfm)	3,000										
70	Fan/coil unit (120,000 btu)	20,800	5,911	14,889		20,800			20,800			20,800
71	Condensing Unit (25 ton)	20,800	5,911	14,889		20,800			20,800			20,800
72	Fan/coil unit (45,000 btu)	13,000	3,694	9,306		13,000			13,000			13,000
73	Condensing Unit (15 ton)	20,800	5,911	14,889		20,800			20,800			20,800
74	Fan/coil unit (45,000 btu)	13,000	3,694	9,306		13,000			13,000			13,000
75	Compressor (2 ton)	6,400										
76	Fan/coil unit (45,000 btu)	6,500	1,847	4,653		6,500			6,500			6,500
77	Compressor (3 ton)	6,400	1,819	4,581		6,400			6,400			6,400
78	Boiler, (1,700 MBH)	20,000	5,683	14,317		20,000			20,000			20,000
79	AHU (cfm)	10,000										
SANCTUARY (CONT.)												
80	CCTV system	2,850										
81	A/V Design/Integration	2,500		819		819	1,211		2,030	470		2,500
82	Wireless receiver	450		147		147	218		365	85		450
83	Lapel microphone	600		197		197	291		487	113		600
84	4 CH. mixer	199		65		65	96		162	37		199
85	400 W power amp	300		98		98	145		244	56		300
86	CD/MP3	350		115		115	170		284	66		350
87	Power control	250		82		82	121		203	47		250
88	Hearing aid system	1,549		507		507	750		1,258	291		1,549
89	Cabling	3,000		983		983	1,453		2,436	564		3,000
90	Wall mount speaker	4,000		1,310		1,310	1,938		3,248	752		4,000
91	Loudspeaker	1,600		524		524	775		1,299	301		1,600
92	Ceiling speaker	1,200		393		393	581		974	226		1,200
93	DVR	4,500		1,474		1,474	2,180		3,654	846		4,500
94	Hard drive	400		131		131	194		325	75		400
95	Hearing aid adapter	1,029		337		337	498		836	193		1,029
CONVENT												
96	Built-up roof	11,184		3,664		3,664	5,418		9,082	2,102		11,184
97	Membrane roof w/ insulation	18,486	18,486		(18,486)							
98	8" roof scuppers and downspouts	9,520										
99	Roof hatch	1,680		550		550	814		1,364	316		1,680
100	Brick veneer repoint (10% allowance)	8,595		2,816		2,816	4,164		6,980	1,615		8,595

Sample

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CF4 cont'd

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
101	Caulking (allowance)	4,500		1,474		1,474	2,180		3,654	846		4,500
102	Exterior door (allowance)	10,000		3,276		3,276	4,844		8,121	1,879		10,000
103	Exterior building lights	400		131		131	194		325	75		400
104	Windows (4' x 6')	39,960										
105	Windows (18" x 3')	400										
106	Windows (24"X48") stained glass cover	7,200										
CONVENT (CONT.)												
107	Renovation (phase 1)	46,740										
108	Renovation (phase 2)	46,740										
109	Renovation (phase 3)	46,740										
110	Piano, restoration (upright)	5,000										
111	Small restroom w/shower, renovation	36,000										
112	Interior door (allowance)	10,000										
113	Laundry room appliances	2,000										
114	Chapel (ceiling spot lighting)	5,000										
115	Chapel (sound system)	3,550										
116	Overhead doors	2,500										
117	Fire Alarm System	10,200		3,342		3,342	4,941		8,283	1,917		10,200
CONVENT (CONT.)												
118	Domestic water piping (allowance)	4,000										
119	Water heater (boiler)	2,000										
120	Boiler buddy	2,000										
121	Electrical	5,000										
122	Exhaust fan (15,000 cfm)	3,000										
123	Self-contained unit	4,500										
124	Fan/coil unit (45,000 btu)	6,500		2,130		2,130	3,149		5,278	1,222		6,500
125	Compressor (3 ton)	6,500		2,130		2,130	3,149		5,278	1,222		6,500
126	Fan/coil unit (45,000 btu)	6,500		2,130		2,130	3,149		5,278	1,222		6,500
127	Compressor (3 ton)	6,500		2,130		2,130	3,149		5,278	1,222		6,500
128	Fan/coil unit (45,000 btu)	6,500		2,130		2,130	3,149		5,278	1,222		6,500
129	Compressor (3 ton)	6,500		2,130		2,130	3,149		5,278	1,222		6,500
130	Fan/coil unit (30,000 btu)	3,200		1,048		1,048	1,550		2,599	601		3,200
131	Compressor (2 ton)	3,200		1,048		1,048	1,550		2,599	601		3,200
132	Boiler, (1,000 MBH)	20,000		6,552		6,552	9,689		16,241	3,759		20,000
CONVENT (CONT.)												
133	Countertop and Basin	8,000										
134	Kitchen flooring	1,200										
135	Refrigeration	3,600										
136	Wall cabinet	4,500										
137	Dishwasher	800										
138	Range/Oven	800										
SCHOOL												
139	Slate shingle	328,730										
140	Membrane roof	26,130		8,561		8,561	12,658		21,219	4,911		26,130
141	Gutters and downspouts (8")	1,056		346		346	512		858	198		1,056
142	8" roof scuppers and downspouts	11,200										
143	Brick veneer repoint (10% allowance)	21,000										
144	Caulking (allowance)	4,500		1,474		1,474	2,180		3,654	846		4,500
145	Exterior door (allowance)	10,000										
146	Wood trim (allowance)	5,000		1,638		1,638	2,422		4,060	940		5,000
147	Windows (3' x 7')	67,095										
148	Glass block	3,600										
149	Windows (4' x 4')	15,840										
150	Exterior building lights	400		131		131	194		325	75		400
SCHOOL (CONT.)												
151	School/Classroom renovation (phase 1)	237,500		77,811		77,811	115,054		192,864	44,636		237,500
152	School/Classroom renovation (phase 2)	237,500								163,507		163,507
153	School/Classroom renovation (phase 3)	237,500										
154	School/Classroom renovation (phase 4)	237,500										
155	Blinds	10,000										
156	Teacher kitchenette renovation	14,466										
157	Private restroom, renovation	5,204										
158	Standard restroom, renovation	20,000										
159	Education restroom, renovation	20,700										
160	Music room flooring	2,992										
161	Music room ceiling	2,992										

Sample

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CF4 cont'd

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
162	Smoke detector	3,500										
163	Fire strobe	250										
164	Fire alarm pull	1,250										
165	Interior door (allowance)	10,000										
166	Exit sign	750										
167	Fire Alarm Control Annunciator Panel	10,200		3,342		3,342	4,941		8,283	1,917		10,200
168	Fire Alarm Booster Panel	1,500		491		491	727		1,218	282		1,500
SCHOOL (CONT.)												
169	Domestic water piping (allowance)	4,000										
170	Water heater	8,500		2,785		2,785	4,118		6,903	1,597		8,500
171	Electrical (allowance)	5,000										
172	Exhaust fan (15,000 cfm)	3,000										
173	Fan/coil unit (75,000 btu)	10,400										
174	Compressor (5 ton)	10,400										
175	Fan/coil unit (30,000 btu)	3,200										
176	Compressor (2 ton)	3,200										
177	Fan/coil unit (20,000 btu)	6,400										
178	Compressor (1.5 ton)	6,400										
179	Fan/coil unit (60,000 btu)	20,800										
180	Carrier 50ss048	13,000										
181	Boiler Glycol system	2,000										
182	Boiler, (1,700 MBH)	40,000										
183	Water Heater	17,000										
184	Pass-thru fan/coil unit	3,000										
SCHOOL (CONT.)												
185	Accessibility lift	20,000		6,552		6,552	9,689		16,241	3,759		20,000
186	Sump pump	2,500										
187	Access Control System (ACS)	6,604										
188	CCTV system	2,850										
189	Dumpster pad	4,000										
190	Cafeteria flooring	3,750										
191	Commercial refrigeration	7,000										
192	Cabinets and counter top	9,000										
193	Exhaust hood	8,000										
194	Ice machine	3,500										
195	Kitchen flooring	2,400										
196	Range	10,000										
197	Folding cafeteria table	12,000										
198	Food Warmer Box	1,000										
SCHOOL (CONT.)												
199	Fan/coil unit, (18,000 btu) classroom	49,000										
200	Compressor (2.5 ton)	6,400		2,097		2,097	3,100		5,197	1,203		6,400
201	Compressor (2.5 ton)	6,400		2,097		2,097	3,100		5,197	1,203		6,400
202	Compressor (2.5 ton)	3,200		1,048		1,048	1,550		2,599	601		3,200
203	Compressor (2 ton)	6,400		2,097		2,097	3,100		5,197	1,203		6,400
204	Compressor (5 ton)	31,200		10,222		10,222	15,114		25,336	5,864		31,200
205	Compressor (2 ton)	9,600		3,145		3,145	4,651		7,796	1,804		9,600
206	Compressor (2 ton)	3,200		1,048		1,048	1,550		2,599	601		3,200
HELLER HALL												
207	Built-up roof	44,590	44,590			44,590			44,590		(44,590)	
208	8" Gutters and downspouts	3,600	3,600			3,600			3,600		(3,600)	
209	Roof hatch	1,680										
210	Brick veneer repoint (10% allowance)	7,344	7,344			7,344			7,344		(7,344)	
211	Caulking (allowance)	4,500	4,500			4,500			4,500		(4,500)	
212	Exterior door (allowance)	10,000										
213	Windows (4' x 8')	11,520										
214	Windows (3' x 8')	49,680										
215	Exterior building lights	400		131		131	194		325	75		400
216	Blinds	3,600										
217	VCT	17,279		5,661		5,661	8,370		14,031	3,247		17,279
218	Interior painting (allowance)	10,000	2,842	7,158		10,000			10,000	6,885		16,885
219	Piano, restoration (upright)	5,000										
HELLER HALL (CONT.)												
220	Private restroom, renovation	2,602										
221	Standard restroom, renovation	20,000										
222	Interior door (allowance)	10,000										

