REPLACEMENT RESERVE REPORT FY 2016
RUSSELL TOWNSHIP

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Prepared for:

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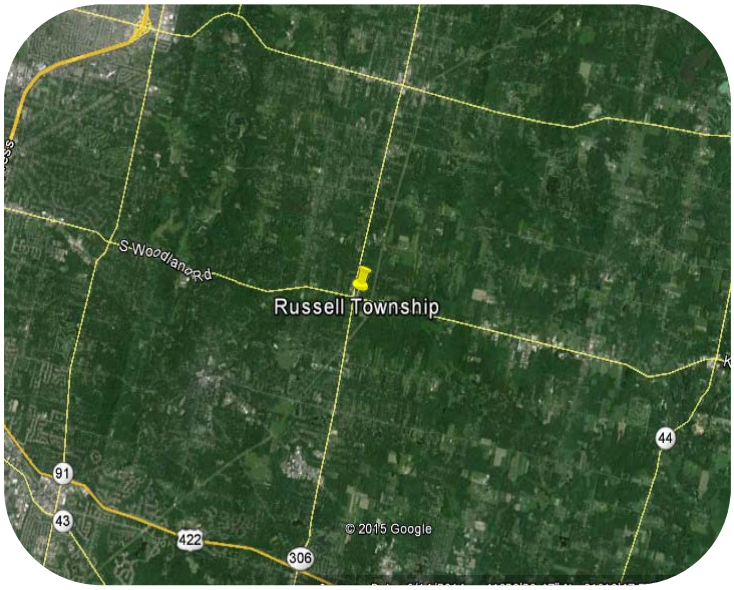
REPLACEMENT RESERVE REPORT

RUSSELL TOWNSHIP

NOVELTY, OHIO



Description. Russell Township is a township located in Novelty, Ohio. The survey examined the burden centers of the organization, including:

- Admin Building
- Fire Station
- Police Station
- Road Department
- Town Hall
- Old Fire Station
- Cemetery and Baseball Field

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 Fiscal Officer 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.

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 Russell Township (hereinafter called The Township or Association) 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 Township.** 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 Township.** 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 Township has a fiduciary responsibility to protect the appearance, value, and safety of the property and it is therefore essential the Township 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 Township and recommends annual funding of Replacement Reserves by the Cash Flow Method. Section A, Replacement Reserve Analysis includes graphic and tabular presentations of the Township'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 Township.

- Miller - Dodson performed a visual evaluation on March 19, 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 Township 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 2016 covering the period from January 1, 2016 to December 31, 2016. The Replacement Reserves on deposit as of January 1, 2016 are not specified. The planned contribution for the fiscal year is not specified.

The balance and contribution figures have been supplied by the managing 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.

Acknowledgement. Miller - Dodson Associates would like to acknowledge the assistance and input of the Fiscal Officer, Mr. Chuck Walder who provided very helpful insight into the current operations of the Township.

Analyst's Credentials. Mr. Mark Haase holds a Bachelor's Degree in Economics from the State University of New York at Fredonia and an Associate's degree in Civil Engineering from Northern Virginia Community College. Mr. Haase has experience in all phases of construction project design, initiation, administration, and inspection of facilities. As a project manager, he has managed all phases of commercial construction. He is currently a Reserve Analyst for Miller - Dodson Associates.

Respectfully submitted,

millerdodson ASSOCIATES | Capital Reserve Consultants

Mark Haase
Reserve Analyst

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CONDITION ASSESSMENT

General Comments. Miller - Dodson Associates conducted a Reserve Study at Russell Township in March 2015. 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.

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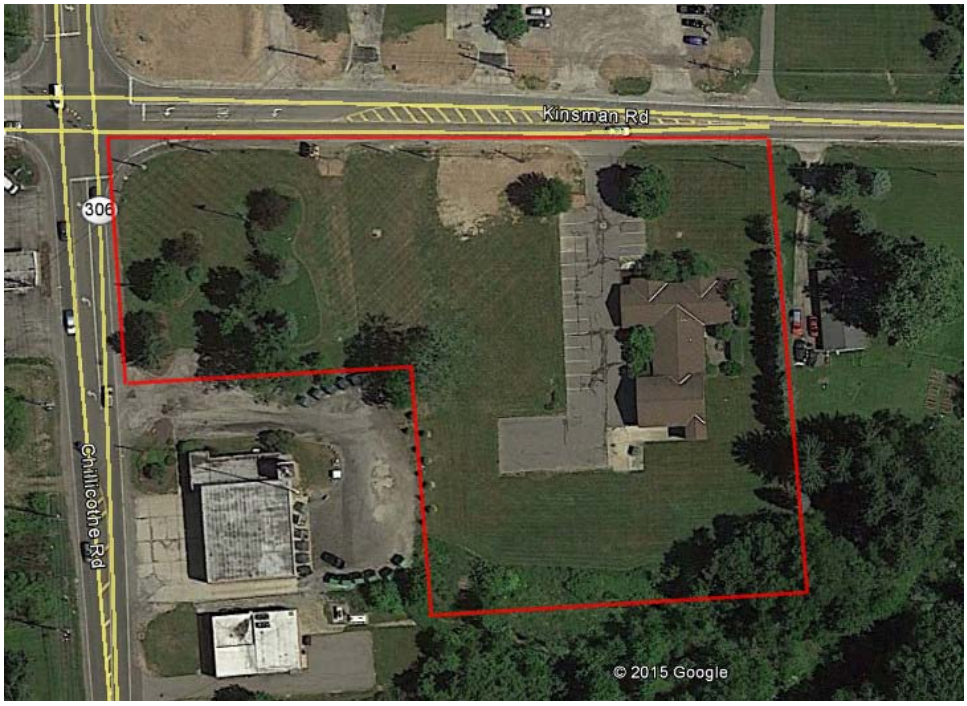
ADMIN BUILDING



Admin Building. The Township operates a single story wood structure with wood siding and pitched asphalt room. The structure is a converted residential structure and has limitations on the functionality as a commercial facility.

Asphalt Pavement. The Township is responsible for the parking areas at the Admin Building. In general, the Township's asphalt pavements are in fair condition, with wide cracking and distress in a few locations.

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 2-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 Township better manage the asphalt pavements throughout the community: http://mdareserves.com/resources/links/site-components.

Concrete Work. The concrete work includes the Admin Bldg. sidewalks, leadwalks, stairs, stoops, and other flatwork.

The standards we use for recommending replacement are as follows:

- 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. Accent lighting and spot lighting are installed to provide site lighting. The lighting was not on at the time of our visit but we understand that they are working properly.

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.

A whole-scale lighting replacement project was completed in 2014. The lighting was designed to provide increased efficiency and upgraded lighting. The Township intended to obtain a system that illuminated the building and site while reducing glare and blinding spot lighting.

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 Township 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 Township 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 Township 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 building is 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.

Security. The facility is would benefit from an integrated intrusion detection, access control, CCTV and recording (DVR). Security is an important factor in facility management. Electronic security represents a proactive approach to safeguarding the occupants and property.

For the system to function optimally the following should be practiced:

- Manage inventory and issuance of access fobs.
- Maintain electronically actuated door hardware and associated door hardware so that all doors release when activated and fully close thereafter.
- Perform operational testing of cameras and recorders.
- Establish and maintain a relationship with 24-hour monitoring service.
- Establish a call list for security emergencies and test it periodically.

Emergency Generator. The building is served by a 25 kW generator that is located outside the building. The generator is in fair condition.

It is recommended that the Township continue the following to maintain the serviceability of the system:

- Maintenance contract.
- Weekly start-up and test.
- Regular service of electrical connections.

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EXECUTIVE SUMMARY

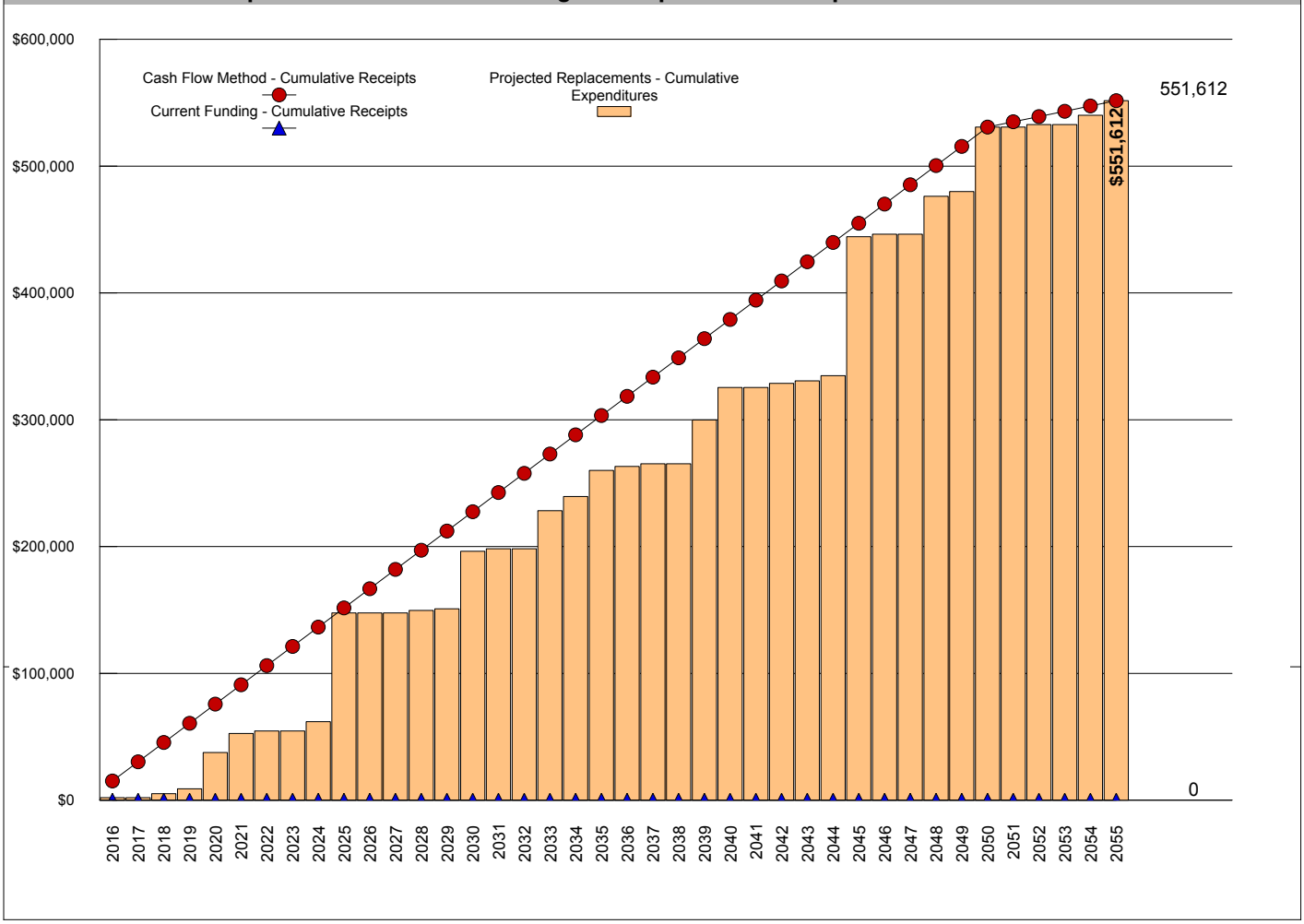
The Admin Building Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 32 Projected Replacements identified in the Replacement Reserve Inventory.

$15,166 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2016**

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

Admin Building reports a that the Township is currently not funding Replacement Reserves.
This Study contains the information necessary for the Township to develop a Funding Plan to address the $551,612 of Projected Replacements identified in the Replacement Reserve Inventory over the 40-year Study Period.

#1 - Cumulative Replacement Reserve Funding and Expenditures Graph



The Current Funding Objective as calculated by the Component Method (Fully Funded) is $96,279 making the reserve account 0.0% funded. See the Appendix for more information on this method.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Admin Building 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.

2016 | **STUDY YEAR**

The Township 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, 2016.

40 Years | **STUDY PERIOD**

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

NONE | **STARTING BALANCE**

The Township reports that no funds are attributed to Replacement Reserves

Level One | **LEVEL OF SERVICE**

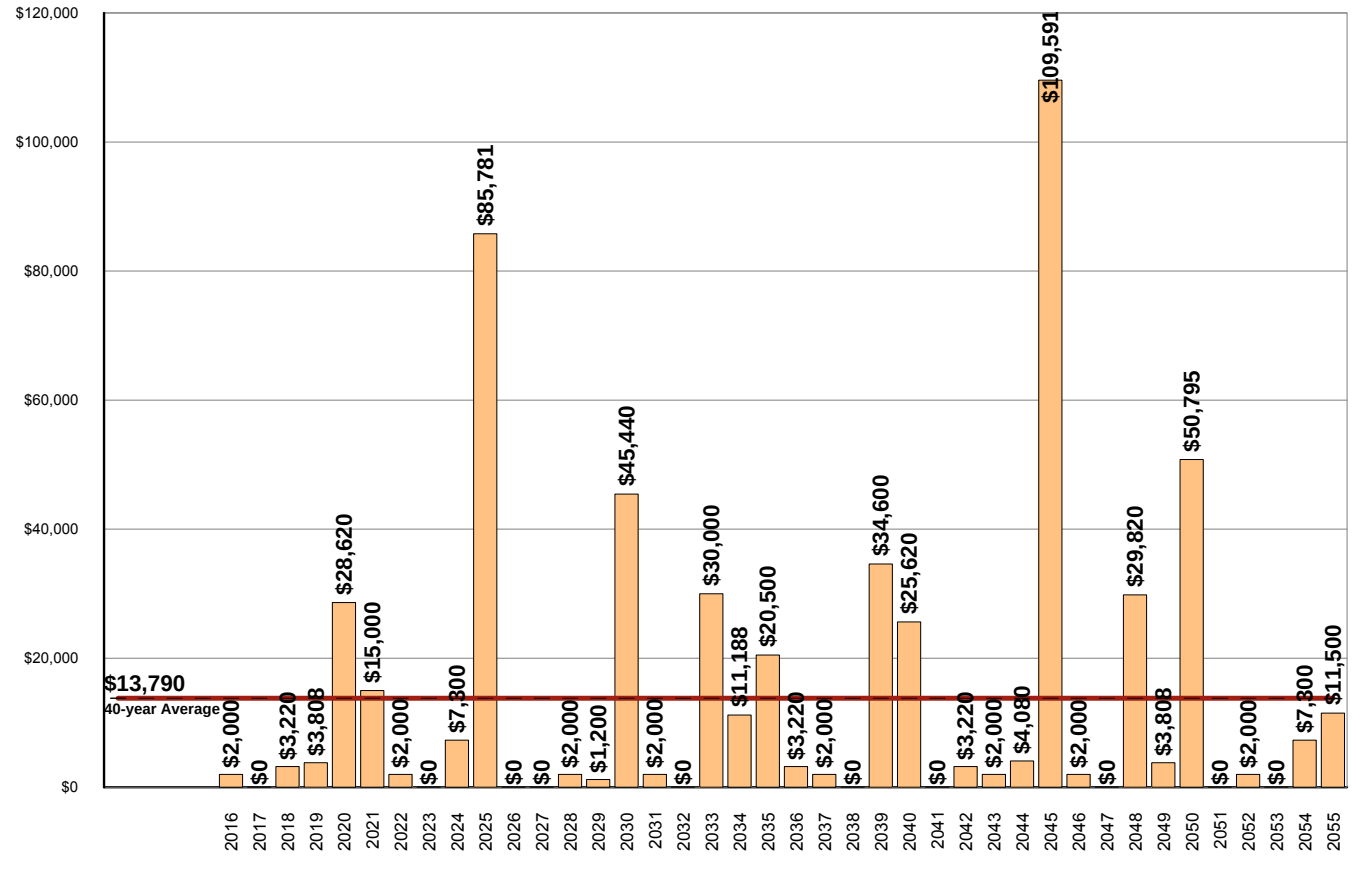
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level One Study, as defined by the Community Associations Institute (CAI).

$551,612 | **REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS**

The Admin Building Replacement Reserve Inventory identifies 32 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be $551,612 over the 40-year Study Period. The Projected Replacements are divided into 5 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 $13,790. Section C provides a year by year Calender of these expenditures.



UPDATING

UPDATING OF THE FUNDING PLAN

The Township 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

The annual expenditures that comprise the $551,612 of Projected Expenditures over the 40-year Study Period are detailed in Table 3. A year-by-year listing of the specific projects can be found beginning on Page C2.

#3 - Table of Annual Expenditures - Years 1 through 40

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Projected Replacements	($2,000)		($3,220)	($3,808)	($28,620)	($15,000)	($2,000)		($7,300)	($85,781)
End of Year Balance	($2,000)	($2,000)	($5,220)	($9,028)	($37,648)	($52,648)	($54,648)	($54,648)	($61,948)	($147,729)
Cumulative Expenditures	($2,000)	($2,000)	($5,220)	($9,028)	($37,648)	($52,648)	($54,648)	($54,648)	($61,948)	($147,729)

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements			($2,000)	($1,200)	($45,440)	($2,000)		($30,000)	($11,188)	($20,500)
End of Year Balance	($147,729)	($147,729)	($149,729)	($150,929)	($196,369)	($198,369)	($198,369)	($228,369)	($239,557)	($260,057)
Cumulative Expenditures	($147,729)	($147,729)	($149,729)	($150,929)	($196,369)	($198,369)	($198,369)	($228,369)	($239,557)	($260,057)

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Projected Replacements	($3,220)	($2,000)		($34,600)	($25,620)		($3,220)	($2,000)	($4,080)	($109,591)
End of Year Balance	($263,277)	($265,277)	($265,277)	($299,877)	($325,497)	($325,497)	($328,717)	($330,717)	($334,797)	($444,389)
Cumulative Expenditures	($263,277)	($265,277)	($265,277)	($299,877)	($325,497)	($325,497)	($328,717)	($330,717)	($334,797)	($444,389)

Year	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
Projected Replacements	($2,000)		($29,820)	($3,808)	($50,795)		($2,000)		($7,300)	($11,500)
End of Year Balance	($446,389)	($446,389)	($476,209)	($480,017)	($530,812)	($530,812)	($532,812)	($532,812)	($540,112)	($551,612)
Cumulative Expenditures	($446,389)	($446,389)	($476,209)	($480,017)	($530,812)	($530,812)	($532,812)	($532,812)	($540,112)	($551,612)

Table #3 shows the annual costs for Projected Replacements and the cumulative annual expenditures for the Projected Replacements. Table #3 also shows the Starting Balance and Current Annual Funding if reported by Township. When this information is provided, Table #3 will calculate the consequences of continuing to fund Replacement Reserves at current levels over the 40-year Study Period.

This information is for use by the Township for the development of a Funding Plan. The Funding Plan is a critical planning tool if the Township is to provide timely and adequate funding for the $551,612 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period.

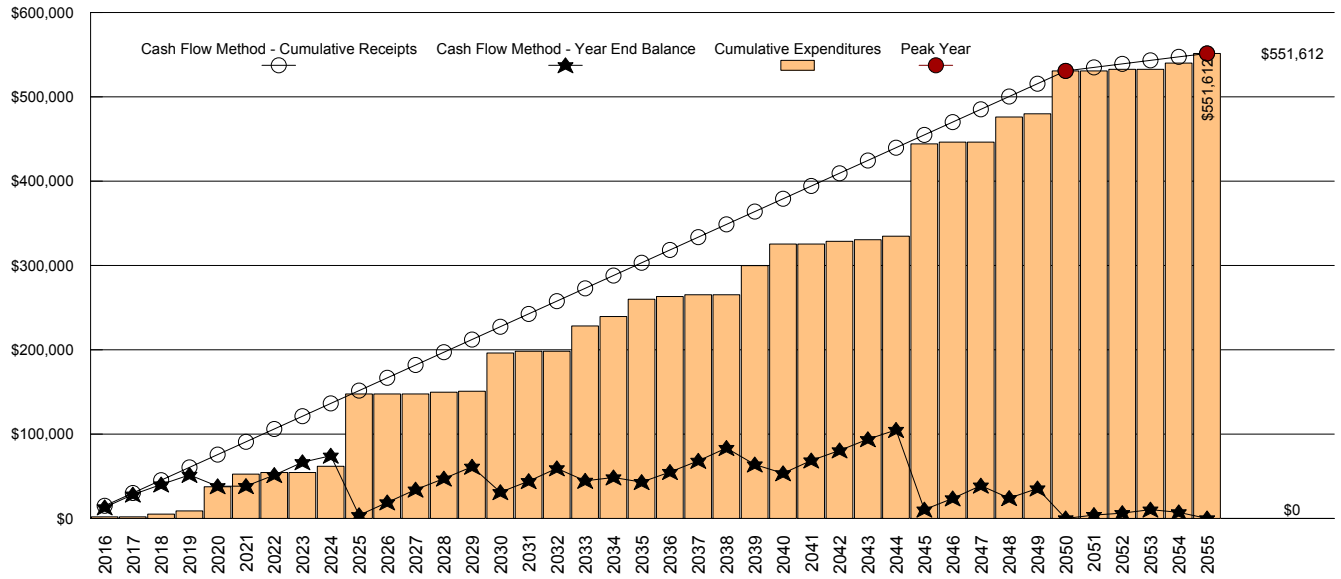
CASH FLOW METHOD FUNDING

$15,166 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2016**

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 2050 with Replacement Reserves on Deposit dropping to the Minimum Balance after the completion of $530,812 of replacements from 2016 to 2050. Recommended funding declines from $15,166 in 2050 to $4,160 in 2051. Peak Years are identified in Chart 4 and Table 5.
- Minimum Balance. The calculations assume a Minimum Balance of $0 in Replacement Reserves. This is approx. 0 months of average expenditures based on the $13,790, 40-year average annual expenditure.
- Cash Flow Method Study Period. Cash Flow Method calculates funding for $551,612 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2055 and in 2055, 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Starting Balance										
Projected Replacements	($2,000)		($3,220)	($3,808)	($28,620)	($15,000)	($2,000)		($7,300)	($85,781)
Annual Deposit	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166
End of Year Balance	$13,166	$28,332	$40,278	$51,636	$38,182	$38,348	$51,514	$66,680	$74,546	$3,931
Cumulative Expenditures	$2,000	$2,000	$5,220	$9,028	$37,648	$52,648	$54,648	$54,648	$61,948	$147,729
Cumulative Receipts	$15,166	$30,332	$45,498	$60,664	$75,830	$90,996	$106,162	$121,328	$136,494	$151,660

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements			($2,000)	($1,200)	($45,440)	($2,000)		($30,000)	($11,188)	($20,500)
Annual Deposit	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166
End of Year Balance	$19,097	$34,263	$47,429	$61,395	$31,121	$44,287	$59,453	$44,620	$48,598	$43,264
Cumulative Expenditures	($147,729)	($147,729)	($149,729)	($150,929)	($196,369)	($198,369)	($198,369)	($228,369)	($239,557)	($260,057)
Cumulative Receipts	$166,826	$181,993	$197,159	$212,325	$227,491	$242,657	$257,823	$272,989	$288,155	$303,321

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Projected Replacements	($3,220)	($2,000)		($34,600)	($25,620)		($3,220)	($2,000)	($4,080)	($109,591)
Annual Deposit	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166	$15,166
End of Year Balance	$55,210	$68,376	$83,542	$64,108	$53,654	$68,820	$80,766	$93,932	$105,018	$10,593
Cumulative Expenditures	($263,277)	($265,277)	($265,277)	($299,877)	($325,497)	($325,497)	($328,717)	($330,717)	($334,797)	($444,389)
Cumulative Receipts	$318,487	$333,653	$348,819	$363,985	$379,151	$394,317	$409,483	$424,649	$439,815	$454,981

Year	2046	2047	2048	2049	1st Peak - 2050	2051	2052	2053	2054	2nd Peak - 2055
Projected Replacements	($2,000)		($29,820)	($3,808)	($50,795)		($2,000)		($7,300)	($11,500)
Annual Deposit	$15,166	$15,166	$15,166	$15,166	$15,166	$4,160	$4,160	$4,160	$4,160	$4,160
End of Year Balance	$23,759	$38,925	$24,271	$35,629	$0	$4,160	$6,320	$10,480	$7,340	$0
Cumulative Expenditures	($446,389)	($446,389)	($476,209)	($480,017)	($530,812)	($530,812)	($532,812)	($532,812)	($540,112)	($551,612)
Cumulative Receipts	$470,147	$485,313	$500,479	$515,645	$530,812	$534,972	$539,132	$543,292	$547,452	$551,612

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 belive 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.

$15,166 **2016 - CASH FLOW METHOD RECOMMENDED FUNDING**

The 2016 Study Year calculations have been made using current replacement costs (see Page B2), modified by the Analyst for any project specific conditions.

$15,633 **2017 - INFLATION ADJUSTED FUNDING**

A new analysis calculates 2017 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $13,166 on January 1, 2017.
- All 2016 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $2,000.
- Construction Cost Inflation of 3.00 percent in 2016.

The $15,633 inflation adjusted funding in 2017 is a 3.08 percent increase over the non-inflation adjusted 2017 funding of $15,166.

$16,128 **2018 - INFLATION ADJUSTED FUNDING**

A new analysis calculates 2018 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $28,799 on January 1, 2018.
- No Expenditures from Replacement Reserves in 2017.
- Construction Cost Inflation of 3.00 percent in 2017.

The $16,128 inflation adjusted funding in 2018 is a 6.34 percent increase over the non-inflation adjusted 2018 funding of $15,166.

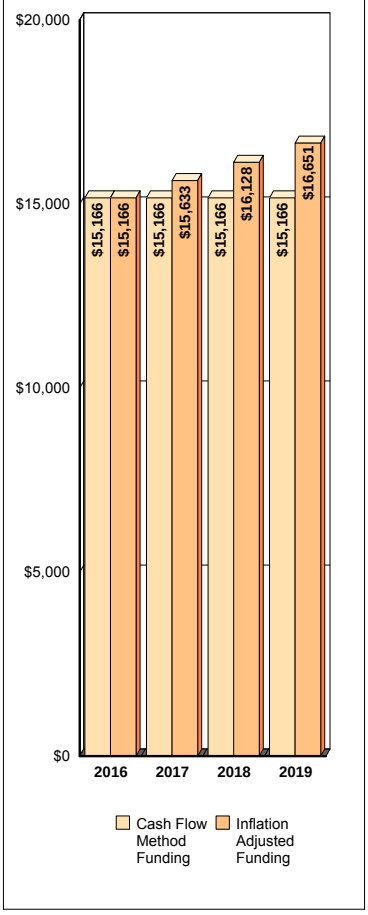
$16,651 **2019 - INFLATION ADJUSTED FUNDING**

A new analysis calculates 2019 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $41,510 on January 1, 2019.
- All 2018 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $3,416.
- Construction Cost Inflation of 3.00 percent in 2018.

The $16,651 inflation adjusted funding in 2019 is a 9.79 percent increase over the non-inflation adjusted funding of $15,166.

#6 - Inflation Adjusted Funding



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 2017, 2018 and 2019 inflation adjusted funding calculations above, the 3.00 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 2016, based on a 1.00 percent interest rate, we estimate the Association may earn $66 on an average balance of $6,583, $210 on an average balance of $20,982 in 2017, and $351 on $35,155 in 2018. The Association may elect to use these funds to reduce annual funding.

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 32 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B1.

REPLACEMENT RESERVE INVENTORY
GENERAL INFORMATION

Admin Building - Replacement Reserve Inventory identifies 32 Projected Replacements.

- PROJECTED REPLACEMENTS. 32 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 $260,294. Replacements totaling $444,389 are scheduled in the Replacement Reserve Inventory over the 40-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. None of the items included in the Replacement Reserve Inventory are 'Excluded Items'. Multiple categories of items 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 that $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 Township policy on the administration of Replacement Reserves. If the Township 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 Township.

  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 Township. These types of items are generally not the responsibility of the Township and are excluded from the Replacement Reserve Inventory.

- CATEGORIES. The 32 items included in the Admin Building Replacement Reserve Inventory are divided into 5 major categories. Each category is printed on a separate page, Pages B3 to B7.

- 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.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- INVENTORY DATA. Each of the 32 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.

- REVIEW OF EXPENDITURES. This Replacement Reserve Study should be reviewed by an accounting professional representing the Township 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.

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	Asphalt pavement, mill and overlay	sf	14,000	$1.90	18	14	$26,600
2	Pavement, rejuvenator seal coat/striping	sf	14,000	$0.23	6	2	$3,220
3	Concrete flatwork	sf	2,600	$9.00	60	23	$23,400
4	Bollards	ea	4	$250.00	20	14	$1,000
5	Exterior lighting systems	ls	1	$1,200.00	5	3	$1,200
6	Privacy fencing at generator	ft	16	$38.00	15	3	$608
7	Russell Township sign (composite)	sf	72	$40.00	10	8	$2,880
8	Admin. Bldg. sign (replace w composite)	sf	128	$40.00	10	4	$5,120
9	Flagpole (approx. 30')	ea	1	$4,500.00	25	18	$4,500

SITE COMPONENTS - Replacement Costs - Subtotal $68,528

SITE COMPONENTS
COMMENTS

- Exterior lighting systems includes the replacement of components for the flagpole and building lights.

SITE COMPONENTS (CONT.)

PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
10	Storm Water Management (allowance)	ls	1	$2,000.00	30	29	$2,000
11	Sanitary sewer (allowance) (2014)	ls	1	$8,000.00	30	29	$8,000
12	Sanitary sewer, lift station alternate pumps	ls	1	$8,000.00	30	29	$8,000
13	Sanitary sewer, grinder and tank	ls	1	$8,000.00	30	29	$8,000
14	Hardscapes/foundation plantings (allowance)	ls	1	$2,000.00	3	none	$2,000

SITE COMPONENTS (CONT.) - Replacement Costs - Subtotal $28,000

SITE COMPONENTS (CONT.)

COMMENTS

- Remaining Economic Life is based in part on the age of the installation, the quality of the installation and the condition of the installation. Where the age of the installation is not known it is estimated.
- Storm water management allowance included to account for run-off, inlets, piping, and outlets.
- Sanitary sewer allowance included for potential replacements of existing sewer utility.

BUILDING EXTERIOR
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
15	Asphalt shingle	sf	7,100	$4.25	25	9	$30,175
16	Gutters and downspouts	lf	2,800	$6.00	20	9	$16,800
17	Caulking (allowance)	ls	1	$4,500.00	5	4	$4,500
18	Exterior door (allowance)	ls	1	$5,000.00	10	9	$5,000
19	Siding, wood	sf	4,250	$5.00	20	9	$21,250
20	Soffit, wood	sf	850	$5.70	20	9	$4,845
21	Fascia, wood	ft	213	$5.70	20	9	$1,211
22	Overhead door (10' x 8')	ea	1	$2,000.00	15	4	$2,000
23	Overhead door (10' x 10')	ea	1	$3,000.00	15	4	$3,000
24	Windows (3' x 5')	ea	21	$675.00	35	29	$14,175
25	Windows (2' x 3')	ea	3	$270.00	35	29	$810

BUILDING EXTERIOR - Replacement Costs - Subtotal $103,766

BUILDING EXTERIOR
COMMENTS

BUILDING SYSTEMS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
26	Fire Alarm Control Panel	ea	1	$1,500.00	20	4	$1,500
27	Storage tank	ea	1	$7,500.00	20	4	$7,500
28	Water softener	ea	1	$5,000.00	10	4	$5,000
29	Well replacement	ea	1	$6,000.00	25	19	$6,000
30	Heat pump, furnace (60,000 btu)	ea	3	$5,000.00	24	17	$15,000
31	Heat pump, compressor (5 ton)	ea	3	$5,000.00	12	5	$15,000
32	Emergency Generator (25 Kw)	ea	1	$10,000.00	30	23	$10,000

BUILDING SYSTEMS - Replacement Costs - Subtotal $60,000

BUILDING SYSTEMS
COMMENTS

VALUATION EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Smoke detector	ea	8				EXCLUDED
	Fire alarm pull	ea	5				EXCLUDED
	Domestic water piping (allowance)	ls	1				EXCLUDED
	Water heater	ea	1				EXCLUDED
	Well pump	ea	1				EXCLUDED
	Well clean-up service	ea	1				EXCLUDED
	Pressure tank	ea	1				EXCLUDED
	Water testing	ea	1				EXCLUDED
	Electrical (allowance)	ls	1				EXCLUDED
	Access Control System (ACS)	ea	1				EXCLUDED
	Wood post signage	ea	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 $2,000.00 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.

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PROJECTED ANNUAL REPLACEMENTS
GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 32 Projected Replacements in the Admin Building 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 Township 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 Township 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 Township and the visual evaluations of the Analyst. It has been prepared for the sole use of the Township 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 Admin Building Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Township.

PROJECTED REPLACEMENTS - YEARS 1 TO 6

Item	2016 - STUDY YEAR	$
14	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2017 - YEAR 2	$
	No Scheduled Replacements	

Item	2018 - YEAR 3	$
2	Pavement, rejuvenator seal	$3,220
	Total Scheduled Replacements	$3,220

Item	2019 - YEAR 4	$
5	Exterior lighting systems	$1,200
6	Privacy fencing at generator	$608
14	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$3,808

Item	2020 - YEAR 5	$
8	Admin. Bldg. sign (replace w	$5,120
17	Caulking (allowance)	$4,500
22	Overhead door (10' x 8')	$2,000
23	Overhead door (10' x 10')	$3,000
26	Fire Alarm Control Panel	$1,500
27	Storage tank	$7,500
28	Water softener	$5,000
	Total Scheduled Replacements	$28,620

Item	2021 - YEAR 6	$
31	Heat pump, compressor (5 t	$15,000
	Total Scheduled Replacements	$15,000

PROJECTED REPLACEMENTS - YEARS 7 TO 12

Item	2022 - YEAR 7	$
14	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2023 - YEAR 8	$
	No Scheduled Replacements	

Item	2024 - YEAR 9	$
2	Pavement, rejuvenator seal	$3,220
5	Exterior lighting systems	$1,200
7	Russell Township sign (com	$2,880
	Total Scheduled Replacements	$7,300

Item	2025 - YEAR 10	$
14	Hardscapes/foundation plan	$2,000
15	Asphalt shingle	$30,175
16	Gutters and downspouts	$16,800
17	Caulking (allowance)	$4,500
18	Exterior door (allowance)	$5,000
19	Siding, wood	$21,250
20	Soffit, wood	$4,845
21	Fascia, wood	$1,211
	Total Scheduled Replacements	$85,781

Item	2026 - YEAR 11	$
	No Scheduled Replacements	

Item	2027 - YEAR 12	$
	No Scheduled Replacements	

PROJECTED REPLACEMENTS - YEARS 13 TO 18

Item	2028 - YEAR 13	$
14	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2029 - YEAR 14	$
5	Exterior lighting systems	$1,200
	Total Scheduled Replacements	$1,200

Item	2030 - YEAR 15	$
1	Asphalt pavement, mill and (	$26,600
2	Pavement, rejuvenator seal	$3,220
4	Bollards	$1,000
8	Admin. Bldg. sign (replace w	$5,120
17	Caulking (allowance)	$4,500
28	Water softener	$5,000
	All Replacements not listed	$45,440

Item	2031 - YEAR 16	$
14	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2032 - YEAR 17	$
	No Scheduled Replacements	

Item	2033 - YEAR 18	$
30	Heat pump, furnace (60,000	$15,000
31	Heat pump, compressor (5 t	$15,000
	Total Scheduled Replacements	$30,000

PROJECTED REPLACEMENTS - YEARS 19 TO 24

Item	2034 - YEAR 19	$
5	Exterior lighting systems	$1,200
6	Privacy fencing at generator	$608
7	Russell Township sign (com	$2,880
9	Flagpole (approx. 30')	$4,500
14	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$11,188

Item	2035 - YEAR 20	$
17	Caulking (allowance)	$4,500
18	Exterior door (allowance)	$5,000
22	Overhead door (10' x 8')	$2,000
23	Overhead door (10' x 10')	$3,000
29	Well replacement	$6,000
	Total Scheduled Replacements	$20,500

Item	2036 - YEAR 21	$
2	Pavement, rejuvenator seal	$3,220
	Total Scheduled Replacements	$3,220

Item	2037 - YEAR 22	$
14	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2038 - YEAR 23	$
	No Scheduled Replacements	

Item	2039 - YEAR 24	$
3	Concrete flatwork	$23,400
5	Exterior lighting systems	$1,200
32	Emergency Generator (25 K	$10,000
	Total Scheduled Replacements	$34,600

PROJECTED REPLACEMENTS - YEARS 25 TO 30

Item	2040 - YEAR 25	$
8	Admin. Bldg. sign (replace w	$5,120
14	Hardscapes/foundation plan	$2,000
17	Caulking (allowance)	$4,500
26	Fire Alarm Control Panel	$1,500
27	Storage tank	$7,500
28	Water softener	$5,000
	Total Scheduled Replacements	$25,620

Item	2041 - YEAR 26	$
	No Scheduled Replacements	

Item	2042 - YEAR 27	$
2	Pavement, rejuvenator seal	$3,220
	Total Scheduled Replacements	$3,220

Item	2043 - YEAR 28	$
14	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2044 - YEAR 29	$
5	Exterior lighting systems	$1,200
7	Russell Township sign (com	$2,880
	Total Scheduled Replacements	$4,080

Item	2045 - YEAR 30	$
10	Storm Water Management (	$2,000
11	Sanitary sewer (allowance) (	$8,000
12	Sanitary sewer, lift station al	$8,000
13	Sanitary sewer, grinder and	$8,000
16	Gutters and downspouts	$16,800
17	Caulking (allowance)	$4,500
18	Exterior door (allowance)	$5,000
19	Siding, wood	$21,250
20	Soffit, wood	$4,845
21	Fascia, wood	$1,211
24	Windows (3' x 5')	$14,175
25	Windows (2' x 3')	$810
31	Heat pump, compressor (5 t	$15,000
	Total Scheduled Replacements	$109,591

PROJECTED REPLACEMENTS - YEARS 31 TO 36

Item	2046 - YEAR 31	$
14	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2047 - YEAR 32	$
	No Scheduled Replacements	

Item	2048 - YEAR 33	$
1	Asphalt pavement, mill and (	$26,600
2	Pavement, rejuvenator seal	$3,220
	Total Scheduled Replacements	$29,820

Item	2049 - YEAR 34	$
5	Exterior lighting systems	$1,200
6	Privacy fencing at generator	$608
14	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$3,808

Item	2050 - YEAR 35	$
4	Bollards	$1,000
8	Admin. Bldg. sign (replace w	$5,120
15	Asphalt shingle	$30,175
17	Caulking (allowance)	$4,500
22	Overhead door (10' x 8')	$2,000
23	Overhead door (10' x 10')	$3,000
28	Water softener	$5,000
	All Replacements not listed	$50,795

Item	2051 - YEAR 36	$
	No Scheduled Replacements	

PROJECTED REPLACEMENTS - YEARS 37 TO 42

Item	2052 - YEAR 37	$
14	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2053 - YEAR 38	$
	No Scheduled Replacements	

Item	2054 - YEAR 39	$
2	Pavement, rejuvenator seal	$3,220
5	Exterior lighting systems	$1,200
7	Russell Township sign (com	$2,880
	Total Scheduled Replacements	$7,300

Item	2055 - YEAR 40	$
14	Hardscapes/foundation plan	$2,000
17	Caulking (allowance)	$4,500
18	Exterior door (allowance)	$5,000
	Total Scheduled Replacements	$11,500

Item	2056 (beyond Study Period)	$
	No Scheduled Replacements	

Item	2057 (beyond Study Period)	$
30	Heat pump, furnace (60,000	$15,000
31	Heat pump, compressor (5 t	$15,000
	Total Scheduled Replacements	$30,000

CASH FLOW METHOD ACCOUNTING SUMMARY

This Admin Building - Cash Flow Method Accounting Summary is an attachment to the Admin Building - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 32 Projected Replacements listed in the Admin Building Replacement Reserve Inventory has been assigned to one of 4 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 $0 Beginning Balance (at the start of the Study Year) and the $45,498 of additional Replacement Reserve Funding in 2016 through 2018 (as calculated in the Replacement Reserve Analysis) to each of the 32 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by Chronological Allocation.
  - Allocation of the $45,498 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, 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 $0 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 Admin Building the Beginning Balance funds 0.0% of Scheduled Replacements in the Study Year.
  - The next step is the allocation of the $15,166 of 2016 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 Admin Building the Beginning Balance and the 2016 Replacement Reserve Funding, funds replacements through 2019 and partial funds (21.4%) replacements in 2020.
  - Allocations of the 2017 and 2018 Reserve Funding are done using the same methodology.
  - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

2016 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 32 Projected Replacements included in the Admin Building Replacement Reserve Inventory has been assigned to one of the 4 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $15,166 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 2016 being accomplished in 2016 at a cost of $2,000.