Sample

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CF4 cont'd

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
223	Auditorium (ceiling lighting)	5,000										
224	Exit sign	500										
225	Interior door (allowance)	10,000										
226	Ceiling speakers	800										
227	Domestic water piping (allowance)	4,000										
228	Water heater	2,000		655		655	969		1,624	376		2,000
229	Electrical (allowance)	5,000										
230	Exhaust fan (15,000 cfm)	3,000										
231	Fan/coil unit (225,000 BTU)	10,400										
232	Compressor (15 ton)	20,800										
233	Fan/coil unit (45,000 BTU)	52,000										
234	Compressor (3 ton)	52,000										
235	Compressor (5 ton)	10,400										
HELLER HALL (CONT.)												
236	Boiler, (1,700 MBH)	20,000										
237	Water Heater	1,000										
238	A/V system	13,398										
239	A/V Design/Integration	2,500										
240	4 CH. mixer	199										
241	400 W power amp	300										
242	CD/MP3	350										
243	Power control	250										
244	Cabling	3,000										
245	Speakers	1,600										
246	Stackable chair (metal frame, plastic)	3,840										
247	6' round banquet table	2,650										
248	8' rectangle table	1,900										
249	Kitchen flooring	2,184										
250	Commercial Refrigeration	3,200										
251	Ice Machine	1,500										
252	Exhaust hood w/ suppression	8,800										
253	Cabinets and countertop	8,000										
254	Commercial Range	10,000										
GYMNASIUM												
255	Asphalt shingle	80,164										
256	Gutters and downspouts	6,360										
257	Brick veneer repoint (10% allowance)	10,020										
258	Caulking (allowance)	4,500		1,474		1,474	2,180		3,654	846		4,500
259	Exterior door (allowance)	10,000										
260	Wood trim (allowance)	5,000		1,638		1,638	2,422		4,060	940		5,000
261	Corrugated metal awning	19,200										
262	Windows (3' x 3')	4,860										
263	Windows (4' x 6')	5,950										
264	Windows (4' x 3')	3,150										
265	Windows (2' x 2')	900										
266	Exterior building lights, small	250		82		82	121		203	47		250
267	Exterior building lights, large	1,200		393		393	581		974	226		1,200
268	Walkway lights, recessed	2,000		655		655	969		1,624	376		2,000
GYMNASIUM (CONT.)												
269	Conference Center, renovation	26,600		8,715		8,715	12,886		21,601	4,999		26,600
270	Interior painting (allowance)	10,000	2,842	7,158		10,000			10,000	6,885		16,885
271	Gymnasium flooring restoration	3,500	995	2,505		3,500			3,500	2,410		5,910
272	Private restroom, renovation	5,204										
273	Standard restroom, renovation	20,000										
274	Shower room, tbd	18,000										
275	Interior door (allowance)	10,000										
276	Gymnasium (ceiling down light)	14,400										
277	Gymnasium (ceiling spot lighting)	9,000										
278	Emergency lights	1,250										
279	Exit sign	1,250										
280	Fire Alarm Control Panel	10,200		3,342		3,342	4,941		8,283	1,917		10,200
281	Fire Alarm, booster panel	1,500		491		491	727		1,218	282		1,500
282	Fire sprinkler compressor for dry pipe	750										
283	Fire sprinkler system (allowance)	10,000										
284	Smoke detector	10,000										
285	Fire strobe	1,500										
286	Fire alarm pull	750										
GYMNASIUM (CONT.)												

Sample

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CF4 cont'd

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
287	Emergency lights	750										
288	Domestic water piping (allowance)	4,000		1,310		1,310	1,938		3,248	752		4,000
289	Water heater	1,000		328		328	484		812	188		1,000
290	Exhaust fan (15,000 cfm)	1,500										
291	Electrical (allowance)	5,000		1,638		1,638	2,422		4,060	940		5,000
292	Fan/coil unit (75,000 btu)	20,800										
293	Compressor (5 ton)	20,800										
294	Condensing Unit (25 ton)	41,600										
295	AHU w/ coil (200,000 btu)	41,600		13,629		13,629	20,153		33,782	7,818		41,600
296	Unit Heater (150,000 btu)	13,000		4,259		4,259	6,298		10,557	2,443		13,000
297	Water Heater	800		262		262	388		650	150		800
298	Access Control System (ACS)	6,604		2,164		2,164	3,199		5,363	1,241		6,604
299	Camera	5,400		1,769		1,769	2,616		4,385	1,015		5,400
300	CCTV system	2,850		934		934	1,381		2,314	536		2,850
GYMNASIUM (CONT.)												
301	A/V system	13,398										
302	Projector and screen	6,500										
303	Folding table	2,400										
304	Bleachers	64,000										
305	Scoreboard system	5,000										
306	Concrete pad	3,420										
RECTORY												
307	Asphalt shingle	12,725										
308	Garage, Asphalt shingle	6,970										
309	Built-up roof	20,800										
310	Gutters and downspouts	1,926										
311	Soffit, vinyl	1,140										
312	Siding, painted aluminum, restoration	10,800										
313	Garage door	4,000										
314	Windows (3' x 5')	29,700										
315	Carpet	10,625										
316	VCT	3,300										
317	Interior painting (allowance)	4,000	1,137	2,863		4,000			4,000	2,754		6,754
318	Small restroom, renovation	9,000										
319	Wood flooring restoration	250	71	179		250			250	172		422
320	Private restroom, renovation	10,408										
RECTORY (CONT.)												
321	Fan/coil unit (45,000 btu)	13,000										
322	Compressor (3 ton)	6,400										
323	Fan/coil unit (30,000 btu)	6,400										
324	Compressor (2 ton)	6,400										
325	Fan/coil unit (75,000 btu)	20,800										
326	Compressor (5 ton)	10,400										
327	Boiler, (50 MBH)	10,000										
328	Water Heater	8,500										
329	Access Control System (ACS)	6,604										
330	CCTV system	2,850										
331	Countertop and Basin	3,000										
332	Kitchen flooring	900										
333	Refrigeration	1,800										
334	Enclosed base cabinet	2,000										
335	Dishwasher	700										
336	Range	700										
HOUSE OF MINISTRIES												
337	Asphalt shingle	10,893										
338	Gutters and downspouts	2,160										
339	Soffit, vinyl	1,254										
340	Siding, vinyl	20,064										
341	Garage door	4,000										
342	Carpet	8,500										
343	Interior painting (allowance)	4,000	1,137	2,863		4,000			4,000	2,754		6,754
344	Small restroom w/shower, renovation	5,000										
345	Emergency lights	1,250										
346	Water heater (80 gal.)	2,500		819		819	1,211		2,030	470		2,500
347	Compressor (2 ton)	3,200										
348	Compressor (5 ton)	20,800										
349	Fan/coil unit (60,000 btu)	13,000								8,950		8,950
350	Fan/coil unit (30,000 btu)	3,200								2,203		2,203

Sample

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CF4 cont'd

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
351	Sump pump	1,000								688		688
	HOUSE OF MINISTRIES (CONT.)											
352	Access Control System (ACS)	6,604										
353	CCTV system	2,850										
354	Kitchen flooring	750										
355	Commercial Refrigeration	1,800										
356	Cabinet and countertop	5,000										
357	Commercial Range	750										
358	ADA ramp	5,280										
	MISC.											
359	Allowance for Steeple Cross	10,000		3,276		3,276	4,844		8,121	1,879		10,000
360	Allowance for Church Pew Restoration	75,000										
361	Guest house, asphalt shingle	3,766										
362	Guest house, gutters and downspouts	720										
363	Guest house, siding	10,944										

Sample

COMPONENT METHOD

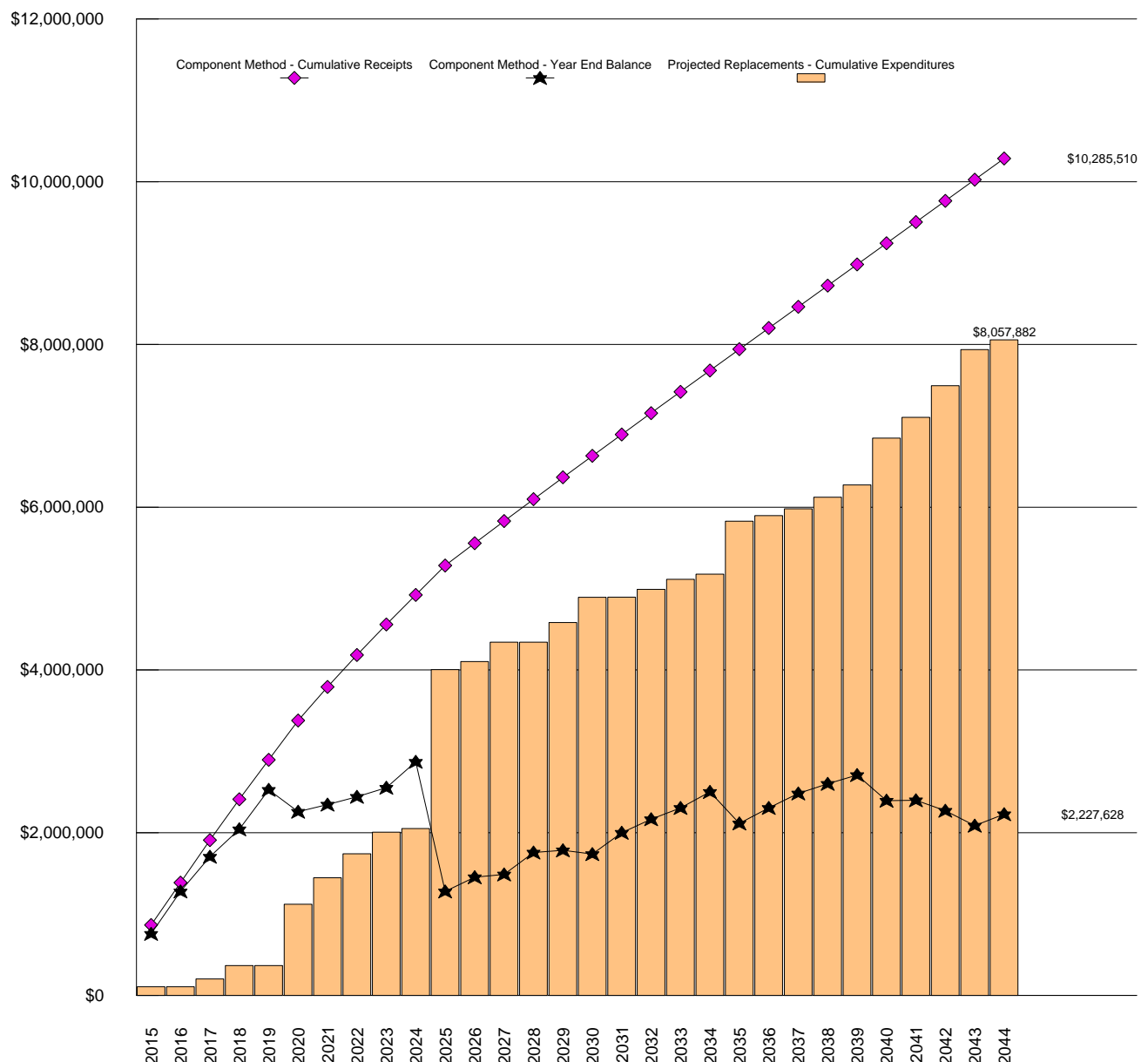


\$616,120

COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2015.

General. The Component Method (also referred to as the Full Funded Method) is a very conservative mathematical model developed by HUD in the early 1980s. Each of the 363 Projected Replacements listed in the Replacement Reserve Inventory is treated as a separate account. The Beginning Balance is allocated to each of the individual accounts, as is all subsequent funding of Replacement Reserves. These funds are "locked" in these individual accounts and are not available to fund other Projected Replacements. The calculation of Recommended Annual Funding of Replacement Reserves is a multi-step process outlined in more detail on Page CM2.

Component Method - Cumulative Receipts and Expenditures Graph



Sample

COMPONENT METHOD (cont'd)

- **Current Funding Objective.** A Current Funding Objective is calculated for each of the Projected Replacements listed in the Replacement Reserve Inventory. Replacement Cost is divided by the Normal Economic Life to determine the nominal annual contribution. The Remaining Economic Life is then subtracted from the Normal Economic Life to calculate the number of years that the nominal annual contribution should have been made. The two values are then multiplied to determine the Current Funding Objective. This is repeated for each of the 363 Projected Replacements. The total, \$2,612,294, is the Current Funding Objective.