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 CF1

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	5 to 60 years	2 to 23 years	$68,528		$6,126		$6,126
SITE COMPONENTS (CONT.)	3 to 30 years	0 to 29 years	$28,000		$4,000	($2,000)	$2,000
BUILDING EXTERIOR	5 to 35 years	4 to 29 years	$103,766		$2,037		$2,037
BUILDING SYSTEMS	10 to 30 years	4 to 23 years	$60,000		$3,003		$3,003

2017 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 32 Projected Replacements included in the Admin Building Replacement Reserve Inventory has been assigned to one of the 4 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 $13,166 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $30,332 from 2016 through 2017.
- 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.

2017 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF2

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	5 to 60 years	1 to 22 years	$68,528	$6,126	$2,713		$8,839
SITE COMPONENTS (CONT.)	3 to 30 years	2 to 28 years	$28,000	$2,000			$2,000
BUILDING EXTERIOR	5 to 35 years	3 to 28 years	$103,766	$2,037	$5,034		$7,072
BUILDING SYSTEMS	10 to 30 years	3 to 22 years	$60,000	$3,003	$7,419		$10,421

2018 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 32 Projected Replacements included in the Admin Building Replacement Reserve Inventory has been assigned to one of the 4 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 $28,332 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $45,498 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $3,220.

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.

2018 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	5 to 60 years	0 to 21 years	$68,528	$8,839	$1,309	($3,220)	$6,928
SITE COMPONENTS (CONT.)	3 to 30 years	1 to 27 years	$28,000	$2,000			$2,000
BUILDING EXTERIOR	5 to 35 years	2 to 27 years	$103,766	$7,072	$2,428		$9,500
BUILDING SYSTEMS	10 to 30 years	2 to 21 years	$60,000	$10,421	$11,429		$21,850

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CF4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $45,498 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 32 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $13,166 on January 1, 2017.
- Replacement Reserves on Deposit totaling $28,332 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $45,498 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $5,220.

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

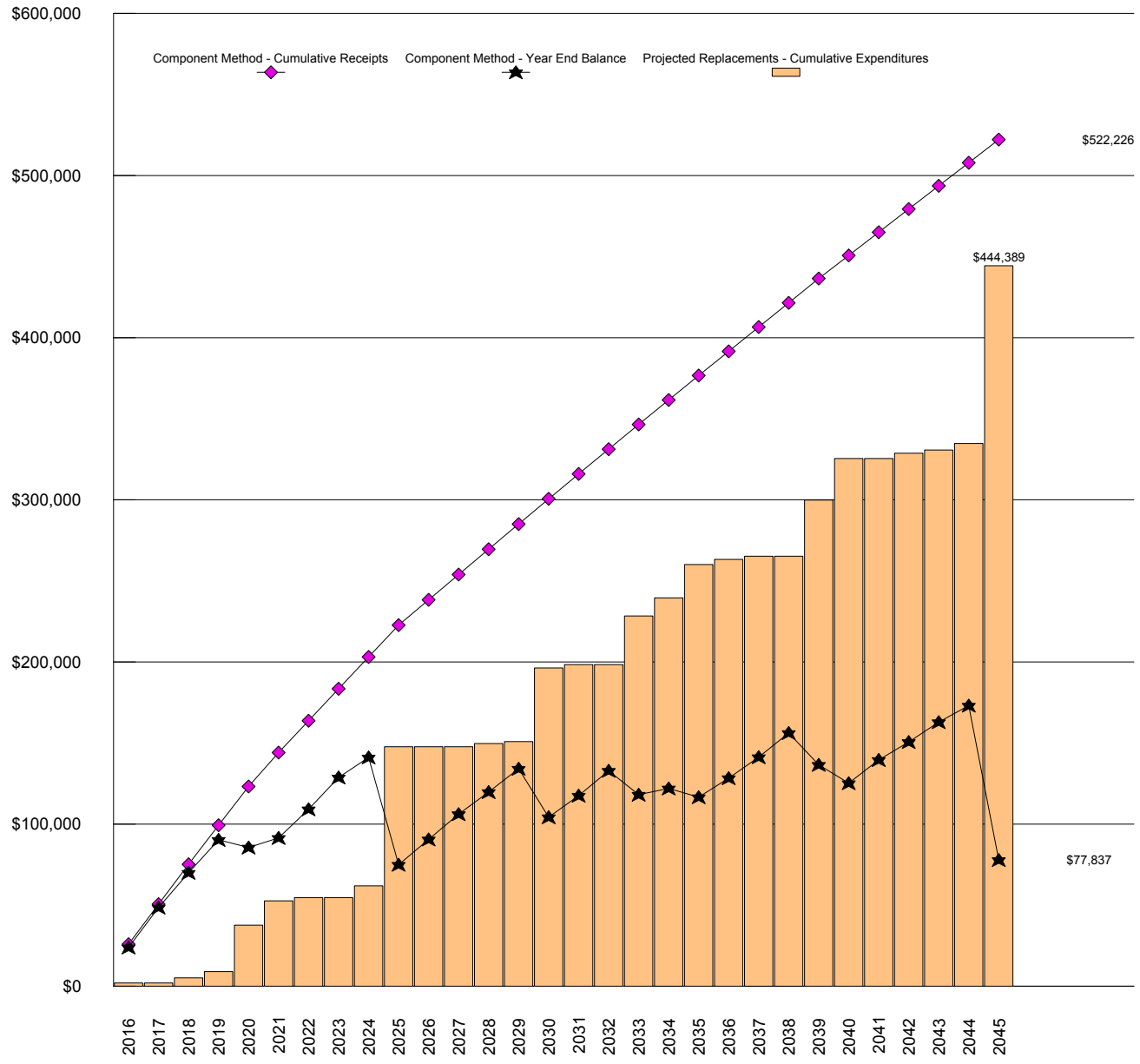
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement, mill and overlay	26,600										
2	Pavement, rejuvenator seal coat/stripin	3,220		3,220		3,220			3,220		(3,220)	
3	Concrete flatwork	23,400										
4	Bollards	1,000										
5	Exterior lighting systems	1,200		1,200		1,200			1,200			1,200
6	Privacy fencing at generator	608		608		608			608			608
7	Russell Township sign (composite)	2,880										
8	Admin. Bldg. sign (replace w composi	5,120		1,098		1,098	2,713		3,811	1,309		5,120
9	Flagpole (approx. 30')	4,500										
	SITE COMPONENTS (CONT.)											
10	Storm Water Management (allowance)	2,000										
11	Sanitary sewer (allowance) (2014)	8,000										
12	Sanitary sewer, lift station alternate pu	8,000										
13	Sanitary sewer, grinder and tank	8,000										
14	Hardscapes/foundation plantings (allov	2,000		4,000	(2,000)	2,000			2,000			2,000
	BUILDING EXTERIOR											
15	Asphalt shingle	30,175										
16	Gutters and downspouts	16,800										
17	Caulking (allowance)	4,500		965		965	2,385		3,350	1,150		4,500
18	Exterior door (allowance)	5,000										
19	Siding, wood	21,250										
20	Soffit, wood	4,845										
21	Fascia, wood	1,211										
22	Overhead door (10' x 8')	2,000		429		429	1,060		1,489	511		2,000
23	Overhead door (10' x 10')	3,000		643		643	1,590		2,233	767		3,000
24	Windows (3' x 5')	14,175										
25	Windows (2' x 3')	810										
	BUILDING SYSTEMS											
26	Fire Alarm Control Panel	1,500		322		322	795		1,117	383		1,500
27	Storage tank	7,500		1,609		1,609	3,974		5,583	1,917		7,500
28	Water softener	5,000		1,072		1,072	2,650		3,722	1,278		5,000
29	Well replacement	6,000										
30	Heat pump, furnace (60,000 btu)	15,000										
31	Heat pump, compressor (5 ton)	15,000								7,850		7,850
32	Emergency Generator (25 Kw)	10,000										

COMPONENT METHOD

$25,965 **COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2016.**

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 32 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



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 32 Projected Replacements. The total, $96,279, 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 ($0) by the Current Funding Objective ($96,279). At Admin Building the Funding Percentage is 0.0%

- Allocation of the Beginning Balance. The Beginning Balance is divided among the 32 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 Township has not accumulated $800 in Reserves (the Funding Objective), but rather at 0.0 percent funded, there is $0 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 $25,965, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2016).

  In our fence example, the $0 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 $500. Next year, the deposit remains $500, 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Beginning balance										
Recommended annual funding	$25,965	$24,632	$24,632	$24,095	$23,924	$20,895	$19,645	$19,645	$19,645	$19,613
Expenditures	$2,000		$3,220	$3,808	$28,620	$15,000	$2,000		$7,300	$85,781
Year end balance	$23,965	$48,598	$70,010	$90,297	$85,601	$91,497	$109,142	$128,787	$141,133	$74,965
Cumulative Expenditures	$2,000	$2,000	$5,220	$9,028	$37,648	$52,648	$54,648	$54,648	$61,948	$147,729
Cumulative Receipts	$25,965	$50,598	$75,230	$99,325	$123,249	$144,145	$163,790	$183,435	$203,081	$222,694

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Recommended annual funding	$15,598	$15,598	$15,598	$15,598	$15,598	$15,285	$15,285	$15,285	$15,077	$15,020
Expenditures			$2,000	$1,200	$45,440	$2,000		$30,000	$11,188	$20,500
Year end balance	$90,562	$106,160	$119,757	$134,155	$104,312	$117,598	$132,883	$118,168	$122,057	$116,577
Cumulative Expenditures	$147,729	$147,729	$149,729	$150,929	$196,369	$198,369	$198,369	$228,369	$239,557	$260,057
Cumulative Receipts	$238,291	$253,889	$269,486	$285,084	$300,681	$315,967	$331,252	$346,537	$361,614	$376,634

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Recommended annual funding	$14,960	$14,960	$14,960	$14,960	$14,292	$14,292	$14,292	$14,292	$14,292	$14,292
Expenditures	$3,220	$2,000		$34,600	$25,620		$3,220	$2,000	$4,080	$109,591
Year end balance	$128,317	$141,277	$156,238	$136,598	$125,269	$139,561	$150,633	$162,925	$173,137	$77,837
Cumulative Expenditures	$263,277	$265,277	$265,277	$299,877	$325,497	$325,497	$328,717	$330,717	$334,797	$444,389
Cumulative Receipts	$391,595	$406,555	$421,515	$436,475	$450,767	$465,059	$479,350	$493,642	$507,934	$522,226

COMPONENT METHOD ACCOUNTING SUMMARY

This Admin Building - Component Method Accounting Summary is an attachment to the Admin Building - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 32 Projected Replacements listed in the Admin Building Replacement Reserve Inventory has been assigned to one of 4 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 $0 Beginning Balance (at the start of the Study Year) and the $75,230 of additional Replacement Reserve funding from 2016 to 2018 (as calculated in the Replacement Reserve Analysis) to each of the 32 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by the Component Method.
  - Allocation of the $75,230 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, by the Component Method.

2016 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 32 Projected Replacements included in the Admin Building Replacement Reserve Inventory has been assigned to one of the 4 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $25,965 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 2016 being accomplished in 2016 at a cost of $2,000.

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 CM1

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	5 to 60 years	2 to 23 years	$68,528		$5,921		$5,921
SITE COMPONENTS (CONT.)	3 to 30 years	0 to 29 years	$28,000		$2,867	$2,000	$867
BUILDING EXTERIOR	5 to 35 years	4 to 29 years	$103,766		$10,328		$10,328
BUILDING SYSTEMS	10 to 30 years	4 to 23 years	$60,000		$6,850		$6,850

2017 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 32 Projected Replacements included in the Admin Building Replacement Reserve Inventory has been assigned to one of the 4 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 $23,965 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $50,598 from 2016 through 2017.
- 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.

2017 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM2

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	5 to 60 years	1 to 22 years	$68,528	$5,921	$5,921		$11,842
SITE COMPONENTS (CONT.)	3 to 30 years	2 to 28 years	$28,000	$867	$1,533		$2,400
BUILDING EXTERIOR	5 to 35 years	3 to 28 years	$103,766	$10,328	$10,328		$20,655
BUILDING SYSTEMS	10 to 30 years	3 to 22 years	$60,000	$6,850	$6,850		$13,700

2018 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 32 Projected Replacements included in the Admin Building Replacement Reserve Inventory has been assigned to one of the 4 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 $48,598 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $75,230 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $3,220.

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.

2018 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	5 to 60 years	0 to 21 years	$68,528	$11,842	$5,921	$3,220	$14,544
SITE COMPONENTS (CONT.)	3 to 30 years	1 to 27 years	$28,000	$2,400	$1,533		$3,933
BUILDING EXTERIOR	5 to 35 years	2 to 27 years	$103,766	$20,655	$10,328		$30,983
BUILDING SYSTEMS	10 to 30 years	2 to 21 years	$60,000	$13,700	$6,850		$20,550

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $75,230 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 32 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $23,965 on January 1, 2017.
- Replacement Reserves on Deposit totaling $48,598 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $75,230 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $5,220.

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	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement, mill and overlay	26,600		1,773		1,773	1,773		3,547	1,773		5,320
2	Pavement, rejuvenator seal coat/stripin	3,220		1,073		1,073	1,073		2,147	1,073	(3,220)	
3	Concrete flatwork	23,400		975		975	975		1,950	975		2,925
4	Bollards	1,000		67		67	67		133	67		200
5	Exterior lighting systems	1,200		300		300	300		600	300		900
6	Privacy fencing at generator	608		152		152	152		304	152		456
7	Russell Township sign (composite)	2,880		320		320	320		640	320		960
8	Admin. Bldg. sign (replace w composi	5,120		1,024		1,024	1,024		2,048	1,024		3,072
9	Flagpole (approx. 30')	4,500		237		237	237		474	237		711
	SITE COMPONENTS (CONT.)											
10	Storm Water Management (allowance)	2,000		67		67	67		133	67		200
11	Sanitary sewer (allowance) (2014)	8,000		267		267	267		533	267		800
12	Sanitary sewer, lift station alternate pu	8,000		267		267	267		533	267		800
13	Sanitary sewer, grinder and tank	8,000		267		267	267		533	267		800
14	Hardscapes/foundation plantings (allov	2,000		2,000	(2,000)		667		667	667		1,333
	BUILDING EXTERIOR											
15	Asphalt shingle	30,175		3,018		3,018	3,018		6,035	3,018		9,053
16	Gutters and downspouts	16,800		1,680		1,680	1,680		3,360	1,680		5,040
17	Caulking (allowance)	4,500		900		900	900		1,800	900		2,700
18	Exterior door (allowance)	5,000		500		500	500		1,000	500		1,500
19	Siding, wood	21,250		2,125		2,125	2,125		4,250	2,125		6,375
20	Soffit, wood	4,845		485		485	485		969	485		1,454
21	Fascia, wood	1,211		121		121	121		242	121		363
22	Overhead door (10' x 8')	2,000		400		400	400		800	400		1,200
23	Overhead door (10' x 10')	3,000		600		600	600		1,200	600		1,800
24	Windows (3' x 5')	14,175		473		473	473		945	473		1,418
25	Windows (2' x 3')	810		27		27	27		54	27		81
	BUILDING SYSTEMS											
26	Fire Alarm Control Panel	1,500		300		300	300		600	300		900
27	Storage tank	7,500		1,500		1,500	1,500		3,000	1,500		4,500
28	Water softener	5,000		1,000		1,000	1,000		2,000	1,000		3,000
29	Well replacement	6,000		300		300	300		600	300		900
30	Heat pump, furnace (60,000 btu)	15,000		833		833	833		1,667	833		2,500
31	Heat pump, compressor (5 ton)	15,000		2,500		2,500	2,500		5,000	2,500		7,500
32	Emergency Generator (25 Kw)	10,000		417		417	417		833	417		1,250

FIRE STATION

Fire Station. The fire station is of recent construction and is designed and constructed for the purpose of a fire station. The existing facility supports the needs of the fire department.

Asphalt Pavement. The Township is responsible for the drive and parking areas. In general, the asphalt pavement is in good condition, with minor cracking.

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 Township better manage the asphalt pavements throughout the community: http://mdareserves.com/resources/links/site-components.

Site Lighting. The Township is responsible for the operation of the facility's 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.

Building Roofing. The station roofed in a flat roofing system that is in generally good condition.

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.

Access to the roof was not provided at the time of inspection. The roofing was observed from the Police Station roof.

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.

Siding and Trim. The exterior of the building is clad in masonry siding and trim. The siding and trim materials are in generally good condition.

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.

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 Township 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.

Building Electrical Service. The electrical systems of the building(s) 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.

Emergency Generator. The building is served by a 175 kW generator that is located behind the building. The generator is in good condition and receives regular maintenance.

It is recommended that the Township continue the following to maintain the serviceability of the system:

- Maintenance contract.
- Weekly start-up and test.
- Regular service of electrical connections.

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EXECUTIVE SUMMARY

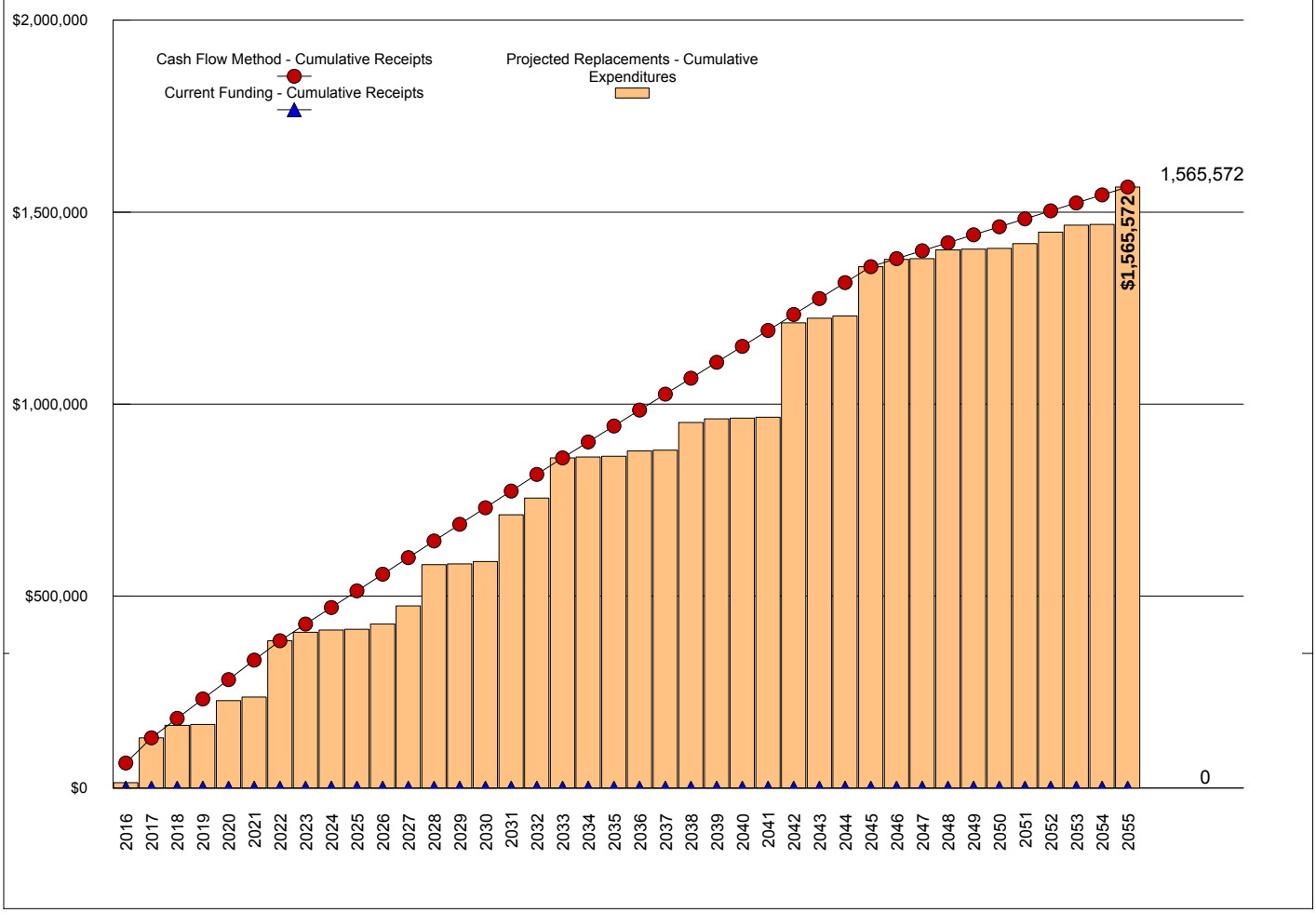
The Fire Station Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 44 Projected Replacements identified in the Replacement Reserve Inventory.

$65,500 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2016**

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

Fire Station reports a that the Township is currently not funding Replacement Reserves.
This Study contains the information necessary for the Township to develop a Funding Plan to address the $1,565,572 of Projected Replacements identified in the Replacement Reserve Inventory over the 40-year Study Period.

#1 - Cumulative Replacement Reserve Funding and Expenditures Graph



The Current Funding Objective as calculated by the Component Method (Fully Funded) is $372,777 making the reserve account 0.0% funded. See the Appendix for more information on this method.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Fire Station 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.

2016 | **STUDY YEAR**

The Township 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, 2016.

40 Years | **STUDY PERIOD**

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

NONE | **STARTING BALANCE**

The Township reports that no funds are attributed to Replacement Reserves

Level One | **LEVEL OF SERVICE**

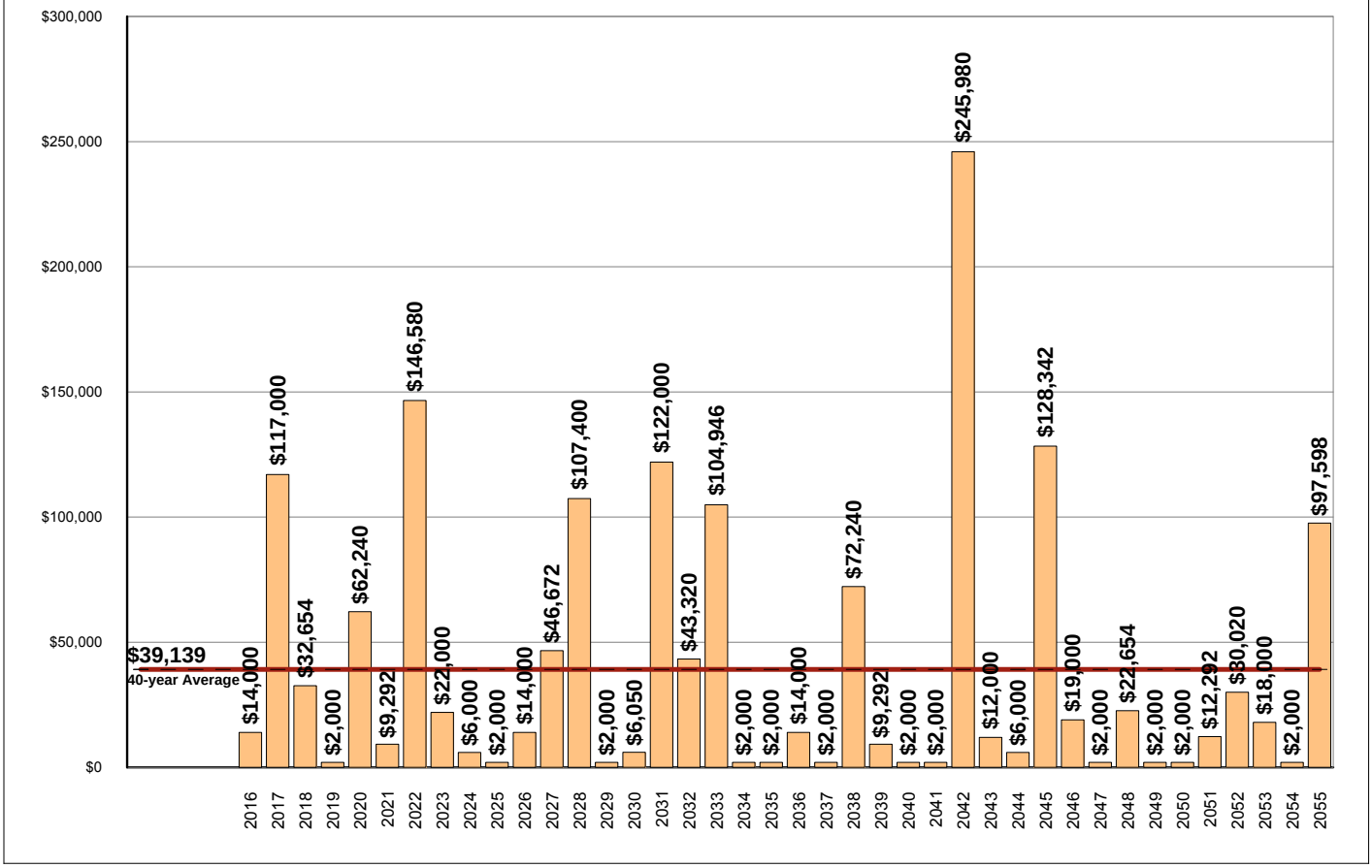
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level One Study, as defined by the Community Associations Institute (CAI).

$1,565,572 | **REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS**

The Fire Station Replacement Reserve Inventory identifies 44 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be $1,565,572 over the 40-year Study Period. The Projected Replacements are divided into 6 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 $39,139. Section C provides a year by year Calender of these expenditures.



UPDATING

UPDATING OF THE FUNDING PLAN

The Township 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

The annual expenditures that comprise the $1,565,572 of Projected Expenditures over the 40-year Study Period are detailed in Table 3. A year-by-year listing of the specific projects can be found beginning on Page C2.

#3 - Table of Annual Expenditures - Years 1 through 40

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Projected Replacements	($14,000)	($117,000)	($32,654)	($2,000)	($62,240)	($9,292)	($146,580)	($22,000)	($6,000)	($2,000)
End of Year Balance	($14,000)	($131,000)	($163,654)	($165,654)	($227,894)	($237,186)	($383,766)	($405,766)	($411,766)	($413,766)
Cumulative Expenditures	($14,000)	($131,000)	($163,654)	($165,654)	($227,894)	($237,186)	($383,766)	($405,766)	($411,766)	($413,766)

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements	($14,000)	($46,672)	($107,400)	($2,000)	($6,050)	($122,000)	($43,320)	($104,946)	($2,000)	($2,000)
End of Year Balance	($427,766)	($474,438)	($581,838)	($583,838)	($589,888)	($711,888)	($755,208)	($860,154)	($862,154)	($864,154)
Cumulative Expenditures	($427,766)	($474,438)	($581,838)	($583,838)	($589,888)	($711,888)	($755,208)	($860,154)	($862,154)	($864,154)

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Projected Replacements	($14,000)	($2,000)	($72,240)	($9,292)	($2,000)	($2,000)	($245,980)	($12,000)	($6,000)	($128,342)
End of Year Balance	($878,154)	($880,154)	($952,393)	($961,686)	($963,686)	($965,686)	($1,211,666)	($1,223,666)	($1,229,666)	($1,358,008)
Cumulative Expenditures	($878,154)	($880,154)	($952,393)	($961,686)	($963,686)	($965,686)	($1,211,666)	($1,223,666)	($1,229,666)	($1,358,008)

Year	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
Projected Replacements	($19,000)	($2,000)	($22,654)	($2,000)	($2,000)	($12,292)	($30,020)	($18,000)	($2,000)	($97,598)
End of Year Balance	($1,377,008)	($1,379,008)	($1,401,662)	($1,403,662)	($1,405,662)	($1,417,954)	($1,447,974)	($1,465,974)	($1,467,974)	($1,565,572)
Cumulative Expenditures	($1,377,008)	($1,379,008)	($1,401,662)	($1,403,662)	($1,405,662)	($1,417,954)	($1,447,974)	($1,465,974)	($1,467,974)	($1,565,572)

Table #3 shows the annual costs for Projected Replacements and the cumulative annual expenditures for the Projected Replacements. Table #3 also shows the Starting Balance and Current Annual Funding if reported by Township. When this information is provided, Table #3 will calculate the consequences of continuing to fund Replacement Reserves at current levels over the 40-year Study Period.

This information is for use by the Township for the development of a Funding Plan. The Funding Plan is a critical planning tool if the Township is to provide timely and adequate funding for the $1,565,572 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period.

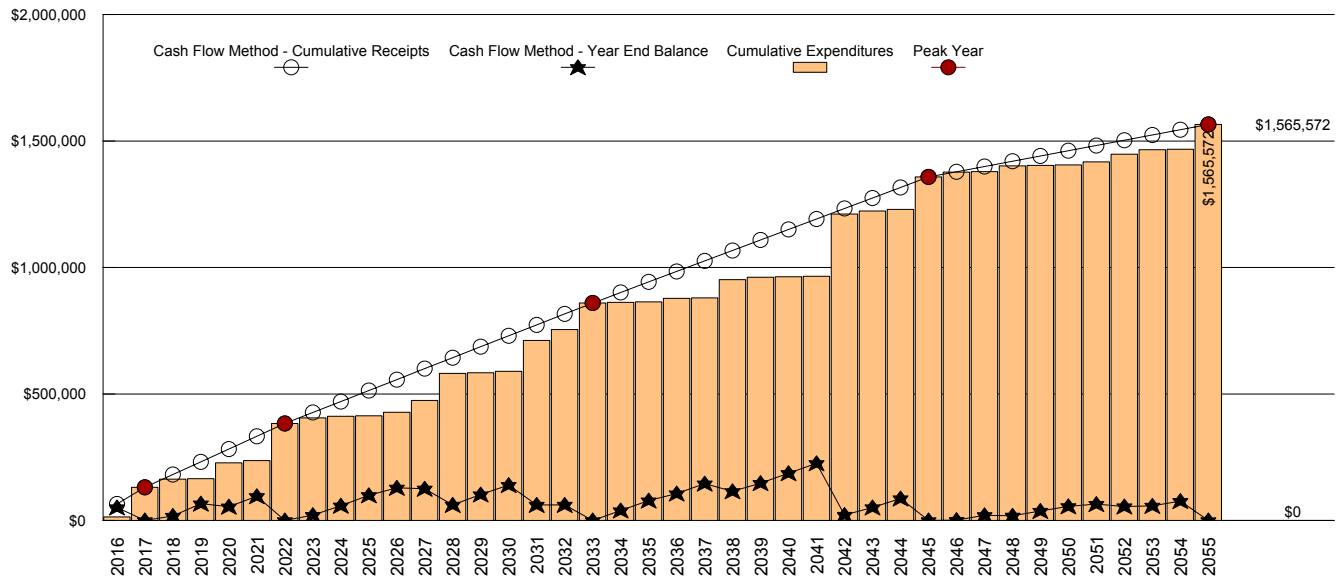
CASH FLOW METHOD FUNDING

$65,500 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2016**

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 2017 with Replacement Reserves on Deposit dropping to the Minimum Balance after the completion of $131,000 of replacements from 2016 to 2017. Recommended funding declines from $65,500 in 2017 to $50,553 in 2018. Peak Years are identified in Chart 4 and Table 5.
- Minimum Balance. The calculations assume a Minimum Balance of $0 in Replacement Reserves. This is approx. 0 months of average expenditures based on the $39,139, 40-year average annual expenditure.
- Cash Flow Method Study Period. Cash Flow Method calculates funding for $1,565,572 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2055 and in 2055, 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	2016	1st Peak - 2017	2018	2019	2020	2021	2nd Peak - 2022	2023	2024	2025
Starting Balance										
Projected Replacements	($14,000)	($117,000)	($32,654)	($2,000)	($62,240)	($9,292)	($146,580)	($22,000)	($6,000)	($2,000)
Annual Deposit	$65,500	$65,500	$50,553	$50,553	$50,553	$50,553	$50,553	$43,308	$43,308	$43,308
End of Year Balance	$51,500	$0	$17,899	$66,452	$54,766	$96,027	$0	$21,308	$58,616	$99,924
Cumulative Expenditures	$14,000	$131,000	$163,654	$165,654	$227,894	$237,186	$383,766	$405,766	$411,766	$413,766
Cumulative Receipts	$65,500	$131,000	$181,553	$232,106	$282,659	$333,213	$383,766	$427,074	$470,381	$513,689

Year	2026	2027	2028	2029	2030	2031	2032	3rd Peak - 2033	2034	2035
Projected Replacements	($14,000)	($46,672)	($107,400)	($2,000)	($6,050)	($122,000)	($43,320)	($104,946)	($2,000)	($2,000)
Annual Deposit	$43,308	$43,308	$43,308	$43,308	$43,308	$43,308	$43,308	$43,308	$41,487	$41,487
End of Year Balance	$129,232	$125,868	$61,776	$103,084	$140,342	$61,650	$61,638	$0	$39,487	$78,974
Cumulative Expenditures	($427,766)	($474,438)	($581,838)	($583,838)	($589,888)	($711,888)	($755,208)	($860,154)	($862,154)	($864,154)
Cumulative Receipts	$556,997	$600,305	$643,613	$686,922	$730,230	$773,538	$816,846	$860,154	$901,641	$943,128

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	4th Peak - 2045
Projected Replacements	($14,000)	($2,000)	($72,240)	($9,292)	($2,000)	($2,000)	($245,980)	($12,000)	($6,000)	($128,342)
Annual Deposit	$41,487	$41,487	$41,488	$41,488	$41,488	$41,488	$41,488	$41,488	$41,489	$41,489
End of Year Balance	$106,461	$145,948	$115,196	$147,392	$186,880	$226,368	$21,877	$51,365	$86,854	$0
Cumulative Expenditures	($878,154)	($880,154)	($952,393)	($961,686)	($963,686)	($965,686)	($1,211,666)	($1,223,666)	($1,229,666)	($1,358,008)
Cumulative Receipts	$984,615	$1,026,102	$1,067,590	$1,109,078	$1,150,566	$1,192,054	$1,233,542	$1,275,031	$1,316,519	$1,358,008

Year	2046	2047	2048	2049	2050	2051	2052	2053	2054	5th Peak - 2055
Projected Replacements	($19,000)	($2,000)	($22,654)	($2,000)	($2,000)	($12,292)	($30,020)	($18,000)	($2,000)	($97,598)
Annual Deposit	$20,756	$20,756	$20,756	$20,756	$20,756	$20,756	$20,756	$20,756	$20,756	$20,756
End of Year Balance	$1,756	$20,513	$18,615	$37,372	$56,128	$64,592	$55,329	$58,085	$76,842	$0
Cumulative Expenditures	($1,377,008)	($1,379,008)	($1,401,662)	($1,403,662)	($1,405,662)	($1,417,954)	($1,447,974)	($1,465,974)	($1,467,974)	($1,565,572)
Cumulative Receipts	$1,378,764	$1,399,521	$1,420,277	$1,441,033	$1,461,790	$1,482,546	$1,503,303	$1,524,059	$1,544,816	$1,565,572

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 belive 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.

$65,500 2016 - CASH FLOW METHOD RECOMMENDED FUNDING

The 2016 Study Year calculations have been made using current replacement costs (see Page B2), modified by the Analyst for any project specific conditions.

$69,010 2017 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2017 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $51,500 on January 1, 2017.
- All 2016 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $14,000.
- Construction Cost Inflation of 3.00 percent in 2016.

The $69,010 inflation adjusted funding in 2017 is a 5.36 percent increase over the non-inflation adjusted 2017 funding of $65,500.

$53,632 2018 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2018 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $0 on January 1, 2018.
- All 2017 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $120,510.
- Construction Cost Inflation of 3.00 percent in 2017.

The $53,632 inflation adjusted funding in 2018 is a 6.09 percent increase over the non-inflation adjusted 2018 funding of $50,553.

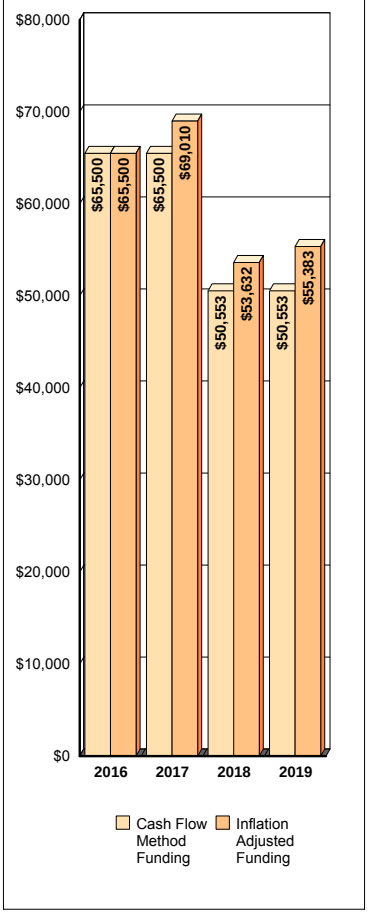
$55,383 2019 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2019 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $18,989 on January 1, 2019.
- All 2018 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $34,643.
- Construction Cost Inflation of 3.00 percent in 2018.

The $55,383 inflation adjusted funding in 2019 is a 9.55 percent increase over the non-inflation adjusted funding of $50,553.

#6 - Inflation Adjusted Funding



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 2017, 2018 and 2019 inflation adjusted funding calculations above, the 3.00 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 2016, based on a 1.00 percent interest rate, we estimate the Association may earn $257 on an average balance of $25,750, $257 on an average balance of $25,750 in 2017, and $95 on $9,495 in 2018. The Association may elect to use these funds to reduce annual funding.

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 44 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B1.

REPLACEMENT RESERVE INVENTORY
GENERAL INFORMATION

Fire Station - Replacement Reserve Inventory identifies 44 Projected Replacements.

- PROJECTED REPLACEMENTS. 44 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 $749,314. Replacements totaling $1,358,008 are scheduled in the Replacement Reserve Inventory over the 40-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. None of the items included in the Replacement Reserve Inventory are 'Excluded Items'. Multiple categories of items 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 that $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 Township policy on the administration of Replacement Reserves. If the Township 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 Township.

  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 Township. These types of items are generally not the responsibility of the Township and are excluded from the Replacement Reserve Inventory.

- CATEGORIES. The 44 items included in the Fire Station Replacement Reserve Inventory are divided into 6 major categories. Each category is printed on a separate page, Pages B3 to B8.

- 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.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- INVENTORY DATA. Each of the 44 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.

- REVIEW OF EXPENDITURES. This Replacement Reserve Study should be reviewed by an accounting professional representing the Township 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.

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	Asphalt pavement, mill and overlay	sf	31,705	$1.90	18	4	$60,240
2	Pavement, rejuvenator seal coat/striping	sf	31,705	$0.23	6	5	$7,292
3	Concrete skirt	sf	2,380	$9.00	45	39	$21,420
4	Concrete flatwork	sf	8,242	$9.00	45	39	$74,178
5	Bollards	ea	20	$250.00	20	6	$5,000
6	Building exterior lighting (lg. downlight)	ea	5	$450.00	15	14	$2,250
7	Lamp post	ea	4	$3,500.00	30	16	$14,000
8	Inductive (red) light	ea	4	$450.00	15	14	$1,800
9	Brick veneer repoint (10% allowance)	sf	1,100	$9.00	25	11	$9,900
10	Flagpole (approx. 30')	ea	1	$4,500.00	20	6	$4,500

SITE COMPONENTS - Replacement Costs - Subtotal $200,580

SITE COMPONENTS
COMMENTS

- Remaining Economic Life is based in part on the age of the installation, the quality of the installation and the condition of the installation. Where the age of the installation is not known it is estimated.

SITE COMPONENTS (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
11	Storm Water Management (allowance)	ls	1	$12,000.00	30	16	$12,000
12	Enlarge detention basin	ls	1	$10,000.00	20	2	$10,000
13	Domestic water lateral (allowance)	ls	1	$3,000.00	10	none	$3,000
14	Sanitary sewer lateral (allowance)	ls	1	$4,000.00	10	none	$4,000

SITE COMPONENTS (CONT.) - Replacement Costs - Subtotal $29,000

SITE COMPONENTS (CONT.)
COMMENTS

- Storm water management allowance included to account for run-off, inlets, piping, and outlets.

- Sanitary sewer allowance included for potential replacements of existing sewer utility.

BUILDING EXTERIOR
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
15	Built-up roofing, flat	sf	15,580	$6.00	20	6	$93,480
16	Gutters and downspouts	lf	200	$6.00	20	6	$1,200
17	8" roof scuppers and downspouts	lf	320	$16.00	30	16	$5,120
18	Brick veneer repoint (10% allowance)	sf	880	$9.00	25	11	$7,920
19	Overhead door repairs (10 ea)	ls	1	$2,000.00	1	none	$2,000
20	Windows (4' x 10')	ea	5	$1,800.00	35	11	$9,000
21	Windows (4' x 6')	ea	7	$1,080.00	35	11	$7,560
22	Fire alarm control annunciator panel	ea	1	$10,200.00	20	6	$10,200
23	Fire sprinkler control system	ea	1	$20,000.00	20	6	$20,000
24	Fire sprinkler pump	ea	1	$10,200.00	10	6	$10,200

BUILDING EXTERIOR - Replacement Costs - Subtotal $166,680

BUILDING EXTERIOR
COMMENTS

BUILDING SYSTEMS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
25	Water heater	ea	1	$8,500.00	15	2	$8,500
26	Water softener	ea	1	$5,000.00	10	none	$5,000
27	Well replacement	ea	1	$6,000.00	25	12	$6,000
28	175k btu boiler	ea	4	$8,000.00	14	1	$32,000
29	Boiler tank & recirculate pumps	ea	2	$6,500.00	14	1	$13,000
30	Ductless A/C, wall Mounted, 12k btu	ea	2	$1,500.00	24	11	$3,000
31	Carrier "Aero"air handler, cfm	ea	3	$25,000.00	14	12	$75,000
32	Condensing unit (15 ton)	ea	1	$12,000.00	14	12	$12,000
33	Drying cabinet (circul-air)	ea	1	$12,400.00	14	12	$12,400
34	CO alarm system	ea	1	$10,000.00	14	1	$10,000

BUILDING SYSTEMS - Replacement Costs - Subtotal $176,900

BUILDING SYSTEMS
COMMENTS

BUILDING SYSTEMS (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
35	Unit heater	ea	4	$1,000.00	20	8	$4,000
36	Garage radiant heat system	ft	600	$100.00	14	1	$60,000
37	Exhaust fan, 2 hp	ea	2	$2,500.00	20	7	$5,000
38	Exhaust hood fan	ea	2	$2,500.00	20	7	$5,000
39	Emergency Generator (175 Kw)	ea	1	$75,000.00	30	17	$75,000
40	Emergency Generator (rebuild)	ea	1	$10,000.00	30	7	$10,000
41	Access Control System (ACS)	ea	1	$6,604.00	15	2	$6,604
42	Security camera	ea	6	$450.00	15	2	$2,700
43	CCTV system	ea	1	$2,850.00	15	2	$2,850
44	Radio antenna (allowance)	ls	1	$5,000.00	15	15	$5,000

BUILDING SYSTEMS (CONT.) - Replacement Costs - Subtotal $176,154

BUILDING SYSTEMS (CONT.)
COMMENTS

VALUATION EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Building exterior lighting (recessed)	ea	2				EXCLUDED
	Lamp post head	ea	4				EXCLUDED
	Signage lighting	ea	2				EXCLUDED
	Flagpole lighting	ea	2				EXCLUDED
	Graphic sign	sf	64				EXCLUDED
	Caulking (allowance)	ls	1				EXCLUDED
	Exterior door (allowance)	ls	1				EXCLUDED
	Fire Alarm Control Panel	ea	1				EXCLUDED
	Smoke detector	ea	10				EXCLUDED
	Fire strobe	ea	10				EXCLUDED
	Fire alarm pull	ea	6				EXCLUDED
	Well pump	ea	1				EXCLUDED
	Pressure pumps	ea	2				EXCLUDED
	Well clean-up service	ea	1				EXCLUDED
	Pressure tank	ea	2				EXCLUDED
	Water testing	ea	1				EXCLUDED
	Exhaust fan, 1 hp	ea	1				EXCLUDED
	Exhaust fan, 1/4 hp	ea	4				EXCLUDED
	Domestic water piping (allowance)	ls	1				EXCLUDED
	Electrical (allowance)	ea	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 $2,000.00 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.

PROJECTED ANNUAL REPLACEMENTS
GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 44 Projected Replacements in the Fire Station 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 Township 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 Township 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 Township and the visual evaluations of the Analyst. It has been prepared for the sole use of the Township 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 Fire Station Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Township.

PROJECTED REPLACEMENTS - YEARS 1 TO 6

Item	2016 - STUDY YEAR	$
13	Domestic water lateral (allov	$3,000
14	Sanitary sewer lateral (allow	$4,000
19	Overhead door repairs (10 e	$2,000
26	Water softener	$5,000
	Total Scheduled Replacements	$14,000

Item	2017 - YEAR 2	$
19	Overhead door repairs (10 e	$2,000
28	175k btu boiler	$32,000
29	Boiler tank & recirculate pun	$13,000
34	CO alarm system	$10,000
36	Garage radiant heat system	$60,000
	Total Scheduled Replacements	$117,000

Item	2018 - YEAR 3	$
12	Enlarge detention basin	$10,000
19	Overhead door repairs (10 e	$2,000
25	Water heater	$8,500
41	Access Control System (AC:	$6,604
42	Security camera	$2,700
43	CCTV system	$2,850
	Total Scheduled Replacements	$32,654

Item	2019 - YEAR 4	$
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$2,000

Item	2020 - YEAR 5	$
1	Asphalt pavement, mill and (	$60,240
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$62,240

Item	2021 - YEAR 6	$
2	Pavement, rejuvenator seal	$7,292
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$9,292

PROJECTED REPLACEMENTS - YEARS 7 TO 12

Item	2022 - YEAR 7	$
5	Bollards	$5,000
10	Flagpole (approx. 30')	$4,500
15	Built-up roofing, flat	$93,480
16	Gutters and downspouts	$1,200
19	Overhead door repairs (10 e	$2,000
22	Fire alarm control annunciat	$10,200
23	Fire sprinkler control system	$20,000
24	Fire sprinkler pump	$10,200
	Total Scheduled Replacements	$146,580

Item	2023 - YEAR 8	$
19	Overhead door repairs (10 e	$2,000
37	Exhaust fan, 2 hp	$5,000
38	Exhaust hood fan	$5,000
40	Emergency Generator (rebu	$10,000
	Total Scheduled Replacements	$22,000

Item	2024 - YEAR 9	$
19	Overhead door repairs (10 e	$2,000
35	Unit heater	$4,000
	Total Scheduled Replacements	$6,000

Item	2025 - YEAR 10	$
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$2,000

Item	2026 - YEAR 11	$
13	Domestic water lateral (allov	$3,000
14	Sanitary sewer lateral (allow	$4,000
19	Overhead door repairs (10 e	$2,000
26	Water softener	$5,000
	Total Scheduled Replacements	$14,000

Item	2027 - YEAR 12	$
2	Pavement, rejuvenator seal	$7,292
9	Brick veneer repoint (10% al	$9,900
18	Brick veneer repoint (10% al	$7,920
19	Overhead door repairs (10 e	$2,000
20	Windows (4' x 10')	$9,000
21	Windows (4' x 6')	$7,560
30	Ductless A/C, wall Mounted,	$3,000
	All Replacements not listed	$46,672

PROJECTED REPLACEMENTS - YEARS 13 TO 18

Item	2028 - YEAR 13	$
19	Overhead door repairs (10 e	$2,000
27	Well replacement	$6,000
31	Carrier "Aero"air handler, cfr	$75,000
32	Condensing unit (15 ton)	$12,000
33	Drying cabinet (circul-air)	$12,400
	Total Scheduled Replacements	$107,400

Item	2029 - YEAR 14	$
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$2,000

Item	2030 - YEAR 15	$
6	Building exterior lighting (lg.	$2,250
8	Inductive (red) light	$1,800
19	Overhead door repairs (10 e	$2,000
	All Replacements not listed	$6,050

Item	2031 - YEAR 16	$
19	Overhead door repairs (10 e	$2,000
28	175k btu boiler	$32,000
29	Boiler tank & recirculate pun	$13,000
34	CO alarm system	$10,000
36	Garage radiant heat system	$60,000
44	Radio antenna (allowance)	$5,000
	Total Scheduled Replacements	$122,000

Item	2032 - YEAR 17	$
7	Lamp post	$14,000
11	Storm Water Management (	$12,000
17	8" roof scuppers and downs	$5,120
19	Overhead door repairs (10 e	$2,000
24	Fire sprinkler pump	$10,200
	Total Scheduled Replacements	$43,320

Item	2033 - YEAR 18	$
2	Pavement, rejuvenator seal	$7,292
19	Overhead door repairs (10 e	$2,000
25	Water heater	$8,500
39	Emergency Generator (175	$75,000
41	Access Control System (AC	$6,604
42	Security camera	$2,700
43	CCTV system	$2,850
	Total Scheduled Replacements	$104,946

PROJECTED REPLACEMENTS - YEARS 19 TO 24

Item	2034 - YEAR 19	$
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$2,000

Item	2035 - YEAR 20	$
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$2,000

Item	2036 - YEAR 21	$
13	Domestic water lateral (allov	$3,000
14	Sanitary sewer lateral (allow	$4,000
19	Overhead door repairs (10 e	$2,000
26	Water softener	$5,000
	Total Scheduled Replacements	$14,000

Item	2037 - YEAR 22	$
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$2,000

Item	2038 - YEAR 23	$
1	Asphalt pavement, mill and (	$60,240
12	Enlarge detention basin	$10,000
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$72,240

Item	2039 - YEAR 24	$
2	Pavement, rejuvenator seal	$7,292
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$9,292

PROJECTED REPLACEMENTS - YEARS 25 TO 30

Item	2040 - YEAR 25	$
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$2,000

Item	2041 - YEAR 26	$
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$2,000

Item	2042 - YEAR 27	$
5	Bollards	$5,000
10	Flagpole (approx. 30')	$4,500
15	Built-up roofing, flat	$93,480
16	Gutters and downspouts	$1,200
19	Overhead door repairs (10 e	$2,000
22	Fire alarm control annunciat	$10,200
23	Fire sprinkler control system	$20,000
24	Fire sprinkler pump	$10,200
31	Carrier "Aero"air handler, cfı	$75,000
32	Condensing unit (15 ton)	$12,000
33	Drying cabinet (circul-air)	$12,400
	Total Scheduled Replacements	$245,980

Item	2043 - YEAR 28	$
19	Overhead door repairs (10 e	$2,000
37	Exhaust fan, 2 hp	$5,000
38	Exhaust hood fan	$5,000
	Total Scheduled Replacements	$12,000

Item	2044 - YEAR 29	$
19	Overhead door repairs (10 e	$2,000
35	Unit heater	$4,000
	Total Scheduled Replacements	$6,000

Item	2045 - YEAR 30	$
2	Pavement, rejuvenator seal	$7,292
6	Building exterior lighting (lg.	$2,250
8	Inductive (red) light	$1,800
19	Overhead door repairs (10 e	$2,000
28	175k btu boiler	$32,000
29	Boiler tank & recirculate pun	$13,000
34	CO alarm system	$10,000
36	Garage radiant heat system	$60,000
	Total Scheduled Replacements	$128,342

PROJECTED REPLACEMENTS - YEARS 31 TO 36

Item	2046 - YEAR 31	$
13	Domestic water lateral (allov	$3,000
14	Sanitary sewer lateral (allow	$4,000
19	Overhead door repairs (10 e	$2,000
26	Water softener	$5,000
44	Radio antenna (allowance)	$5,000
	Total Scheduled Replacements	$19,000

Item	2047 - YEAR 32	$
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$2,000

Item	2048 - YEAR 33	$
19	Overhead door repairs (10 e	$2,000
25	Water heater	$8,500
41	Access Control System (AC:	$6,604
42	Security camera	$2,700
43	CCTV system	$2,850
	Total Scheduled Replacements	$22,654

Item	2049 - YEAR 34	$
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$2,000

Item	2050 - YEAR 35	$
19	Overhead door repairs (10 e	$2,000
	All Replacements not listed	$2,000

Item	2051 - YEAR 36	$
2	Pavement, rejuvenator seal	$7,292
19	Overhead door repairs (10 e	$2,000
30	Ductless A/C, wall Mounted,	$3,000
	Total Scheduled Replacements	$12,292

PROJECTED REPLACEMENTS - YEARS 37 TO 42

Item	2052 - YEAR 37	$
9	Brick veneer repoint (10% al	$9,900
18	Brick veneer repoint (10% al	$7,920
19	Overhead door repairs (10 e	$2,000
24	Fire sprinkler pump	$10,200
	Total Scheduled Replacements	$30,020

Item	2053 - YEAR 38	$
19	Overhead door repairs (10 e	$2,000
27	Well replacement	$6,000
40	Emergency Generator (rebu	$10,000
	Total Scheduled Replacements	$18,000

Item	2054 - YEAR 39	$
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$2,000

Item	2055 - YEAR 40	$
3	Concrete skirt	$21,420
4	Concrete flatwork	$74,178
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$97,598

Item	2056 (beyond Study Period)	$
1	Asphalt pavement, mill and (	$60,240
13	Domestic water lateral (allov	$3,000
14	Sanitary sewer lateral (allow	$4,000
19	Overhead door repairs (10 e	$2,000
26	Water softener	$5,000
31	Carrier "Aero"air handler, cfr	$75,000
32	Condensing unit (15 ton)	$12,000
33	Drying cabinet (circul-air)	$12,400
	Total Scheduled Replacements	$173,640

Item	2057 (beyond Study Period)	$
2	Pavement, rejuvenator seal	$7,292
19	Overhead door repairs (10 e	$2,000
	Total Scheduled Replacements	$9,292

CASH FLOW METHOD ACCOUNTING SUMMARY

This Fire Station - Cash Flow Method Accounting Summary is an attachment to the Fire Station - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 44 Projected Replacements listed in the Fire Station Replacement Reserve Inventory has been assigned to one of 5 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 $0 Beginning Balance (at the start of the Study Year) and the $181,553 of additional Replacement Reserve Funding in 2016 through 2018 (as calculated in the Replacement Reserve Analysis) to each of the 44 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by Chronological Allocation.
  - Allocation of the $181,553 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, 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 $0 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 Fire Station the Beginning Balance funds 0.0% of Scheduled Replacements in the Study Year.
  - The next step is the allocation of the $65,500 of 2016 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 Fire Station the Beginning Balance and the 2016 Replacement Reserve Funding, funds replacements through 2016 and partial funds (44.0%) replacements in 2017.
  - Allocations of the 2017 and 2018 Reserve Funding are done using the same methodology.
  - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

2016 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 44 Projected Replacements included in the Fire Station Replacement Reserve Inventory has been assigned to one of the 5 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $65,500 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 2016 being accomplished in 2016 at a cost of $14,000.

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 CF1

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 45 years	4 to 39 years	$200,580				
SITE COMPONENTS (CONT.)	10 to 30 years	0 to 16 years	$29,000		$7,000	($7,000)	
BUILDING EXTERIOR	1 to 35 years	0 to 16 years	$166,680		$2,880	($2,000)	$880
BUILDING SYSTEMS	10 to 25 years	0 to 12 years	$176,900		$29,209	($5,000)	$24,209
BUILDING SYSTEMS (CONT.)	14 to 30 years	1 to 17 years	$176,154		$26,410		$26,410

2017 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 44 Projected Replacements included in the Fire Station Replacement Reserve Inventory has been assigned to one of the 5 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 $51,500 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $131,000 from 2016 through 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 $117,000.

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 CF2

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 45 years	3 to 38 years	$200,580				
SITE COMPONENTS (CONT.)	10 to 30 years	1 to 15 years	$29,000		$0		$0
BUILDING EXTERIOR	1 to 35 years	0 to 15 years	$166,680	$880	$1,120	($2,000)	$0
BUILDING SYSTEMS	10 to 25 years	0 to 11 years	$176,900	$24,209	$30,791	($55,000)	$0
BUILDING SYSTEMS (CONT.)	14 to 30 years	0 to 16 years	$176,154	$26,410	$33,590	($60,000)	$0

2018 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 44 Projected Replacements included in the Fire Station Replacement Reserve Inventory has been assigned to one of the 5 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 $0 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $181,553 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $32,654.

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.

2018 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	6 to 45 years	2 to 37 years	$200,580		$15,388		$15,388
SITE COMPONENTS (CONT.)	10 to 30 years	0 to 14 years	$29,000	$0	$10,000	($10,000)	
BUILDING EXTERIOR	1 to 35 years	0 to 14 years	$166,680	$0	$4,511	($2,000)	$2,511
BUILDING SYSTEMS	10 to 25 years	0 to 13 years	$176,900	$0	$8,500	($8,500)	$0
BUILDING SYSTEMS (CONT.)	14 to 30 years	0 to 15 years	$176,154	$0	$12,154	($12,154)	$0

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CF4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $181,553 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 44 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $51,500 on January 1, 2017.
- Replacement Reserves on Deposit totaling $0 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $181,553 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $163,654.

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	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement, mill and overlay	60,240								15,388		15,388
2	Pavement, rejuvenator seal coat/stripin	7,292										
3	Concrete skirt	21,420										
4	Concrete flatwork	74,178										
5	Bollards	5,000										
6	Building exterior lighting (lg. downligl	2,250										
7	Lamp post	14,000										
8	Inductive (red) light	1,800										
9	Brick veneer repoint (10% allowance)	9,900										
10	Flagpole (approx. 30')	4,500										
	SITE COMPONENTS (CONT.)											
11	Storm Water Management (allowance)	12,000										
12	Enlarge detention basin	10,000								10,000	(10,000)	
13	Domestic water lateral (allowance)	3,000		3,000	(3,000)							
14	Sanitary sewer lateral (allowance)	4,000		4,000	(4,000)							
	BUILDING EXTERIOR											
15	Built-up roofing, flat	93,480										
16	Gutters and downspouts	1,200										
17	8" roof scuppers and downspouts	5,120										
18	Brick veneer repoint (10% allowance)	7,920										
19	Overhead door repairs (10 ea)	2,000		2,880	(2,000)	880	1,120	(2,000)		4,511	(2,000)	2,511
20	Windows (4' x 10')	9,000										
21	Windows (4' x 6')	7,560										
22	Fire alarm control annunciator panel	10,200										
23	Fire sprinkler control system	20,000										
24	Fire sprinkler pump	10,200										
	BUILDING SYSTEMS											
25	Water heater	8,500								8,500	(8,500)	
26	Water softener	5,000		5,000	(5,000)							
27	Well replacement	6,000										
28	175k btu boiler	32,000		14,085		14,085	17,915	(32,000)				
29	Boiler tank & recirculate pumps	13,000		5,722		5,722	7,278	(13,000)				
30	Ductless A/C, wall Mounted, 12k btu	3,000										
31	Carrier "Aero"air handler, cfm	75,000										
32	Condensing unit (15 ton)	12,000										
33	Drying cabinet (circul-air)	12,400										
34	CO alarm system	10,000		4,402		4,402	5,598	(10,000)				
	BUILDING SYSTEMS (CONT.)											

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

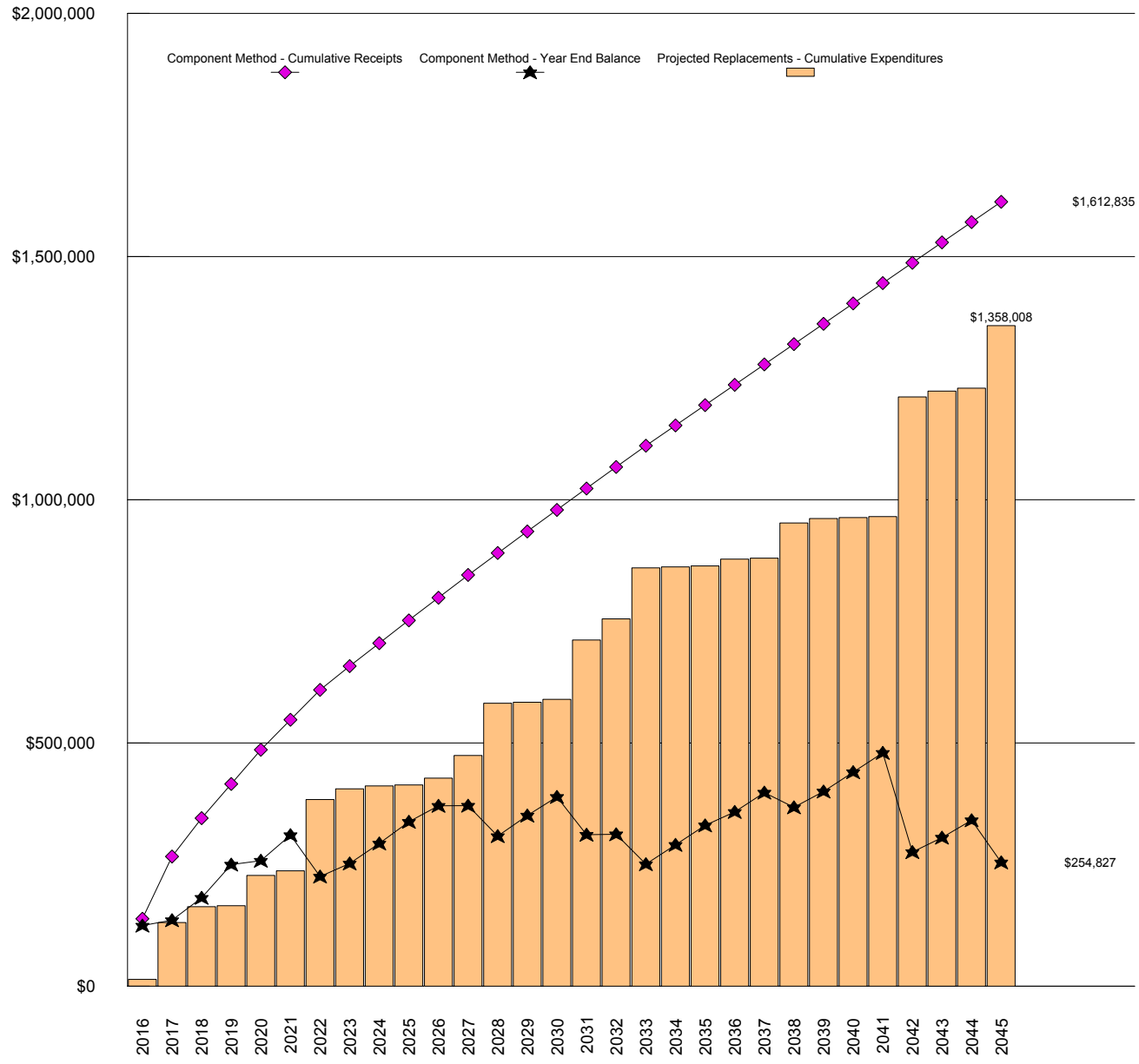
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
35	Unit heater	4,000										
36	Garage radiant heat system	60,000		26,410		26,410	33,590	(60,000)				
37	Exhaust fan, 2 hp	5,000										
38	Exhaust hood fan	5,000										
39	Emergency Generator (175 Kw)	75,000										
40	Emergency Generator (rebuild)	10,000										
41	Access Control System (ACS)	6,604								6,604	(6,604)	
42	Security camera	2,700								2,700	(2,700)	
43	CCTV system	2,850								2,850	(2,850)	
44	Radio antenna (allowance)	5,000										

COMPONENT METHOD

$138,772 **COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2016.**

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 44 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



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 44 Projected Replacements. The total, $372,777, 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 ($0) by the Current Funding Objective ($372,777). At Fire Station the Funding Percentage is 0.0%

- Allocation of the Beginning Balance. The Beginning Balance is divided among the 44 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 Township has not accumulated $800 in Reserves (the Funding Objective), but rather at 0.0 percent funded, there is $0 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 $138,772, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2016).

  In our fence example, the $0 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 $500. Next year, the deposit remains $500, 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Beginning balance										
Recommended annual funding	$138,772	$127,972	$78,687	$70,346	$70,346	$61,644	$61,644	$48,729	$47,062	$46,818
Expenditures	$14,000	$117,000	$32,654	$2,000	$62,240	$9,292	$146,580	$22,000	$6,000	$2,000
Year end balance	$124,772	$135,745	$181,777	$250,123	$258,229	$310,581	$225,646	$252,375	$293,437	$338,255
Cumulative Expenditures	$14,000	$131,000	$163,654	$165,654	$227,894	$237,186	$383,766	$405,766	$411,766	$413,766
Cumulative Receipts	$138,772	$266,745	$345,431	$415,777	$486,123	$547,767	$609,411	$658,140	$705,203	$752,021

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Recommended annual funding	$46,818	$46,818	$45,014	$44,246	$44,246	$44,246	$44,267	$43,474	$41,807	$41,807
Expenditures	$14,000	$46,672	$107,400	$2,000	$6,050	$122,000	$43,320	$104,946	$2,000	$2,000
Year end balance	$371,073	$371,219	$308,833	$351,079	$389,275	$311,521	$312,468	$250,996	$290,803	$330,610
Cumulative Expenditures	$427,766	$474,438	$581,838	$583,838	$589,888	$711,888	$755,208	$860,154	$862,154	$864,154
Cumulative Receipts	$798,839	$845,657	$890,671	$934,917	$979,163	$1,023,409	$1,067,676	$1,111,150	$1,152,957	$1,194,764

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Recommended annual funding	$41,807	$41,807	$41,807	$41,807	$41,807	$41,807	$41,807	$41,807	$41,807	$41,807
Expenditures	$14,000	$2,000	$72,240	$9,292	$2,000	$2,000	$245,980	$12,000	$6,000	$128,342
Year end balance	$358,417	$398,224	$367,792	$400,307	$440,114	$479,921	$275,748	$305,555	$341,363	$254,827
Cumulative Expenditures	$878,154	$880,154	$952,393	$961,686	$963,686	$965,686	$1,211,666	$1,223,666	$1,229,666	$1,358,008
Cumulative Receipts	$1,236,571	$1,278,378	$1,320,185	$1,361,993	$1,403,800	$1,445,607	$1,487,414	$1,529,221	$1,571,028	$1,612,835

COMPONENT METHOD ACCOUNTING SUMMARY

This Fire Station - Component Method Accounting Summary is an attachment to the Fire Station - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 44 Projected Replacements listed in the Fire Station Replacement Reserve Inventory has been assigned to one of 5 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 $0 Beginning Balance (at the start of the Study Year) and the $345,431 of additional Replacement Reserve funding from 2016 to 2018 (as calculated in the Replacement Reserve Analysis) to each of the 44 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by the Component Method.
  - Allocation of the $345,431 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, by the Component Method.

2016 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 44 Projected Replacements included in the Fire Station Replacement Reserve Inventory has been assigned to one of the 5 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $138,772 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 2016 being accomplished in 2016 at a cost of $14,000.

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 CM1

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 45 years	4 to 39 years	$200,580		$18,929		$18,929
SITE COMPONENTS (CONT.)	10 to 30 years	0 to 16 years	$29,000		$11,039	$7,000	$4,039
BUILDING EXTERIOR	1 to 35 years	0 to 16 years	$166,680		$23,638	$2,000	$21,638
BUILDING SYSTEMS	10 to 25 years	0 to 12 years	$176,900		$43,691	$5,000	$38,691
BUILDING SYSTEMS (CONT.)	14 to 30 years	1 to 17 years	$176,154		$41,475		$41,475

2017 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 44 Projected Replacements included in the Fire Station Replacement Reserve Inventory has been assigned to one of the 5 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 $124,772 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $266,745 from 2016 through 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 $117,000.

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 CM2

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 45 years	3 to 38 years	$200,580	$18,929	$18,929		$37,858
SITE COMPONENTS (CONT.)	10 to 30 years	1 to 15 years	$29,000	$4,039	$4,739		$8,778
BUILDING EXTERIOR	1 to 35 years	0 to 15 years	$166,680	$21,638	$23,638	$2,000	$43,277
BUILDING SYSTEMS	10 to 25 years	0 to 11 years	$176,900	$38,691	$39,191	$55,000	$22,882
BUILDING SYSTEMS (CONT.)	14 to 30 years	0 to 16 years	$176,154	$41,475	$41,475	$60,000	$22,950

2018 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 44 Projected Replacements included in the Fire Station Replacement Reserve Inventory has been assigned to one of the 5 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 $135,745 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $345,431 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $32,654.

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.

2018 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	6 to 45 years	2 to 37 years	$200,580	$37,858	$18,929		$56,787
SITE COMPONENTS (CONT.)	10 to 30 years	0 to 14 years	$29,000	$8,778	$4,739	$10,000	$3,518
BUILDING EXTERIOR	1 to 35 years	0 to 14 years	$166,680	$43,277	$23,638	$2,000	$64,915
BUILDING SYSTEMS	10 to 25 years	0 to 13 years	$176,900	$22,882	$15,620	$8,500	$30,002
BUILDING SYSTEMS (CONT.)	14 to 30 years	0 to 15 years	$176,154	$22,950	$15,761	$12,154	$26,557

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $345,431 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 44 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $124,772 on January 1, 2017.
- Replacement Reserves on Deposit totaling $135,745 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $345,431 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $163,654.

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.

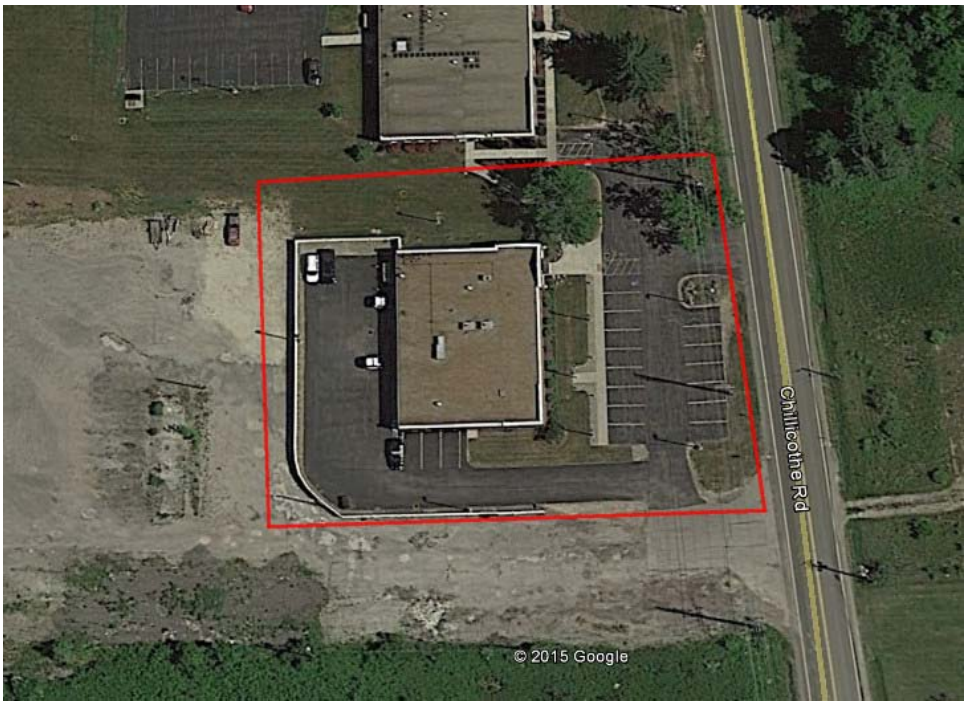
COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement, mill and overlay	60,240		12,048		12,048	12,048		24,096	12,048		36,144
2	Pavement, rejuvenator seal coat/stripin	7,292		1,215		1,215	1,215		2,431	1,215		3,646
3	Concrete skirt	21,420		536		536	536		1,071	536		1,607
4	Concrete flatwork	74,178		1,854		1,854	1,854		3,709	1,854		5,563
5	Bollards	5,000		714		714	714		1,429	714		2,143
6	Building exterior lighting (lg. downligl	2,250		150		150	150		300	150		450
7	Lamp post	14,000		824		824	824		1,647	824		2,471
8	Inductive (red) light	1,800		120		120	120		240	120		360
9	Brick veneer repoint (10% allowance)	9,900		825		825	825		1,650	825		2,475
10	Flagpole (approx. 30')	4,500		643		643	643		1,286	643		1,929
	SITE COMPONENTS (CONT.)											
11	Storm Water Management (allowance)	12,000		706		706	706		1,412	706		2,118
12	Enlarge detention basin	10,000		3,333		3,333	3,333		6,667	3,333	(10,000)	
13	Domestic water lateral (allowance)	3,000		3,000	(3,000)		300		300	300		600
14	Sanitary sewer lateral (allowance)	4,000		4,000	(4,000)		400		400	400		800
	BUILDING EXTERIOR											
15	Built-up roofing, flat	93,480		13,354		13,354	13,354		26,709	13,354		40,063
16	Gutters and downspouts	1,200		171		171	171		343	171		514
17	8" roof scuppers and downspouts	5,120		301		301	301		602	301		904
18	Brick veneer repoint (10% allowance)	7,920		660		660	660		1,320	660		1,980
19	Overhead door repairs (10 ea)	2,000		2,000	(2,000)		2,000	(2,000)		2,000	(2,000)	
20	Windows (4' x 10')	9,000		750		750	750		1,500	750		2,250
21	Windows (4' x 6')	7,560		630		630	630		1,260	630		1,890
22	Fire alarm control annunciator panel	10,200		1,457		1,457	1,457		2,914	1,457		4,371
23	Fire sprinkler control system	20,000		2,857		2,857	2,857		5,714	2,857		8,571
24	Fire sprinkler pump	10,200		1,457		1,457	1,457		2,914	1,457		4,371
	BUILDING SYSTEMS											
25	Water heater	8,500		2,833		2,833	2,833		5,667	2,833	(8,500)	
26	Water softener	5,000		5,000	(5,000)		500		500	500		1,000
27	Well replacement	6,000		462		462	462		923	462		1,385
28	175k btu boiler	32,000		16,000		16,000	16,000	(32,000)		2,286		2,286
29	Boiler tank & recirculate pumps	13,000		6,500		6,500	6,500	(13,000)		929		929
30	Ductless A/C, wall Mounted, 12k btu	3,000		250		250	250		500	250		750
31	Carrier "Aero"air handler, cfm	75,000		5,769		5,769	5,769		11,538	5,769		17,308
32	Condensing unit (15 ton)	12,000		923		923	923		1,846	923		2,769
33	Drying cabinet (circul-air)	12,400		954		954	954		1,908	954		2,862
34	CO alarm system	10,000		5,000		5,000	5,000	(10,000)		714		714
	BUILDING SYSTEMS (CONT.)											

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4 cont'd

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
35	Unit heater	4,000		444		444	444		889	444		1,333
36	Garage radiant heat system	60,000		30,000		30,000	30,000	(60,000)		4,286		4,286
37	Exhaust fan, 2 hp	5,000		625		625	625		1,250	625		1,875
38	Exhaust hood fan	5,000		625		625	625		1,250	625		1,875
39	Emergency Generator (175 Kw)	75,000		4,167		4,167	4,167		8,333	4,167		12,500
40	Emergency Generator (rebuild)	10,000		1,250		1,250	1,250		2,500	1,250		3,750
41	Access Control System (ACS)	6,604		2,201		2,201	2,201		4,403	2,201	(6,604)	
42	Security camera	2,700		900		900	900		1,800	900	(2,700)	
43	CCTV system	2,850		950		950	950		1,900	950	(2,850)	
44	Radio antenna (allowance)	5,000		313		313	313		625	313		938

POLICE STATION



Police Station. The police station is of recent construction and is designed and constructed for the purpose of a police station. Our understanding is that the station is adequate for Police Department operations.

Asphalt Pavement. The Township is responsible for the drive and parking areas. In general, the asphalt pavement is in good condition, with minor cracking.

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 Township better manage the asphalt pavements throughout the community: http://mdareserves.com/resources/links/site-components.

Site Lighting. The Township is responsible for the operation of the facility's 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.

Building Roofing. The station roofed in a flat roofing system that is in generally good condition.

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.

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.

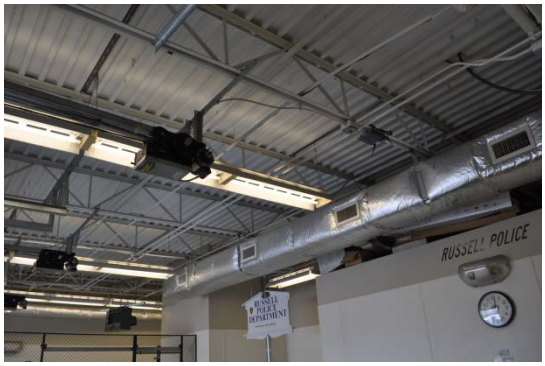
Siding and Trim. The exterior of the building is clad in masonry siding and trim. The siding and trim materials are in generally good condition.