For an example, consider a very simple Replacement Reserve Inventory with one Projected Replacement, a fence with a \$1,000 Replacement Cost, a Normal Economic Life of 10 years, and a Remaining Economic Life of 2 years. A contribution to Replacement Reserves of \$100 (\$1,000 ÷ 10 years) should have been made in each of the previous 8 years (10 years - 2 years). The result is a Current Funding Objective of \$800 (8 years x \$100 per year).

- **Funding Percentage.** The Funding Percentage is calculated by dividing the Beginning Balance (\$250,000) by the Current Funding Objective (\$2,612,294). At St John's Church and School the Funding Percentage is 9.6%
- **Allocation of the Beginning Balance.** The Beginning Balance is divided among the 363 Projected Replacements in the Replacement Reserve Inventory. The Current Funding Objective for each Projected Replacement is multiplied by the Funding Percentage and these funds are then "locked" into the account of each item.

If we relate this calculation back to our fence example, it means that the Church has not accumulated \$800 in Reserves (the Funding Objective), but rather at 9.6 percent funded, there is \$77 in the account for the fence.

- **Annual Funding.** The Recommended Annual Funding of Replacement Reserves is then calculated for each Projected Replacement. The funds allocated to the account of the Projected Replacement are subtracted from the Replacement Cost. The result is then divided by the number of years until replacement, and the result is the annual funding for each of the Projected Replacements. The sum of these is \$616,120, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2015).

In our fence example, the \$77 in the account is subtracted from the \$1,000 Total Replacement Cost and divided by the 2 years that remain before replacement, resulting in an annual deposit of \$462. Next year, the deposit remains \$462, but in the third year, the fence is replaced and the annual funding adjusts to \$100.

- **Adjustment to the Component Method for interest and inflation.** The calculations in the Replacement Reserve Analysis do not account for interest earned on Replacement Reserves, inflation, or a constant annual increase in Annual Funding of Replacement Reserves. The Component Method is a very conservative method and if the Analysis is updated regularly, adequate funding will be maintained without the need for adjustments.

Component Method Data - Years 1 through 30

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Beginning balance	\$250,000									
Recommended annual funding	\$616,120	\$521,249	\$521,249	\$502,385	\$484,236	\$484,236	\$412,819	\$391,595	\$375,936	\$362,181
Interest on reserves										
Expenditures	\$107,901		\$95,197	\$165,050		\$753,435	\$324,484	\$295,109	\$265,763	\$43,750
Year end balance	\$758,219	\$1,279,468	\$1,705,521	\$2,042,856	\$2,527,092	\$2,257,892	\$2,346,227	\$2,442,713	\$2,552,886	\$2,871,316
Cumulative Expenditures	\$107,901	\$107,901	\$203,098	\$368,148	\$368,148	\$1,121,583	\$1,446,067	\$1,741,176	\$2,006,939	\$2,050,689
Cumulative Receipts	\$866,120	\$1,387,369	\$1,908,619	\$2,411,003	\$2,895,239	\$3,379,475	\$3,792,294	\$4,183,889	\$4,559,825	\$4,922,005
Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Recommended annual funding	\$362,181	\$273,425	\$272,693	\$268,819	\$268,819	\$264,389	\$262,052	\$262,052	\$262,052	\$261,732
Interest on reserves										
Expenditures	\$1,954,322	\$98,863	\$238,084		\$241,002	\$310,619	\$1,000	\$96,063	\$123,544	\$64,019
Year end balance	\$1,279,175	\$1,453,737	\$1,488,346	\$1,757,165	\$1,784,982	\$1,738,752	\$1,999,804	\$2,165,793	\$2,304,301	\$2,502,013
Cumulative Expenditures	\$4,005,011	\$4,103,874	\$4,341,958	\$4,341,958	\$4,582,960	\$4,893,579	\$4,894,579	\$4,990,641	\$5,114,186	\$5,178,204
Cumulative Receipts	\$5,284,186	\$5,557,611	\$5,830,304	\$6,099,123	\$6,367,942	\$6,632,331	\$6,894,383	\$7,156,434	\$7,418,486	\$7,680,218
Year	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Recommended annual funding	\$261,732	\$260,426	\$260,426	\$260,426	\$260,426	\$260,403	\$260,397	\$260,397	\$260,397	\$260,261
Interest on reserves										
Expenditures	\$649,730	\$68,859	\$83,690	\$142,063	\$151,084	\$576,294	\$255,363	\$388,694	\$443,639	\$120,263
Year end balance	\$2,114,015	\$2,305,582	\$2,482,318	\$2,600,682	\$2,710,024	\$2,394,133	\$2,399,168	\$2,270,871	\$2,087,629	\$2,227,628
Cumulative Expenditures	\$5,827,934	\$5,896,793	\$5,980,483	\$6,122,546	\$6,273,630	\$6,849,924	\$7,105,287	\$7,493,981	\$7,937,619	\$8,057,882
Cumulative Receipts	\$7,941,949	\$8,202,376	\$8,462,802	\$8,723,228	\$8,983,654	\$9,244,057	\$9,504,454	\$9,764,851	\$10,025,249	\$10,285,510

Sample

COMPONENT METHOD ACCOUNTING SUMMARY

This St John's Church and School - Component Method Accounting Summary is an attachment to the St John's Church and School - Replacement Reserve Study dated August 5, 2015 and is for use by accounting and reserve professionals experienced in Church funding and accounting principles.

This Summary consists of four reports, the 2015, 2016, and 2017 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2015, 2016, and 2017. Each of the 363 Projected Replacements listed in the St John's Church and School Replacement Reserve Inventory has been assigned to one of 28 categories. The following information is summarized by category in each report:
 - Normal Economic Life and Remaining Economic Life of the Projected Replacements.
 - Cost of all Scheduled Replacements in each category.
 - Replacement Reserves on Deposit allocated to the category at the beginning and end of the report period.
 - Cost of Projected Replacements in the report period.
 - Recommended Replacement Reserve Funding allocated to the category during the report period as calculated by the Component Method.
- THREE-YEAR REPLACEMENT FUNDING REPORT. This report details the allocation of the \$250,000 Beginning Balance (at the start of the Study Year) and the \$1,658,619 of additional Replacement Reserve funding from 2015 to 2017 (as calculated in the Replacement Reserve Analysis) to each of the 363 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made using the Component Method as outlined in the Replacement Reserve Analysis. The calculated data includes:
 - Identification and estimated cost of each Projected Replacement schedule in years 2015 through 2017.
 - Allocation of the \$250,000 Beginning Balance to the Projected Replacements by the Component Method.
 - Allocation of the \$1,658,619 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2015 through 2017, by the Component Method.

Sample

2015 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 363 Projected Replacements included in the St John's Church and School Replacement Reserve Inventory has been assigned to one of the 28 categories listed in TABLE CM1 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- A Beginning Balance of \$250,000 as of the first day of the Study Year, January 1, 2015.
- Total reserve funding (including the Beginning Balance) of \$866,120 in the Study Year.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2015 being accomplished in 2015 at a cost of \$107,901.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2015 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM1

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2015 BEGINNING BALANCE	2015 RESERVE FUNDING	2015 PROJECTED REPLACEMENTS	2015 END OF YEAR BALANCE
SITE COMPONENTS	6 to 60 years	0 to 54 years	\$294,464	\$11,963	\$28,220	\$5,915	\$34,267
SITE COMPONENTS (CONT.)	10 to 54 years	0 to 53 years	\$311,793	\$16,585	\$88,015	\$83,000	\$21,600
SITE COMPONENTS (CONT.)	3 to 30 years	0 to 20 years	\$75,173	\$2,128	\$10,233	\$500	\$11,861
SANCTUARY	5 to 100 years	5 to 38 years	\$443,808	\$29,366	\$32,903		\$62,269
SANCTUARY (CONT.)	3 to 25 years	2 to 15 years	\$82,704	\$3,175	\$16,762		\$19,938
SANCTUARY (CONT.)	14 to 30 years	3 to 20 years	\$140,700	\$10,006	\$29,366		\$39,372
SANCTUARY (CONT.)	10 to 15 years	5 to 10 years	\$24,777	\$1,026	\$3,748		\$4,774
CONVENT	5 to 35 years	0 to 15 years	\$111,925	\$7,313	\$27,052	\$18,486	\$15,879
CONVENT (CONT.)	10 to 25 years	5 to 20 years	\$214,470	\$2,591	\$14,267		\$16,858
CONVENT (CONT.)	10 to 24 years	5 to 11 years	\$85,900	\$4,470	\$12,020		\$16,490
CONVENT (CONT.)	20 years	10 years	\$18,900	\$814	\$1,644		\$2,458
SCHOOL	5 to 60 years	5 to 40 years	\$494,551	\$34,667	\$43,938		\$78,605
SCHOOL (CONT.)	7 to 25 years	5 to 15 years	\$1,053,804	\$61,184	\$131,236		\$192,420
SCHOOL (CONT.)	10 to 24 years	5 to 24 years	\$156,300	\$2,848	\$11,153		\$14,001
SCHOOL (CONT.)	10 to 30 years	5 to 15 years	\$92,604	\$3,232	\$8,212		\$11,445
SCHOOL (CONT.)	24 years	5 to 12 years	\$115,400	\$6,915	\$13,876		\$20,791
HELLER HALL	3 to 35 years	2 to 20 years	\$169,193	\$9,776	\$30,554		\$40,330
HELLER HALL (CONT.)	10 to 25 years	5 to 23 years	\$208,502	\$2,564	\$15,997		\$18,561
HELLER HALL (CONT.)	10 to 30 years	10 to 15 years	\$84,671	\$1,246	\$6,223		\$7,469
GYMNASIUM	5 to 50 years	5 to 35 years	\$153,554	\$6,389	\$12,546		\$18,935
GYMNASIUM (CONT.)	3 to 25 years	3 to 10 years	\$153,904	\$6,135	\$18,288		\$24,423
GYMNASIUM (CONT.)	10 to 25 years	5 to 14 years	\$165,704	\$8,145	\$18,076		\$26,221
GYMNASIUM (CONT.)	15 to 20 years	15 to 20 years	\$94,718	\$16	\$4,823		\$4,839
RECTORY	3 to 35 years	3 to 20 years	\$125,644	\$3,857	\$10,341		\$14,197
RECTORY (CONT.)	14 to 24 years	10 to 15 years	\$100,454	\$3,094	\$7,304		\$10,398
HOUSE OF MINISTRIES	3 to 25 years	3 to 23 years	\$100,821	\$2,531	\$8,611		\$11,142
HOUSE OF MINISTRIES (CONT.)	15 to 20 years	10 to 14 years	\$23,034	\$566	\$1,721		\$2,287
MISC.	20 to 60 years	5 to 20 years	\$100,430	\$7,398	\$8,989		\$16,387

Sample

2016 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 363 Projected Replacements included in the St John's Church and School Replacement Reserve Inventory has been assigned to one of the 28 categories listed in TABLE CM2 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$758,219 on January 1, 2016.
- Total reserve funding (including the Beginning Balance) of \$1,387,369 from 2015 through 2016.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2016 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM2

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2016 BEGINNING BALANCE	2016 RESERVE FUNDING	2016 PROJECTED REPLACEMENTS	2016 END OF YEAR BALANCE
SITE COMPONENTS	6 to 60 years	5 to 59 years	\$294,464	\$34,267	\$22,969		\$57,237
SITE COMPONENTS (CONT.)	10 to 54 years	1 to 53 years	\$311,793	\$21,600	\$14,620		\$36,220
SITE COMPONENTS (CONT.)	3 to 30 years	1 to 24 years	\$75,173	\$11,861	\$9,801		\$21,662
SANCTUARY	5 to 100 years	4 to 37 years	\$443,808	\$62,269	\$32,903		\$95,172
SANCTUARY (CONT.)	3 to 25 years	1 to 14 years	\$82,704	\$19,938	\$16,762		\$36,700
SANCTUARY (CONT.)	14 to 30 years	2 to 19 years	\$140,700	\$39,372	\$29,366		\$68,738
SANCTUARY (CONT.)	10 to 15 years	4 to 9 years	\$24,777	\$4,774	\$3,748		\$8,522
CONVENT	5 to 35 years	4 to 19 years	\$111,925	\$15,879	\$11,260		\$27,138
CONVENT (CONT.)	10 to 25 years	4 to 19 years	\$214,470	\$16,858	\$14,267		\$31,125
CONVENT (CONT.)	10 to 24 years	4 to 10 years	\$85,900	\$16,490	\$12,020		\$28,511
CONVENT (CONT.)	20 years	9 years	\$18,900	\$2,458	\$1,644		\$4,102
SCHOOL	5 to 60 years	4 to 39 years	\$494,551	\$78,605	\$43,938		\$122,543
SCHOOL (CONT.)	7 to 25 years	4 to 14 years	\$1,053,804	\$192,420	\$131,236		\$323,656
SCHOOL (CONT.)	10 to 24 years	4 to 23 years	\$156,300	\$14,001	\$11,153		\$25,154
SCHOOL (CONT.)	10 to 30 years	4 to 14 years	\$92,604	\$11,445	\$8,212		\$19,657
SCHOOL (CONT.)	24 years	4 to 11 years	\$115,400	\$20,791	\$13,876		\$34,668
HELLER HALL	3 to 35 years	1 to 19 years	\$169,193	\$40,330	\$30,554		\$70,884
HELLER HALL (CONT.)	10 to 25 years	4 to 22 years	\$208,502	\$18,561	\$15,997		\$34,558
HELLER HALL (CONT.)	10 to 30 years	9 to 14 years	\$84,671	\$7,469	\$6,223		\$13,691
GYMNASIUM	5 to 50 years	4 to 34 years	\$153,554	\$18,935	\$12,546		\$31,481
GYMNASIUM (CONT.)	3 to 25 years	2 to 9 years	\$153,904	\$24,423	\$18,288		\$42,712
GYMNASIUM (CONT.)	10 to 25 years	4 to 13 years	\$165,704	\$26,221	\$18,076		\$44,297
GYMNASIUM (CONT.)	15 to 20 years	14 to 19 years	\$94,718	\$4,839	\$4,823		\$9,662
RECTORY	3 to 35 years	2 to 19 years	\$125,644	\$14,197	\$10,341		\$24,538
RECTORY (CONT.)	14 to 24 years	9 to 14 years	\$100,454	\$10,398	\$7,304		\$17,703
HOUSE OF MINISTRIES	3 to 25 years	2 to 22 years	\$100,821	\$11,142	\$8,611		\$19,753
HOUSE OF MINISTRIES (CONT.)	15 to 20 years	9 to 13 years	\$23,034	\$2,287	\$1,721		\$4,009
MISC.	20 to 60 years	4 to 19 years	\$100,430	\$16,387	\$8,989		\$25,377

Sample

2017 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 363 Projected Replacements included in the St John's Church and School Replacement Reserve Inventory has been assigned to one of the 28 categories listed in TABLE CM3 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$1,279,468 on January 1, 2017.
- Total Replacement Reserve funding (including the Beginning Balance) of \$1,908,619 from 2015 to 2017.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2017 being accomplished in 2017 at a cost of \$95,197.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2017 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2017 BEGINNING BALANCE	2017 RESERVE FUNDING	2017 PROJECTED REPLACEMENTS	2017 END OF YEAR BALANCE
SITE COMPONENTS	6 to 60 years	4 to 58 years	\$294,464	\$57,237	\$22,969		\$80,206
SITE COMPONENTS (CONT.)	10 to 54 years	0 to 52 years	\$311,793	\$36,220	\$14,620	\$2,700	\$48,140
SITE COMPONENTS (CONT.)	3 to 30 years	0 to 23 years	\$75,173	\$21,662	\$9,801	\$4,463	\$27,001
SANCTUARY	5 to 100 years	3 to 36 years	\$443,808	\$95,172	\$32,903		\$128,075
SANCTUARY (CONT.)	3 to 25 years	0 to 13 years	\$82,704	\$36,700	\$16,762	\$28,000	\$25,462
SANCTUARY (CONT.)	14 to 30 years	1 to 18 years	\$140,700	\$68,738	\$29,366		\$98,104
SANCTUARY (CONT.)	10 to 15 years	3 to 8 years	\$24,777	\$8,522	\$3,748		\$12,270
CONVENT	5 to 35 years	3 to 18 years	\$111,925	\$27,138	\$11,260		\$38,398
CONVENT (CONT.)	10 to 25 years	3 to 18 years	\$214,470	\$31,125	\$14,267		\$45,391
CONVENT (CONT.)	10 to 24 years	3 to 9 years	\$85,900	\$28,511	\$12,020		\$40,531
CONVENT (CONT.)	20 years	8 years	\$18,900	\$4,102	\$1,644		\$5,747
SCHOOL	5 to 60 years	3 to 38 years	\$494,551	\$122,543	\$43,938		\$166,481
SCHOOL (CONT.)	7 to 25 years	3 to 13 years	\$1,053,804	\$323,656	\$131,236		\$454,892
SCHOOL (CONT.)	10 to 24 years	3 to 22 years	\$156,300	\$25,154	\$11,153		\$36,307
SCHOOL (CONT.)	10 to 30 years	3 to 13 years	\$92,604	\$19,657	\$8,212		\$27,870
SCHOOL (CONT.)	24 years	3 to 10 years	\$115,400	\$34,668	\$13,876		\$48,544
HELLER HALL	3 to 35 years	0 to 18 years	\$169,193	\$70,884	\$30,554	\$60,034	\$41,404
HELLER HALL (CONT.)	10 to 25 years	3 to 21 years	\$208,502	\$34,558	\$15,997		\$50,555
HELLER HALL (CONT.)	10 to 30 years	8 to 13 years	\$84,671	\$13,691	\$6,223		\$19,914
GYMNASIUM	5 to 50 years	3 to 33 years	\$153,554	\$31,481	\$12,546		\$44,028
GYMNASIUM (CONT.)	3 to 25 years	1 to 8 years	\$153,904	\$42,712	\$18,288		\$61,000
GYMNASIUM (CONT.)	10 to 25 years	3 to 12 years	\$165,704	\$44,297	\$18,076		\$62,373
GYMNASIUM (CONT.)	15 to 20 years	13 to 18 years	\$94,718	\$9,662	\$4,823		\$14,485
RECTORY	3 to 35 years	1 to 18 years	\$125,644	\$24,538	\$10,341		\$34,878
RECTORY (CONT.)	14 to 24 years	8 to 13 years	\$100,454	\$17,703	\$7,304		\$25,007
HOUSE OF MINISTRIES	3 to 25 years	1 to 21 years	\$100,821	\$19,753	\$8,611		\$28,364
HOUSE OF MINISTRIES (CONT.)	15 to 20 years	8 to 12 years	\$23,034	\$4,009	\$1,721		\$5,730
MISC.	20 to 60 years	3 to 18 years	\$100,430	\$25,377	\$8,989		\$34,366

Sample

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM4 below details the allocation of the \$250,000 Beginning Balance, as reported by the Association and the \$1,658,619 of Replacement Reserve Funding calculated by the Cash Flow Method from 2015 to 2017, to the 363 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made by Chronological Allocation, a method developed by Miller Dodson Associates, Inc., and outlined on Page CF1.

The accuracy of the allocations is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$250,000 on January 1, 2015.
- Replacement Reserves on Deposit totaling \$758,219 on January 1, 2016.
- Replacement Reserves on Deposit totaling \$1,279,468 on January 1, 2017.
- Total Replacement Reserve funding (including the Beginning Balance) of \$1,908,619 from 2015 to 2017.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory from 2015 to 2017 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of \$203,098.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates, Inc., to arrange for an update of the Replacement Reserve Study.

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4												
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
SITE COMPONENTS												
1	Pavement, mill and overlay	166,203	6,186	14,547		20,733	14,547		35,280	14,547		49,827
2	Pavement, rejuvenator seal coat	20,119		2,874		2,874	2,874		5,748	2,874		8,623
3	Parking bumpers	1,500	56	131		187	131		318	131		450
4	Concrete curb and gutter (20% allowance)	9,439	719	793		1,512	793		2,305	793		3,097
5	Concrete curb and gutter (20% allowance)	9,439	418	311		729	311		1,040	311		1,351
6	Concrete curb and gutter (20% allowance)	9,439	117	198		315	198		514	198		712
7	Concrete curb	18,585	1,416	1,561		2,977	1,561		4,538	1,561		6,099
8	Asphalt curb	588	22	51		73	51		125	51		176
9	Concrete flatwork (6%)	5,915	566	5,349	(5,915)		99		99	99		197
10	Concrete flatwork (6%)	5,915	500	774		1,274	774		2,047	774		2,821
11	Concrete flatwork (6%)	5,915	443	421		864	421		1,285	421		1,706
12	Concrete flatwork (6%)	5,915	387	291		678	291		969	291		1,260
13	Concrete flatwork (6%)	5,915	330	223		554	223		777	223		1,000
14	Concrete flatwork (6%)	5,915	274	182		456	182		638	182		820
15	Concrete flatwork (6%)	5,915	217	154		371	154		525	154		679
16	Concrete flatwork (6%)	5,915	160	134		294	134		428	134		562
17	Concrete flatwork (6%)	5,915	104	119		222	119		341	119		460
18	Concrete flatwork (6%)	5,915	47	107		154	107		261	107		367
SITE COMPONENTS (CONT.)												
19	Concrete site stairs (full set)	1,200	15	46		61	46		106	46		152
20	Lamp post	9,000	402	537		939	537		1,477	537		2,014
21	Lamp post head	2,700	207	831		1,038	831		1,869	831	(2,700)	
22	Brick retaining wall (25% re-set and replacement)	988	38	158		196	158		355	158		513
23	Concrete retaining wall, replacement (10% allowance)	80,000	7,656	72,344	(80,000)		1,481		1,481	1,481		2,963
24	Concrete retaining wall, replacement (10% allowance)	1,800	172	1,628	(1,800)		60		60	60		120
25	Concrete retaining wall, replacement (10% allowance)	60,000		1,111		1,111	1,111		2,222	1,111		3,333
26	Concrete stairs (full set)	3,600		116		116	116		232	116		348
27	Stone retaining, 10% re-set	1,200	115	1,085	(1,200)		120		120	120		240
28	Stone retaining, replacement	78,000	5,944	6,551		12,495	6,551		19,045	6,551		25,596
29	Wood privacy fence w/ gate	4,000		364		364	364		727	364		1,091
30	8' Metal fencing, replacement	66,400	1,906	3,071		4,977	3,071		8,049	3,071		11,120
31	8' Metal fencing (10% allowance)	2,905	130	173		303	173		477	173		650
SITE COMPONENTS (CONT.)												
32	Metal railing (20% allowance)	500	48	452	(500)		20		20	20		40
33	Metal railing (20% allowance)	500	36	77		114	77		191	77		268
34	Metal railing (20% allowance)	500	27	43		70	43		113	43		156
35	Metal railing (20% allowance)	500	17	30		47	30		78	30		108
36	Metal railing (20% allowance)	500	8	23		31	23		55	23		78
37	Wood sign	1,600		145		145	145		291	145		436
38	Storm Water Management (allowance)	9,000	402	537		939	537		1,477	537		2,014
39	Foundation plantings (allowance)	2,000		500		500	500		1,000	500		1,500