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.

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 Township 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.

Building Electrical Service. The electrical systems of the building is 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.

Emergency Generator. The building is served by a 175 kW generator that is located behind the building. The generator is in good condition and receives regular maintenance.

It is recommended that the Township continue the following to maintain the serviceability of the system:

- Maintenance contract.
- Weekly start-up and test.
- Regular service of electrical connections.

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EXECUTIVE SUMMARY

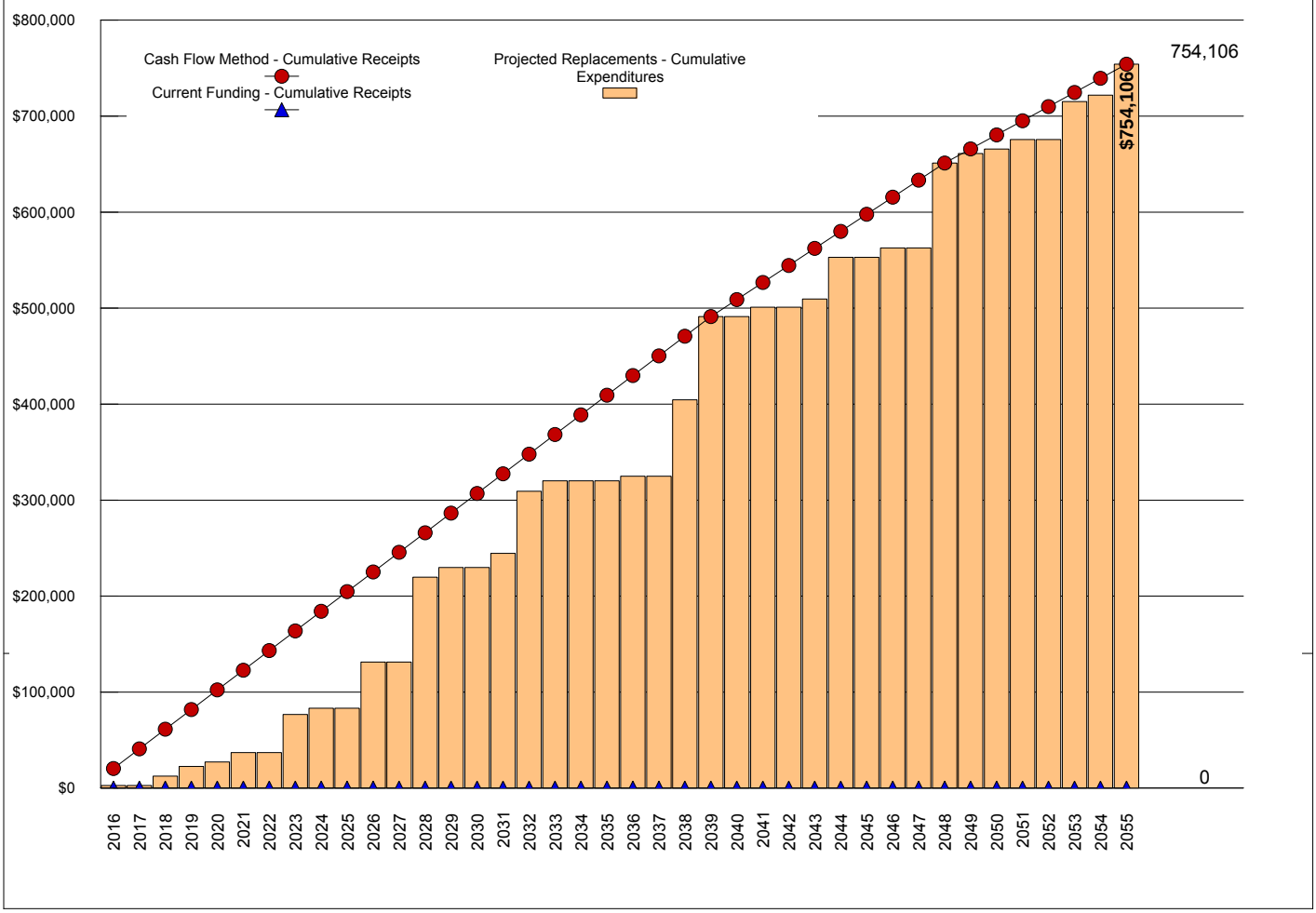
The Police Station Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 33 Projected Replacements identified in the Replacement Reserve Inventory.

$20,465 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2016**

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

Police Station reports a that the Township is currently not funding Replacement Reserves.
This Study contains the information necessary for the Township to develop a Funding Plan to address the $754,106 of Projected Replacements identified in the Replacement Reserve Inventory over the 40-year Study Period.

#1 - Cumulative Replacement Reserve Funding and Expenditures Graph



The Current Funding Objective as calculated by the Component Method (Fully Funded) is $133,433 making the reserve account 0.0% funded. See the Appendix for more information on this method.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Police Station 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.

2016 | **STUDY YEAR**

The Township 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, 2016.

40 Years | **STUDY PERIOD**

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

NONE | **STARTING BALANCE**

The Township reports that no funds are attributed to Replacement Reserves

Level One | **LEVEL OF SERVICE**

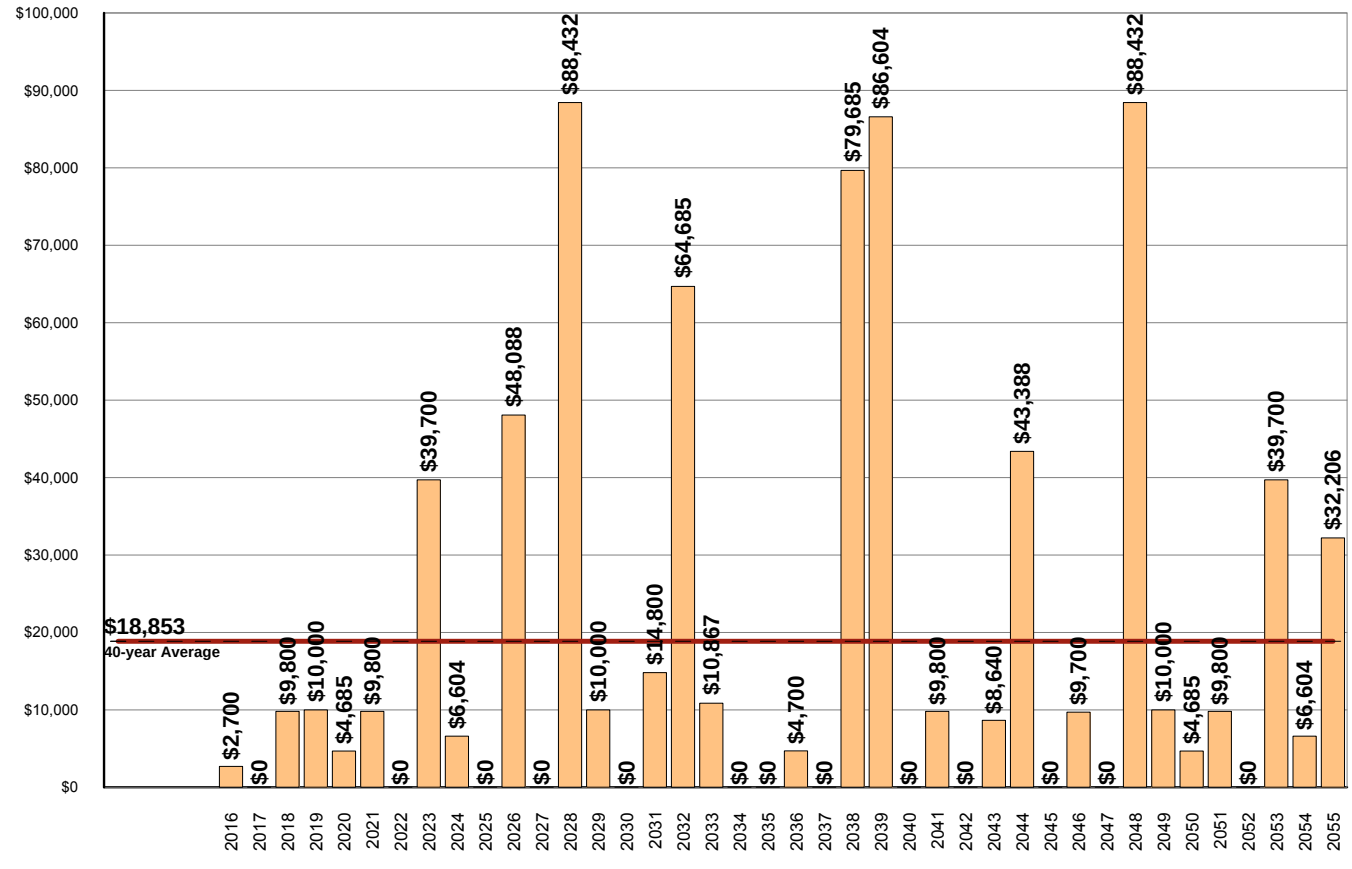
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level One Study, as defined by the Community Associations Institute (CAI).

$754,106 | **REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS**

The Police Station Replacement Reserve Inventory identifies 33 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be $754,106 over the 40-year Study Period. The Projected Replacements are divided into 5 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 $18,853. Section C provides a year by year Calender of these expenditures.



UPDATING

UPDATING OF THE FUNDING PLAN

The Township 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

The annual expenditures that comprise the $754,106 of Projected Expenditures over the 40-year Study Period are detailed in Table 3. A year-by-year listing of the specific projects can be found beginning on Page C2.

#3 - Table of Annual Expenditures - Years 1 through 40

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Projected Replacements	($2,700)		($9,800)	($10,000)	($4,685)	($9,800)		($39,700)	($6,604)	
End of Year Balance	($2,700)	($2,700)	($12,500)	($22,500)	($27,185)	($36,985)	($36,985)	($76,685)	($83,289)	($83,289)
Cumulative Expenditures	($2,700)	($2,700)	($12,500)	($22,500)	($27,185)	($36,985)	($36,985)	($76,685)	($83,289)	($83,289)

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements	($48,088)		($88,432)	($10,000)		($14,800)	($64,685)	($10,867)		
End of Year Balance	($131,377)	($131,377)	($219,809)	($229,809)	($229,809)	($244,609)	($309,294)	($320,162)	($320,162)	($320,162)
Cumulative Expenditures	($131,377)	($131,377)	($219,809)	($229,809)	($229,809)	($244,609)	($309,294)	($320,162)	($320,162)	($320,162)

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Projected Replacements	($4,700)		($79,685)	($86,604)		($9,800)		($8,640)	($43,388)	
End of Year Balance	($324,862)	($324,862)	($404,547)	($491,151)	($491,151)	($500,951)	($500,951)	($509,591)	($552,979)	($552,979)
Cumulative Expenditures	($324,862)	($324,862)	($404,547)	($491,151)	($491,151)	($500,951)	($500,951)	($509,591)	($552,979)	($552,979)

Year	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
Projected Replacements	($9,700)		($88,432)	($10,000)	($4,685)	($9,800)		($39,700)	($6,604)	($32,206)
End of Year Balance	($562,679)	($562,679)	($651,111)	($661,111)	($665,796)	($675,596)	($675,596)	($715,296)	($721,900)	($754,106)
Cumulative Expenditures	($562,679)	($562,679)	($651,111)	($661,111)	($665,796)	($675,596)	($675,596)	($715,296)	($721,900)	($754,106)

Table #3 shows the annual costs for Projected Replacements and the cumulative annual expenditures for the Projected Replacements. Table #3 also shows the Starting Balance and Current Annual Funding if reported by Township. When this information is provided, Table #3 will calculate the consequences of continuing to fund Replacement Reserves at current levels over the 40-year Study Period.

This information is for use by the Township for the development of a Funding Plan. The Funding Plan is a critical planning tool if the Township is to provide timely and adequate funding for the $754,106 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period.

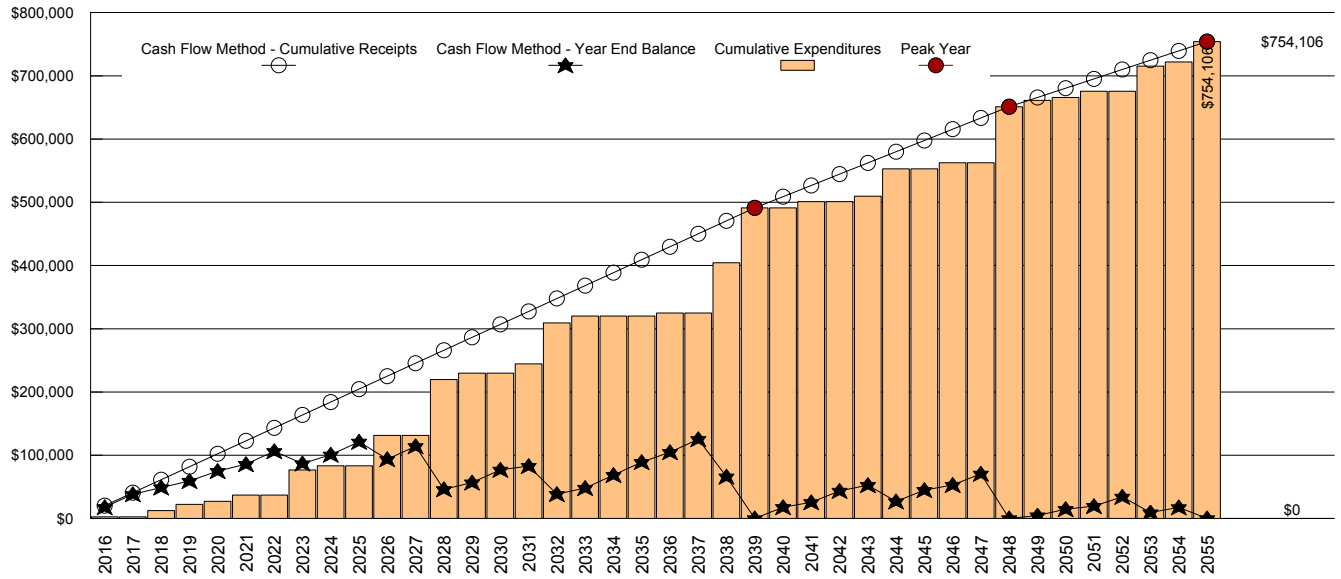
CASH FLOW METHOD FUNDING

$20,465 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2016**

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 2039 with Replacement Reserves on Deposit dropping to the Minimum Balance after the completion of $491,151 of replacements from 2016 to 2039. Recommended funding declines from $20,465 in 2039 to $17,773 in 2040. Peak Years are identified in Chart 4 and Table 5.
- Minimum Balance. The calculations assume a Minimum Balance of $0 in Replacement Reserves. This is approx. 0 months of average expenditures based on the $18,853, 40-year average annual expenditure.
- Cash Flow Method Study Period. Cash Flow Method calculates funding for $754,106 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2055 and in 2055, 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Starting Balance										
Projected Replacements	($2,700)		($9,800)	($10,000)	($4,685)	($9,800)		($39,700)	($6,604)	
Annual Deposit	$20,465	$20,465	$20,465	$20,465	$20,465	$20,465	$20,465	$20,465	$20,465	$20,465
End of Year Balance	$17,765	$38,229	$48,894	$59,358	$75,138	$85,803	$106,267	$87,032	$100,892	$121,357
Cumulative Expenditures	$2,700	$2,700	$12,500	$22,500	$27,185	$36,985	$36,985	$76,685	$83,289	$83,289
Cumulative Receipts	$20,465	$40,929	$61,394	$81,858	$102,323	$122,788	$143,252	$163,717	$184,181	$204,646

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements	($48,088)		($88,432)	($10,000)		($14,800)	($64,685)	($10,867)		
Annual Deposit	$20,465	$20,465	$20,465	$20,465	$20,465	$20,465	$20,465	$20,465	$20,465	$20,465
End of Year Balance	$93,733	$114,198	$46,231	$56,695	$77,160	$82,825	$38,604	$48,201	$68,666	$89,131
Cumulative Expenditures	($131,377)	($131,377)	($219,809)	($229,809)	($229,809)	($244,609)	($309,294)	($320,162)	($320,162)	($320,162)
Cumulative Receipts	$225,111	$245,575	$266,040	$286,505	$306,969	$327,434	$347,898	$368,363	$388,828	$409,292

Year	2036	2037	2038	1st Peak - 2039	2040	2041	2042	2043	2044	2045
Projected Replacements	($4,700)		($79,685)	($86,604)		($9,800)		($8,640)	($43,388)	
Annual Deposit	$20,465	$20,465	$20,465	$20,465	$17,773	$17,773	$17,773	$17,773	$17,773	$17,773
End of Year Balance	$104,895	$125,360	$66,139	$0	$17,773	$25,747	$43,520	$52,653	$27,039	$44,812
Cumulative Expenditures	($324,862)	($324,862)	($404,547)	($491,151)	($491,151)	($500,951)	($500,951)	($509,591)	($552,979)	($552,979)
Cumulative Receipts	$429,757	$450,221	$470,686	$491,151	$508,924	$526,697	$544,471	$562,244	$580,017	$597,791

Year	2046	2047	2nd Peak - 2048	2049	2050	2051	2052	2053	2054	3rd Peak - 2055
Projected Replacements	($9,700)		($88,432)	($10,000)	($4,685)	($9,800)		($39,700)	($6,604)	($32,206)
Annual Deposit	$17,773	$17,773	$17,773	$14,714	$14,714	$14,714	$14,714	$14,714	$14,714	$14,714
End of Year Balance	$52,885	$70,659	$0	$4,714	$14,742	$19,656	$34,369	$9,383	$17,493	$0
Cumulative Expenditures	($562,679)	($562,679)	($651,111)	($661,111)	($665,796)	($675,596)	($675,596)	($715,296)	($721,900)	($754,106)
Cumulative Receipts	$615,564	$633,337	$651,111	$665,824	$680,538	$695,252	$709,965	$724,679	$739,393	$754,106

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 belive 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.

$20,465 2016 - CASH FLOW METHOD RECOMMENDED FUNDING

The 2016 Study Year calculations have been made using current replacement costs (see Page B2), modified by the Analyst for any project specific conditions.

$21,102 2017 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2017 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $17,765 on January 1, 2017.
- All 2016 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $2,700.
- Construction Cost Inflation of 3.00 percent in 2016.

The $21,102 inflation adjusted funding in 2017 is a 3.11 percent increase over the non-inflation adjusted 2017 funding of $20,465.

$21,788 2018 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2018 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $38,866 on January 1, 2018.
- No Expenditures from Replacement Reserves in 2017.
- Construction Cost Inflation of 3.00 percent in 2017.

The $21,788 inflation adjusted funding in 2018 is a 6.47 percent increase over the non-inflation adjusted 2018 funding of $20,465.

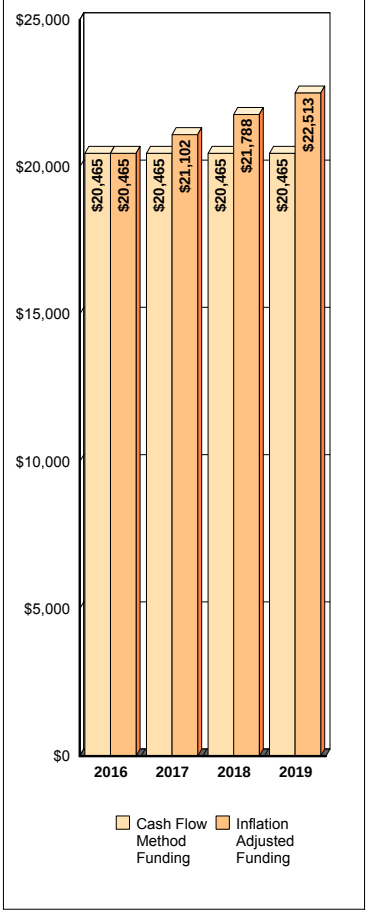
$22,513 2019 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2019 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $50,257 on January 1, 2019.
- All 2018 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $10,397.
- Construction Cost Inflation of 3.00 percent in 2018.

The $22,513 inflation adjusted funding in 2019 is a 10.01 percent increase over the non-inflation adjusted funding of $20,465.

#6 - Inflation Adjusted Funding



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 2017, 2018 and 2019 inflation adjusted funding calculations above, the 3.00 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 2016, based on a 1.00 percent interest rate, we estimate the Association may earn $89 on an average balance of $8,882, $283 on an average balance of $28,315 in 2017, and $445 on $44,562 in 2018. The Association may elect to use these funds to reduce annual funding.

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 33 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B1.

REPLACEMENT RESERVE INVENTORY
GENERAL INFORMATION

Police Station - Replacement Reserve Inventory identifies 33 Projected Replacements.

- PROJECTED REPLACEMENTS. 33 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 $410,138. Replacements totaling $552,979 are scheduled in the Replacement Reserve Inventory over the 40-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. None of the items included in the Replacement Reserve Inventory are 'Excluded Items'. Multiple categories of items 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 that $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 Township policy on the administration of Replacement Reserves. If the Township 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 Township.

  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 Township. These types of items are generally not the responsibility of the Township and are excluded from the Replacement Reserve Inventory.

- CATEGORIES. The 33 items included in the Police Station Replacement Reserve Inventory are divided into 5 major categories. Each category is printed on a separate page, Pages B3 to B7.

- 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.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- INVENTORY DATA. Each of the 33 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.

- REVIEW OF EXPENDITURES. This Replacement Reserve Study should be reviewed by an accounting professional representing the Township 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.

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	Asphalt pavement, mill and overlay	sf	20,370	$1.90	18	10	$38,703
2	Pavement, rejuvenator seal coat/striping (201	sf	20,370	$0.23	6	4	$4,685
3	Concrete curb and gutter	ft	112	$35.70	54	39	$3,998
4	Concrete flatwork	sf	1,112	$9.00	60	39	$10,008
5	Bollards	ea	8	$250.00	20	12	$2,000
6	Exterior lighting systems (allowance)	ls	1	$2,000.00	5	5	$2,000
7	Lamp post	ea	8	$2,500.00	30	22	$20,000
8	Landscape bollard	ea	9	$800.00	15	7	$7,200
9	Block retaining wall , re-set allowance	ls	1	$800.00	10	2	$800
10	Block retaining wall, replacement	sf	280	$65.00	54	39	$18,200
11	Privacy fencing	ft	325	$38.00	20	12	$12,350
12	Flagpole (approx. 30')	ea	1	$4,500.00	30	22	$4,500
13	Storm water management (allowance)	ls	1	$1,000.00	30	22	$1,000
14	Sanitary sewer lateral (allowance)	ls	1	$4,000.00	10	2	$4,000

SITE COMPONENTS - Replacement Costs - Subtotal $129,445

SITE COMPONENTS
COMMENTS

- Remaining Economic Life is based in part on the age of the installation, the quality of the installation and the condition of the installation. Where the age of the installation is not known it is estimated.
- Allowance for exterior lighting systems includes replacement of components of ornamental light, lamp post head, and flagpole lights.
- Sanitary sewer allowance included for potential replacements of existing sewer utility.
- Storm water management allowance included to account for run-off, inlets, piping, and outlets.

BUILDING EXTERIOR
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
15	Builtup roofing, gutters& downspouts	sf	7,347	$6.00	20	12	$44,082
16	Brick veneer repoint (10% allowance)	sf	541	$9.00	25	17	$4,867
17	Exterior door (allowance)	ls	1	$10,000.00	20	12	$10,000
18	Overhead door	ea	4	$6,000.00	15	7	$24,000
19	Windows, extruded aluminum double glazed	sf	192	$45.00	35	27	$8,640
20	Exterior building lights	ea	6	$450.00	5	none	$2,700

BUILDING EXTERIOR - Replacement Costs - Subtotal $94,289

BUILDING EXTERIOR
COMMENTS

BUILDING SYSTEMS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
21	Fire alarm control annunciator panel	ea	1	$10,200.00	20	12	$10,200
22	Water heater	ea	1	$8,500.00	15	7	$8,500
23	Water softener	ea	1	$5,000.00	10	2	$5,000
24	Well replacement	ea	1	$6,000.00	25	17	$6,000
25	Package unit, RTU (4 ton/48,000 btu)	ea	2	$15,000.00	24	16	$30,000
26	Package unit, RTU (5 ton/70,000 btu)	ea	1	$15,000.00	24	16	$15,000
27	Package unit, RTU (2.5 ton/30,000 btu)	ea	1	$15,000.00	24	16	$15,000

BUILDING SYSTEMS - Replacement Costs - Subtotal $89,700

BUILDING SYSTEMS
COMMENTS

BUILDING SYTEMS (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
28	Emergency Generator (150 Kw)	ea	1	$70,000.00	30	23	$70,000
29	Emergency Generator (rebuild)	ea	1	$10,000.00	10	3	$10,000
30	Access Control System (ACS)	ea	1	$6,604.00	15	8	$6,604
31	Security camera	ea	5	$450.00	10	5	$2,250
32	CCTV system	ea	1	$2,850.00	10	5	$2,850
33	Radio antenna (allowance)	ls	1	$5,000.00	15	15	$5,000

BUILDING SYTEMS (CONT.) - Replacement Costs - Subtotal $96,704

BUILDING SYTEMS (CONT.)
COMMENTS

VALUATION EXCLUSIONS
EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Roof hatch	sf	16				EXCLUDED
	Caulking (allowance)	ls	1				EXCLUDED
	Fire Alarm Control Panel	ea	1				EXCLUDED
	Smoke detector	ea	10				EXCLUDED
	Fire strobe	ea	10				EXCLUDED
	Fire alarm pull	ea	4				EXCLUDED
	Well pump	ea	1				EXCLUDED
	Well clean-up service	ea	1				EXCLUDED
	Pressure tank	ea	1				EXCLUDED
	Water testing	ea	1				EXCLUDED
	Exhaust fan, 1/4 hp	ea	3				EXCLUDED
	Domestic water piping (allowance)	ls	1				EXCLUDED
	Electrical (allowance)	ea	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 $2,000.00 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.

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PROJECTED ANNUAL REPLACEMENTS
GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 33 Projected Replacements in the Police Station 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 Township 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 Township 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 Township and the visual evaluations of the Analyst. It has been prepared for the sole use of the Township 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 Police Station Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Township.

PROJECTED REPLACEMENTS - YEARS ONE TO FIFTEEN

Item	2016 - STUDY YEAR	$
20	Exterior building lights	$2,700
	Total Scheduled Replacements	$2,700

Item	2017 - YEAR 2	$
	No Scheduled Replacements	

Item	2018 - YEAR 3	$
9	Block retaining wall , re-set a	$800
14	Sanitary sewer lateral (allow	$4,000
23	Water softener	$5,000
	Total Scheduled Replacements	$9,800

Item	2019 - YEAR 4	$
29	Emergency Generator (rebu	$10,000
	Total Scheduled Replacements	$10,000

Item	2020 - YEAR 5	$
2	Pavement, rejuvenator seal	$4,685
	Total Scheduled Replacements	$4,685

Item	2021 - YEAR 6	$
6	Exterior lighting systems (all	$2,000
20	Exterior building lights	$2,700
31	Security camera	$2,250
32	CCTV system	$2,850
	Total Scheduled Replacements	$9,800

Item	2022 - YEAR 7	$
	No Scheduled Replacements	

Item	2023 - YEAR 8	$
8	Landscape bollard	$7,200
18	Overhead door	$24,000
22	Water heater	$8,500
	Total Scheduled Replacements	$39,700

Item	2024 - YEAR 9	$
30	Access Control System (AC	$6,604
	Total Scheduled Replacements	$6,604

Item	2025 - YEAR 10	$
	No Scheduled Replacements	

Item	2026 - YEAR 11	$
1	Asphalt pavement, mill and o	$38,703
2	Pavement, rejuvenator seal	$4,685
6	Exterior lighting systems (all	$2,000
20	Exterior building lights	$2,700
	Total Scheduled Replacements	$48,088

Item	2027 - YEAR 12	$
	No Scheduled Replacements	

Item	2028 - YEAR 13	$
5	Bollards	$2,000
9	Block retaining wall , re-set a	$800
11	Privacy fencing	$12,350
14	Sanitary sewer lateral (allow	$4,000
15	Builtup roofing, gutters& dov	$44,082
17	Exterior door (allowance)	$10,000
21	Fire alarm control annunciat	$10,200
23	Water softener	$5,000
	Total Scheduled Replacements	$88,432

Item	2029 - YEAR 14	$
29	Emergency Generator (rebu	$10,000
	Total Scheduled Replacements	$10,000

Item	2030 - YEAR 15	$
	No Scheduled Replacements	

PROJECTED REPLACEMENTS - YEARS SIXTEEN TO THIRTY

Item	2031 - YEAR 16	$
6	Exterior lighting systems (all	$2,000
20	Exterior building lights	$2,700
31	Security camera	$2,250
32	CCTV system	$2,850
33	Radio antenna (allowance)	$5,000
	Total Scheduled Replacements	$14,800

Item	2032 - YEAR 17	$
2	Pavement, rejuvenator seal	$4,685
25	Package unit, RTU (4 ton/48	$30,000
26	Package unit, RTU (5 ton/70	$15,000
27	Package unit, RTU (2.5 ton/:	$15,000
	Total Scheduled Replacements	$64,685

Item	2033 - YEAR 18	$
16	Brick veneer repoint (10% al	$4,867
24	Well replacement	$6,000
	Total Scheduled Replacements	$10,867

Item	2034 - YEAR 19	$
	No Scheduled Replacements	

Item	2035 - YEAR 20	$
	No Scheduled Replacements	

Item	2036 - YEAR 21	$
6	Exterior lighting systems (all	$2,000
20	Exterior building lights	$2,700
	Total Scheduled Replacements	$4,700

Item	2037 - YEAR 22	$
	No Scheduled Replacements	

Item	2038 - YEAR 23	$
2	Pavement, rejuvenator seal	$4,685
7	Lamp post	$20,000
8	Landscape bollard	$7,200
9	Block retaining wall , re-set a	$800
12	Flagpole (approx. 30')	$4,500
13	Storm water management (a	$1,000
14	Sanitary sewer lateral (allow	$4,000
18	Overhead door	$24,000
22	Water heater	$8,500
23	Water softener	$5,000
	Total Scheduled Replacements	$79,685

Item	2039 - YEAR 24	$
28	Emergency Generator (150	$70,000
29	Emergency Generator (rebu	$10,000
30	Access Control System (AC:	$6,604
	Total Scheduled Replacements	$86,604

Item	2040 - YEAR 25	$
	No Scheduled Replacements	

Item	2041 - YEAR 26	$
6	Exterior lighting systems (all	$2,000
20	Exterior building lights	$2,700
31	Security camera	$2,250
32	CCTV system	$2,850
	Total Scheduled Replacements	$9,800

Item	2042 - YEAR 27	$
	No Scheduled Replacements	

Item	2043 - YEAR 28	$
19	Windows, extruded aluminu	$8,640
	Total Scheduled Replacements	$8,640

Item	2044 - YEAR 29	$
1	Asphalt pavement, mill and c	$38,703
2	Pavement, rejuvenator seal	$4,685
	Total Scheduled Replacements	$43,388

Item	2045 - YEAR 30	$
	No Scheduled Replacements	

PROJECTED REPLACEMENTS - YEARS THIRTY-ONE TO FORTY-FIVE

Item	2046 - YEAR 31	$
6	Exterior lighting systems (all	$2,000
20	Exterior building lights	$2,700
33	Radio antenna (allowance)	$5,000
	Total Scheduled Replacements	$9,700

Item	2047 - YEAR 32	$
	No Scheduled Replacements	

Item	2048 - YEAR 33	$
5	Bollards	$2,000
9	Block retaining wall , re-set a	$800
11	Privacy fencing	$12,350
14	Sanitary sewer lateral (allow	$4,000
15	Builtup roofing, gutters& dov	$44,082
17	Exterior door (allowance)	$10,000
21	Fire alarm control annunciat	$10,200
23	Water softener	$5,000
	Total Scheduled Replacements	$88,432

Item	2049 - YEAR 34	$
29	Emergency Generator (rebu	$10,000
	Total Scheduled Replacements	$10,000

Item	2050 - YEAR 35	$
2	Pavement, rejuvenator seal	$4,685
	Total Scheduled Replacements	$4,685

Item	2051 - YEAR 36	$
6	Exterior lighting systems (all	$2,000
20	Exterior building lights	$2,700
31	Security camera	$2,250
32	CCTV system	$2,850
	Total Scheduled Replacements	$9,800

Item	2052 - YEAR 37	$
	No Scheduled Replacements	

Item	2053 - YEAR 38	$
8	Landscape bollard	$7,200
18	Overhead door	$24,000
22	Water heater	$8,500
	Total Scheduled Replacements	$39,700

Item	2054 - YEAR 39	$
30	Access Control System (ACS	$6,604
	Total Scheduled Replacements	$6,604

Item	2055 - YEAR 40	$
3	Concrete curb and gutter	$3,998
4	Concrete flatwork	$10,008
10	Block retaining wall, replace	$18,200
	Total Scheduled Replacements	$32,206

Item	2056 (beyond Study Period)	$
2	Pavement, rejuvenator seal	$4,685
6	Exterior lighting systems (all	$2,000
20	Exterior building lights	$2,700
25	Package unit, RTU (4 ton/48	$30,000
26	Package unit, RTU (5 ton/70	$15,000
27	Package unit, RTU (2.5 ton/3	$15,000
	Total Scheduled Replacements	$69,385

Item	2057 (beyond Study Period)	$
	No Scheduled Replacements	

Item	2058 (beyond Study Period)	$
9	Block retaining wall , re-set a	$800
14	Sanitary sewer lateral (allow	$4,000
16	Brick veneer repoint (10% al	$4,867
23	Water softener	$5,000
24	Well replacement	$6,000
	Total Scheduled Replacements	$20,667

Item	2059 (beyond Study Period)	$
29	Emergency Generator (rebu	$10,000
	Total Scheduled Replacements	$10,000

Item	2060 (beyond Study Period)	$
	No Scheduled Replacements	

CASH FLOW METHOD ACCOUNTING SUMMARY

This Police Station - Cash Flow Method Accounting Summary is an attachment to the Police Station - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 33 Projected Replacements listed in the Police Station Replacement Reserve Inventory has been assigned to one of 4 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 $0 Beginning Balance (at the start of the Study Year) and the $61,394 of additional Replacement Reserve Funding in 2016 through 2018 (as calculated in the Replacement Reserve Analysis) to each of the 33 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by Chronological Allocation.
  - Allocation of the $61,394 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, 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 $0 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 Police Station the Beginning Balance funds 0.0% of Scheduled Replacements in the Study Year.
  - The next step is the allocation of the $20,465 of 2016 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 Police Station the Beginning Balance and the 2016 Replacement Reserve Funding, funds replacements through 2018 and partial funds (79.6%) replacements in 2019.
  - Allocations of the 2017 and 2018 Reserve Funding are done using the same methodology.
  - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

2016 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 33 Projected Replacements included in the Police Station Replacement Reserve Inventory has been assigned to one of the 4 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $20,465 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 2016 being accomplished in 2016 at a cost of $2,700.

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 CF1

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	5 to 60 years	2 to 39 years	$129,445		$4,800		$4,800
BUILDING EXTERIOR	5 to 35 years	0 to 27 years	$94,289		$2,700	($2,700)	
BUILDING SYSTEMS	10 to 25 years	2 to 17 years	$89,700		$5,000		$5,000
BUILDING SYTEMS (CONT.)	10 to 30 years	3 to 23 years	$96,704		$7,965		$7,965

2017 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 33 Projected Replacements included in the Police Station Replacement Reserve Inventory has been assigned to one of the 4 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 $17,765 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $40,929 from 2016 through 2017.
- 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.

2017 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF2

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	5 to 60 years	1 to 38 years	$129,445	$4,800	$7,400		$12,200
BUILDING EXTERIOR	5 to 35 years	4 to 26 years	$94,289		$5,084		$5,084
BUILDING SYSTEMS	10 to 25 years	1 to 16 years	$89,700	$5,000	$844		$5,844
BUILDING SYTEMS (CONT.)	10 to 30 years	2 to 22 years	$96,704	$7,965	$7,135		$15,100

2018 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 33 Projected Replacements included in the Police Station Replacement Reserve Inventory has been assigned to one of the 4 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 $38,229 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $61,394 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $9,800.

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.

2018 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	5 to 60 years	0 to 37 years	$129,445	$12,200	$3,711	($4,800)	$11,112
BUILDING EXTERIOR	5 to 35 years	3 to 25 years	$94,289	$5,084	$12,372		$17,456
BUILDING SYSTEMS	10 to 25 years	0 to 15 years	$89,700	$5,844	$4,382	($5,000)	$5,226
BUILDING SYTEMS (CONT.)	10 to 30 years	1 to 21 years	$96,704	$15,100			$15,100

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CF4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $61,394 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 33 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $17,765 on January 1, 2017.
- Replacement Reserves on Deposit totaling $38,229 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $61,394 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $12,500.

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

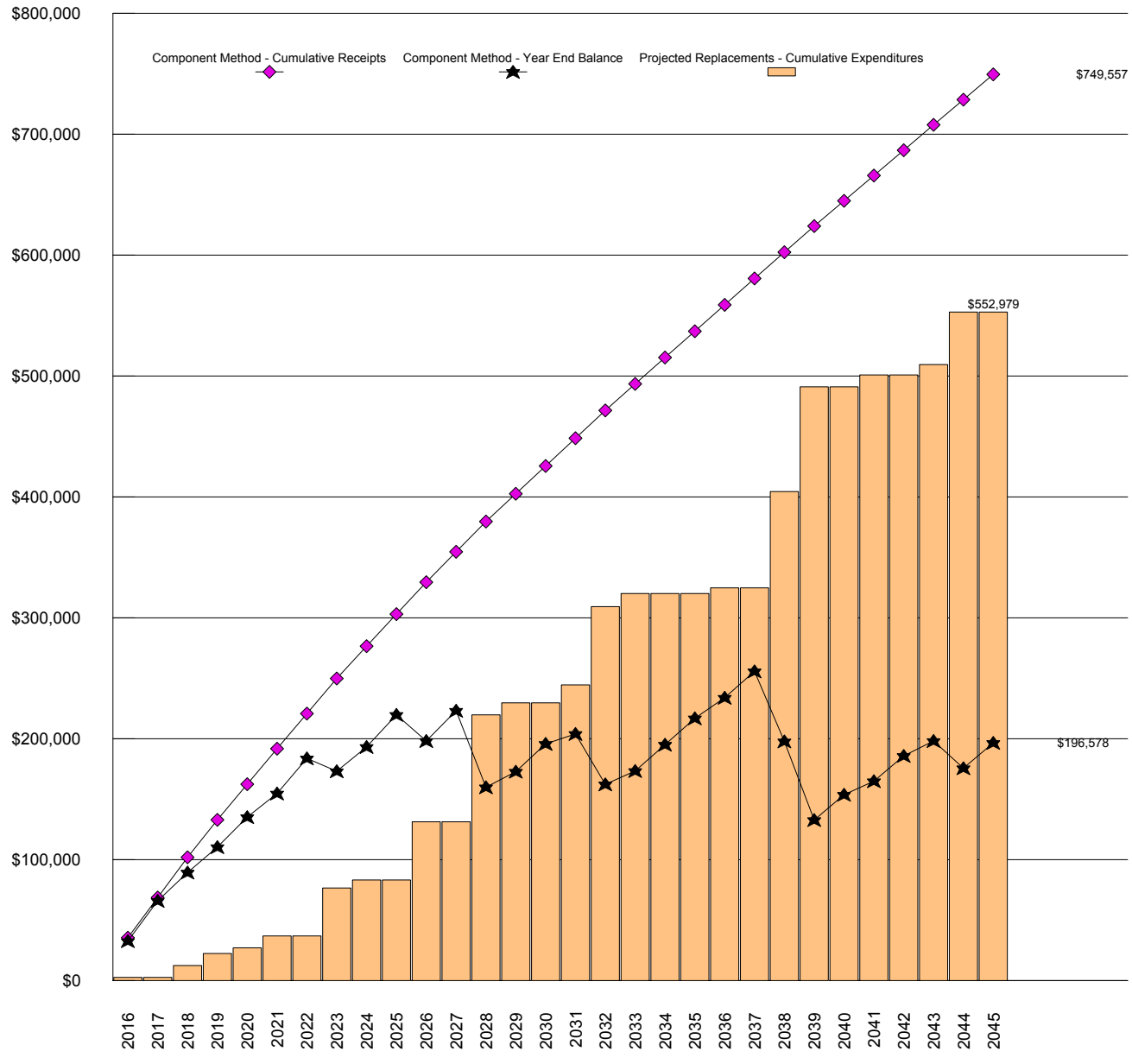
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement, mill and overlay	38,703										
2	Pavement, rejuvenator seal coat/stripin	4,685					4,685		4,685			4,685
3	Concrete curb and gutter	3,998										
4	Concrete flatwork	10,008										
5	Bollards	2,000										
6	Exterior lighting systems (allowance)	2,000					2,000		2,000			2,000
7	Lamp post	20,000										
8	Landscape bollard	7,200					715		715	3,711		4,427
9	Block retaining wall , re-set allowance	800		800		800			800		(800)	
10	Block retaining wall, replacement	18,200										
11	Privacy fencing	12,350										
12	Flagpole (approx. 30')	4,500										
13	Storm water management (allowance)	1,000										
14	Sanitary sewer lateral (allowance)	4,000		4,000		4,000			4,000		(4,000)	
	BUILDING EXTERIOR											
15	Builtup roofing, gutters& downspouts	44,082										
16	Brick veneer repoint (10% allowance)	4,867										
17	Exterior door (allowance)	10,000										
18	Overhead door	24,000					2,384		2,384	12,372		14,756
19	Windows, extruded aluminum double g	8,640										
20	Exterior building lights	2,700		2,700	(2,700)		2,700		2,700			2,700
	BUILDING SYSTEMS											
21	Fire alarm control annunciator panel	10,200										
22	Water heater	8,500					844		844	4,382		5,226
23	Water softener	5,000		5,000		5,000			5,000		(5,000)	
24	Well replacement	6,000										
25	Package unit, RTU (4 ton/48,000 btu)	30,000										
26	Package unit, RTU (5 ton/70,000 btu)	15,000										
27	Package unit, RTU (2.5 ton/30,000 btu	15,000										
	BUILDING SYTEMS (CONT.)											
28	Emergency Generator (150 Kw)	70,000										
29	Emergency Generator (rebuild)	10,000		7,965		7,965	2,035		10,000			10,000
30	Access Control System (ACS)	6,604										
31	Security camera	2,250					2,250		2,250			2,250
32	CCTV system	2,850					2,850		2,850			2,850
33	Radio antenna (allowance)	5,000										

COMPONENT METHOD

$35,435 **COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2016.**

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 33 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



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 33 Projected Replacements. The total, $133,433, 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 ($0) by the Current Funding Objective ($133,433). At Police Station the Funding Percentage is 0.0%

- Allocation of the Beginning Balance. The Beginning Balance is divided among the 33 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 Township has not accumulated $800 in Reserves (the Funding Objective), but rather at 0.0 percent funded, there is $0 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 $35,435, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2016).

  In our fence example, the $0 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 $500. Next year, the deposit remains $500, 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Beginning balance										
Recommended annual funding	$35,435	$33,275	$33,275	$30,988	$29,488	$29,332	$29,059	$29,059	$26,743	$26,450
Expenditures	$2,700		$9,800	$10,000	$4,685	$9,800		$39,700	$6,604	
Year end balance	$32,735	$66,010	$89,485	$110,474	$135,277	$154,809	$183,868	$173,227	$193,366	$219,816
Cumulative Expenditures	$2,700	$2,700	$12,500	$22,500	$27,185	$36,985	$36,985	$76,685	$83,289	$83,289
Cumulative Receipts	$35,435	$68,710	$101,985	$132,974	$162,462	$191,794	$220,853	$249,912	$276,655	$303,105
Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Recommended annual funding	$26,450	$25,081	$25,081	$22,964	$22,964	$22,964	$22,985	$21,956	$21,787	$21,787
Expenditures	$48,088		$88,432	$10,000		$14,800	$64,685	$10,867		
Year end balance	$198,177	$223,259	$159,908	$172,872	$195,837	$204,001	$162,301	$173,389	$195,176	$216,963
Cumulative Expenditures	$131,377	$131,377	$219,809	$229,809	$229,809	$244,609	$309,294	$320,162	$320,162	$320,162
Cumulative Receipts	$329,555	$354,636	$379,717	$402,682	$425,646	$448,610	$471,595	$493,551	$515,338	$537,124
Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Recommended annual funding	$21,787	$21,787	$21,787	$21,528	$20,945	$20,945	$20,945	$20,945	$20,883	$20,883
Expenditures	$4,700		$79,685	$86,604		$9,800		$8,640	$43,388	
Year end balance	$234,049	$255,836	$197,938	$132,862	$153,806	$164,951	$185,896	$198,200	$175,695	$196,578
Cumulative Expenditures	$324,862	$324,862	$404,547	$491,151	$491,151	$500,951	$500,951	$509,591	$552,979	$552,979
Cumulative Receipts	$558,911	$580,698	$602,484	$624,012	$644,957	$665,902	$686,846	$707,791	$728,674	$749,557

COMPONENT METHOD ACCOUNTING SUMMARY

This Police Station - Component Method Accounting Summary is an attachment to the Police Station - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 33 Projected Replacements listed in the Police Station Replacement Reserve Inventory has been assigned to one of 4 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 $0 Beginning Balance (at the start of the Study Year) and the $101,985 of additional Replacement Reserve funding from 2016 to 2018 (as calculated in the Replacement Reserve Analysis) to each of the 33 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by the Component Method.
  - Allocation of the $101,985 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, by the Component Method.

2016 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 33 Projected Replacements included in the Police Station Replacement Reserve Inventory has been assigned to one of the 4 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $35,435 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 2016 being accomplished in 2016 at a cost of $2,700.

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 CM1

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	5 to 60 years	2 to 39 years	$129,445		$10,307		$10,307
BUILDING EXTERIOR	5 to 35 years	0 to 27 years	$94,289		$10,439	$2,700	$7,739
BUILDING SYSTEMS	10 to 25 years	2 to 17 years	$89,700		$7,377		$7,377
BUILDING SYTEMS (CONT.)	10 to 30 years	3 to 23 years	$96,704		$7,313		$7,313

2017 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 33 Projected Replacements included in the Police Station Replacement Reserve Inventory has been assigned to one of the 4 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 $32,735 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $68,710 from 2016 through 2017.
- 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.

2017 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM2

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	5 to 60 years	1 to 38 years	$129,445	$10,307	$10,307		$20,613
BUILDING EXTERIOR	5 to 35 years	4 to 26 years	$94,289	$7,739	$8,279		$16,018
BUILDING SYSTEMS	10 to 25 years	1 to 16 years	$89,700	$7,377	$7,377		$14,753
BUILDING SYTEMS (CONT.)	10 to 30 years	2 to 22 years	$96,704	$7,313	$7,313		$14,626

2018 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 33 Projected Replacements included in the Police Station Replacement Reserve Inventory has been assigned to one of the 4 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 $66,010 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $101,985 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $9,800.

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.

2018 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	5 to 60 years	0 to 37 years	$129,445	$20,613	$10,307	$4,800	$26,120
BUILDING EXTERIOR	5 to 35 years	3 to 25 years	$94,289	$16,018	$8,279		$24,297
BUILDING SYSTEMS	10 to 25 years	0 to 15 years	$89,700	$14,753	$7,377	$5,000	$17,130
BUILDING SYTEMS (CONT.)	10 to 30 years	1 to 21 years	$96,704	$14,626	$7,313		$21,939

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $101,985 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 33 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $32,735 on January 1, 2017.
- Replacement Reserves on Deposit totaling $66,010 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $101,985 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $12,500.

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	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement, mill and overlay	38,703		3,518		3,518	3,518		7,037	3,518		10,555
2	Pavement, rejuvenator seal coat/stripin	4,685		937		937	937		1,874	937		2,811
3	Concrete curb and gutter	3,998		100		100	100		200	100		300
4	Concrete flatwork	10,008		250		250	250		500	250		751
5	Bollards	2,000		154		154	154		308	154		462
6	Exterior lighting systems (allowance)	2,000		333		333	333		667	333		1,000
7	Lamp post	20,000		870		870	870		1,739	870		2,609
8	Landscape bollard	7,200		900		900	900		1,800	900		2,700
9	Block retaining wall , re-set allowance	800		267		267	267		533	267	(800)	
10	Block retaining wall, replacement	18,200		455		455	455		910	455		1,365
11	Privacy fencing	12,350		950		950	950		1,900	950		2,850
12	Flagpole (approx. 30')	4,500		196		196	196		391	196		587
13	Storm water management (allowance)	1,000		43		43	43		87	43		130
14	Sanitary sewer lateral (allowance)	4,000		1,333		1,333	1,333		2,667	1,333	(4,000)	
	BUILDING EXTERIOR											
15	Builtup roofing, gutters& downspouts	44,082		3,391		3,391	3,391		6,782	3,391		10,173
16	Brick veneer repoint (10% allowance)	4,867		270		270	270		541	270		811
17	Exterior door (allowance)	10,000		769		769	769		1,538	769		2,308
18	Overhead door	24,000		3,000		3,000	3,000		6,000	3,000		9,000
19	Windows, extruded aluminum double g	8,640		309		309	309		617	309		926
20	Exterior building lights	2,700		2,700	(2,700)		540		540	540		1,080
	BUILDING SYSTEMS											
21	Fire alarm control annunciator panel	10,200		785		785	785		1,569	785		2,354
22	Water heater	8,500		1,063		1,063	1,063		2,125	1,063		3,188
23	Water softener	5,000		1,667		1,667	1,667		3,333	1,667	(5,000)	
24	Well replacement	6,000		333		333	333		667	333		1,000
25	Package unit, RTU (4 ton/48,000 btu)	30,000		1,765		1,765	1,765		3,529	1,765		5,294
26	Package unit, RTU (5 ton/70,000 btu)	15,000		882		882	882		1,765	882		2,647
27	Package unit, RTU (2.5 ton/30,000 btu	15,000		882		882	882		1,765	882		2,647
	BUILDING SYTEMS (CONT.)											
28	Emergency Generator (150 Kw)	70,000		2,917		2,917	2,917		5,833	2,917		8,750
29	Emergency Generator (rebuild)	10,000		2,500		2,500	2,500		5,000	2,500		7,500
30	Access Control System (ACS)	6,604		734		734	734		1,468	734		2,201
31	Security camera	2,250		375		375	375		750	375		1,125
32	CCTV system	2,850		475		475	475		950	475		1,425
33	Radio antenna (allowance)	5,000		313		313	313		625	313		938

ROAD DEPARTMENT

Road Department. The road department is converted from a prior use ad a trucking company. In general, there are issues with the design of the facility and its current use. This combined with the aging infrastructure makes replacement a decision point for the long term. Long-term use of the converted trucking dispatch facility will prove to be cost prohibitive.

Site Drainage. The location has minimal structured drainage and or run-off control. The site is exhibiting evidence of soil deterioration from water run-off. The majority of the site is paved and impermeable with minimal inlet options. Furthermore, there are environmental considerations due to storage of ice treatment measures.

Site Grading. The site has a consistent grade for about 90% of the square footage in service. Sloping areas do not contribute any benefit to the operations and may decrease the utility of the space.

Roofing. The Township is located in a region with considerable precipitation and snowfall. Flat roofing is not ideal for this region due to drainage and the weight of the snow accumulation. Roof systems with a pitch or grade are better suited.

Garage. The truck bays provide limited options for modern heavy equipment. The truck bays consist of a converted scale house with imitations on space, drainage, lighting, and energy efficiency.

HVAC. The existing HVAC systems perform adequately but are not the most efficient form of climate control for areas with large overhead doors. The overhead radiant heating system may not maintain temperature when the doors are opened for equipment access. Additional duct air systems provide adequate HVAC for the office area.

Storage Building. The storage buildings are adequate for storage of equipment but do not provide HVAC. Additionally there is a police shooting range located within the property that should be located elsewhere.

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EXECUTIVE SUMMARY

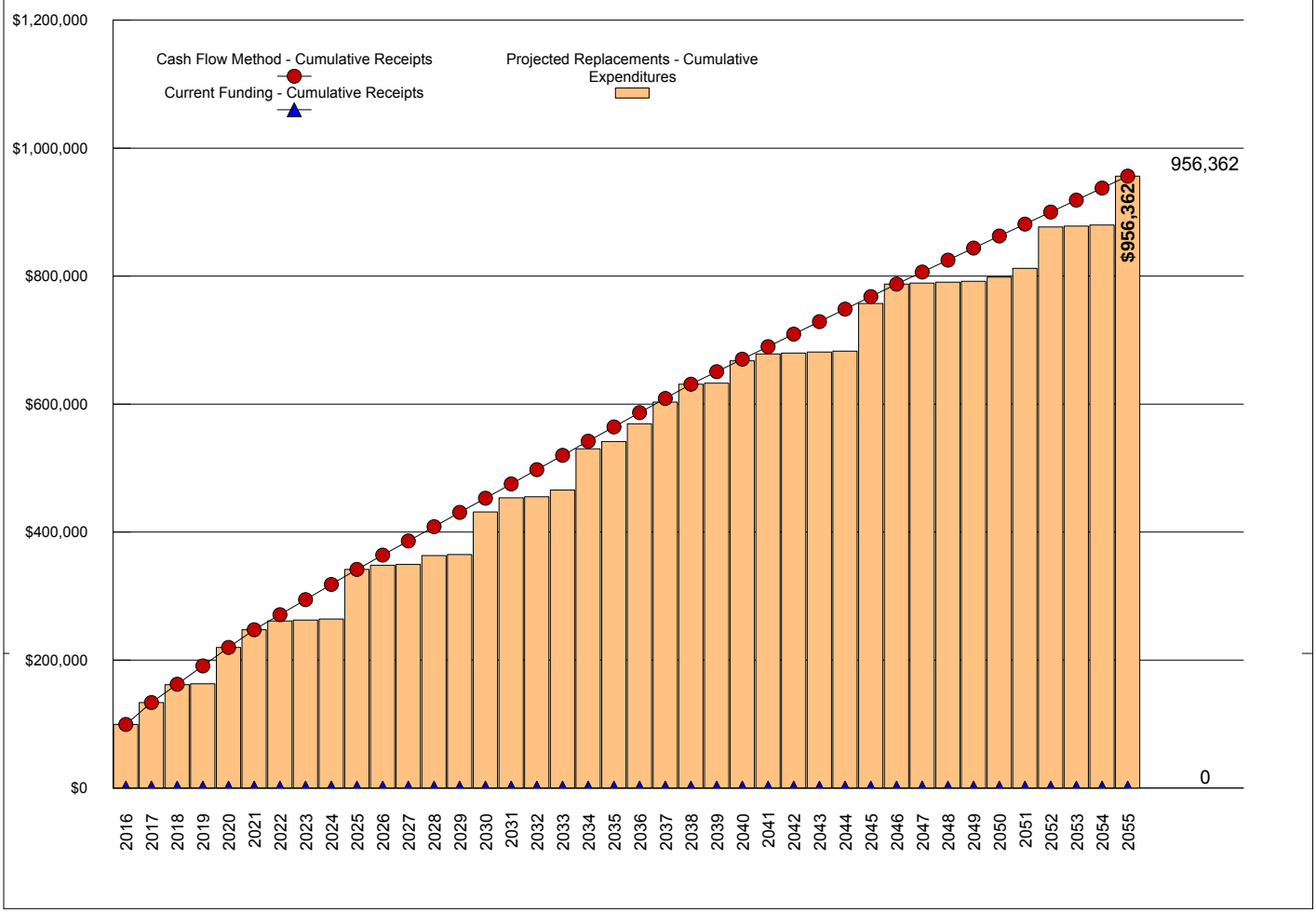
The Road Department Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 28 Projected Replacements identified in the Replacement Reserve Inventory.

$99,566 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2016**

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

Road Department reports a that the Township is currently not funding Replacement Reserves.
This Study contains the information necessary for the Township to develop a Funding Plan to address the $956,362 of Projected Replacements identified in the Replacement Reserve Inventory over the 40-year Study Period.

#1 - Cumulative Replacement Reserve Funding and Expenditures Graph



The Current Funding Objective as calculated by the Component Method (Fully Funded) is $283,729 making the reserve account 0.0% funded. See the Appendix for more information on this method.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Road Department 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.

2016 | **STUDY YEAR**

The Township 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, 2016.

40 Years | **STUDY PERIOD**

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

NONE | **STARTING BALANCE**

The Township reports that no funds are attributed to Replacement Reserves

Level One | **LEVEL OF SERVICE**

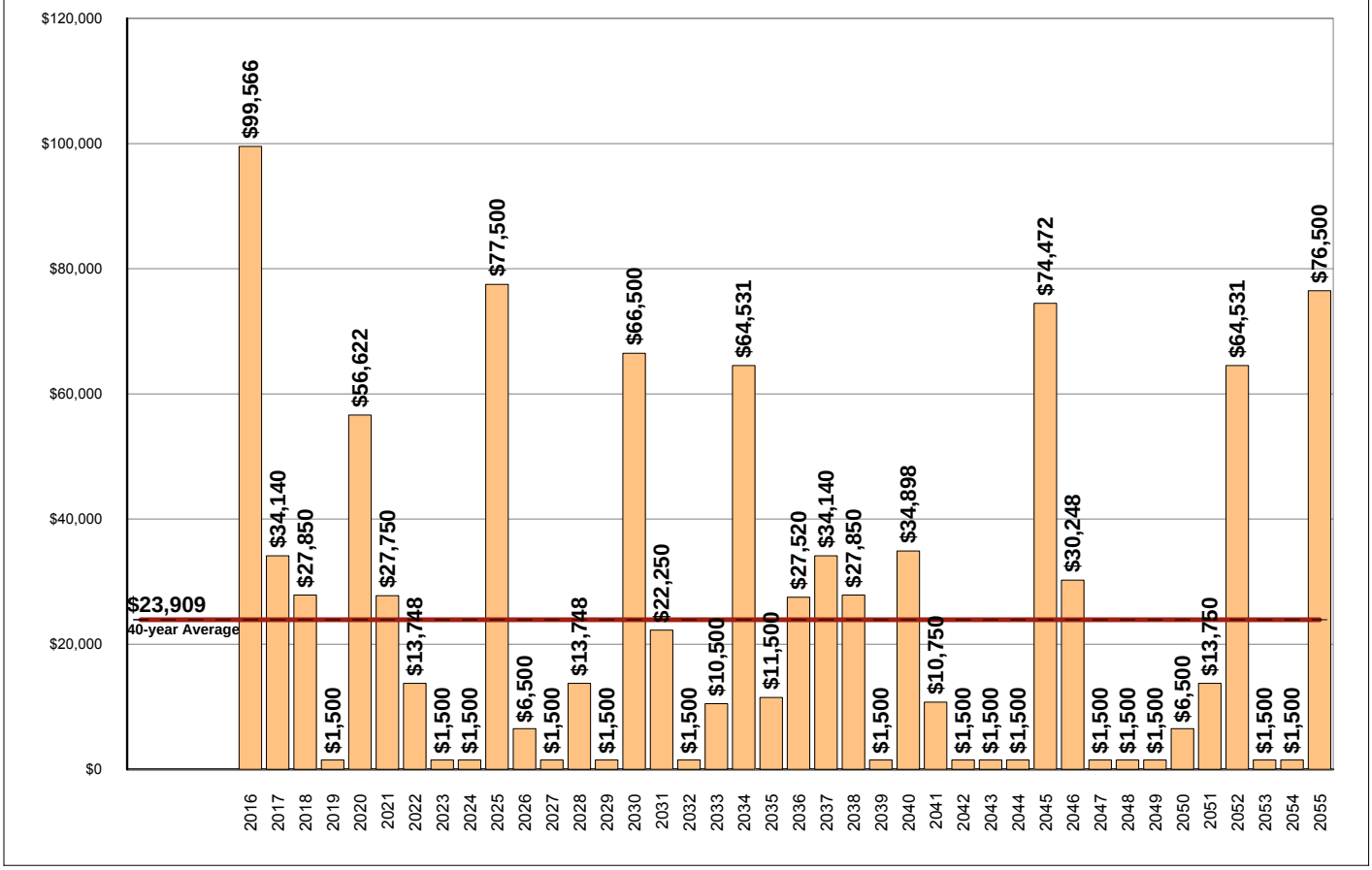
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level One Study, as defined by the Community Associations Institute (CAI).

$956,362 | **REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS**

The Road Department Replacement Reserve Inventory identifies 28 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be $956,362 over the 40-year Study Period. The Projected Replacements are divided into 5 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 $23,909. Section C provides a year by year Calender of these expenditures.



UPDATING

UPDATING OF THE FUNDING PLAN

The Township 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

The annual expenditures that comprise the $956,362 of Projected Expenditures over the 40-year Study Period are detailed in Table 3. A year-by-year listing of the specific projects can be found beginning on Page C2.

#3 - Table of Annual Expenditures - Years 1 through 40

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Projected Replacements	($99,566)	($34,140)	($27,850)	($1,500)	($56,622)	($27,750)	($13,748)	($1,500)	($1,500)	($77,500)
End of Year Balance	($99,566)	($133,706)	($161,556)	($163,056)	($219,678)	($247,428)	($261,175)	($262,675)	($264,175)	($341,675)
Cumulative Expenditures	($99,566)	($133,706)	($161,556)	($163,056)	($219,678)	($247,428)	($261,175)	($262,675)	($264,175)	($341,675)

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements	($6,500)	($1,500)	($13,748)	($1,500)	($66,500)	($22,250)	($1,500)	($10,500)	($64,531)	($11,500)
End of Year Balance	($348,175)	($349,675)	($363,423)	($364,923)	($431,423)	($453,673)	($455,173)	($465,673)	($530,204)	($541,704)
Cumulative Expenditures	($348,175)	($349,675)	($363,423)	($364,923)	($431,423)	($453,673)	($455,173)	($465,673)	($530,204)	($541,704)

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Projected Replacements	($27,520)	($34,140)	($27,850)	($1,500)	($34,898)	($10,750)	($1,500)	($1,500)	($1,500)	($74,472)
End of Year Balance	($569,224)	($603,364)	($631,214)	($632,714)	($667,611)	($678,361)	($679,861)	($681,361)	($682,861)	($757,333)
Cumulative Expenditures	($569,224)	($603,364)	($631,214)	($632,714)	($667,611)	($678,361)	($679,861)	($681,361)	($682,861)	($757,333)

Year	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
Projected Replacements	($30,248)	($1,500)	($1,500)	($1,500)	($6,500)	($13,750)	($64,531)	($1,500)	($1,500)	($76,500)
End of Year Balance	($787,581)	($789,081)	($790,581)	($792,081)	($798,581)	($812,331)	($876,862)	($878,362)	($879,862)	($956,362)
Cumulative Expenditures	($787,581)	($789,081)	($790,581)	($792,081)	($798,581)	($812,331)	($876,862)	($878,362)	($879,862)	($956,362)

Table #3 shows the annual costs for Projected Replacements and the cumulative annual expenditures for the Projected Replacements. Table #3 also shows the Starting Balance and Current Annual Funding if reported by Township. When this information is provided, Table #3 will calculate the consequences of continuing to fund Replacement Reserves at current levels over the 40-year Study Period.

This information is for use by the Township for the development of a Funding Plan. The Funding Plan is a critical planning tool if the Township is to provide timely and adequate funding for the $956,362 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period.

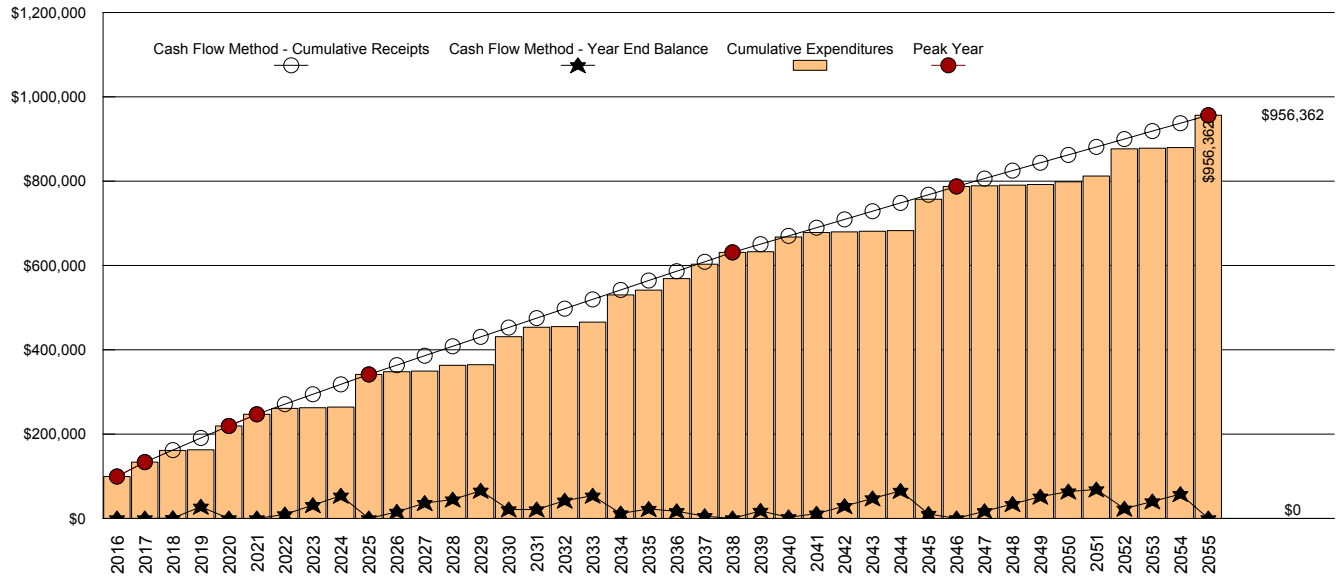
CASH FLOW METHOD FUNDING

$99,566 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2016**

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 2016 with Replacement Reserves on Deposit dropping to the Minimum Balance after the completion of $99,566 of replacements in the Study Year, 2016. Recommended funding declines from $99,566 in 2016 to $34,140 in 2017. Peak Years are identified in Chart 4 and Table 5.
- Minimum Balance. The calculations assume a Minimum Balance of $0 in Replacement Reserves. This is approx. 0 months of average expenditures based on the $23,909, 40-year average annual expenditure.
- Cash Flow Method Study Period. Cash Flow Method calculates funding for $956,362 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2055 and in 2055, 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	1st Peak - 2016	2nd Peak - 2017	2018	2019	3rd Peak - 2020	4th Peak - 2021	2022	2023	2024	5th Peak - 2025
Starting Balance										
Projected Replacements	($99,566)	($34,140)	($27,850)	($1,500)	($56,622)	($27,750)	($13,748)	($1,500)	($1,500)	($77,500)
Annual Deposit	$99,566	$34,140	$28,657	$28,657	$28,657	$27,750	$23,562	$23,562	$23,562	$23,562
End of Year Balance	$0	$0	$807	$27,965	$0	$0	$9,814	$31,876	$53,938	$0
Cumulative Expenditures	$99,566	$133,706	$161,556	$163,056	$219,678	$247,428	$261,175	$262,675	$264,175	$341,675
Cumulative Receipts	$99,566	$133,706	$162,363	$191,020	$219,678	$247,428	$270,990	$294,552	$318,113	$341,675

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements	($6,500)	($1,500)	($13,748)	($1,500)	($66,500)	($22,250)	($1,500)	($10,500)	($64,531)	($11,500)
Annual Deposit	$22,271	$22,271	$22,271	$22,272	$22,272	$22,272	$22,272	$22,272	$22,273	$22,273
End of Year Balance	$15,771	$36,542	$45,066	$65,838	$21,610	$21,632	$42,404	$54,177	$11,918	$22,691
Cumulative Expenditures	($348,175)	($349,675)	($363,423)	($364,923)	($431,423)	($453,673)	($455,173)	($465,673)	($530,204)	($541,704)
Cumulative Receipts	$363,946	$386,218	$408,489	$430,761	$453,033	$475,305	$497,577	$519,849	$542,122	$564,395

Year	2036	2037	6th Peak - 2038	2039	2040	2041	2042	2043	2044	2045
Projected Replacements	($27,520)	($34,140)	($27,850)	($1,500)	($34,898)	($10,750)	($1,500)	($1,500)	($1,500)	($74,472)
Annual Deposit	$22,273	$22,273	$22,273	$19,546	$19,546	$19,546	$19,546	$19,546	$19,546	$19,546
End of Year Balance	$17,444	$5,577	$0	$18,046	$2,694	$11,490	$29,536	$47,582	$65,628	$10,702
Cumulative Expenditures	($569,224)	($603,364)	($631,214)	($632,714)	($667,611)	($678,361)	($679,861)	($681,361)	($682,861)	($757,333)
Cumulative Receipts	$586,668	$608,941	$631,214	$650,760	$670,306	$689,851	$709,397	$728,943	$748,489	$768,035

Year	7th Peak - 2046	2047	2048	2049	2050	2051	2052	2053	2054	8th Peak - 2055
Projected Replacements	($30,248)	($1,500)	($1,500)	($1,500)	($6,500)	($13,750)	($64,531)	($1,500)	($1,500)	($76,500)
Annual Deposit	$19,546	$18,753	$18,753	$18,753	$18,753	$18,753	$18,753	$18,753	$18,753	$18,753
End of Year Balance	$0	$17,253	$34,507	$51,760	$64,014	$69,017	$23,240	$40,493	$57,747	$0
Cumulative Expenditures	($787,581)	($789,081)	($790,581)	($792,081)	($798,581)	($812,331)	($876,862)	($878,362)	($879,862)	($956,362)
Cumulative Receipts	$787,581	$806,334	$825,088	$843,841	$862,595	$881,348	$900,101	$918,855	$937,608	$956,362

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 belive 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.

$99,566 **2016 - CASH FLOW METHOD RECOMMENDED FUNDING**

The 2016 Study Year calculations have been made using current replacement costs (see Page B2), modified by the Analyst for any project specific conditions.

$35,164 **2017 - INFLATION ADJUSTED FUNDING**

A new analysis calculates 2017 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $0 on January 1, 2017.
- All 2016 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $99,566.
- Construction Cost Inflation of 3.00 percent in 2016.

The $35,164 inflation adjusted funding in 2017 is a 3.00 percent increase over the non-inflation adjusted 2017 funding of $34,140.

$30,403 **2018 - INFLATION ADJUSTED FUNDING**

A new analysis calculates 2018 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $0 on January 1, 2018.
- All 2017 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $35,164.
- Construction Cost Inflation of 3.00 percent in 2017.

The $30,403 inflation adjusted funding in 2018 is a 6.09 percent increase over the non-inflation adjusted 2018 funding of $28,657.

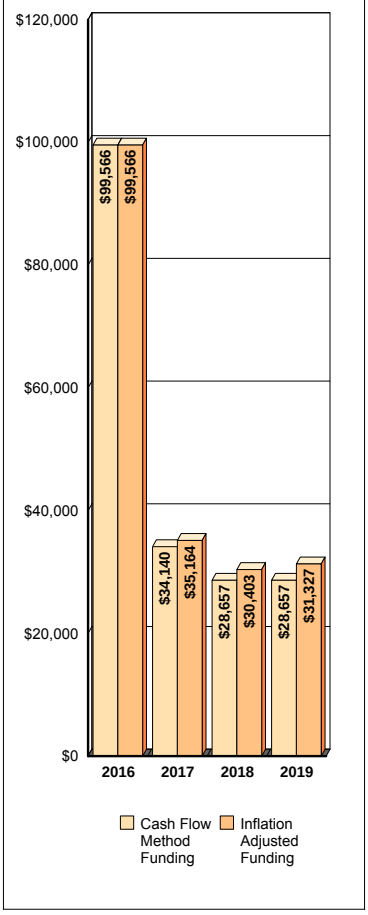
$31,327 **2019 - INFLATION ADJUSTED FUNDING**

A new analysis calculates 2019 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $857 on January 1, 2019.
- All 2018 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $29,546.
- Construction Cost Inflation of 3.00 percent in 2018.

The $31,327 inflation adjusted funding in 2019 is a 9.32 percent increase over the non-inflation adjusted funding of $28,657.

#6 - Inflation Adjusted Funding



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 2017, 2018 and 2019 inflation adjusted funding calculations above, the 3.00 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 2016, based on a 1.00 percent interest rate, we estimate the Association may earn $0 on an average balance of $0, $0 on an average balance of $0 in 2017, and $4 on $428 in 2018. The Association may elect to use these funds to reduce annual funding.

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 28 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B1.

REPLACEMENT RESERVE INVENTORY
GENERAL INFORMATION

Road Department - Replacement Reserve Inventory identifies 28 Projected Replacements.

- PROJECTED REPLACEMENTS. 28 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 $393,413. Replacements totaling $757,333 are scheduled in the Replacement Reserve Inventory over the 40-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. None of the items included in the Replacement Reserve Inventory are 'Excluded Items'. Multiple categories of items 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 that $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 Township policy on the administration of Replacement Reserves. If the Township 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 Township.

  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 Township. These types of items are generally not the responsibility of the Township and are excluded from the Replacement Reserve Inventory.

- CATEGORIES. The 28 items included in the Road Department Replacement Reserve Inventory are divided into 5 major categories. Each category is printed on a separate page, Pages B3 to B7.

- 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.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- INVENTORY DATA. Each of the 28 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.

- REVIEW OF EXPENDITURES. This Replacement Reserve Study should be reviewed by an accounting professional representing the Township 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.

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	Asphalt pavement, mill and overlay (50%)	sf	26,728	$1.90	18	none	$50,783
2	Pavement, rejuvenator seal coat/striping (50%	sf	26,728	$0.23	6	6	$6,147
3	Gravel path, replenish	sf	15,050	$0.25	6	none	$3,763
4	Concrete flatwork - 6% every 6 yrs	sf	260	$9.00	6	6	$2,338
5	Bollards	ea	26	$250.00	20	none	$6,500
6	Storm Water Management (allowance)	ls	1	$3,000.00	30	none	$3,000
7	Salt hut, replacement	ea	1	$9,000.00	20	15	$9,000
8	Salt hut, canopy	sf	650	$5.00	10	5	$3,250
9	Radio tower	ea	1	$55,000.00	30	14	$55,000

SITE COMPONENTS - Replacement Costs - Subtotal $139,781

SITE COMPONENTS
COMMENTS

- Remaining Economic Life is based in part on the age of the installation, the quality of the installation and the condition of the installation. Where the age of the installation is not known it is estimated.

- Storm water management allowance included to account for run-off, inlets, piping, and outlets.

BUILDING EXTERIORS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
10	Asphalt shingle, Main Bldg.	sf	3,800	$4.25	20	4	$16,150
11	Modified bitumen flat roofing, Main Bldg.	sf	5,440	$6.00	20	1	$32,640
12	Sky light plastic bubble stationary, Main Bldg.	sf	96	$45.00	20	none	$4,320
13	Asphalt shingle, storage	sf	2,400	$4.25	20	none	$10,200
14	Asphalt shingle, storage	sf	6,200	$4.25	20	2	$26,350
15	Exterior door (allowance)	ls	1	$5,000.00	10	4	$5,000
16	Siding/soffit	sf	5,960	$5.70	25	4	$33,972
17	Overhead door repair (8)	ls	1	$1,500.00	1	none	$1,500

BUILDING EXTERIORS - Replacement Costs - Subtotal $130,132

BUILDING EXTERIORS
COMMENTS

- Remaining Economic Life is based in part on the age of the installation, the quality of the installation and the condition of the installation. Where the age of the installation is not known it is estimated.

- Flat roof systems pose potential problems in heavy snow conditions. A peaked system should be considered at the point replacement is required.

BUILDING SYSTEMS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
18	Fire Alarm Control Annunciator Panel	ea	1	$5,000.00	25	14	$5,000
19	Water heater	ea	1	$8,500.00	15	none	$8,500
20	Water softener	ea	1	$5,000.00	10	none	$5,000
21	Well replacement	ea	1	$6,000.00	25	none	$6,000
22	Septic system	ls	1	$30,000.00	30	9	$30,000
					BUILDING SYSTEMS - Replacement Costs - Subtotal		$54,500

BUILDING SYSTEMS
COMMENTS

BUILDING SYSTEMS (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
23	Heat pump, furnace (48,000 btu)	ea	2	$4,500.00	24	5	$9,000
24	Heat pump, compressor (4 ton)	ea	2	$4,500.00	12	5	$9,000
25	Garage radiant heat system	ea	600	$10.00	20	9	$6,000
26	Air handler (33,000 btu)	ea	1	$5,000.00	24	5	$5,000
27	Emergency Generator (100 Kw)	ea	1	$30,000.00	30	9	$30,000
28	Emergency Generator (rebuild)	ea	1	$10,000.00	10	9	$10,000

BUILDING SYSTEMS (CONT.) - Replacement Costs - Subtotal $69,000

BUILDING SYSTEMS (CONT.)
COMMENTS

VALUATION EXCLUSIONS
EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Building exterior lighting	ea	3				EXCLUDED
	Wood post signage	ea	1				EXCLUDED
	Gutters and downspouts, Main Bldg.	lf	120				EXCLUDED
	Gutters and downspouts, Storage	ls	1				EXCLUDED
	Glass block	ea	5				EXCLUDED
	Windows (3' x 6')	ea	2				EXCLUDED
	Smoke detector	ea	5				EXCLUDED
	Fire alarm pull	ea	3				EXCLUDED
	Well pump	ea	1				EXCLUDED
	Well clean-up service	ea	1				EXCLUDED
	Pressure tank	ea	1				EXCLUDED
	Water testing	ea	1				EXCLUDED
	Electrical (allowance)	ea	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 $2,000.00 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.

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PROJECTED ANNUAL REPLACEMENTS
GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 28 Projected Replacements in the Road Department 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 Township 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 Township 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 Township and the visual evaluations of the Analyst. It has been prepared for the sole use of the Township 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 Road Department Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Township.