Sample

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4 cont'd												
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
40	Tot lot, mulch	4,463		1,488		1,488	1,488		2,975	1,488	(4,463)	
41	Tot lot, playset	18,000	689	2,885		3,574	2,885		6,459	2,885		9,345
42	Tot lot, jungle gym	4,800	184	769		953	769		1,722	769		2,492
43	Tot lot, swing	2,400	92	385		477	385		861	385		1,246
44	Tot lot, PTL border	2,610	100	418		518	418		937	418		1,355
45	Tot lot, fence	9,800	525	843		1,368	843		2,212	843		3,055
46	Genie lift	18,000		1,636		1,636	1,636		3,273	1,636		4,909
SANCTUARY												
47	Slate shingle roofing	250,800	19,602	21,018		40,620	21,018		61,638	21,018		82,656
48	Built-up roofing	14,300	616	1,244		1,860	1,244		3,104	1,244		4,348
49	8" roof scuppers and downspouts	12,320	747	1,052		1,799	1,052		2,851	1,052		3,903
50	Stone exterior repoint (10% allowance)	27,168	1,456	2,337		3,793	2,337		6,131	2,337		8,468
51	Caulking (allowance)	4,500		750		750	750		1,500	750		2,250
52	Exterior door (allowance)	10,000		909		909	909		1,818	909		2,727
53	Windows (3' x 4')	4,860	385	746		1,131	746		1,877	746		2,623
54	Windows (3' x 6')	2,160	171	331		503	331		834	331		1,166
55	Windows (3' x 6')	5,000	396	767		1,164	767		1,931	767		2,698
56	Stained glass restoration (allowance)	100,000	5,838	2,414		8,252	2,414		10,667	2,414		13,081
57	Stained glass ventilators (allowance)	10,000		909		909	909		1,818	909		2,727
58	Exterior building lights	2,700	155	424		579	424		1,003	424		1,428
SANCTUARY (CONT.)												
59	Interior painting (allowance)	10,000		2,500		2,500	2,500		5,000	2,500		7,500
60	Organ, restoration (allowance)	28,000	1,072	8,976		10,048	8,976		19,024	8,976	(28,000)	
61	Pendant fixture, refurbish	10,800	579	929		1,508	929		2,437	929		3,366
62	Private restroom, renovation	5,204	279	448		727	448		1,174	448		1,622
63	Interior door (allowance)	10,000	383	1,603		1,986	1,603		3,589	1,603		5,191
64	Exit sign	1,000	54	86		140	86		226	86		312
65	Fire Alarm Control Panel	10,200	683	1,586		2,269	1,586		3,856	1,586		5,442
66	Fire Alarm Booster Panel	1,500	100	233		334	233		567	233		800
67	Water heater	1,000	26	89		114	89		203	89		291
68	Electrical (allowance)	5,000		313		313	313		625	313		938
SANCTUARY (CONT.)												
69	Exhaust fan (15,000 cfm)	3,000	129	261		390	261		651	261		912
70	Fan/coil unit (120,000 btu)	20,800	1,422	4,845		6,266	4,845		11,111	4,845		15,955
71	Condensing Unit (25 ton)	20,800	1,659	4,785		6,444	4,785		11,229	4,785		16,015
72	Fan/coil unit (45,000 btu)	13,000	1,037	2,991		4,028	2,991		7,018	2,991		10,009
73	Condensing Unit (15 ton)	20,800	1,659	4,785		6,444	4,785		11,229	4,785		16,015
74	Fan/coil unit (45,000 btu)	13,000	1,037	2,991		4,028	2,991		7,018	2,991		10,009
75	Compressor (2 ton)	6,400	77	301		378	301		679	301		980
76	Fan/coil unit (45,000 btu)	6,500	444	1,514		1,958	1,514		3,472	1,514		4,986
77	Compressor (3 ton)	6,400	437	1,491		1,928	1,491		3,419	1,491		4,909
78	Boiler, (1,700 MBH)	20,000	1,531	4,617		6,148	4,617		10,766	4,617		15,383
79	AHU (cfm)	10,000	574	785		1,360	785		2,145	785		2,931
SANCTUARY (CONT.)												
80	CCTV system	2,850	73	252		325	252		578	252		830
81	A/V Design/Integration	2,500	96	401		496	401		897	401		1,298
82	Wireless receiver	450	17	72		89	72		161	72		234
83	Lapel microphone	600	23	96		119	96		215	96		311
84	4 CH. mixer	199	8	32		40	32		71	32		103
85	400 W power amp	300	11	48		60	48		108	48		156
86	CD/MP3	350	13	56		69	56		126	56		182
87	Power control	250	10	40		50	40		90	40		130
88	Hearing aid system	1,549	59	248		308	248		556	248		804
89	Cabling	3,000	115	481		596	481		1,077	481		1,557
90	Wall mount speaker	4,000	153	641		794	641		1,435	641		2,077
91	Loudspeaker	1,600	61	256		318	256		574	256		831
92	Ceiling speaker	1,200	46	192		238	192		431	192		623
93	DVR	4,500	258	707		965	707		1,672	707		2,379
94	Hard drive	400	23	63		86	63		149	63		211
95	Hearing aid adapter	1,029	59	162		221	162		382	162		544
CONVENT												
96	Built-up roof	11,184	856	1,721		2,578	1,721		4,299	1,721		6,020
97	Membrane roof w/ insulation	18,486	1,769	16,717	(18,486)		924		924	924		1,849
98	8" roof scuppers and downspouts	9,520	425	568		994	568		1,562	568		2,130
99	Roof hatch	1,680	133	258		391	258		649	258		907
100	Brick veneer repoint (10% allowance)	8,595	625	1,328		1,953	1,328		3,282	1,328		4,610

Sample

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4 cont'd												
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
101	Caulking (allowance)	4,500		750		750	750		1,500	750		2,250
102	Exterior door (allowance)	10,000	383	1,603		1,986	1,603		3,589	1,603		5,191
103	Exterior building lights	400		67		67	67		133	67		200
104	Windows (4' x 6')	39,960	2,622	3,394		6,017	3,394		9,411	3,394		12,805
105	Windows (18" x 3')	400	26	34		60	34		94	34		128
106	Windows (24"X48") stained glass cover	7,200	472	612		1,084	612		1,696	612		2,307
CONVENT (CONT.)												
107	Renovation (phase 1)	46,740	224	2,448		2,672	2,448		5,120	2,448		7,568
108	Renovation (phase 2)	46,740		2,337		2,337	2,337		4,674	2,337		7,011
109	Renovation (phase 3)	46,740		2,226		2,226	2,226		4,451	2,226		6,677
110	Piano, restoration (upright)	5,000		455		455	455		909	455		1,364
111	Small restroom w/shower, renovation	36,000	1,550	3,132		4,682	3,132		7,814	3,132		10,946
112	Interior door (allowance)	10,000		909		909	909		1,818	909		2,727
113	Laundry room appliances	2,000		182		182	182		364	182		545
114	Chapel (ceiling spot lighting)	5,000		455		455	455		909	455		1,364
115	Chapel (sound system)	3,550		323		323	323		645	323		968
116	Overhead doors	2,500	134	215		349	215		564	215		779
117	Fire Alarm System	10,200	683	1,586		2,269	1,586		3,856	1,586		5,442
CONVENT (CONT.)												
118	Domestic water piping (allowance)	4,000		364		364	364		727	364		1,091
119	Water heater (boiler)	2,000	38	163		202	163		365	163		529
120	Boiler buddy	2,000	27	164		192	164		356	164		521
121	Electrical	5,000	128	443		571	443		1,013	443		1,456
122	Exhaust fan (15,000 cfm)	3,000	129	261		390	261		651	261		912
123	Self-contained unit	4,500	92	401		493	401		894	401		1,294
124	Fan/coil unit (45,000 btu)	6,500	467	1,006		1,472	1,006		2,478	1,006		3,483
125	Compressor (3 ton)	6,500	311	1,031		1,343	1,031		2,374	1,031		3,406
126	Fan/coil unit (45,000 btu)	6,500	467	1,006		1,472	1,006		2,478	1,006		3,483
127	Compressor (3 ton)	6,500	311	1,031		1,343	1,031		2,374	1,031		3,406
128	Fan/coil unit (45,000 btu)	6,500	467	1,006		1,472	1,006		2,478	1,006		3,483
129	Compressor (3 ton)	6,500	311	1,031		1,343	1,031		2,374	1,031		3,406
130	Fan/coil unit (30,000 btu)	3,200	230	495		725	495		1,220	495		1,715
131	Compressor (2 ton)	3,200	153	508		661	508		1,169	508		1,677
132	Boiler, (1,000 MBH)	20,000	1,340	3,110		4,450	3,110		7,560	3,110		10,670
CONVENT (CONT.)												
133	Countertop and Basin	8,000	345	696		1,040	696		1,736	696		2,432
134	Kitchen flooring	1,200	52	104		156	104		260	104		365
135	Refrigeration	3,600	155	313		468	313		781	313		1,095
136	Wall cabinet	4,500	194	391		585	391		977	391		1,368
137	Dishwasher	800	34	70		104	70		174	70		243
138	Range/Oven	800	34	70		104	70		174	70		243
SCHOOL												
139	Slate shingle	328,730	25,692	27,549		53,241	27,549		80,790	27,549		108,339
140	Membrane roof	26,130	1,750	4,063		5,814	4,063		9,877	4,063		13,940
141	Gutters and downspouts (8")	1,056	71	164		235	164		399	164		563
142	8" roof scuppers and downspouts	11,200	500	669		1,169	669		1,838	669		2,506
143	Brick veneer repoint (10% allowance)	21,000	1,125	1,807		2,932	1,807		4,739	1,807		6,546
144	Caulking (allowance)	4,500		750		750	750		1,500	750		2,250
145	Exterior door (allowance)	10,000		909		909	909		1,818	909		2,727
146	Wood trim (allowance)	5,000		833		833	833		1,667	833		2,500
147	Windows (3' x 7')	67,095	4,403	5,699		10,102	5,699		15,802	5,699		21,501
148	Glass block	3,600	62	86		148	86		235	86		321
149	Windows (4' x 4')	15,840	1,039	1,346		2,385	1,346		3,730	1,346		5,076
150	Exterior building lights	400	23	63		86	63		149	63		211
SCHOOL (CONT.)												
151	School/Classroom renovation (phase 1)	237,500	15,910	36,932		52,842	36,932		89,774	36,932		126,705
152	School/Classroom renovation (phase 2)	237,500	14,774	31,818		46,592	31,818		78,410	31,818		110,228
153	School/Classroom renovation (phase 3)	237,500	13,637	27,983		41,620	27,983		69,603	27,983		97,586
154	School/Classroom renovation (phase 4)	237,500	12,501	25,000		37,501	25,000		62,501	25,000		87,501
155	Blinds	10,000	431	870		1,301	870		2,171	870		3,040
156	Teacher kitchenette renovation	14,466	775	1,245		2,020	1,245		3,264	1,245		4,509
157	Private restroom, renovation	5,204	279	448		727	448		1,174	448		1,622
158	Standard restroom, renovation	20,000	1,072	1,721		2,793	1,721		4,513	1,721		6,234
159	Education restroom, renovation	20,700	713	1,249		1,962	1,249		3,212	1,249		4,461
160	Music room flooring	2,992		374		374	374		748	374		1,122
161	Music room ceiling	2,992		374		374	374		748	374		1,122