PROJECTED REPLACEMENTS - YEARS ONE TO FIFTEEN

Item	2016 - STUDY YEAR	$
1	Asphalt pavement, mill and c	$50,783
3	Gravel path, replenish	$3,763
5	Bollards	$6,500
6	Storm Water Management (a	$3,000
12	Sky light plastic bubble stati	$4,320
13	Asphalt shingle, storage	$10,200
17	Overhead door repair (8)	$1,500
19	Water heater	$8,500
20	Water softener	$5,000
21	Well replacement	$6,000
	Total Scheduled Replacements	$99,566

Item	2017 - YEAR 2	$
11	Modified bitumen flat roofing	$32,640
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$34,140

Item	2018 - YEAR 3	$
14	Asphalt shingle, storage	$26,350
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$27,850

Item	2019 - YEAR 4	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2020 - YEAR 5	$
10	Asphalt shingle, Main Bldg.	$16,150
15	Exterior door (allowance)	$5,000
16	Siding/soffit	$33,972
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$56,622

Item	2021 - YEAR 6	$
8	Salt hut, canopy	$3,250
17	Overhead door repair (8)	$1,500
23	Heat pump, furnace (48,000	$9,000
24	Heat pump, compressor (4 t	$9,000
26	Air handler (33,000 btu)	$5,000
	Total Scheduled Replacements	$27,750

Item	2022 - YEAR 7	$
2	Pavement, rejuvenator seal	$6,147
3	Gravel path, replenish	$3,763
4	Concrete flatwork - 6% ever	$2,338
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$13,748

Item	2023 - YEAR 8	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2024 - YEAR 9	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2025 - YEAR 10	$
17	Overhead door repair (8)	$1,500
22	Septic system	$30,000
25	Garage radiant heat system	$6,000
27	Emergency Generator (100	$30,000
28	Emergency Generator (rebu	$10,000
	Total Scheduled Replacements	$77,500

Item	2026 - YEAR 11	$
17	Overhead door repair (8)	$1,500
20	Water softener	$5,000
	Total Scheduled Replacements	$6,500

Item	2027 - YEAR 12	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2028 - YEAR 13	$
2	Pavement, rejuvenator seal	$6,147
3	Gravel path, replenish	$3,763
4	Concrete flatwork - 6% ever	$2,338
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$13,748

Item	2029 - YEAR 14	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2030 - YEAR 15	$
9	Radio tower	$55,000
15	Exterior door (allowance)	$5,000
17	Overhead door repair (8)	$1,500
18	Fire Alarm Control Annuncia	$5,000
	Total Scheduled Replacements	$66,500

PROJECTED REPLACEMENTS - YEARS SIXTEEN TO THIRTY

Item	2031 - YEAR 16	$
7	Salt hut, replacement	$9,000
8	Salt hut, canopy	$3,250
17	Overhead door repair (8)	$1,500
19	Water heater	$8,500
	Total Scheduled Replacements	$22,250

Item	2032 - YEAR 17	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2033 - YEAR 18	$
17	Overhead door repair (8)	$1,500
24	Heat pump, compressor (4 t	$9,000
	Total Scheduled Replacements	$10,500

Item	2034 - YEAR 19	$
1	Asphalt pavement, mill and (	$50,783
2	Pavement, rejuvenator seal	$6,147
3	Gravel path, replenish	$3,763
4	Concrete flatwork - 6% even	$2,338
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$64,531

Item	2035 - YEAR 20	$
17	Overhead door repair (8)	$1,500
28	Emergency Generator (rebu	$10,000
	Total Scheduled Replacements	$11,500

Item	2036 - YEAR 21	$
5	Bollards	$6,500
12	Sky light plastic bubble stati	$4,320
13	Asphalt shingle, storage	$10,200
17	Overhead door repair (8)	$1,500
20	Water softener	$5,000
	Total Scheduled Replacements	$27,520

Item	2037 - YEAR 22	$
11	Modified bitumen flat roofing	$32,640
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$34,140

Item	2038 - YEAR 23	$
14	Asphalt shingle, storage	$26,350
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$27,850

Item	2039 - YEAR 24	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2040 - YEAR 25	$
2	Pavement, rejuvenator seal	$6,147
3	Gravel path, replenish	$3,763
4	Concrete flatwork - 6% even	$2,338
10	Asphalt shingle, Main Bldg.	$16,150
15	Exterior door (allowance)	$5,000
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$34,898

Item	2041 - YEAR 26	$
8	Salt hut, canopy	$3,250
17	Overhead door repair (8)	$1,500
21	Well replacement	$6,000
	Total Scheduled Replacements	$10,750

Item	2042 - YEAR 27	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2043 - YEAR 28	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2044 - YEAR 29	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2045 - YEAR 30	$
16	Siding/soffit	$33,972
17	Overhead door repair (8)	$1,500
23	Heat pump, furnace (48,000	$9,000
24	Heat pump, compressor (4 t	$9,000
25	Garage radiant heat system	$6,000
26	Air handler (33,000 btu)	$5,000
28	Emergency Generator (rebu	$10,000
	Total Scheduled Replacements	$74,472

PROJECTED REPLACEMENTS - YEARS THIRTY-ONE TO FORTY-FIVE

Item	2046 - YEAR 31	$
2	Pavement, rejuvenator seal	$6,147
3	Gravel path, replenish	$3,763
4	Concrete flatwork - 6% even	$2,338
6	Storm Water Management (a	$3,000
17	Overhead door repair (8)	$1,500
19	Water heater	$8,500
20	Water softener	$5,000
	Total Scheduled Replacements	$30,248

Item	2047 - YEAR 32	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2048 - YEAR 33	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2049 - YEAR 34	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2050 - YEAR 35	$
15	Exterior door (allowance)	$5,000
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$6,500

Item	2051 - YEAR 36	$
7	Salt hut, replacement	$9,000
8	Salt hut, canopy	$3,250
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$13,750

Item	2052 - YEAR 37	$
1	Asphalt pavement, mill and c	$50,783
2	Pavement, rejuvenator seal	$6,147
3	Gravel path, replenish	$3,763
4	Concrete flatwork - 6% even	$2,338
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$64,531

Item	2053 - YEAR 38	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2054 - YEAR 39	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2055 - YEAR 40	$
17	Overhead door repair (8)	$1,500
18	Fire Alarm Control Annuncia	$5,000
22	Septic system	$30,000
27	Emergency Generator (100	$30,000
28	Emergency Generator (rebu	$10,000
	Total Scheduled Replacements	$76,500

Item	2056 (beyond Study Period)	$
5	Bollards	$6,500
12	Sky light plastic bubble stati	$4,320
13	Asphalt shingle, storage	$10,200
17	Overhead door repair (8)	$1,500
20	Water softener	$5,000
	Total Scheduled Replacements	$27,520

Item	2057 (beyond Study Period)	$
11	Modified bitumen flat roofing	$32,640
17	Overhead door repair (8)	$1,500
24	Heat pump, compressor (4 t	$9,000
	Total Scheduled Replacements	$43,140

Item	2058 (beyond Study Period)	$
2	Pavement, rejuvenator seal	$6,147
3	Gravel path, replenish	$3,763
4	Concrete flatwork - 6% even	$2,338
14	Asphalt shingle, storage	$26,350
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$40,098

Item	2059 (beyond Study Period)	$
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$1,500

Item	2060 (beyond Study Period)	$
9	Radio tower	$55,000
10	Asphalt shingle, Main Bldg.	$16,150
15	Exterior door (allowance)	$5,000
17	Overhead door repair (8)	$1,500
	Total Scheduled Replacements	$77,650

CASH FLOW METHOD ACCOUNTING SUMMARY

This Road Department - Cash Flow Method Accounting Summary is an attachment to the Road Department - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 28 Projected Replacements listed in the Road Department Replacement Reserve Inventory has been assigned to one of 4 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 $0 Beginning Balance (at the start of the Study Year) and the $162,363 of additional Replacement Reserve Funding in 2016 through 2018 (as calculated in the Replacement Reserve Analysis) to each of the 28 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by Chronological Allocation.
  - Allocation of the $162,363 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, 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 $0 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 Road Department the Beginning Balance funds 0.0% of Scheduled Replacements in the Study Year.
  - The next step is the allocation of the $99,566 of 2016 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 Road Department the Beginning Balance and the 2016 Replacement Reserve Funding, funds replacements through 2016 and partial funds (0.0%) replacements in 2017.
  - Allocations of the 2017 and 2018 Reserve Funding are done using the same methodology.
  - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

2016 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 28 Projected Replacements included in the Road Department Replacement Reserve Inventory has been assigned to one of the 4 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $99,566 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 2016 being accomplished in 2016 at a cost of $99,566.

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 CF1

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 30 years	0 to 15 years	$139,781		$64,046	($64,046)	
BUILDING EXTERIORS	1 to 25 years	0 to 4 years	$130,132		$16,020	($16,020)	$0
BUILDING SYSTEMS	10 to 30 years	0 to 14 years	$54,500		$19,500	($19,500)	
BUILDING SYSTEMS (CONT.)	10 to 30 years	5 to 9 years	$69,000				

2017 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 28 Projected Replacements included in the Road Department Replacement Reserve Inventory has been assigned to one of the 4 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 $0 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $133,706 from 2016 through 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 $34,140.

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 CF2

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 30 years	4 to 29 years	$139,781				
BUILDING EXTERIORS	1 to 25 years	0 to 19 years	$130,132	$0	$34,140	($34,140)	$0
BUILDING SYSTEMS	10 to 30 years	8 to 24 years	$54,500				
BUILDING SYSTEMS (CONT.)	10 to 30 years	4 to 8 years	$69,000				

2018 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 28 Projected Replacements included in the Road Department Replacement Reserve Inventory has been assigned to one of the 4 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 $0 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $162,363 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $27,850.

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.

2018 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	6 to 30 years	3 to 28 years	$139,781				
BUILDING EXTERIORS	1 to 25 years	0 to 19 years	$130,132	$0	$28,657	($27,850)	$807
BUILDING SYSTEMS	10 to 30 years	7 to 23 years	$54,500				
BUILDING SYSTEMS (CONT.)	10 to 30 years	3 to 7 years	$69,000				

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CF4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $162,363 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 28 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $0 on January 1, 2017.
- Replacement Reserves on Deposit totaling $0 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $162,363 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $161,556.

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

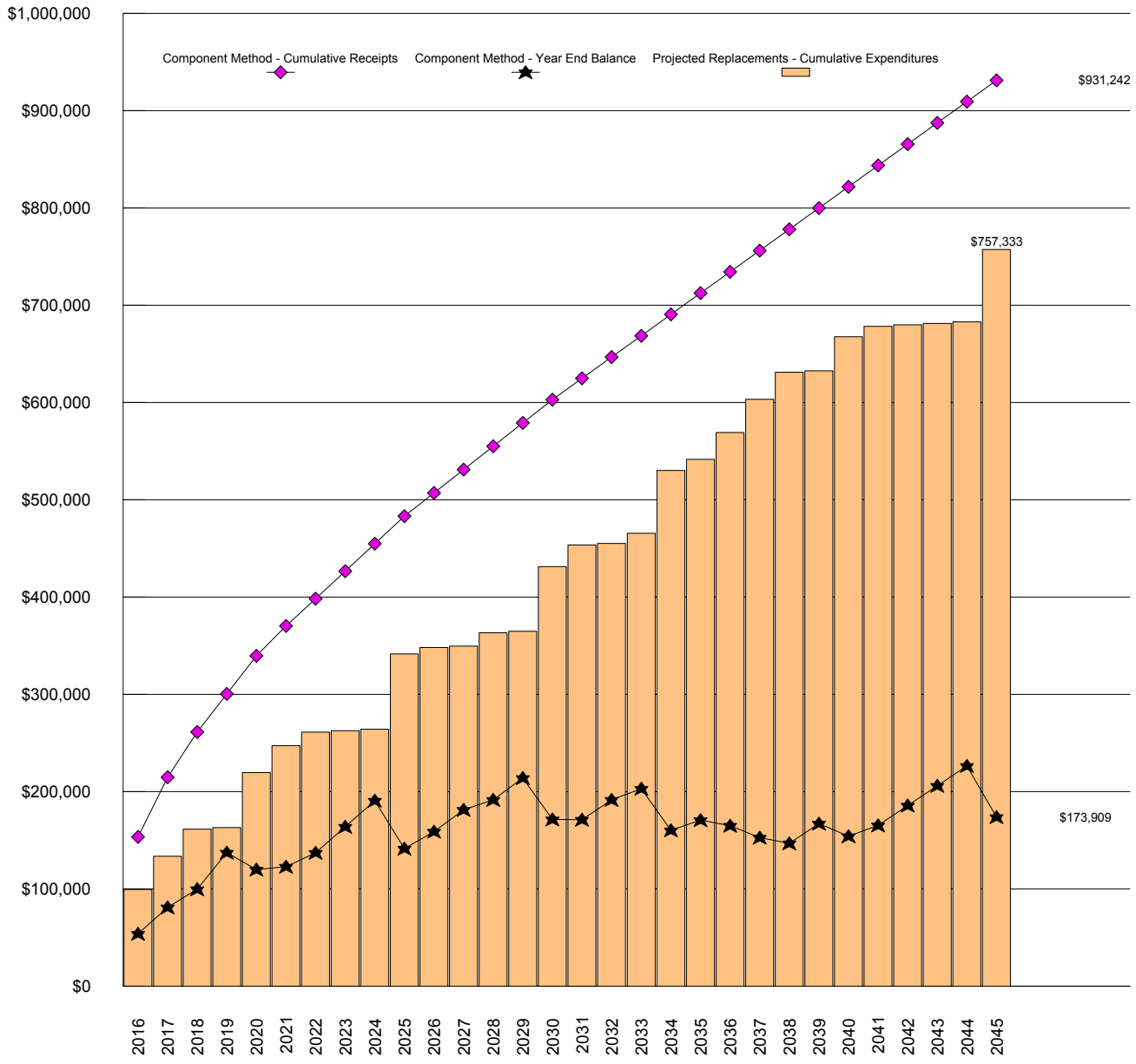
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement, mill and overlay (5(	50,783		50,783	(50,783)							
2	Pavement, rejuvenator seal coat/stripin	6,147										
3	Gravel path, replenish	3,763		3,763	(3,763)							
4	Concrete flatwork - 6% every 6 yrs	2,338										
5	Bollards	6,500		6,500	(6,500)							
6	Storm Water Management (allowance)	3,000		3,000	(3,000)							
7	Salt hut, replacement	9,000										
8	Salt hut, canopy	3,250										
9	Radio tower	55,000										
	BUILDING EXTERIORS											
10	Asphalt shingle, Main Bldg.	16,150										
11	Modified bitumen flat roofing, Main B	32,640					32,640	(32,640)				
12	Sky light plastic bubble stationary, Ma	4,320		4,320	(4,320)							
13	Asphalt shingle, storage	10,200		10,200	(10,200)							
14	Asphalt shingle, storage	26,350								26,350	(26,350)	
15	Exterior door (allowance)	5,000										
16	Siding/soffit	33,972										
17	Overhead door repair (8)	1,500		1,500	(1,500)		1,500	(1,500)		2,307	(1,500)	807
	BUILDING SYSTEMS											
18	Fire Alarm Control Annunciator Panel	5,000										
19	Water heater	8,500		8,500	(8,500)							
20	Water softener	5,000		5,000	(5,000)							
21	Well replacement	6,000		6,000	(6,000)							
22	Septic system	30,000										
	BUILDING SYSTEMS (CONT.)											
23	Heat pump, furnace (48,000 btu)	9,000										
24	Heat pump, compressor (4 ton)	9,000										
25	Garage radiant heat system	6,000										
26	Air handler (33,000 btu)	5,000										
27	Emergency Generator (100 Kw)	30,000										
28	Emergency Generator (rebuild)	10,000										

COMPONENT METHOD

$153,443 **COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2016.**

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 28 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



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 28 Projected Replacements. The total, $283,729, 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 ($0) by the Current Funding Objective ($283,729). At Road Department the Funding Percentage is 0.0%

- Allocation of the Beginning Balance. The Beginning Balance is divided among the 28 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 Township has not accumulated $800 in Reserves (the Funding Objective), but rather at 0.0 percent funded, there is $0 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 $153,443, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2016).

  In our fence example, the $0 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 $500. Next year, the deposit remains $500, 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Beginning balance										
Recommended annual funding	$153,443	$61,283	$46,595	$39,130	$39,130	$30,772	$28,055	$28,257	$28,257	$28,257
Expenditures	$99,566	$34,140	$27,850	$1,500	$56,622	$27,750	$13,748	$1,500	$1,500	$77,500
Year end balance	$53,877	$81,021	$99,766	$137,396	$119,903	$122,925	$137,232	$163,989	$190,746	$141,503
Cumulative Expenditures	$99,566	$133,706	$161,556	$163,056	$219,678	$247,428	$261,175	$262,675	$264,175	$341,675
Cumulative Receipts	$153,443	$214,727	$261,322	$300,452	$339,581	$370,353	$398,408	$426,665	$454,921	$483,178

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Recommended annual funding	$23,957	$23,957	$23,957	$23,957	$23,957	$21,990	$21,878	$21,878	$21,878	$21,878
Expenditures	$6,500	$1,500	$13,748	$1,500	$66,500	$22,250	$1,500	$10,500	$64,531	$11,500
Year end balance	$158,960	$181,417	$191,626	$214,083	$171,540	$171,280	$191,658	$203,036	$160,383	$170,761
Cumulative Expenditures	$348,175	$349,675	$363,423	$364,923	$431,423	$453,673	$455,173	$465,673	$530,204	$541,704
Cumulative Receipts	$507,135	$531,092	$555,049	$579,006	$602,963	$624,953	$646,831	$668,709	$690,587	$712,464

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Recommended annual funding	$21,878	$21,878	$21,878	$21,878	$21,878	$21,878	$21,878	$21,878	$21,878	$21,878
Expenditures	$27,520	$34,140	$27,850	$1,500	$34,898	$10,750	$1,500	$1,500	$1,500	$74,472
Year end balance	$165,119	$152,856	$146,884	$167,262	$154,242	$165,370	$185,748	$206,125	$226,503	$173,909
Cumulative Expenditures	$569,224	$603,364	$631,214	$632,714	$667,611	$678,361	$679,861	$681,361	$682,861	$757,333
Cumulative Receipts	$734,342	$756,220	$778,098	$799,976	$821,853	$843,731	$865,609	$887,487	$909,364	$931,242

COMPONENT METHOD ACCOUNTING SUMMARY

This Road Department - Component Method Accounting Summary is an attachment to the Road Department - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 28 Projected Replacements listed in the Road Department Replacement Reserve Inventory has been assigned to one of 4 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 $0 Beginning Balance (at the start of the Study Year) and the $261,322 of additional Replacement Reserve funding from 2016 to 2018 (as calculated in the Replacement Reserve Analysis) to each of the 28 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by the Component Method.
  - Allocation of the $261,322 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, by the Component Method.

2016 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 28 Projected Replacements included in the Road Department Replacement Reserve Inventory has been assigned to one of the 4 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $153,443 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 2016 being accomplished in 2016 at a cost of $99,566.

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 CM1

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 30 years	0 to 15 years	$139,781		$70,029	$64,046	$5,983
BUILDING EXTERIORS	1 to 25 years	0 to 4 years	$130,132		$52,148	$16,020	$36,128
BUILDING SYSTEMS	10 to 30 years	0 to 14 years	$54,500		$22,833	$19,500	$3,333
BUILDING SYSTEMS (CONT.)	10 to 30 years	5 to 9 years	$69,000		$8,433		$8,433

2017 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 28 Projected Replacements included in the Road Department Replacement Reserve Inventory has been assigned to one of the 4 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 $53,877 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $214,727 from 2016 through 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 $34,140.

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 CM2

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 30 years	4 to 29 years	$139,781	$5,983	$9,856		$15,839
BUILDING EXTERIORS	1 to 25 years	0 to 19 years	$130,132	$36,128	$38,354	$34,140	$40,341
BUILDING SYSTEMS	10 to 30 years	8 to 24 years	$54,500	$3,333	$4,640		$7,973
BUILDING SYSTEMS (CONT.)	10 to 30 years	4 to 8 years	$69,000	$8,433	$8,433		$16,867

2018 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 28 Projected Replacements included in the Road Department Replacement Reserve Inventory has been assigned to one of the 4 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 $81,021 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $261,322 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $27,850.

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.

2018 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	6 to 30 years	3 to 28 years	$139,781	$15,839	$9,856		$25,696
BUILDING EXTERIORS	1 to 25 years	0 to 19 years	$130,132	$40,341	$23,666	$27,850	$36,157
BUILDING SYSTEMS	10 to 30 years	7 to 23 years	$54,500	$7,973	$4,640		$12,613
BUILDING SYSTEMS (CONT.)	10 to 30 years	3 to 7 years	$69,000	$16,867	$8,433		$25,300

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $261,322 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 28 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $53,877 on January 1, 2017.
- Replacement Reserves on Deposit totaling $81,021 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $261,322 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $161,556.

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	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement, mill and overlay (5(	50,783		50,783	(50,783)		2,821		2,821	2,821		5,643
2	Pavement, rejuvenator seal coat/stripin	6,147		878		878	878		1,756	878		2,635
3	Gravel path, replenish	3,763		3,763	(3,763)		627		627	627		1,254
4	Concrete flatwork - 6% every 6 yrs	2,338		334		334	334		668	334		1,002
5	Bollards	6,500		6,500	(6,500)		325		325	325		650
6	Storm Water Management (allowance)	3,000		3,000	(3,000)		100		100	100		200
7	Salt hut, replacement	9,000		563		563	563		1,125	563		1,688
8	Salt hut, canopy	3,250		542		542	542		1,083	542		1,625
9	Radio tower	55,000		3,667		3,667	3,667		7,333	3,667		11,000
	BUILDING EXTERIORS											
10	Asphalt shingle, Main Bldg.	16,150		3,230		3,230	3,230		6,460	3,230		9,690
11	Modified bitumen flat roofing, Main B	32,640		16,320		16,320	16,320	(32,640)		1,632		1,632
12	Sky light plastic bubble stationary, Ma	4,320		4,320	(4,320)		216		216	216		432
13	Asphalt shingle, storage	10,200		10,200	(10,200)		510		510	510		1,020
14	Asphalt shingle, storage	26,350		8,783		8,783	8,783		17,567	8,783	(26,350)	
15	Exterior door (allowance)	5,000		1,000		1,000	1,000		2,000	1,000		3,000
16	Siding/soffit	33,972		6,794		6,794	6,794		13,589	6,794		20,383
17	Overhead door repair (8)	1,500		1,500	(1,500)		1,500	(1,500)		1,500	(1,500)	
	BUILDING SYSTEMS											
18	Fire Alarm Control Annunciator Panel	5,000		333		333	333		667	333		1,000
19	Water heater	8,500		8,500	(8,500)		567		567	567		1,133
20	Water softener	5,000		5,000	(5,000)		500		500	500		1,000
21	Well replacement	6,000		6,000	(6,000)		240		240	240		480
22	Septic system	30,000		3,000		3,000	3,000		6,000	3,000		9,000
	BUILDING SYSTEMS (CONT.)											
23	Heat pump, furnace (48,000 btu)	9,000		1,500		1,500	1,500		3,000	1,500		4,500
24	Heat pump, compressor (4 ton)	9,000		1,500		1,500	1,500		3,000	1,500		4,500
25	Garage radiant heat system	6,000		600		600	600		1,200	600		1,800
26	Air handler (33,000 btu)	5,000		833		833	833		1,667	833		2,500
27	Emergency Generator (100 Kw)	30,000		3,000		3,000	3,000		6,000	3,000		9,000
28	Emergency Generator (rebuild)	10,000		1,000		1,000	1,000		2,000	1,000		3,000

TOWN HALL

Town Hall. The Historical Town Hall building was construction in the mid 1800's. The building is maintained but in need of restoration and preservation. The Township plans some interim preservation measures in the near term. Full restoration should occur sometime in the future to correct some of the interim fixes to historic methods.

Asphalt Pavement. The Township is responsible for the parking areas. In general, the asphalt pavement is in poor condition, with wide cracking and significant distress in many locations and with incipient potholes and full-depth pavement failure. The Township Plans to resurface the asphalt pavement in 2015.

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 Township better manage the asphalt pavements throughout the community: http://mdareserves.com/resources/links/site-components.

Unit Pavers. Unit pavers provide a solid, decorative, and renewable surface that are part of the Town Hall's sidewalks. The overall condition of the unit pavers is fair with areas of defects consistent with the age of the installation.

The defects noted include the following:

- Cracking. There are multiple cracked pavers, some of which are creating trip hazards.

- Settlement. We identified areas where pavers have settled due to a failure of the base under the pavers. This settlement has resulted in an uneven surface that can pose a trip hazard.

- Ponding. There is evidence of areas where water is ponding on the unit paver system due to settlement or poor drainage of the surface and surrounding area.

To correct defects and provide the longest service life of the unit paver system, periodic re-setting is required. Re-setting provides an opportunity to replace broken unit pavers, fill in voids in the foundation material, and level the surface. We have included an allowance for periodic re-set of portions of the system.

Unit pavers have a service life of 30 years or more if the system is maintained on a periodic basis. Eventually the system will require a large-scale replacement, identical paver units may not be available and it is recommended that the unit paver system be replaced.

Building Roofing. The Town Hall is roofed in asphalt shingles that are in generally fair condition.

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.

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.

Siding and Trim. The exterior of the building is clad in aluminum siding and trim. The siding and trim materials are in generally good condition.

A restoration measure for replacement of the siding would be to remove the aluminum siding and install a clapboard product that replicates the style of the construction and provides a durable envelope to the structure.

Additionally, the structure could benefit from in-wall insulation that could be installed during the replacement of the siding.

Emergency Generator. The Town Hal building does not have an emergency generator. An emergency generator system would make the Town Hal useable in most all conditions. If the Town Hall was equipped with emergency power, it could provide a shelter in severe weather events and in local emergencies.

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 Township 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.

Building Electrical Service. The electrical systems of the building have recently been upgraded and 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.

EXECUTIVE SUMMARY

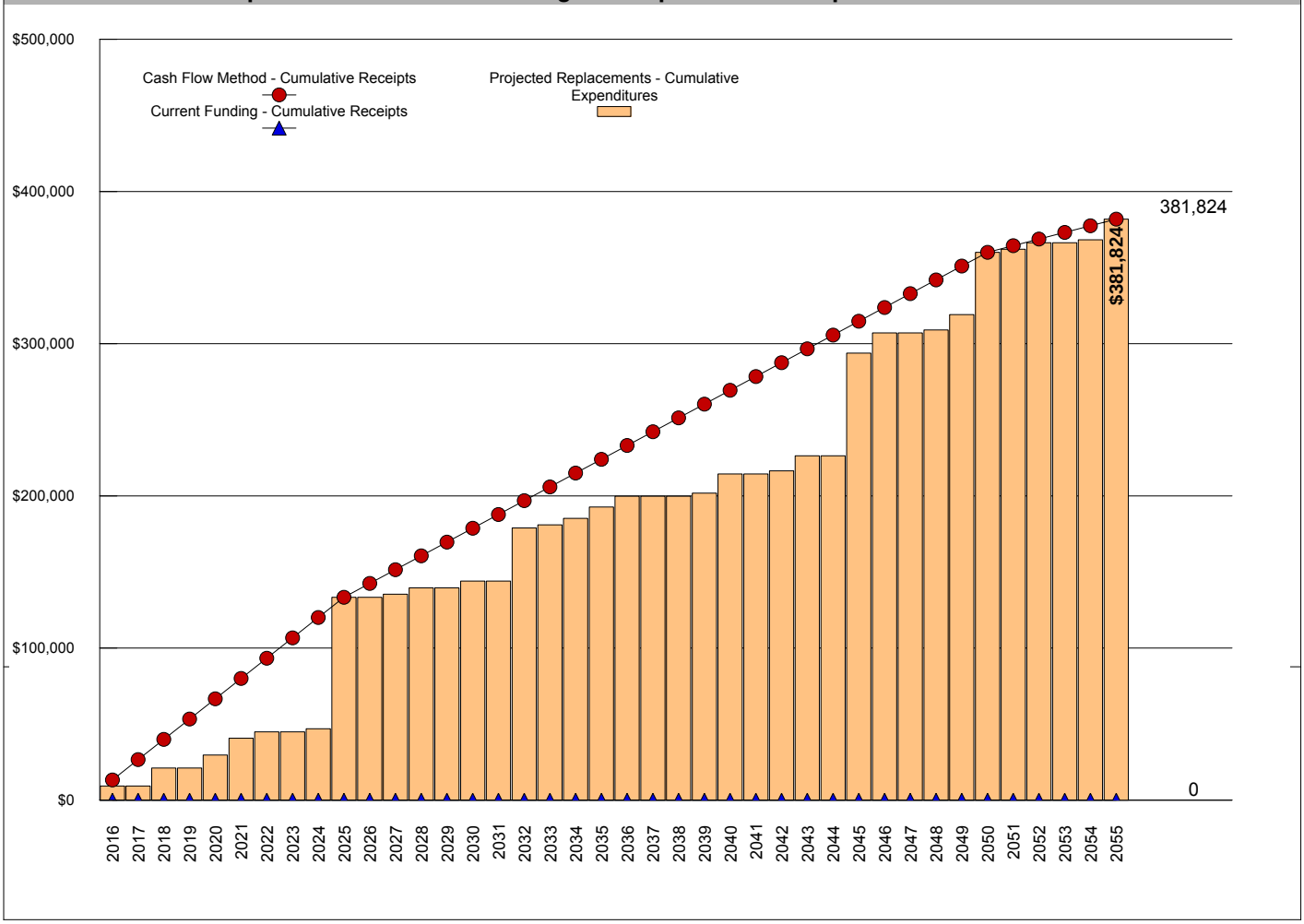
The Town Hall Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 21 Projected Replacements identified in the Replacement Reserve Inventory.

$13,337 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2016**

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

Town Hall reports a that the Township is currently not funding Replacement Reserves.
This Study contains the information necessary for the Township to develop a Funding Plan to address the $381,824 of Projected Replacements identified in the Replacement Reserve Inventory over the 40-year Study Period.

#1 - Cumulative Replacement Reserve Funding and Expenditures Graph



The Current Funding Objective as calculated by the Component Method (Fully Funded) is $76,336 making the reserve account 0.0% funded. See the Appendix for more information on this method.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Town Hall 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.

2016 | **STUDY YEAR**

The Township 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, 2016.

40 Years | **STUDY PERIOD**

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

NONE | **STARTING BALANCE**

The Township reports that no funds are attributed to Replacement Reserves

Level One | **LEVEL OF SERVICE**

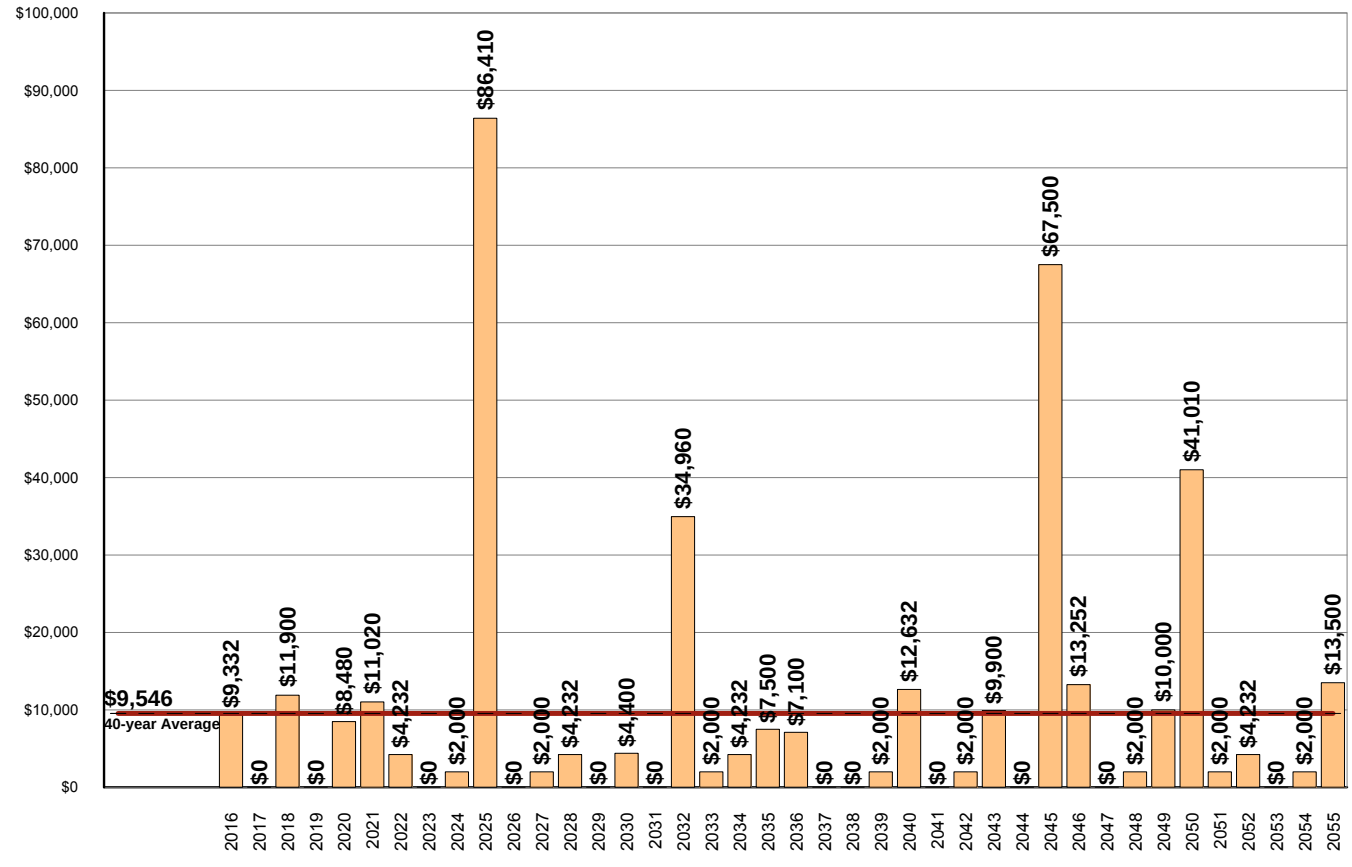
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level One Study, as defined by the Community Associations Institute (CAI).

$381,824 | **REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS**

The Town Hall Replacement Reserve Inventory identifies 21 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be $381,824 over the 40-year Study Period. The Projected Replacements are divided into 4 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 $9,546. Section C provides a year by year Calender of these expenditures.



UPDATING

UPDATING OF THE FUNDING PLAN

The Township 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

The annual expenditures that comprise the $381,824 of Projected Expenditures over the 40-year Study Period are detailed in Table 3. A year-by-year listing of the specific projects can be found beginning on Page C2.

#3 - Table of Annual Expenditures - Years 1 through 40

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Projected Replacements	($9,332)		($11,900)		($8,480)	($11,020)	($4,232)		($2,000)	($86,410)
End of Year Balance	($9,332)	($9,332)	($21,232)	($21,232)	($29,712)	($40,732)	($44,964)	($44,964)	($46,964)	($133,374)
Cumulative Expenditures	($9,332)	($9,332)	($21,232)	($21,232)	($29,712)	($40,732)	($44,964)	($44,964)	($46,964)	($133,374)

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements		($2,000)	($4,232)		($4,400)		($34,960)	($2,000)	($4,232)	($7,500)
End of Year Balance	($133,374)	($135,374)	($139,606)	($139,606)	($144,006)	($144,006)	($178,966)	($180,966)	($185,198)	($192,698)
Cumulative Expenditures	($133,374)	($135,374)	($139,606)	($139,606)	($144,006)	($144,006)	($178,966)	($180,966)	($185,198)	($192,698)

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Projected Replacements	($7,100)			($2,000)	($12,632)		($2,000)	($9,900)		($67,500)
End of Year Balance	($199,798)	($199,798)	($199,798)	($201,798)	($214,430)	($214,430)	($216,430)	($226,330)	($226,330)	($293,830)
Cumulative Expenditures	($199,798)	($199,798)	($199,798)	($201,798)	($214,430)	($214,430)	($216,430)	($226,330)	($226,330)	($293,830)

Year	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
Projected Replacements	($13,252)		($2,000)	($10,000)	($41,010)	($2,000)	($4,232)		($2,000)	($13,500)
End of Year Balance	($307,082)	($307,082)	($309,082)	($319,082)	($360,092)	($362,092)	($366,324)	($366,324)	($368,324)	($381,824)
Cumulative Expenditures	($307,082)	($307,082)	($309,082)	($319,082)	($360,092)	($362,092)	($366,324)	($366,324)	($368,324)	($381,824)

Table #3 shows the annual costs for Projected Replacements and the cumulative annual expenditures for the Projected Replacements. Table #3 also shows the Starting Balance and Current Annual Funding if reported by Township. When this information is provided, Table #3 will calculate the consequences of continuing to fund Replacement Reserves at current levels over the 40-year Study Period.

This information is for use by the Township for the development of a Funding Plan. The Funding Plan is a critical planning tool if the Township is to provide timely and adequate funding for the $381,824 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period.

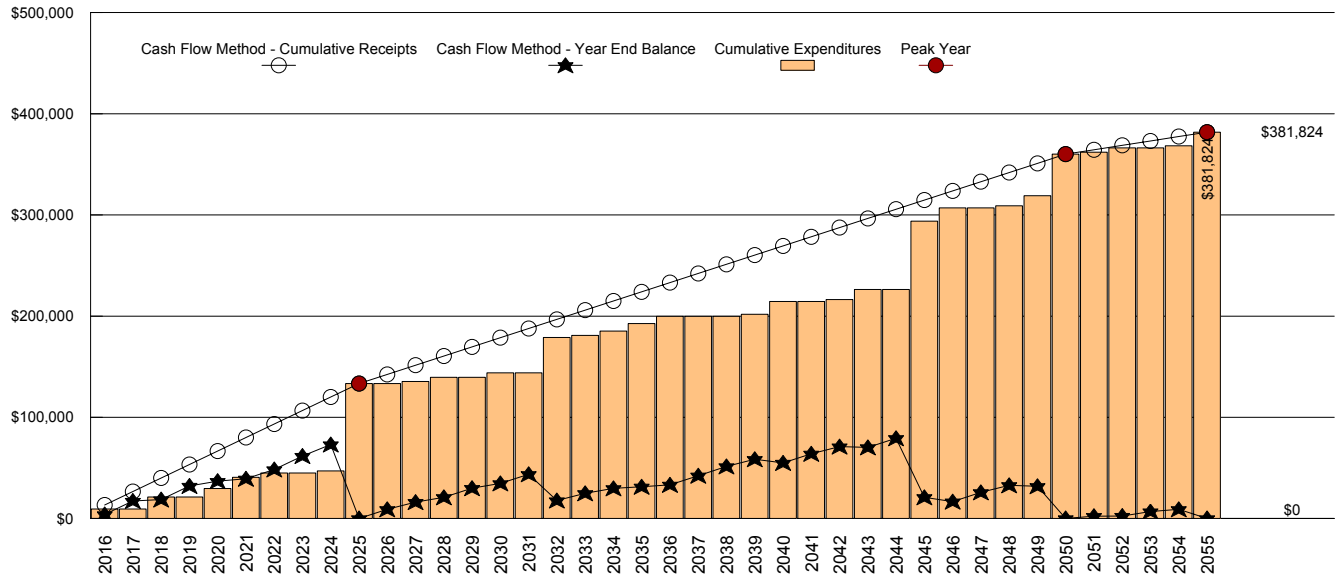
CASH FLOW METHOD FUNDING

$13,337 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2016**

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 $133,374 of replacements from 2016 to 2025. Recommended funding declines from $13,337 in 2025 to $9,065 in 2026. Peak Years are identified in Chart 4 and Table 5.
- Minimum Balance. The calculations assume a Minimum Balance of $0 in Replacement Reserves. This is approx. 0 months of average expenditures based on the $9,546, 40-year average annual expenditure.
- Cash Flow Method Study Period. Cash Flow Method calculates funding for $381,824 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2055 and in 2055, 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	1st Peak - 2025
Starting Balance										
Projected Replacements	($9,332)		($11,900)		($8,480)	($11,020)	($4,232)		($2,000)	($86,410)
Annual Deposit	$13,337	$13,337	$13,337	$13,337	$13,337	$13,337	$13,337	$13,337	$13,337	$13,337
End of Year Balance	$4,005	$17,343	$18,780	$32,118	$36,975	$39,292	$48,398	$61,735	$73,073	$0
Cumulative Expenditures	$9,332	$9,332	$21,232	$21,232	$29,712	$40,732	$44,964	$44,964	$46,964	$133,374
Cumulative Receipts	$13,337	$26,675	$40,012	$53,350	$66,687	$80,024	$93,362	$106,699	$120,037	$133,374

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements		($2,000)	($4,232)		($4,400)		($34,960)	($2,000)	($4,232)	($7,500)
Annual Deposit	$9,065	$9,065	$9,065	$9,065	$9,066	$9,066	$9,066	$9,067	$9,067	$9,068
End of Year Balance	$9,065	$16,130	$20,963	$30,029	$34,694	$43,760	$17,867	$24,933	$29,769	$31,336
Cumulative Expenditures	($133,374)	($135,374)	($139,606)	($139,606)	($144,006)	($144,006)	($178,966)	($180,966)	($185,198)	($192,698)
Cumulative Receipts	$142,439	$151,504	$160,569	$169,635	$178,700	$187,766	$196,833	$205,899	$214,967	$224,034

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Projected Replacements	($7,100)			($2,000)	($12,632)		($2,000)	($9,900)		($67,500)
Annual Deposit	$9,068	$9,068	$9,069	$9,069	$9,070	$9,070	$9,071	$9,071	$9,071	$9,071
End of Year Balance	$33,304	$42,373	$51,442	$58,511	$54,949	$64,019	$71,090	$70,260	$79,332	$20,903
Cumulative Expenditures	($199,798)	($199,798)	($199,798)	($201,798)	($214,430)	($214,430)	($216,430)	($226,330)	($226,330)	($293,830)
Cumulative Receipts	$233,102	$242,171	$251,240	$260,309	$269,379	$278,449	$287,520	$296,590	$305,662	$314,733

Year	2046	2047	2048	2049	2nd Peak - 2050	2051	2052	2053	2054	3rd Peak - 2055
Projected Replacements	($13,252)		($2,000)	($10,000)	($41,010)	($2,000)	($4,232)		($2,000)	($13,500)
Annual Deposit	$9,072	$9,072	$9,072	$9,072	$9,072	$4,346	$4,346	$4,346	$4,346	$4,346
End of Year Balance	$16,723	$25,794	$32,866	$31,938	$0	$2,346	$2,461	$6,807	$9,154	$0
Cumulative Expenditures	($307,082)	($307,082)	($309,082)	($319,082)	($360,092)	($362,092)	($366,324)	($366,324)	($368,324)	($381,824)
Cumulative Receipts	$323,805	$332,876	$341,948	$351,020	$360,092	$364,438	$368,785	$373,131	$377,478	$381,824

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 belive 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.

$13,337 2016 - CASH FLOW METHOD RECOMMENDED FUNDING

The 2016 Study Year calculations have been made using current replacement costs (see Page B2), modified by the Analyst for any project specific conditions.

$13,751 2017 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2017 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $4,005 on January 1, 2017.
- All 2016 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $9,332.
- Construction Cost Inflation of 3.00 percent in 2016.

The $13,751 inflation adjusted funding in 2017 is a 3.10 percent increase over the non-inflation adjusted 2017 funding of $13,337.

$14,230 2018 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2018 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $17,756 on January 1, 2018.
- No Expenditures from Replacement Reserves in 2017.
- Construction Cost Inflation of 3.00 percent in 2017.

The $14,230 inflation adjusted funding in 2018 is a 6.69 percent increase over the non-inflation adjusted 2018 funding of $13,337.

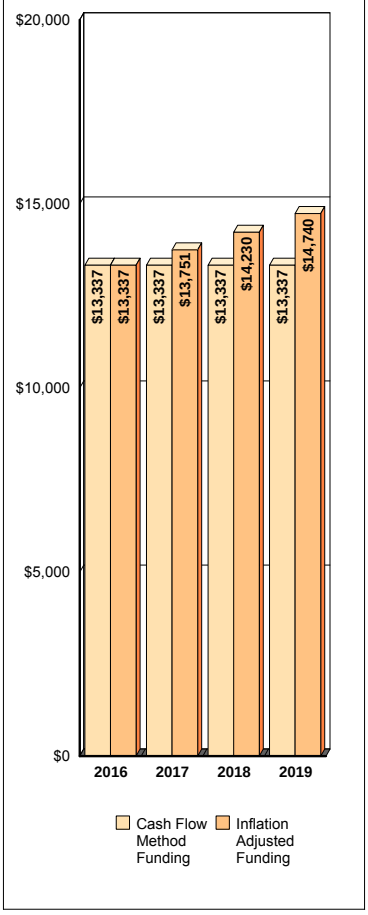
$14,740 2019 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2019 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $19,362 on January 1, 2019.
- All 2018 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $12,625.
- Construction Cost Inflation of 3.00 percent in 2018.

The $14,740 inflation adjusted funding in 2019 is a 10.52 percent increase over the non-inflation adjusted funding of $13,337.

#6 - Inflation Adjusted Funding



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 2017, 2018 and 2019 inflation adjusted funding calculations above, the 3.00 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 2016, based on a 1.00 percent interest rate, we estimate the Association may earn $20 on an average balance of $2,003, $109 on an average balance of $10,881 in 2017, and $185 on $18,559 in 2018. The Association may elect to use these funds to reduce annual funding.

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 21 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B1.

REPLACEMENT RESERVE INVENTORY
GENERAL INFORMATION

Town Hall - Replacement Reserve Inventory identifies 21 Projected Replacements.

- PROJECTED REPLACEMENTS. 21 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 $170,102. Replacements totaling $293,830 are scheduled in the Replacement Reserve Inventory over the 40-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. None of the items included in the Replacement Reserve Inventory are 'Excluded Items'. Multiple categories of items 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 that $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 Township policy on the administration of Replacement Reserves. If the Township 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 Township.

  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 Township. These types of items are generally not the responsibility of the Township and are excluded from the Replacement Reserve Inventory.

- CATEGORIES. The 21 items included in the Town Hall Replacement Reserve Inventory are divided into 4 major categories. Each category is printed on a separate page, Pages B3 to B6.

- 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.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- INVENTORY DATA. Each of the 21 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.

- REVIEW OF EXPENDITURES. This Replacement Reserve Study should be reviewed by an accounting professional representing the Township 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.

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	Asphalt pavement, mill and overlay (2015)	sf	18,400	$1.90	18	16	$34,960
2	Pavement, rejuvenator seal coat/striping	sf	18,400	$0.23	6	none	$4,232
3	Concrete flatwork	sf	120	$9.00	60	4	$1,080
4	Accessable ramp at entrance	ls	1	$5,000.00	35	4	$5,000
5	Walkway/Staircase w/ pavers and railing	ls	1	$3,650.00	25	9	$3,650
6	Storm water management (allowance)	ls	1	$1,000.00	30	9	$1,000
7	Sanitary sewer lateral (allowance) (2014)	ls	1	$4,000.00	30	29	$4,000
8	Hardscapes/foundation plantings (allowance)	ls	1	$2,000.00	3	2	$2,000

SITE COMPONENTS - Replacement Costs - Subtotal $55,922

SITE COMPONENTS
COMMENTS

- Remaining Economic Life is based in part on the age of the installation, the quality of the installation and the condition of the installation. Where the age of the installation is not known it is estimated.
- Storm water management allowance included to account for run-off, inlets, piping, and outlets.
- Sanitary sewer allowance included for potential replacements of existing sewer utility.

BUILDING EXTERIOR
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
9	Asphalt shingles, gutters & downspouts	sf	2,200	$4.25	25	2	$9,350
10	Roof sheathing allowance (10%)	sf	220	$2.50	25	2	$550
11	Restore exterior doors (allowance)	ea	3	$800.00	10	4	$2,400
12	Siding and trim, replace with Hardiboard	sf	3,600	$15.00	20	9	$54,000
13	Window shutter (replace vinyl w wood)	ls	22	$410.00	25	5	$9,020
14	Restore windows (4' x 7')	ea	6	$1,260.00	35	9	$7,560
15	Restore windows (3' x 4')	ea	5	$540.00	35	9	$2,700

BUILDING EXTERIOR - Replacement Costs - Subtotal $85,580

BUILDING EXTERIOR
COMMENTS

- For building skin and shell components the REL is projected based on the serviceability and condition of the existing material. Replacement of siding, trim, soffit and fascia with hardiboard. Pricing includes insulation.

BUILDING SYSTEMS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
16	Fire Alarm Control Annunciator Panel	ea	1	$5,100.00	20	none	$5,100
17	Water softener	ea	1	$5,000.00	10	9	$5,000
18	Well replacement	ea	1	$6,000.00	25	24	$6,000
19	Heat pump, furnace (48,000 btu)	ea	1	$5,000.00	24	9	$5,000
20	Heat pump, compressor (4 ton)	ea	1	$5,000.00	24	9	$5,000
21	Sump pump	ea	1	$2,500.00	10	9	$2,500

BUILDING SYSTEMS - Replacement Costs - Subtotal $28,600

BUILDING SYSTEMS
COMMENTS

VALUATION EXCLUSIONS
EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Building exterior lighting	ea	2				EXCLUDED
	Sign, text and/or graphic	ea	1				EXCLUDED
	Glass block	sf	12				EXCLUDED
	Smoke detector	ea	1				EXCLUDED
	Fire strobe	ea	2				EXCLUDED
	Fire alarm pull	ea	2				EXCLUDED
	Emergency lights	ea	2				EXCLUDED
	Well pump	ea	1				EXCLUDED
	Well clean-up service	ea	1				EXCLUDED
	Pressure tank	ea	1				EXCLUDED
	Water testing	ea	1				EXCLUDED
	Electrical (allowance)	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 $2,000.00 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.

PROJECTED ANNUAL REPLACEMENTS
GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 21 Projected Replacements in the Town Hall 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 Township 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 Township 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 Township and the visual evaluations of the Analyst. It has been prepared for the sole use of the Township 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 Town Hall Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Township.

PROJECTED REPLACEMENTS - YEARS ONE TO FIFTEEN

Item	2016 - STUDY YEAR	$
2	Pavement, rejuvenator seal	$4,232
16	Fire Alarm Control Annuncia	$5,100
	Total Scheduled Replacements	$9,332

Item	2017 - YEAR 2	$
	No Scheduled Replacements	

Item	2018 - YEAR 3	$
8	Hardscapes/foundation plan	$2,000
9	Asphalt shingles, gutters & d	$9,350
10	Roof sheathing allowance (1	$550
	Total Scheduled Replacements	$11,900

Item	2019 - YEAR 4	$
	No Scheduled Replacements	

Item	2020 - YEAR 5	$
3	Concrete flatwork	$1,080
4	Accessable ramp at entranc	$5,000
11	Restore exterior doors (allov	$2,400
	Total Scheduled Replacements	$8,480

Item	2021 - YEAR 6	$
8	Hardscapes/foundation plan	$2,000
13	Window shutter (replace vin	$9,020
	Total Scheduled Replacements	$11,020

Item	2022 - YEAR 7	$
2	Pavement, rejuvenator seal	$4,232
	Total Scheduled Replacements	$4,232

Item	2023 - YEAR 8	$
	No Scheduled Replacements	

Item	2024 - YEAR 9	$
8	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2025 - YEAR 10	$
5	Walkway/Staircase w/ paver	$3,650
6	Storm water management (a	$1,000
12	Siding and trim, replace with	$54,000
14	Restore windows (4' x 7')	$7,560
15	Restore windows (3' x 4')	$2,700
17	Water softener	$5,000
19	Heat pump, furnace (48,000	$5,000
20	Heat pump, compressor (4 t	$5,000
21	Sump pump	$2,500
	Total Scheduled Replacements	$86,410

Item	2026 - YEAR 11	$
	No Scheduled Replacements	

Item	2027 - YEAR 12	$
8	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2028 - YEAR 13	$
2	Pavement, rejuvenator seal	$4,232
	Total Scheduled Replacements	$4,232

Item	2029 - YEAR 14	$
	No Scheduled Replacements	

Item	2030 - YEAR 15	$
8	Hardscapes/foundation plan	$2,000
11	Restore exterior doors (allov	$2,400
	Total Scheduled Replacements	$4,400

PROJECTED REPLACEMENTS - YEARS SIXTEEN TO THIRTY

Item	2031 - YEAR 16	$
	No Scheduled Replacements	

Item	2032 - YEAR 17	$
1	Asphalt pavement, mill and (	$34,960
	Total Scheduled Replacements	$34,960

Item	2033 - YEAR 18	$
8	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2034 - YEAR 19	$
2	Pavement, rejuvenator seal	$4,232
	Total Scheduled Replacements	$4,232

Item	2035 - YEAR 20	$
17	Water softener	$5,000
21	Sump pump	$2,500
	Total Scheduled Replacements	$7,500

Item	2036 - YEAR 21	$
8	Hardscapes/foundation plan	$2,000
16	Fire Alarm Control Annuncia	$5,100
	Total Scheduled Replacements	$7,100

Item	2037 - YEAR 22	$
	No Scheduled Replacements	

Item	2038 - YEAR 23	$
	No Scheduled Replacements	

Item	2039 - YEAR 24	$
8	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2040 - YEAR 25	$
2	Pavement, rejuvenator seal	$4,232
11	Restore exterior doors (allov	$2,400
18	Well replacement	$6,000
	Total Scheduled Replacements	$12,632

Item	2041 - YEAR 26	$
	No Scheduled Replacements	

Item	2042 - YEAR 27	$
8	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2043 - YEAR 28	$
9	Asphalt shingles, gutters & c	$9,350
10	Roof sheathing allowance (1	$550
	Total Scheduled Replacements	$9,900

Item	2044 - YEAR 29	$
	No Scheduled Replacements	

Item	2045 - YEAR 30	$
7	Sanitary sewer lateral (allow	$4,000
8	Hardscapes/foundation plan	$2,000
12	Siding and trim, replace with	$54,000
17	Water softener	$5,000
21	Sump pump	$2,500
	Total Scheduled Replacements	$67,500

PROJECTED REPLACEMENTS - YEARS THIRTY-ONE TO FORTY-FIVE

Item	2046 - YEAR 31	$
2	Pavement, rejuvenator seal	$4,232
13	Window shutter (replace vin	$9,020
	Total Scheduled Replacements	$13,252

Item	2047 - YEAR 32	$
	No Scheduled Replacements	

Item	2048 - YEAR 33	$
8	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2049 - YEAR 34	$
19	Heat pump, furnace (48,000	$5,000
20	Heat pump, compressor (4 t	$5,000
	Total Scheduled Replacements	$10,000

Item	2050 - YEAR 35	$
1	Asphalt pavement, mill and (	$34,960
5	Walkway/Staircase w/ paver	$3,650
11	Restore exterior doors (allov	$2,400
	Total Scheduled Replacements	$41,010

Item	2051 - YEAR 36	$
8	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2052 - YEAR 37	$
2	Pavement, rejuvenator seal	$4,232
	Total Scheduled Replacements	$4,232

Item	2053 - YEAR 38	$
	No Scheduled Replacements	

Item	2054 - YEAR 39	$
8	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2055 - YEAR 40	$
4	Accessable ramp at entranc	$5,000
6	Storm water management (a	$1,000
17	Water softener	$5,000
21	Sump pump	$2,500
	Total Scheduled Replacements	$13,500

Item	2056 (beyond Study Period)	$
16	Fire Alarm Control Annuncia	$5,100
	Total Scheduled Replacements	$5,100

Item	2057 (beyond Study Period)	$
8	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2058 (beyond Study Period)	$
2	Pavement, rejuvenator seal	$4,232
	Total Scheduled Replacements	$4,232

Item	2059 (beyond Study Period)	$
	No Scheduled Replacements	

Item	2060 (beyond Study Period)	$
8	Hardscapes/foundation plan	$2,000
11	Restore exterior doors (allov	$2,400
14	Restore windows (4' x 7')	$7,560
15	Restore windows (3' x 4')	$2,700
	Total Scheduled Replacements	$14,660

CASH FLOW METHOD ACCOUNTING SUMMARY

This Town Hall - Cash Flow Method Accounting Summary is an attachment to the Town Hall - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 21 Projected Replacements listed in the Town Hall Replacement Reserve Inventory has been assigned to one of 3 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 $0 Beginning Balance (at the start of the Study Year) and the $40,012 of additional Replacement Reserve Funding in 2016 through 2018 (as calculated in the Replacement Reserve Analysis) to each of the 21 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by Chronological Allocation.
  - Allocation of the $40,012 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, 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 $0 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 Town Hall the Beginning Balance funds 0.0% of Scheduled Replacements in the Study Year.
  - The next step is the allocation of the $13,337 of 2016 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 Town Hall the Beginning Balance and the 2016 Replacement Reserve Funding, funds replacements through 2017 and partial funds (33.7%) replacements in 2018.
  - Allocations of the 2017 and 2018 Reserve Funding are done using the same methodology.
  - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

2016 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Town Hall Replacement Reserve Inventory has been assigned to one of the 3 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $13,337 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 2016 being accomplished in 2016 at a cost of $9,332.

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 CF1

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	3 to 60 years	0 to 29 years	$55,922		$4,905	($4,232)	$673
BUILDING EXTERIOR	10 to 35 years	2 to 9 years	$85,580		$3,332		$3,332
BUILDING SYSTEMS	10 to 25 years	0 to 24 years	$28,600		$5,100	($5,100)	

2017 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Town Hall Replacement Reserve Inventory has been assigned to one of the 3 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 $4,005 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $26,675 from 2016 through 2017.
- 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.

2017 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF2

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	3 to 60 years	1 to 28 years	$55,922	$673	$5,229		$5,902
BUILDING EXTERIOR	10 to 35 years	1 to 8 years	$85,580	$3,332	$8,108		$11,440
BUILDING SYSTEMS	10 to 25 years	8 to 23 years	$28,600				

2018 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Town Hall Replacement Reserve Inventory has been assigned to one of the 3 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 $17,343 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $40,012 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $11,900.

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.

2018 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	3 to 60 years	0 to 27 years	$55,922	$5,902	$4,047	($2,000)	$7,949
BUILDING EXTERIOR	10 to 35 years	0 to 7 years	$85,580	$11,440	$9,290	($9,900)	$10,831
BUILDING SYSTEMS	10 to 25 years	7 to 22 years	$28,600				

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CF4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $40,012 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 21 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $4,005 on January 1, 2017.
- Replacement Reserves on Deposit totaling $17,343 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $40,012 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $21,232.

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

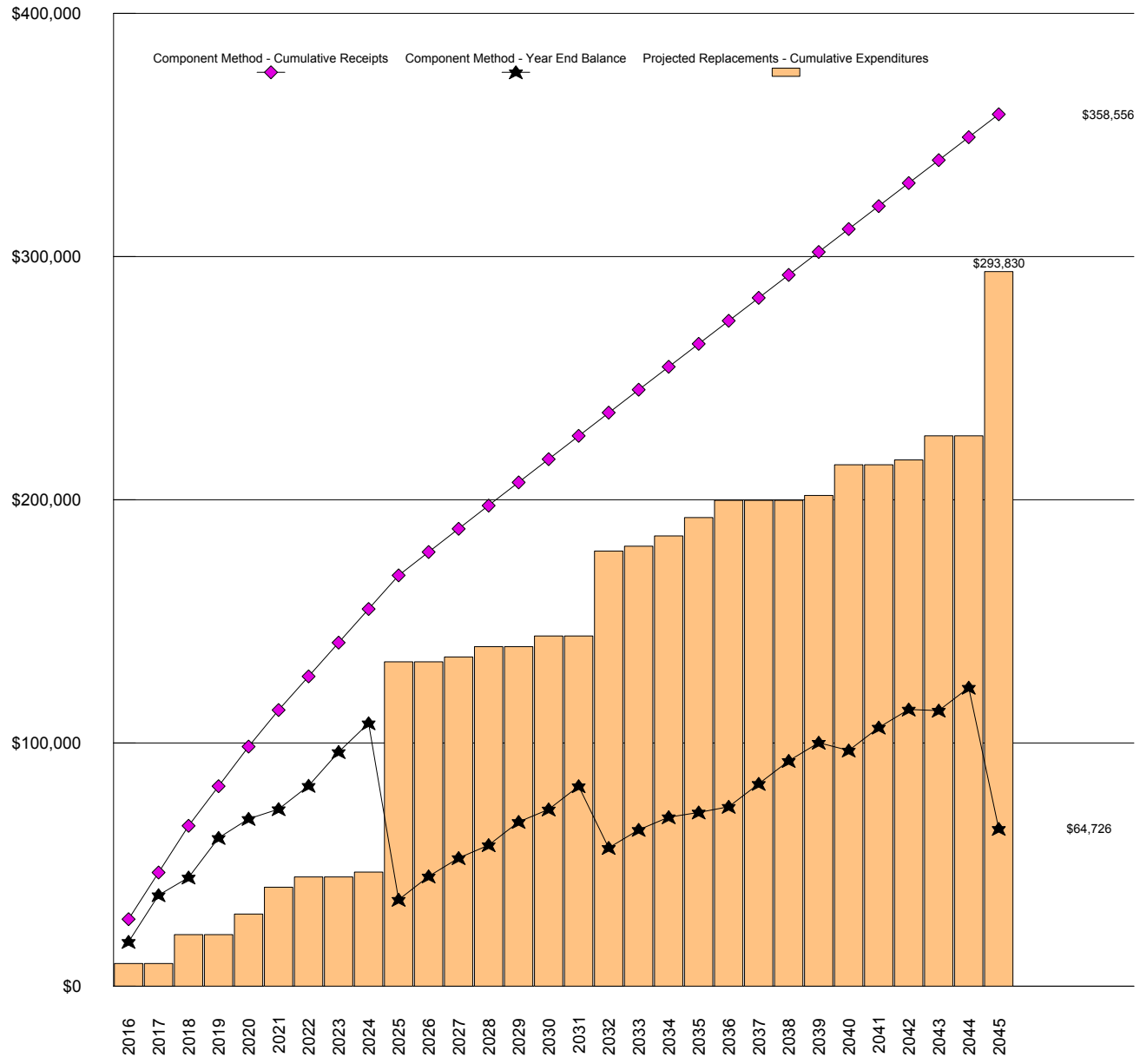
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement, mill and overlay (2(	34,960										
2	Pavement, rejuvenator seal coat/stripin	4,232		4,232	(4,232)							
3	Concrete flatwork	1,080					693		693	387		1,080
4	Accessable ramp at entrance	5,000					3,209		3,209	1,791		5,000
5	Walkway/Staircase w/ pavers and railir	3,650										
6	Storm water management (allowance)	1,000										
7	Sanitary sewer lateral (allowance) (201	4,000										
8	Hardscapes/foundation plantings (allov	2,000		673		673	1,327		2,000	1,869	(2,000)	1,869
	BUILDING EXTERIOR											
9	Asphalt shingles, gutters & downspout	9,350		3,147		3,147	6,203		9,350		(9,350)	
10	Roof sheathing allowance (10%)	550		185		185	365		550		(550)	
11	Restore exterior doors (allowance)	2,400					1,540		1,540	860		2,400
12	Siding and trim, replace with Hardiboa	54,000										
13	Window shutter (replace vinyl w wood	9,020								8,431		8,431
14	Restore windows (4' x 7')	7,560										
15	Restore windows (3' x 4')	2,700										
	BUILDING SYSTEMS											
16	Fire Alarm Control Annunciator Panel	5,100		5,100	(5,100)							
17	Water softener	5,000										
18	Well replacement	6,000										
19	Heat pump, furnace (48,000 btu)	5,000										
20	Heat pump, compressor (4 ton)	5,000										
21	Sump pump	2,500										

COMPONENT METHOD

$27,569 **COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2016.**

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 21 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



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 21 Projected Replacements. The total, $76,336, 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 ($0) by the Current Funding Objective ($76,336). At Town Hall the Funding Percentage is 0.0%

- Allocation of the Beginning Balance. The Beginning Balance is divided among the 21 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 Township has not accumulated $800 in Reserves (the Funding Objective), but rather at 0.0 percent funded, there is $0 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 $27,569, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2016).

  In our fence example, the $0 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 $500. Next year, the deposit remains $500, 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Beginning balance										
Recommended annual funding	$27,569	$19,197	$19,197	$16,293	$16,293	$14,998	$13,855	$13,855	$13,855	$13,855
Expenditures	$9,332		$11,900		$8,480	$11,020	$4,232		$2,000	$86,410
Year end balance	$18,237	$37,434	$44,731	$61,024	$68,837	$72,815	$82,439	$96,294	$108,150	$35,595
Cumulative Expenditures	$9,332	$9,332	$21,232	$21,232	$29,712	$40,732	$44,964	$44,964	$46,964	$133,374
Cumulative Receipts	$27,569	$46,766	$65,963	$82,256	$98,549	$113,547	$127,403	$141,258	$155,114	$168,969

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Recommended annual funding	$9,554	$9,554	$9,554	$9,554	$9,554	$9,554	$9,554	$9,439	$9,439	$9,439
Expenditures		$2,000	$4,232		$4,400		$34,960	$2,000	$4,232	$7,500
Year end balance	$45,149	$52,702	$58,024	$67,578	$72,731	$82,285	$56,878	$64,318	$69,525	$71,464
Cumulative Expenditures	$133,374	$135,374	$139,606	$139,606	$144,006	$144,006	$178,966	$180,966	$185,198	$192,698
Cumulative Receipts	$178,523	$188,076	$197,630	$207,184	$216,737	$226,291	$235,844	$245,284	$254,723	$264,162

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Recommended annual funding	$9,439	$9,439	$9,439	$9,439	$9,439	$9,439	$9,439	$9,439	$9,439	$9,439
Expenditures	$7,100			$2,000	$12,632		$2,000	$9,900		$67,500
Year end balance	$73,804	$83,243	$92,683	$100,122	$96,929	$106,369	$113,808	$113,347	$122,787	$64,726
Cumulative Expenditures	$199,798	$199,798	$199,798	$201,798	$214,430	$214,430	$216,430	$226,330	$226,330	$293,830
Cumulative Receipts	$273,602	$283,041	$292,481	$301,920	$311,359	$320,799	$330,238	$339,677	$349,117	$358,556

COMPONENT METHOD ACCOUNTING SUMMARY

This Town Hall - Component Method Accounting Summary is an attachment to the Town Hall - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 21 Projected Replacements listed in the Town Hall Replacement Reserve Inventory has been assigned to one of 3 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 $0 Beginning Balance (at the start of the Study Year) and the $65,963 of additional Replacement Reserve funding from 2016 to 2018 (as calculated in the Replacement Reserve Analysis) to each of the 21 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by the Component Method.
  - Allocation of the $65,963 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, by the Component Method.

2016 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Town Hall Replacement Reserve Inventory has been assigned to one of the 3 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $27,569 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 2016 being accomplished in 2016 at a cost of $9,332.

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 CM1

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	3 to 60 years	0 to 29 years	$55,922		$8,769	$4,232	$4,537
BUILDING EXTERIOR	10 to 35 years	2 to 9 years	$85,580		$11,709		$11,709
BUILDING SYSTEMS	10 to 25 years	0 to 24 years	$28,600		$7,090	$5,100	$1,990

2017 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Town Hall Replacement Reserve Inventory has been assigned to one of the 3 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 $18,237 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $46,766 from 2016 through 2017.
- 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.

2017 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM2

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	3 to 60 years	1 to 28 years	$55,922	$4,537	$5,243		$9,780
BUILDING EXTERIOR	10 to 35 years	1 to 8 years	$85,580	$11,709	$11,709		$23,419
BUILDING SYSTEMS	10 to 25 years	8 to 23 years	$28,600	$1,990	$2,245		$4,235

2018 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Town Hall Replacement Reserve Inventory has been assigned to one of the 3 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 $37,434 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $65,963 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $11,900.

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.

2018 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	3 to 60 years	0 to 27 years	$55,922	$9,780	$5,243	$2,000	$13,023
BUILDING EXTERIOR	10 to 35 years	0 to 7 years	$85,580	$23,419	$11,709	$9,900	$25,228
BUILDING SYSTEMS	10 to 25 years	7 to 22 years	$28,600	$4,235	$2,245		$6,480

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $65,963 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 21 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $18,237 on January 1, 2017.
- Replacement Reserves on Deposit totaling $37,434 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $65,963 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $21,232.

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	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement, mill and overlay (2(	34,960		2,056		2,056	2,056		4,113	2,056		6,169
2	Pavement, rejuvenator seal coat/stripin	4,232		4,232	(4,232)		705		705	705		1,411
3	Concrete flatwork	1,080		216		216	216		432	216		648
4	Accessable ramp at entrance	5,000		1,000		1,000	1,000		2,000	1,000		3,000
5	Walkway/Staircase w/ pavers and railir	3,650		365		365	365		730	365		1,095
6	Storm water management (allowance)	1,000		100		100	100		200	100		300
7	Sanitary sewer lateral (allowance) (201	4,000		133		133	133		267	133		400
8	Hardscapes/foundation plantings (allov	2,000		667		667	667		1,333	667	(2,000)	
	BUILDING EXTERIOR											
9	Asphalt shingles, gutters & downspout	9,350		3,117		3,117	3,117		6,233	3,117	(9,350)	
10	Roof sheathing allowance (10%)	550		183		183	183		367	183	(550)	
11	Restore exterior doors (allowance)	2,400		480		480	480		960	480		1,440
12	Siding and trim, replace with Hardiboa	54,000		5,400		5,400	5,400		10,800	5,400		16,200
13	Window shutter (replace vinyl w wood	9,020		1,503		1,503	1,503		3,007	1,503		4,510
14	Restore windows (4' x 7')	7,560		756		756	756		1,512	756		2,268
15	Restore windows (3' x 4')	2,700		270		270	270		540	270		810
	BUILDING SYSTEMS											
16	Fire Alarm Control Annunciator Panel	5,100		5,100	(5,100)		255		255	255		510
17	Water softener	5,000		500		500	500		1,000	500		1,500
18	Well replacement	6,000		240		240	240		480	240		720
19	Heat pump, furnace (48,000 btu)	5,000		500		500	500		1,000	500		1,500
20	Heat pump, compressor (4 ton)	5,000		500		500	500		1,000	500		1,500
21	Sump pump	2,500		250		250	250		500	250		750

OLD FIRE STATION

Old Fire Station. The Old Fire Station building is currently used for equipment storage. The building is maintained and may be redesigned for a new purpose.

Building Roofing. The building is roofed in a flat roofing system. There is no indication there is insulation installed as part of the roofing system. The Township is reporting evidence of active leaks.

The Township is located in a region with considerable precipitation and snowfall. Flat roofing is not ideal for this region due to drainage and the weight of the snow accumulation. Roof systems with a pitch or grade are better suited. The Township should consider redesigning the roof structure and installing a pitched roof with insulation.

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.

Siding and Trim. The exterior of the building is clad in masonry siding and trim. The siding and trim materials are in generally fair condition.

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.

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 Township 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.

Building Electrical Service. The electrical systems of the building is 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.

Emergency Generator. The building is served by a 10 kW generator that is located outside the building.

It is recommended that the Township continue the following to maintain the serviceability of the system:

- Maintenance contract.
- Weekly start-up and test.
- Regular service of electrical connections.

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EXECUTIVE SUMMARY

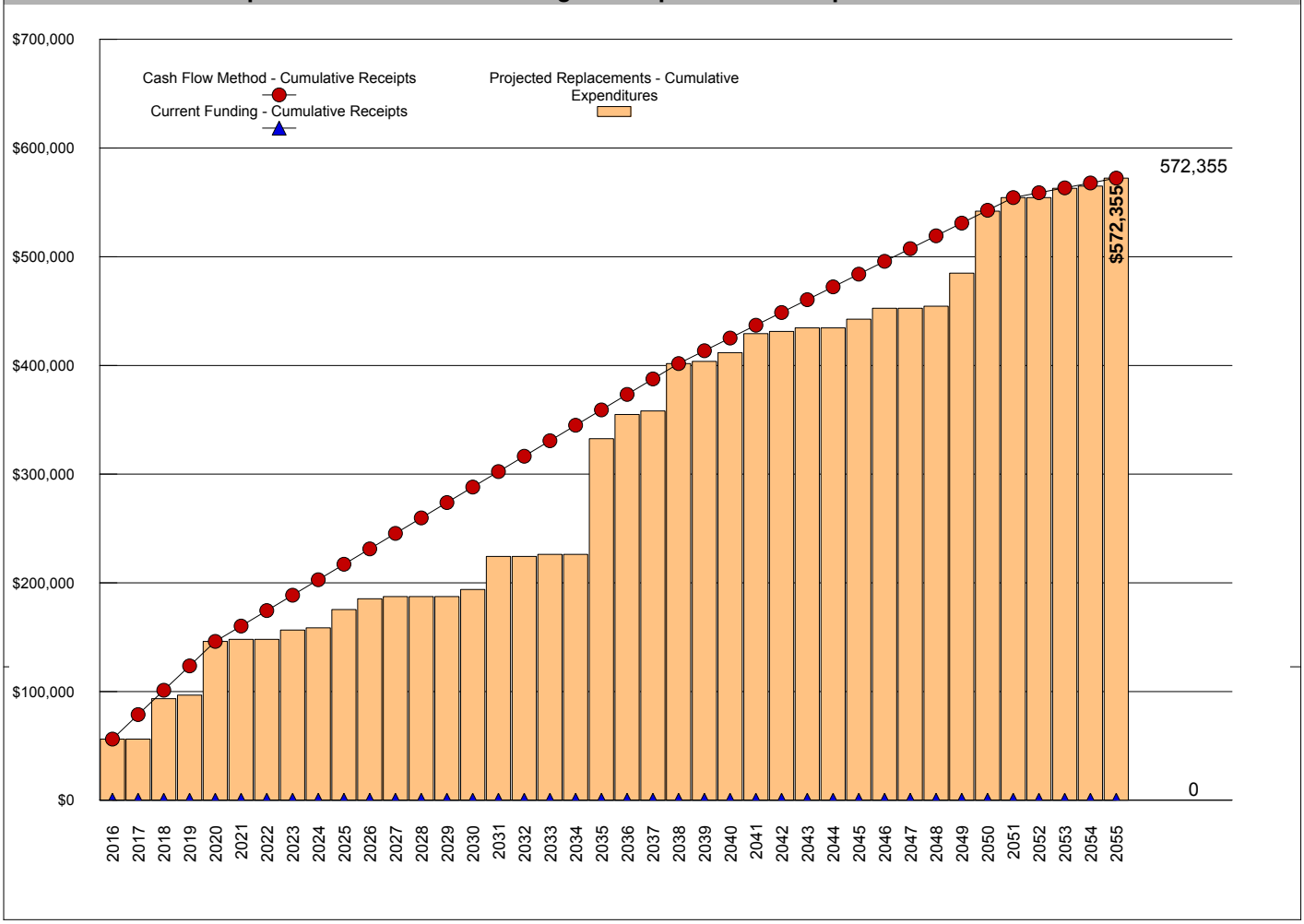
The Old Fire Station Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 21 Projected Replacements identified in the Replacement Reserve Inventory.

$56,303 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2016**

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

Old Fire Station reports a that the Township is currently not funding Replacement Reserves.
This Study contains the information necessary for the Township to develop a Funding Plan to address the $572,355 of Projected Replacements identified in the Replacement Reserve Inventory over the 40-year Study Period.

#1 - Cumulative Replacement Reserve Funding and Expenditures Graph



The Current Funding Objective as calculated by the Component Method (Fully Funded) is $172,200 making the reserve account 0.0% funded. See the Appendix for more information on this method.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Old Fire Station 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.

2016 | **STUDY YEAR**

The Township 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, 2016.

40 Years | **STUDY PERIOD**

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

NONE | **STARTING BALANCE**

The Township reports that no funds are attributed to Replacement Reserves

Level One | **LEVEL OF SERVICE**

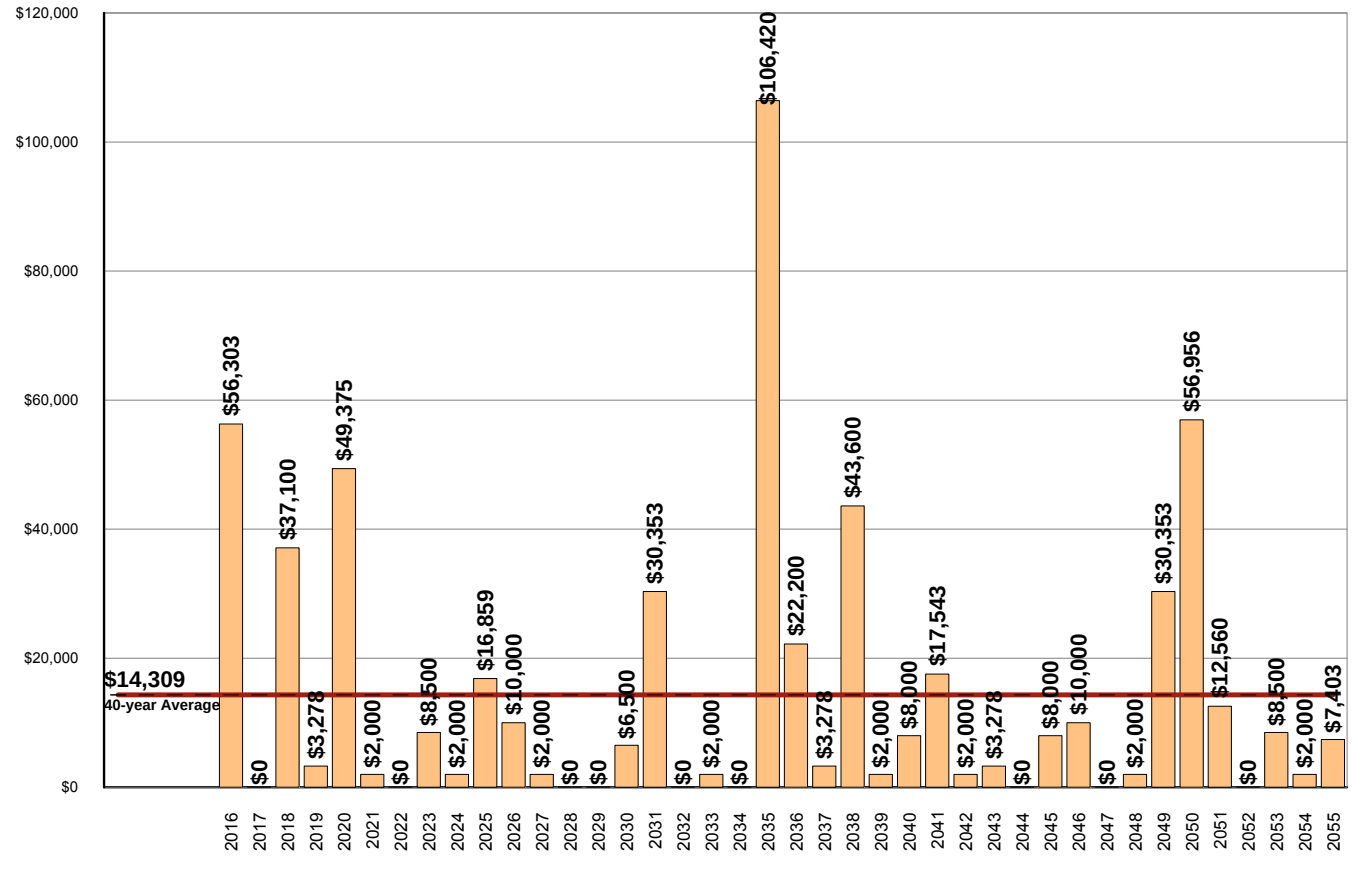
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level One Study, as defined by the Community Associations Institute (CAI).