Sample

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4 cont'd												
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
162	Smoke detector	3,500	188	301		489	301		790	301		1,091
163	Fire strobe	250	13	22		35	22		56	22		78
164	Fire alarm pull	1,250	67	108		175	108		282	108		390
165	Interior door (allowance)	10,000		909		909	909		1,818	909		2,727
166	Exit sign	750	40	65		105	65		169	65		234
167	Fire Alarm Control Annunciator Panel	10,200	683	1,586		2,269	1,586		3,856	1,586		5,442
168	Fire Alarm Booster Panel	1,500	100	233		334	233		567	233		800
SCHOOL (CONT.)												
169	Domestic water piping (allowance)	4,000		364		364	364		727	364		1,091
170	Water heater	8,500	488	1,335		1,823	1,335		3,159	1,335		4,494
171	Electrical (allowance)	5,000	128	443		571	443		1,013	443		1,456
172	Exhaust fan (15,000 cfm)	3,000	129	261		390	261		651	261		912
173	Fan/coil unit (75,000 btu)	10,400		416		416	416		832	416		1,248
174	Compressor (5 ton)	10,400		416		416	416		832	416		1,248
175	Fan/coil unit (30,000 btu)	3,200		128		128	128		256	128		384
176	Compressor (2 ton)	3,200		128		128	128		256	128		384
177	Fan/coil unit (20,000 btu)	6,400		256		256	256		512	256		768
178	Compressor (1.5 ton)	6,400		256		256	256		512	256		768
179	Fan/coil unit (60,000 btu)	20,800		832		832	832		1,664	832		2,496
180	Carrier 50ss048	13,000		1,000		1,000	1,000		2,000	1,000		3,000
181	Boiler Glycol system	2,000	86	174		260	174		434	174		608
182	Boiler, (1,700 MBH)	40,000	1,723	3,480		5,202	3,480		8,682	3,480		12,162
183	Water Heater	17,000	232	1,397		1,630	1,397		3,027	1,397		4,424
184	Pass-thru fan/coil unit	3,000	62	267		329	267		596	267		863
SCHOOL (CONT.)												
185	Accessibility lift	20,000	1,148	3,142		4,290	3,142		7,432	3,142		10,574
186	Sump pump	2,500		227		227	227		455	227		682
187	Access Control System (ACS)	6,604	169	585		754	585		1,339	585		1,924
188	CCTV system	2,850	73	252		325	252		578	252		830
189	Dumpster pad	4,000	77	245		322	245		567	245		812
190	Cafeteria flooring	3,750	167	224		391	224		615	224		839
191	Commercial refrigeration	7,000		438		438	438		875	438		1,313
192	Cabinets and counter top	9,000	402	537		939	537		1,477	537		2,014
193	Exhaust hood	8,000	357	478		835	478		1,313	478		1,790
194	Ice machine	3,500		219		219	219		438	219		656
195	Kitchen flooring	2,400	107	143		250	143		394	143		537
196	Range	10,000	191	613		804	613		1,417	613		2,031
197	Folding cafeteria table	12,000	517	1,044		1,561	1,044		2,605	1,044		3,649
198	Food Warmer Box	1,000	24	65		89	65		154	65		219
SCHOOL (CONT.)												
199	Fan/coil unit, (18,000 btu) classroom	49,000	2,149	3,604		5,753	3,604		9,357	3,604		12,961
200	Compressor (2.5 ton)	6,400	459	990		1,449	990		2,440	990		3,430
201	Compressor (2.5 ton)	6,400	459	990		1,449	990		2,440	990		3,430
202	Compressor (2.5 ton)	3,200	230	495		725	495		1,220	495		1,715
203	Compressor (2 ton)	6,400	459	990		1,449	990		2,440	990		3,430
204	Compressor (5 ton)	31,200	2,239	4,827		7,066	4,827		11,893	4,827		16,720
205	Compressor (2 ton)	9,600	689	1,485		2,174	1,485		3,659	1,485		5,145
206	Compressor (2 ton)	3,200	230	495		725	495		1,220	495		1,715
HELLER HALL												
207	Built-up roof	44,590	3,627	13,654		17,281	13,654		30,936	13,654	(44,590)	
208	8" Gutters and downspouts	3,600	293	1,102		1,395	1,102		2,498	1,102	(3,600)	
209	Roof hatch	1,680	64	77		141	77		218	77		295
210	Brick veneer repoint (10% allowance)	7,344	618	2,242		2,860	2,242		5,102	2,242	(7,344)	
211	Caulking (allowance)	4,500	172	1,443		1,615	1,443		3,057	1,443	(4,500)	
212	Exterior door (allowance)	10,000		909		909	909		1,818	909		2,727
213	Windows (4' x 8')	11,520	756	979		1,735	979		2,713	979		3,692
214	Windows (3' x 8')	49,680	3,260	4,220		7,480	4,220		11,700	4,220		15,920
215	Exterior building lights	400	23	63		86	63		149	63		211
216	Blinds	3,600	17	189		206	189		394	189		583
217	VCT	17,279	945	2,722		3,667	2,722		6,390	2,722		9,112
218	Interior painting (allowance)	10,000		2,500		2,500	2,500		5,000	2,500		7,500
219	Piano, restoration (upright)	5,000		455		455	455		909	455		1,364
HELLER HALL (CONT.)												
220	Private restroom, renovation	2,602	139	224		363	224		587	224		811
221	Standard restroom, renovation	20,000	1,072	1,721		2,793	1,721		4,513	1,721		6,234
222	Interior door (allowance)	10,000		909		909	909		1,818	909		2,727

Sample

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4 cont'd												
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
223	Auditorium (ceiling lighting)	5,000	128	443		571	443		1,013	443		1,456
224	Exit sign	500	27	43		70	43		113	43		156
225	Interior door (allowance)	10,000		909		909	909		1,818	909		2,727
226	Ceiling speakers	800	28	48		76	48		124	48		172
227	Domestic water piping (allowance)	4,000		364		364	364		727	364		1,091
228	Water heater	2,000	115	314		429	314		743	314		1,057
229	Electrical (allowance)	5,000		313		313	313		625	313		938
230	Exhaust fan (15,000 cfm)	3,000	103	322		424	322		746	322		1,068
231	Fan/coil unit (225,000 BTU)	10,400	456	765		1,221	765		1,986	765		2,751
232	Compressor (15 ton)	20,800	498	2,256		2,753	2,256		5,009	2,256		7,265
233	Fan/coil unit (45,000 BTU)	52,000		2,167		2,167	2,167		4,333	2,167		6,500
234	Compressor (3 ton)	52,000		4,333		4,333	4,333		8,667	4,333		13,000
235	Compressor (5 ton)	10,400		867		867	867		1,733	867		2,600
HELLER HALL (CONT.)												
236	Boiler, (1,700 MBH)	20,000	383	1,226		1,609	1,226		2,835	1,226		4,061
237	Water Heater	1,000	57	79		136	79		215	79		293
238	A/V system	13,398		1,218		1,218	1,218		2,436	1,218		3,654
239	A/V Design/Integration	2,500		227		227	227		455	227		682
240	4 CH. mixer	199		18		18	18		36	18		54
241	400 W power amp	300		27		27	27		55	27		82
242	CD/MP3	350		32		32	32		64	32		95
243	Power control	250		23		23	23		45	23		68
244	Cabling	3,000		273		273	273		545	273		818
245	Speakers	1,600		145		145	145		291	145		436
246	Stackable chair (metal frame, plastic)	3,840		349		349	349		698	349		1,047
247	6' round banquet table	2,650		241		241	241		482	241		723
248	8' rectangle table	1,900		173		173	173		345	173		518
249	Kitchen flooring	2,184	52	142		194	142		336	142		479
250	Commercial Refrigeration	3,200	77	208		285	208		493	208		701
251	Ice Machine	1,500	36	98		133	98		231	98		329
252	Exhaust hood w/ suppression	8,800	211	573		783	573		1,356	573		1,928
253	Cabinets and countertop	8,000	191	521		712	521		1,233	521		1,753
254	Commercial Range	10,000	239	651		890	651		1,541	651		2,191
GYMNASIUM												
255	Asphalt shingle	80,164	4,296	6,897		11,193	6,897		18,090	6,897		24,987
256	Gutters and downspouts	6,360	274	553		827	553		1,380	553		1,934
257	Brick veneer repoint (10% allowance)	10,020	537	862		1,399	862		2,261	862		3,123
258	Caulking (allowance)	4,500		750		750	750		1,500	750		2,250
259	Exterior door (allowance)	10,000		909		909	909		1,818	909		2,727
260	Wood trim (allowance)	5,000		833		833	833		1,667	833		2,500
261	Corrugated metal awning	19,200	514	519		1,034	519		1,553	519		2,072
262	Windows (3' x 3')	4,860	186	223		409	223		631	223		854
263	Windows (4' x 6')	5,950	228	272		500	272		773	272		1,045
264	Windows (4' x 3')	3,150	121	144		265	144		409	144		553
265	Windows (2' x 2')	900	34	41		76	41		117	41		158
266	Exterior building lights, small	250	14	39		54	39		93	39		132
267	Exterior building lights, large	1,200	69	189		257	189		446	189		634
268	Walkway lights, recessed	2,000	115	314		429	314		743	314		1,057
GYMNASIUM (CONT.)												
269	Conference Center, renovation	26,600	1,782	4,136		5,918	4,136		10,055	4,136		14,191
270	Interior painting (allowance)	10,000		2,500		2,500	2,500		5,000	2,500		7,500
271	Gymnasium flooring restoration	3,500		875		875	875		1,750	875		2,625
272	Private restroom, renovation	5,204	279	448		727	448		1,174	448		1,622
273	Standard restroom, renovation	20,000	1,072	1,721		2,793	1,721		4,513	1,721		6,234
274	Shower room, tbd	18,000	965	1,549		2,513	1,549		4,062	1,549		5,611
275	Interior door (allowance)	10,000		909		909	909		1,818	909		2,727
276	Gymnasium (ceiling down light)	14,400		1,309		1,309	1,309		2,618	1,309		3,927
277	Gymnasium (ceiling spot lighting)	9,000		818		818	818		1,636	818		2,455
278	Emergency lights	1,250	67	108		175	108		282	108		390
279	Exit sign	1,250	67	108		175	108		282	108		390
280	Fire Alarm Control Panel	10,200	683	1,586		2,269	1,586		3,856	1,586		5,442
281	Fire Alarm, booster panel	1,500	100	233		334	233		567	233		800
282	Fire sprinkler compressor for dry pipe	750	32	65		98	65		163	65		228
283	Fire sprinkler system (allowance)	10,000	431	870		1,301	870		2,171	870		3,040
284	Smoke detector	10,000	536	860		1,396	860		2,257	860		3,117
285	Fire strobe	1,500	80	129		209	129		339	129		468
286	Fire alarm pull	750	40	65		105	65		169	65		234
GYMNASIUM (CONT.)												

Sample

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4 cont'd												
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
287	Emergency lights	750	40	65		105	65		169	65		234
288	Domestic water piping (allowance)	4,000	153	641		794	641		1,435	641		2,077
289	Water heater	1,000	57	157		215	157		372	157		529
290	Exhaust fan (15,000 cfm)	1,500	65	130		195	130		326	130		456
291	Electrical (allowance)	5,000	287	785		1,073	785		1,858	785		2,644
292	Fan/coil unit (75,000 btu)	20,800	746	1,337		2,083	1,337		3,420	1,337		4,757
293	Compressor (5 ton)	20,800	746	1,337		2,083	1,337		3,420	1,337		4,757
294	Condensing Unit (25 ton)	41,600	1,493	2,674		4,167	2,674		6,841	2,674		9,514
295	AHU w/ coil (200,000 btu)	41,600	2,787	6,469		9,256	6,469		15,725	6,469		22,193
296	Unit Heater (150,000 btu)	13,000	871	2,022		2,892	2,022		4,914	2,022		6,935
297	Water Heater	800	46	126		172	126		297	126		423
298	Access Control System (ACS)	6,604	379	1,037		1,417	1,037		2,454	1,037		3,492
299	Camera	5,400	310	848		1,158	848		2,007	848		2,855
300	CCTV system	2,850	164	448		611	448		1,059	448		1,507
GYMNASIUM (CONT.)												
301	A/V system	13,398		837		837	837		1,675	837		2,512
302	Projector and screen	6,500		406		406	406		813	406		1,219
303	Folding table	2,400		114		114	114		229	114		343
304	Bleachers	64,000		3,048		3,048	3,048		6,095	3,048		9,143
305	Scoreboard system	5,000		238		238	238		476	238		714
306	Concrete pad	3,420	16	179		196	179		375	179		554
RECTORY												
307	Asphalt shingle	12,725	195	597		791	597		1,388	597		1,985
308	Garage, Asphalt shingle	6,970	107	327		434	327		760	327		1,087
309	Built-up roof	20,800	896	1,809		2,705	1,809		4,515	1,809		6,324
310	Gutters and downspouts	1,926	46	125		171	125		297	125		422
311	Soffit, vinyl	1,140	44	73		117	73		190	73		263
312	Siding, painted aluminum, restoration	10,800		982		982	982		1,964	982		2,945
313	Garage door	4,000		267		267	267		533	267		800
314	Windows (3' x 5')	29,700	1,624	1,872		3,496	1,872		5,368	1,872		7,239
315	Carpet	10,625		1,328		1,328	1,328		2,656	1,328		3,984
316	VCT	3,300		220		220	220		440	220		660
317	Interior painting (allowance)	4,000		1,000		1,000	1,000		2,000	1,000		3,000
318	Small restroom, renovation	9,000	388	783		1,171	783		1,953	783		2,736
319	Wood flooring restoration	250		63		63	63		125	63		188
320	Private restroom, renovation	10,408	558	895		1,453	895		2,349	895		3,244
RECTORY (CONT.)												
321	Fan/coil unit (45,000 btu)	13,000	570	956		1,526	956		2,482	956		3,439
322	Compressor (3 ton)	6,400	281	471		751	471		1,222	471		1,693
323	Fan/coil unit (30,000 btu)	6,400	281	471		751	471		1,222	471		1,693
324	Compressor (2 ton)	6,400	281	471		751	471		1,222	471		1,693
325	Fan/coil unit (75,000 btu)	20,800	912	1,530		2,442	1,530		3,972	1,530		5,502
326	Compressor (5 ton)	10,400	71	795		866	795		1,660	795		2,455
327	Boiler, (50 MBH)	10,000	239	651		890	651		1,541	651		2,191
328	Water Heater	8,500		531		531	531		1,063	531		1,594
329	Access Control System (ACS)	6,604	169	585		754	585		1,339	585		1,924
330	CCTV system	2,850	73	252		325	252		578	252		830
331	Countertop and Basin	3,000	72	195		267	195		462	195		657
332	Kitchen flooring	900	22	59		80	59		139	59		197
333	Refrigeration	1,800	43	117		160	117		277	117		394
334	Enclosed base cabinet	2,000	48	130		178	130		308	130		438
335	Dishwasher	700	17	46		62	46		108	46		153
336	Range	700	17	46		62	46		108	46		153
HOUSE OF MINISTRIES												
337	Asphalt shingle	10,893	167	511		678	511		1,188	511		1,699
338	Gutters and downspouts	2,160		103		103	103		206	103		309
339	Soffit, vinyl	1,254	19	59		78	59		137	59		196
340	Siding, vinyl	20,064	307	941		1,248	941		2,189	941		3,130
341	Garage door	4,000	61	188		249	188		436	188		624
342	Carpet	8,500		1,063		1,063	1,063		2,125	1,063		3,188
343	Interior painting (allowance)	4,000		1,000		1,000	1,000		2,000	1,000		3,000
344	Small restroom w/shower, renovation	5,000	215	435		650	435		1,085	435		1,520
345	Emergency lights	1,250	67	108		175	108		282	108		390
346	Water heater (80 gal.)	2,500	144	393		536	393		929	393		1,322
347	Compressor (2 ton)	3,200		133		133	133		267	133		400
348	Compressor (5 ton)	20,800	746	1,337		2,083	1,337		3,420	1,337		4,757
349	Fan/coil unit (60,000 btu)	13,000	622	1,768		2,390	1,768		4,159	1,768		5,927
350	Fan/coil unit (30,000 btu)	3,200	153	435		588	435		1,024	435		1,459

Sample

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4 cont'd												
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance
351	Sump pump	1,000	29	139		167	139		306	139		445
	HOUSE OF MINISTRIES (CONT.)											
352	Access Control System (ACS)	6,604	169	585		754	585		1,339	585		1,924
353	CCTV system	2,850	73	252		325	252		578	252		830
354	Kitchen flooring	750	18	49		67	49		116	49		164
355	Commercial Refrigeration	1,800	43	117		160	117		277	117		394
356	Cabinet and countertop	5,000	120	325		445	325		770	325		1,096
357	Commercial Range	750	18	49		67	49		116	49		164
358	ADA ramp	5,280	126	344		470	344		813	344		1,157
	MISC.											
359	Allowance for Steeple Cross	10,000	861	1,523		2,384	1,523		3,908	1,523		5,431
360	Allowance for Church Pew Restoration	75,000	5,862	6,285		12,147	6,285		18,432	6,285		24,718
361	Guest house, asphalt shingle	3,766	58	177		234	177		411	177		587
362	Guest house, gutters and downspouts	720	31	63		94	63		156	63		219
363	Guest house, siding	10,944	587	942		1,528	942		2,470	942		3,411

Sample

1. COMMON INTEREST DEVELOPMENTS - AN OVERVIEW

Over the past 40 years, the responsibility for community facilities and infrastructure around many of our homes has shifted from the local government to Community Associations. Thirty years ago, a typical new town house abutted a public street on the front and a public alley on the rear. Open space was provided by a nearby public park and recreational facilities were purchased ala carte from privately owned country clubs, swim clubs, tennis clubs, and gymnasiums. Today, 60% of all new residential construction, i.e. townhouses, single-family homes, condominiums, and cooperatives, is in Common Interest Developments (CID). In a CID, a homeowner is bound to a Community Association that owns, maintains, and is responsible for periodic replacements of various components that may include the roads, curbs, sidewalks, playgrounds, streetlights, recreational facilities, and other community facilities and infrastructure.

The growth of Community Associations has been explosive. In 1965, there were only 500 Community Associations in the United States. According to the 1990 U.S. Census, there were 130,000 Community Associations. Community Associations Institute (CAI), a national trade association, estimates there were more than 200,000 Community Associations in the year 2000, and that the number of Community Associations will continue to multiply.

The shift of responsibility for billions of dollars of community facilities and infrastructure from the local government and private sector to Community Associations has generated new and unanticipated problems. Although Community Associations have succeeded in solving many short-term problems, many Associations have failed to properly plan for the tremendous expenses of replacing community facilities and infrastructure components. When inadequate replacement reserve funding results in less than timely replacements of failing components, home owners are exposed to the burden of special assessments, major increases in Association fees, and a decline in property values.

2. REPLACEMENT RESERVE STUDY

The purpose of a Replacement Reserve Study is to provide the Association with an inventory of the common community facilities and infrastructure components that require periodic replacement, a general view of the condition of these components, and an effective financial plan to fund projected periodic replacements. The Replacement Reserve Study consists of the following:

- **Replacement Reserve Study Introduction.** The introduction provides a description of the property, reviews the intent of the Replacement Reserve Study, and lists documents and site evaluations upon which the Replacement Reserve Study is based.
- **Section A Replacement Reserve Analysis.** Many components owned by the Association have a limited life and require periodic replacement. Therefore, it is essential the Association have a financial plan that provides funding for the timely replacement of these components in order to protect the safety, appearance, and value of the community. In conformance with American Institute of Certified Public Accountant guidelines, a Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves by two generally accepted accounting methods; the Cash Flow Method and the Component Method. Miller - Dodson provides a replacement reserve recommendation based on the Cash Flow Method in Section A, and the Component Method in the Appendix of the report.
- **Section B Replacement Reserve Inventory.** The Replacement Reserve Inventory lists the commonly owned components within the community that require periodic replacement using funding from Replacement Reserves. The Replacement Reserve Inventory also provides information about components excluded from the Replacement Reserve Inventory whose replacement is not scheduled for funding from Replacement Reserves.

Replacement Reserve Inventory includes estimates of the normal economic life and the remaining economic life for those components whose replacement is scheduled for funding from Replacement Reserves.

- **Section C Projected Annual Replacements.** The Calendar of Projected Annual Replacements provides a year-by-year listing of the Projected Replacements based on the data in the Replacement Reserve Inventory.
- **Section D Condition Assessment.** Several of the items listed in the Replacement Reserve Inventory are discussed in more detail. The Condition Assessment includes a narrative and photographs that document conditions at the property observed during our visual evaluation.
- **The Appendix** is provided as an attachment to the Replacement Reserve Study. Additional attachments may include supplemental photographs to document conditions at the property and additional information specific to the property cited in the Conditions Assessment (i.e. Consumer Product Safety Commission, Handbook for Public Playground Safety, information on segmental retaining walls, manufacturer recommendations for asphalt shingles or siding, etc). The Appendix also includes the Accounting Summary for the Cash Flow Method and the Component Method.

Sample

3. METHODS OF ANALYSIS

The Replacement Reserve industry generally recognizes two different methods of accounting for Replacement Reserve Analysis. Due to the difference in accounting methodologies, these methods lead to different calculated values for the Minimum Annual Contribution to the Reserves. The results of both methods are presented in this report. The Association should obtain the advice of its accounting professional as to which method is more appropriate for the Association. The two methods are:

- **Cash Flow Method.** The Cash Flow Method is sometimes referred to as the "Pooling Method." It calculates the minimum constant annual contribution to reserves (Minimum Annual Deposit) required to meet projected expenditures without allowing total reserves on hand to fall below the specified minimum level in any year.

First, the Minimum Recommended Reserve Level to be Held on Account is determined based on the age, condition, and replacement cost of the individual components. The mathematical model then allocates the estimated replacement costs to the future years in which they are projected to occur. Based on these expenditures, it then calculates the minimum constant yearly contribution (Minimum Annual Deposit) to the reserves necessary to keep the reserve balance at the end of each year above the Minimum Recommended Reserve Level to be Held on Account. The Cash Flow Analysis assumes that the Association will have authority to use all of the reserves on hand for replacements as the need occurs. This method usually results in a Minimum Annual Deposit that is less than that arrived at by the Component Method.

- **Component Method.** This method is a time tested mathematical model developed by HUD in the early 1980s, but has been generally relegated to a few States that require it by law. For the vast majority of Miller - Dodson's clients, this method is not used.

The Component Method treats each item in the replacement schedule as an individual line item budget. Generally, the Minimum Annual Contribution to Reserves is higher when calculated by the Component Method. The mathematical model for this method works as follows:

First, the total Current Objective is calculated, which is the reserve amount that would have accumulated had all of the items on the schedule been funded from initial construction at their current replacement costs. Next, the Reserves Currently on Deposit (as reported by the Association) are distributed to the components in the schedule in proportion to the Current Objective. The Minimum Annual Deposit for each component is equal to the Estimated Replacement Cost, minus the Reserves on Hand, divided by the years of life remaining.

4. REPLACEMENT RESERVE STUDY DATA

- **Identification of Reserve Components.** The Reserve Analyst has only two methods of identifying Reserve Components; (1) information provided by the Association and (2) observations made at the site. It is important that the Reserve Analyst be provided with all available information detailing the components owned by the Association. It is our policy to request such information prior to bidding on a project and to meet with the individuals responsible for maintaining the community after acceptance of our proposal. After completion of the Study, the Study should be reviewed by the Board of Directors, individuals responsible for maintaining the community, and the Association's accounting professionals. We are dependent upon the Association for correct information, documentation, and drawings.
- **Unit Costs.** Unit costs are developed using nationally published standards and estimating guides and are adjusted by state or region. In some instances, recent data received in the course of our work is used to modify these figures.

Contractor proposals or actual cost experience may be available as part of the Association records. This is useful information, which should be incorporated into your report. Please bring any such available data to our attention, preferably before the report is commenced.

- **Replacement vs. Repair and Maintenance.** A Replacement Reserve Study addresses the required funding for Capital Replacement Expenditures. This should not be confused with operational costs or cost of repairs or maintenance.

5. DEFINITIONS

Adjusted Cash Flow Analysis. Cash flow analysis adjusted to take into account annual cost increases due to inflation and interest earned on invested reserves. In this method, the annual contribution is assumed to grow annually at the inflation rate.

Annual Deposit if Reserves Were Fully Funded. Shown on the Summary Sheet A1 in the Component Method summary, this would be the amount of the Annual Deposit needed if the Reserves Currently on Deposit were equal to the Total Current Objective.

Cash Flow Analysis. See Cash Flow Method, above.

Component Analysis. See Component Method, above.

Contingency. An allowance for unexpected requirements. Roughly the same as the Minimum Recommended Reserve Level to be Held on Account used in the Cash Flow Method of analysis.

Critical Year. In the Cash Flow Method, a year in which the reserves on hand are projected to fall to the established minimum level. See Minimum Recommended Reserve Level to be Held on Account.

Current Objective. This is the reserve amount that would have accumulated had the item been funded from initial construction at its current replacement cost. It is equal to the estimated replacement cost divided by the estimated economic life, times the number of years expended (the difference between the Estimated Economic Life and the Estimated Life Left). The Total Current Objective can be thought of as the amount of reserves the Association should now have on hand based on the sum of all of the Current Objectives.

Cyclic Replacement Item. A component item that typically begins to fail after an initial period (Estimated Initial Replacement), but which will be replaced in increments over a number of years (the Estimated Replacement Cycle). The Reserve Analysis program divides the number of years in the Estimated Replacement Cycle into five equal increments. It then allocates the Estimated Replacement Cost equally over those five increments. (As distinguished from Normal Replacement Items, see below)

Estimated Economic Life. Used in the Normal Replacement Schedules. This represents the industry average number of years that a new item should be expected to last until it has to be replaced. This figure is sometimes modified by climate, region, or original construction conditions.

Estimated Economic Life Left. Used in the Normal Replacement Schedules. Number of years until the item is expected to need replacement. Normally, this number would be considered to be the difference between the Estimated Economic Life and the age of the item. However, this number must be modified to reflect maintenance practice, climate, original construction and quality, or other conditions. For the purpose of this report, this number is determined by the Reserve Analyst based on the present condition of the item relative to the actual age.

Estimated Initial Replacement. For a Cyclic Replacement Item (see above), the number of years until the replacement cycle is expected to begin.

Estimated Replacement Cycle. For a Cyclic Replacement Item, the number of years over which the remainder of the component's replacement occurs.

Minimum Annual Deposit. Shown on the Summary Sheet A1. The calculated requirement for annual contribution to reserves as calculated by the Cash Flow Method (see above).

Minimum Deposit in the Study Year. Shown on the Summary Sheet A1. The calculated requirement for contribution to reserves in the study year as calculated by the Component Method (see above).

Minimum Recommended Reserve Level to be Held on Account. Shown on the Summary Sheet A1, this number is used in the Cash Flow Method only. This is the prescribed level below which the reserves will not be allowed to fall in any year. This amount is determined based on the age, condition, and replacement cost of the individual components. This number is normally given as a percentage of the total Estimated Replacement Cost of all reserve components.

Normal Replacement Item. A component of the property that, after an expected economic life, is replaced in its entirety. (As distinguished from Cyclic Replacement Items, see above.)

Normal Replacement Schedules. The list of Normal Replacement Items by category or location. These items appear on pages designated.

Number of Years of the Study. The numbers of years into the future for which expenditures are projected and reserve levels calculated. This number should be large enough to include the projected replacement of every item on the schedule, at least once. This study covers a 40-year period.

One Time Deposit Required to Fully Fund Reserves. Shown on the Summary Sheet A1 in the Component Method summary, this is the difference between the Total Current Objective and the Reserves Currently on Deposit.

Reserves Currently on Deposit. Shown on the Summary Sheet A1, this is the amount of accumulated reserves as reported by the Association in the current year.

Reserves on Hand. Shown in the Cyclic Replacement and Normal Replacement Schedules, this is the amount of reserves allocated to each component item in the Cyclic or Normal Replacement schedules. This figure is based on the ratio of Reserves Currently on Deposit divided by the total Current Objective.

Replacement Reserve Study. An analysis of all of the components of the common property of the Association for which a need for replacement should be anticipated within the economic life of the property as a whole. The analysis involves estimation for each component of its estimated Replacement Cost, Estimated Economic Life, and Estimated Life Left. The objective of the study is to calculate a recommended annual contribution to the Association's Replacement Reserve Fund.

Total Replacement Cost. Shown on the Summary Sheet A1, this is total of the Estimated Replacement Costs for all items on the schedule if they were to be replaced once.

Unit Replacement Cost. Estimated replacement cost for a single unit of a given item on the schedule.

Unit (of Measure). Non-standard abbreviations are defined on the page of the Replacement Reserve Inventory where the item appears. The following standard abbreviations are used in this report:

EA: each FT: feet LS: lump sum PR: pair SF: square feet SY: square yard

What is a Reserve Study?
Who are we?



<http://bcove.me/nc0o69t7>

What kind of property uses a Reserve Study?
Who are our clients?



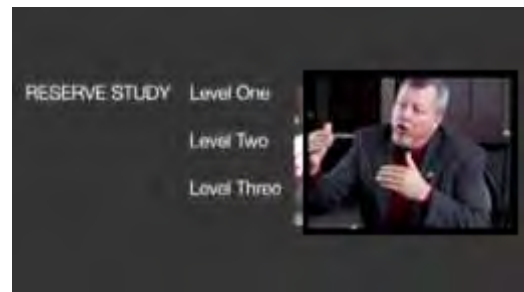
<http://bcove.me/stt373hj>

Who conducts a Reserve Study?
Reserve Specialist (RS) what does this mean?



<http://bcove.me/81ch7kit>

When should a Reserve Study be updated?
What are the different types of Reserve Studies?



<http://bcove.me/ixis1yxm>

What is in a Reserve Study and what is out?
Improvement vs Component, is there a difference?



<http://bcove.me/81ch7kit>

What is my role as a Community Manager?
Will the report help me explain Reserves to my



<http://bcove.me/fazwdk3h>

clients?

Sample

What is my role as a Board Member?
Will a Reserve Study meet my community's needs?



<http://bcove.me/n6nwnktv>

Community dues, how can a Reserve Study help?
Will a study help keep my property competitive?



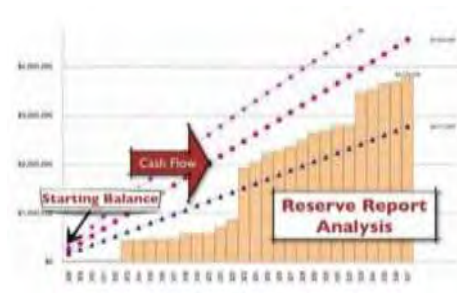
<http://bcove.me/2vfih1tz>

How do I read the report?
Will I have a say in what the report contains?



<http://bcove.me/wb2fugb1>

Where do the numbers come from?
Cumulative expenditures and funding, what?



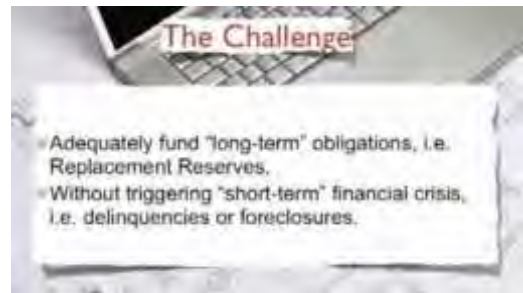
<http://bcove.me/7buer3n8>

How are interest and inflation addressed?
What should we look at when considering inflation?



<http://bcove.me/s2tmtj9b>

A community needs more help, where do we go?
What is a Strategic Funding Plan?



<http://bcove.me/iqul31vq>