$572,355 | **REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS**

The Old Fire Station Replacement Reserve Inventory identifies 21 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be $572,355 over the 40-year Study Period. The Projected Replacements are divided into 4 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 $14,309. Section C provides a year by year Calender of these expenditures.



UPDATING

UPDATING OF THE FUNDING PLAN

The Township 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

The annual expenditures that comprise the $572,355 of Projected Expenditures over the 40-year Study Period are detailed in Table 3. A year-by-year listing of the specific projects can be found beginning on Page C2.

#3 - Table of Annual Expenditures - Years 1 through 40

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Projected Replacements	($56,303)		($37,100)	($3,278)	($49,375)	($2,000)		($8,500)	($2,000)	($16,859)
End of Year Balance	($56,303)	($56,303)	($93,403)	($96,680)	($146,055)	($148,055)	($148,055)	($156,555)	($158,555)	($175,414)
Cumulative Expenditures	($56,303)	($56,303)	($93,403)	($96,680)	($146,055)	($148,055)	($148,055)	($156,555)	($158,555)	($175,414)

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements	($10,000)	($2,000)			($6,500)	($30,353)		($2,000)		($106,420)
End of Year Balance	($185,414)	($187,414)	($187,414)	($187,414)	($193,914)	($224,266)	($224,266)	($226,266)	($226,266)	($332,686)
Cumulative Expenditures	($185,414)	($187,414)	($187,414)	($187,414)	($193,914)	($224,266)	($224,266)	($226,266)	($226,266)	($332,686)

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Projected Replacements	($22,200)	($3,278)	($43,600)	($2,000)	($8,000)	($17,543)	($2,000)	($3,278)		($8,000)
End of Year Balance	($354,886)	($358,164)	($401,764)	($403,764)	($411,764)	($429,306)	($431,306)	($434,584)	($434,584)	($442,584)
Cumulative Expenditures	($354,886)	($358,164)	($401,764)	($403,764)	($411,764)	($429,306)	($431,306)	($434,584)	($434,584)	($442,584)

Year	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
Projected Replacements	($10,000)		($2,000)	($30,353)	($56,956)	($12,560)		($8,500)	($2,000)	($7,403)
End of Year Balance	($452,584)	($452,584)	($454,584)	($484,936)	($541,892)	($554,452)	($554,452)	($562,952)	($564,952)	($572,355)
Cumulative Expenditures	($452,584)	($452,584)	($454,584)	($484,936)	($541,892)	($554,452)	($554,452)	($562,952)	($564,952)	($572,355)

Table #3 shows the annual costs for Projected Replacements and the cumulative annual expenditures for the Projected Replacements. Table #3 also shows the Starting Balance and Current Annual Funding if reported by Township. When this information is provided, Table #3 will calculate the consequences of continuing to fund Replacement Reserves at current levels over the 40-year Study Period.

This information is for use by the Township for the development of a Funding Plan. The Funding Plan is a critical planning tool if the Township is to provide timely and adequate funding for the $572,355 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period.

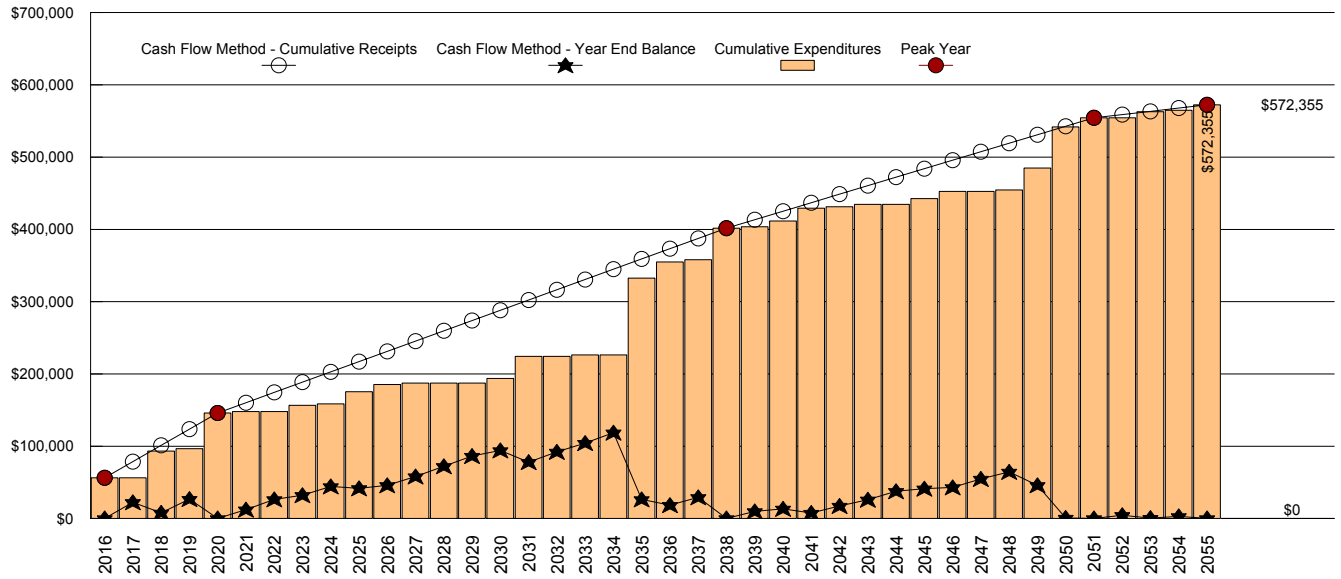
CASH FLOW METHOD FUNDING

$56,303 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2016**

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 2016 with Replacement Reserves on Deposit dropping to the Minimum Balance after the completion of $56,303 of replacements in the Study Year, 2016. Recommended funding declines from $56,303 in 2016 to $22,438 in 2017. Peak Years are identified in Chart 4 and Table 5.
- Minimum Balance. The calculations assume a Minimum Balance of $0 in Replacement Reserves. This is approx. 0 months of average expenditures based on the $14,309, 40-year average annual expenditure.
- Cash Flow Method Study Period. Cash Flow Method calculates funding for $572,355 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2055 and in 2055, 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	1st Peak - 2016	2017	2018	2019	2nd Peak - 2020	2021	2022	2023	2024	2025
Starting Balance										
Projected Replacements	($56,303)		($37,100)	($3,278)	($49,375)	($2,000)		($8,500)	($2,000)	($16,859)
Annual Deposit	$56,303	$22,438	$22,438	$22,438	$22,438	$14,204	$14,204	$14,204	$14,205	$14,205
End of Year Balance	$0	$22,438	$7,776	$26,937	$0	$12,204	$26,408	$32,113	$44,317	$41,664
Cumulative Expenditures	$56,303	$56,303	$93,403	$96,680	$146,055	$148,055	$148,055	$156,555	$158,555	$175,414
Cumulative Receipts	$56,303	$78,741	$101,179	$123,617	$146,055	$160,259	$174,463	$188,668	$202,872	$217,077

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements	($10,000)	($2,000)			($6,500)	($30,353)		($2,000)		($106,420)
Annual Deposit	$14,205	$14,205	$14,206	$14,206	$14,206	$14,207	$14,207	$14,207	$14,207	$14,207
End of Year Balance	$45,869	$58,074	$72,280	$86,486	$94,192	$78,046	$92,253	$104,460	$118,668	$26,455
Cumulative Expenditures	($185,414)	($187,414)	($187,414)	($187,414)	($193,914)	($224,266)	($224,266)	($226,266)	($226,266)	($332,686)
Cumulative Receipts	$231,282	$245,488	$259,693	$273,899	$288,106	$302,312	$316,519	$330,726	$344,934	$359,141

Year	2036	2037	3rd Peak - 2038	2039	2040	2041	2042	2043	2044	2045
Projected Replacements	($22,200)	($3,278)	($43,600)	($2,000)	($8,000)	($17,543)	($2,000)	($3,278)		($8,000)
Annual Deposit	$14,207	$14,208	$14,208	$11,745	$11,745	$11,745	$11,745	$11,745	$11,745	$11,745
End of Year Balance	$18,462	$29,392	$0	$9,745	$13,491	$7,693	$17,439	$25,906	$37,652	$41,397
Cumulative Expenditures	($354,886)	($358,164)	($401,764)	($403,764)	($411,764)	($429,306)	($431,306)	($434,584)	($434,584)	($442,584)
Cumulative Receipts	$373,348	$387,556	$401,764	$413,509	$425,254	$436,999	$448,745	$460,490	$472,235	$483,980

Year	2046	2047	2048	2049	2050	4th Peak - 2051	2052	2053	2054	5th Peak - 2055
Projected Replacements	($10,000)		($2,000)	($30,353)	($56,956)	($12,560)		($8,500)	($2,000)	($7,403)
Annual Deposit	$11,745	$11,745	$11,745	$11,745	$11,745	$11,745	$4,476	$4,476	$4,476	$4,476
End of Year Balance	$43,142	$54,887	$64,633	$46,025	$815	$0	$4,476	$451	$2,927	$0
Cumulative Expenditures	($452,584)	($452,584)	($454,584)	($484,936)	($541,892)	($554,452)	($554,452)	($562,952)	($564,952)	($572,355)
Cumulative Receipts	$495,726	$507,471	$519,216	$530,961	$542,707	$554,452	$558,928	$563,403	$567,879	$572,355

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 belive 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.

$56,303 2016 - CASH FLOW METHOD RECOMMENDED FUNDING

The 2016 Study Year calculations have been made using current replacement costs (see Page B2), modified by the Analyst for any project specific conditions.

$23,111 2017 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2017 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $0 on January 1, 2017.
- All 2016 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $56,303.
- Construction Cost Inflation of 3.00 percent in 2016.

The $23,111 inflation adjusted funding in 2017 is a 3.00 percent increase over the non-inflation adjusted 2017 funding of $22,438.

$24,036 2018 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2018 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $23,111 on January 1, 2018.
- No Expenditures from Replacement Reserves in 2017.
- Construction Cost Inflation of 3.00 percent in 2017.

The $24,036 inflation adjusted funding in 2018 is a 7.12 percent increase over the non-inflation adjusted 2018 funding of $22,438.

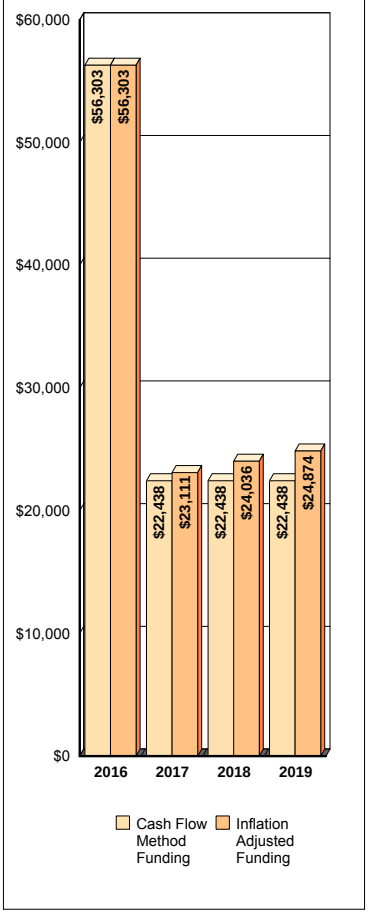
$24,874 2019 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2019 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $7,788 on January 1, 2019.
- All 2018 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $39,359.
- Construction Cost Inflation of 3.00 percent in 2018.

The $24,874 inflation adjusted funding in 2019 is a 10.85 percent increase over the non-inflation adjusted funding of $22,438.

#6 - Inflation Adjusted Funding



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 2017, 2018 and 2019 inflation adjusted funding calculations above, the 3.00 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 2016, based on a 1.00 percent interest rate, we estimate the Association may earn $0 on an average balance of $0, $115 on an average balance of $11,556 in 2017, and $154 on $15,449 in 2018. The Association may elect to use these funds to reduce annual funding.

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 21 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B1.

REPLACEMENT RESERVE INVENTORY
GENERAL INFORMATION

Old Fire Station - Replacement Reserve Inventory identifies 21 Projected Replacements.

- PROJECTED REPLACEMENTS. 21 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 $256,756. Replacements totaling $442,584 are scheduled in the Replacement Reserve Inventory over the 40-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. None of the items included in the Replacement Reserve Inventory are 'Excluded Items'. Multiple categories of items 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 that $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 Township policy on the administration of Replacement Reserves. If the Township 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 Township.

  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 Township. These types of items are generally not the responsibility of the Township and are excluded from the Replacement Reserve Inventory.

- CATEGORIES. The 21 items included in the Old Fire Station Replacement Reserve Inventory are divided into 4 major categories. Each category is printed on a separate page, Pages B3 to B6.

- 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.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- INVENTORY DATA. Each of the 21 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.

- REVIEW OF EXPENDITURES. This Replacement Reserve Study should be reviewed by an accounting professional representing the Township 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.

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	Asphalt pavement, mill and overlay	sf	14,250	$1.90	18	15	$27,075
2	Pavement, rejuvenator seal coat/striping	sf	14,250	$0.23	6	3	$3,278
3	Concrete flatwork	sf	5,880	$9.00	60	19	$52,920
4	Bollards	ea	16	$250.00	20	9	$4,000
5	Building exterior lighting	ea	11	$125.00	15	4	$1,375
6	Guide rail	ft	75	$55.00	20	19	$4,125
7	Hardscapes/foundation plantings (allowance)	ls	1	$2,000.00	3	2	$2,000

SITE COMPONENTS - Replacement Costs - Subtotal $94,773

SITE COMPONENTS
COMMENTS

- Remaining Economic Life is based in part on the age of the installation, the quality of the installation and the condition of the installation. Where the age of the installation is not known it is estimated.
- Storm water management allowance included to account for run-off, inlets, piping, and outlets.
- Sanitary sewer allowance included for potential replacements of existing sewer utility.

BUILDING EXTERIOR
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
8	Modified bitumen roofing, flat	sf	5,850	$6.00	20	2	$35,100
9	Brick veneer repoint (25% allowance)	sf	1,283	$9.00	25	none	$11,543
10	Exterior door (allowance)	ls	2	$2,500.00	10	none	$5,000
11	Siding, metal	sf	1,330	$5.70	25	9	$7,581
12	Overhead door (2011)	ea	8	$6,000.00	15	4	$48,000
13	Windows, extruded aluminum double glazed	sf	192	$55.00	35	none	$10,560

BUILDING EXTERIOR - Replacement Costs - Subtotal $117,784

BUILDING EXTERIOR
COMMENTS

- Roof is a flat system that poses potential problems in heavy snow conditions. A peaked system should be considered at the poingt replacement is required.

BUILDING SYSTEMS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
14	Fire alarm control annunciator panel	ea	1	$10,200.00	20	none	$10,200
15	Water heater	ea	1	$8,500.00	15	7	$8,500
16	Water softener	ea	1	$5,000.00	10	none	$5,000
17	Well replacement	ea	1	$6,000.00	25	none	$6,000
18	Heat pump, furnace (36,000 btu)	ea	1	$4,000.00	24	none	$4,000
19	Heat pump, compressor (3 ton)	ea	1	$4,000.00	24	none	$4,000
20	Unit heater	ea	2	$1,000.00	20	9	$2,000
21	Emergency generator (10 Kw)	ea	1	$4,500.00	30	14	$4,500

BUILDING SYSTEMS - Replacement Costs - Subtotal $44,200

BUILDING SYSTEMS
COMMENTS

VALUATION EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Storm Water Management (allowance)	ls	1				EXCLUDED
	Sanitary sewer llateral (allowance)	ls	1				EXCLUDED
	Caulking (allowance)	ls	1				EXCLUDED
	Fire Alarm Control Panel	ea	1				EXCLUDED
	Smoke detector	ea	10				EXCLUDED
	Fire strobe	ea	10				EXCLUDED
	Fire alarm pull	ea	10				EXCLUDED
	Well pump	ea	1				EXCLUDED
	Well clean-up service	ea	1				EXCLUDED
	Pressure tank	ea	1				EXCLUDED
	Water testing	ea	1				EXCLUDED
	Electrical (allowance)	ea	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 $2,000.00 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.

PROJECTED ANNUAL REPLACEMENTS
GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 21 Projected Replacements in the Old Fire Station 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 Township 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 Township 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 Township and the visual evaluations of the Analyst. It has been prepared for the sole use of the Township 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 Old Fire Station Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Township.

PROJECTED REPLACEMENTS - YEARS ONE TO FIFTEEN

Item	2016 - STUDY YEAR	$
9	Brick veneer repoint (25% al	$11,543
10	Exterior door (allowance)	$5,000
13	Windows, extruded aluminu	$10,560
14	Fire alarm control annunciat	$10,200
16	Water softener	$5,000
17	Well replacement	$6,000
18	Heat pump, furnace (36,000	$4,000
19	Heat pump, compressor (3 t	$4,000
	Total Scheduled Replacements	$56,303

Item	2017 - YEAR 2	$
	No Scheduled Replacements	

Item	2018 - YEAR 3	$
7	Hardscapes/foundation plan	$2,000
8	Modified bitumen roofing, fla	$35,100
	Total Scheduled Replacements	$37,100

Item	2019 - YEAR 4	$
2	Pavement, rejuvenator seal	$3,278
	Total Scheduled Replacements	$3,278

Item	2020 - YEAR 5	$
5	Building exterior lighting	$1,375
12	Overhead door (2011)	$48,000
	Total Scheduled Replacements	$49,375

Item	2021 - YEAR 6	$
7	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2022 - YEAR 7	$
	No Scheduled Replacements	

Item	2023 - YEAR 8	$
15	Water heater	$8,500
	Total Scheduled Replacements	$8,500

Item	2024 - YEAR 9	$
7	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2025 - YEAR 10	$
2	Pavement, rejuvenator seal	$3,278
4	Bollards	$4,000
11	Siding, metal	$7,581
20	Unit heater	$2,000
	Total Scheduled Replacements	$16,859

Item	2026 - YEAR 11	$
10	Exterior door (allowance)	$5,000
16	Water softener	$5,000
	Total Scheduled Replacements	$10,000

Item	2027 - YEAR 12	$
7	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2028 - YEAR 13	$
	No Scheduled Replacements	

Item	2029 - YEAR 14	$
	No Scheduled Replacements	

Item	2030 - YEAR 15	$
7	Hardscapes/foundation plan	$2,000
21	Emergency generator (10 K\	$4,500
	Total Scheduled Replacements	$6,500

PROJECTED REPLACEMENTS - YEARS SIXTEEN TO THIRTY

Item	2031 - YEAR 16	$
1	Asphalt pavement, mill and (	$27,075
2	Pavement, rejuvenator seal	$3,278
	Total Scheduled Replacements	$30,353

Item	2032 - YEAR 17	$
	No Scheduled Replacements	

Item	2033 - YEAR 18	$
7	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2034 - YEAR 19	$
	No Scheduled Replacements	

Item	2035 - YEAR 20	$
3	Concrete flatwork	$52,920
5	Building exterior lighting	$1,375
6	Guide rail	$4,125
12	Overhead door (2011)	$48,000
	Total Scheduled Replacements	$106,420

Item	2036 - YEAR 21	$
7	Hardscapes/foundation plan	$2,000
10	Exterior door (allowance)	$5,000
14	Fire alarm control annunciat	$10,200
16	Water softener	$5,000
	Total Scheduled Replacements	$22,200

Item	2037 - YEAR 22	$
2	Pavement, rejuvenator seal	$3,278
	Total Scheduled Replacements	$3,278

Item	2038 - YEAR 23	$
8	Modified bitumen roofing, fla	$35,100
15	Water heater	$8,500
	Total Scheduled Replacements	$43,600

Item	2039 - YEAR 24	$
7	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2040 - YEAR 25	$
18	Heat pump, furnace (36,000	$4,000
19	Heat pump, compressor (3 t	$4,000
	Total Scheduled Replacements	$8,000

Item	2041 - YEAR 26	$
9	Brick veneer repoint (25% al	$11,543
17	Well replacement	$6,000
	Total Scheduled Replacements	$17,543

Item	2042 - YEAR 27	$
7	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2043 - YEAR 28	$
2	Pavement, rejuvenator seal	$3,278
	Total Scheduled Replacements	$3,278

Item	2044 - YEAR 29	$
	No Scheduled Replacements	

Item	2045 - YEAR 30	$
4	Bollards	$4,000
7	Hardscapes/foundation plan	$2,000
20	Unit heater	$2,000
	Total Scheduled Replacements	$8,000

PROJECTED REPLACEMENTS - YEARS THIRTY-ONE TO FORTY-FIVE

Item	2046 - YEAR 31	$
10	Exterior door (allowance)	$5,000
16	Water softener	$5,000
	Total Scheduled Replacements	$10,000

Item	2047 - YEAR 32	$
	No Scheduled Replacements	

Item	2048 - YEAR 33	$
7	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2049 - YEAR 34	$
1	Asphalt pavement, mill and (	$27,075
2	Pavement, rejuvenator seal	$3,278
	Total Scheduled Replacements	$30,353

Item	2050 - YEAR 35	$
5	Building exterior lighting	$1,375
11	Siding, metal	$7,581
12	Overhead door (2011)	$48,000
	Total Scheduled Replacements	$56,956

Item	2051 - YEAR 36	$
7	Hardscapes/foundation plan	$2,000
13	Windows, extruded aluminu	$10,560
	Total Scheduled Replacements	$12,560

Item	2052 - YEAR 37	$
	No Scheduled Replacements	

Item	2053 - YEAR 38	$
15	Water heater	$8,500
	Total Scheduled Replacements	$8,500

Item	2054 - YEAR 39	$
7	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2055 - YEAR 40	$
2	Pavement, rejuvenator seal	$3,278
6	Guide rail	$4,125
	Total Scheduled Replacements	$7,403

Item	2056 (beyond Study Period)	$
10	Exterior door (allowance)	$5,000
14	Fire alarm control annunciat	$10,200
16	Water softener	$5,000
	Total Scheduled Replacements	$20,200

Item	2057 (beyond Study Period)	$
7	Hardscapes/foundation plan	$2,000
	Total Scheduled Replacements	$2,000

Item	2058 (beyond Study Period)	$
8	Modified bitumen roofing, fla	$35,100
	Total Scheduled Replacements	$35,100

Item	2059 (beyond Study Period)	$
	No Scheduled Replacements	

Item	2060 (beyond Study Period)	$
7	Hardscapes/foundation plan	$2,000
21	Emergency generator (10 K\	$4,500
	Total Scheduled Replacements	$6,500

CASH FLOW METHOD ACCOUNTING SUMMARY

This Old Fire Station - Cash Flow Method Accounting Summary is an attachment to the Old Fire Station - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 21 Projected Replacements listed in the Old Fire Station Replacement Reserve Inventory has been assigned to one of 3 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 $0 Beginning Balance (at the start of the Study Year) and the $101,179 of additional Replacement Reserve Funding in 2016 through 2018 (as calculated in the Replacement Reserve Analysis) to each of the 21 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by Chronological Allocation.
  - Allocation of the $101,179 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, 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 $0 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 Old Fire Station the Beginning Balance funds 0.0% of Scheduled Replacements in the Study Year.
  - The next step is the allocation of the $56,303 of 2016 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 Old Fire Station the Beginning Balance and the 2016 Replacement Reserve Funding, funds replacements through 2017 and partial funds (0.0%) replacements in 2018.
  - Allocations of the 2017 and 2018 Reserve Funding are done using the same methodology.
  - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

2016 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Old Fire Station Replacement Reserve Inventory has been assigned to one of the 3 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $56,303 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 2016 being accomplished in 2016 at a cost of $56,303.

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 CF1

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	3 to 60 years	2 to 19 years	$94,773		$0		$0
BUILDING EXTERIOR	10 to 35 years	0 to 9 years	$117,784		$27,103	($27,103)	$0
BUILDING SYSTEMS	10 to 30 years	0 to 14 years	$44,200		$29,200	($29,200)	

2017 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Old Fire Station Replacement Reserve Inventory has been assigned to one of the 3 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 $0 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $78,741 from 2016 through 2017.
- 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.

2017 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF2

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	3 to 60 years	1 to 18 years	$94,773	$0	$1,210		$1,210
BUILDING EXTERIOR	10 to 35 years	1 to 34 years	$117,784	$0	$21,229		$21,229
BUILDING SYSTEMS	10 to 30 years	6 to 24 years	$44,200				

2018 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Old Fire Station Replacement Reserve Inventory has been assigned to one of the 3 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 $22,438 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $101,179 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $37,100.

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.

2018 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	3 to 60 years	0 to 17 years	$94,773	$1,210	$4,193	($2,000)	$3,403
BUILDING EXTERIOR	10 to 35 years	0 to 33 years	$117,784	$21,229	$18,245	($35,100)	$4,373
BUILDING SYSTEMS	10 to 30 years	5 to 23 years	$44,200				

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CF4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $101,179 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 21 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $0 on January 1, 2017.
- Replacement Reserves on Deposit totaling $22,438 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $101,179 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $93,403.

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

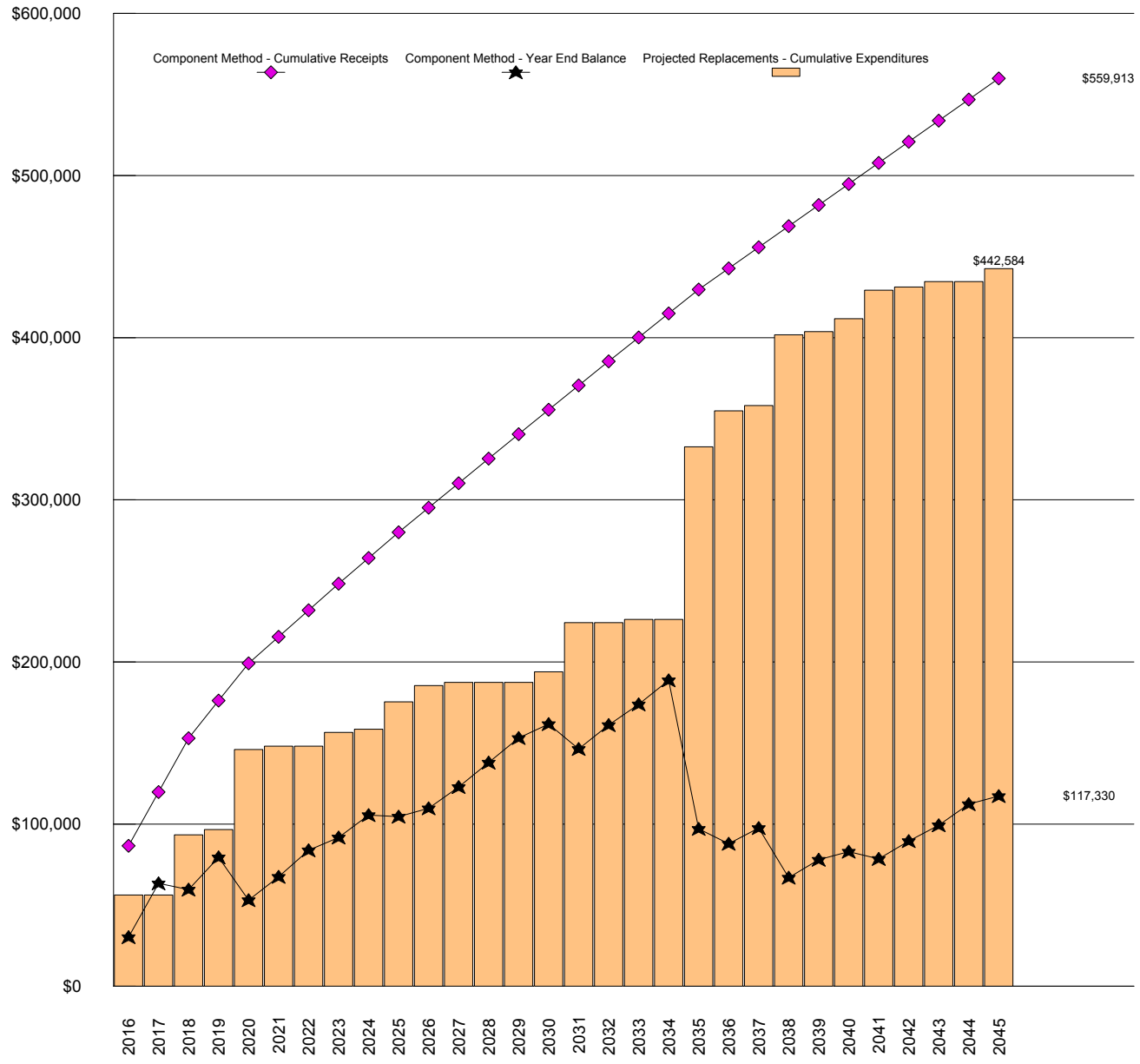
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement, mill and overlay	27,075										
2	Pavement, rejuvenator seal coat/stripin	3,278								3,278		3,278
3	Concrete flatwork	52,920										
4	Bollards	4,000										
5	Building exterior lighting	1,375								125		125
6	Guide rail	4,125										
7	Hardscapes/foundation plantings (allov	2,000					1,210		1,210	790	(2,000)	
	BUILDING EXTERIOR											
8	Modified bitumen roofing, flat	35,100					21,229		21,229	13,871	(35,100)	
9	Brick veneer repoint (25% allowance)	11,543		11,543	(11,543)							
10	Exterior door (allowance)	5,000		5,000	(5,000)							
11	Siding, metal	7,581										
12	Overhead door (2011)	48,000								4,373		4,373
13	Windows, extruded aluminum double g	10,560		10,560	(10,560)							
	BUILDING SYSTEMS											
14	Fire alarm control annunciator panel	10,200		10,200	(10,200)							
15	Water heater	8,500										
16	Water softener	5,000		5,000	(5,000)							
17	Well replacement	6,000		6,000	(6,000)							
18	Heat pump, furnace (36,000 btu)	4,000		4,000	(4,000)							
19	Heat pump, compressor (3 ton)	4,000		4,000	(4,000)							
20	Unit heater	2,000										
21	Emergency generator (10 Kw)	4,500										

COMPONENT METHOD

$86,629 **COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2016.**

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 21 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



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 21 Projected Replacements. The total, $172,200, 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 ($0) by the Current Funding Objective ($172,200). At Old Fire Station the Funding Percentage is 0.0%

- Allocation of the Beginning Balance. The Beginning Balance is divided among the 21 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 Township has not accumulated $800 in Reserves (the Funding Objective), but rather at 0.0 percent funded, there is $0 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 $86,629, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2016).

  In our fence example, the $0 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 $500. Next year, the deposit remains $500, 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Beginning balance										
Recommended annual funding	$86,629	$33,173	$33,173	$23,228	$22,955	$16,371	$16,371	$16,371	$15,876	$15,876
Expenditures	$56,303		$37,100	$3,278	$49,375	$2,000		$8,500	$2,000	$16,859
Year end balance	$30,326	$63,499	$59,572	$79,522	$53,102	$67,473	$83,844	$91,716	$105,591	$104,608
Cumulative Expenditures	$56,303	$56,303	$93,403	$96,680	$146,055	$148,055	$148,055	$156,555	$158,555	$175,414
Cumulative Receipts	$86,629	$119,801	$152,974	$176,202	$199,157	$215,528	$231,899	$248,271	$264,146	$280,022

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Recommended annual funding	$15,121	$15,121	$15,121	$15,121	$15,121	$14,971	$14,783	$14,783	$14,783	$14,783
Expenditures	$10,000	$2,000			$6,500	$30,353		$2,000		$106,420
Year end balance	$109,729	$122,850	$137,970	$153,091	$161,712	$146,330	$161,113	$173,895	$188,678	$97,041
Cumulative Expenditures	$185,414	$187,414	$187,414	$187,414	$193,914	$224,266	$224,266	$226,266	$226,266	$332,686
Cumulative Receipts	$295,143	$310,263	$325,384	$340,505	$355,625	$370,596	$385,379	$400,161	$414,944	$429,727

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Recommended annual funding	$13,019	$13,019	$13,019	$13,019	$13,019	$13,019	$13,019	$13,019	$13,019	$13,019
Expenditures	$22,200	$3,278	$43,600	$2,000	$8,000	$17,543	$2,000	$3,278		$8,000
Year end balance	$87,859	$97,600	$67,019	$78,038	$83,056	$78,533	$89,551	$99,292	$112,311	$117,330
Cumulative Expenditures	$354,886	$358,164	$401,764	$403,764	$411,764	$429,306	$431,306	$434,584	$434,584	$442,584
Cumulative Receipts	$442,745	$455,764	$468,783	$481,801	$494,820	$507,839	$520,857	$533,876	$546,894	$559,913

COMPONENT METHOD ACCOUNTING SUMMARY

This Old Fire Station - Component Method Accounting Summary is an attachment to the Old Fire Station - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 21 Projected Replacements listed in the Old Fire Station Replacement Reserve Inventory has been assigned to one of 3 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 $0 Beginning Balance (at the start of the Study Year) and the $152,974 of additional Replacement Reserve funding from 2016 to 2018 (as calculated in the Replacement Reserve Analysis) to each of the 21 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by the Component Method.
  - Allocation of the $152,974 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, by the Component Method.

2016 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Old Fire Station Replacement Reserve Inventory has been assigned to one of the 3 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $86,629 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 2016 being accomplished in 2016 at a cost of $56,303.

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 CM1

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	3 to 60 years	2 to 19 years	$94,773		$6,705		$6,705
BUILDING EXTERIOR	10 to 35 years	0 to 9 years	$117,784		$49,161	$27,103	$22,058
BUILDING SYSTEMS	10 to 30 years	0 to 14 years	$44,200		$30,763	$29,200	$1,563

2017 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Old Fire Station Replacement Reserve Inventory has been assigned to one of the 3 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 $30,326 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $119,801 from 2016 through 2017.
- 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.

2017 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM2

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	3 to 60 years	1 to 18 years	$94,773	$6,705	$6,705		$13,411
BUILDING EXTERIOR	10 to 35 years	1 to 34 years	$117,784	$22,058	$23,322		$45,380
BUILDING SYSTEMS	10 to 30 years	6 to 24 years	$44,200	$1,563	$3,146		$4,708

2018 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Old Fire Station Replacement Reserve Inventory has been assigned to one of the 3 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 $63,499 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $152,974 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $37,100.

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.

2018 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	3 to 60 years	0 to 17 years	$94,773	$13,411	$6,705	$2,000	$18,116
BUILDING EXTERIOR	10 to 35 years	0 to 33 years	$117,784	$45,380	$23,322	$35,100	$33,601
BUILDING SYSTEMS	10 to 30 years	5 to 23 years	$44,200	$4,708	$3,146		$7,854

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $152,974 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 21 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $30,326 on January 1, 2017.
- Replacement Reserves on Deposit totaling $63,499 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $152,974 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $93,403.

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	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement, mill and overlay	27,075		1,692		1,692	1,692		3,384	1,692		5,077
2	Pavement, rejuvenator seal coat/stripin	3,278		819		819	819		1,639	819		2,458
3	Concrete flatwork	52,920		2,646		2,646	2,646		5,292	2,646		7,938
4	Bollards	4,000		400		400	400		800	400		1,200
5	Building exterior lighting	1,375		275		275	275		550	275		825
6	Guide rail	4,125		206		206	206		413	206		619
7	Hardscapes/foundation plantings (allov	2,000		667		667	667		1,333	667	(2,000)	
	BUILDING EXTERIOR											
8	Modified bitumen roofing, flat	35,100		11,700		11,700	11,700		23,400	11,700	(35,100)	
9	Brick veneer repoint (25% allowance)	11,543		11,543	(11,543)		462		462	462		923
10	Exterior door (allowance)	5,000		5,000	(5,000)		500		500	500		1,000
11	Siding, metal	7,581		758		758	758		1,516	758		2,274
12	Overhead door (2011)	48,000		9,600		9,600	9,600		19,200	9,600		28,800
13	Windows, extruded aluminum double g	10,560		10,560	(10,560)		302		302	302		603
	BUILDING SYSTEMS											
14	Fire alarm control annunciator panel	10,200		10,200	(10,200)		510		510	510		1,020
15	Water heater	8,500		1,063		1,063	1,063		2,125	1,063		3,188
16	Water softener	5,000		5,000	(5,000)		500		500	500		1,000
17	Well replacement	6,000		6,000	(6,000)		240		240	240		480
18	Heat pump, furnace (36,000 btu)	4,000		4,000	(4,000)		167		167	167		333
19	Heat pump, compressor (3 ton)	4,000		4,000	(4,000)		167		167	167		333
20	Unit heater	2,000		200		200	200		400	200		600
21	Emergency generator (10 Kw)	4,500		300		300	300		600	300		900

CEMETERY

Cemetery. There are two cemetery locations, the Briar Hills Cemetery, and the Riverview Cemetery. The Church building at the Briar Hills Cemetery is a Historic structure. The building is in need of preservation but is in good overall condition for its age. The Township has plans for work on this building. This work is included in this study.

Building Roofing. The Church is roofed in asphalt shingles that are in fair condition.

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.

Siding and Trim. The exterior building is clad in wood. The siding and trim materials are in generally fair condition. The Township must preserve this building as a historic structure. Any repairs or replacements must match the materials and techniques of the era of construction. The best replication would be to use wood clapboard and square nails. For 2015 the Township has planned flooring replacement, shutters, soffits, fascia, corner posts, and some clapboard siding

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

Fencing. The Township maintains wood fencing that is in generally mixed 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.

Pressure treated wood fencing should be cleaned and sealed every year or two. Typically the least cost fencing option, this type of fence can last 15 to 20 years if maintained properly.

For more information on fencing, visit our website link to the American Fence Association.

Site Lighting. The Township is responsible for the operation of the 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. We did note, the fixtures are not appropriate for this type of structure and take away from the historic element of the appearance. Typically, these types of fixtures do not provide useable lighting in these types of installations.

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.

Building Electrical Service. The building is equipped with standard electrical service that are 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.

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EXECUTIVE SUMMARY

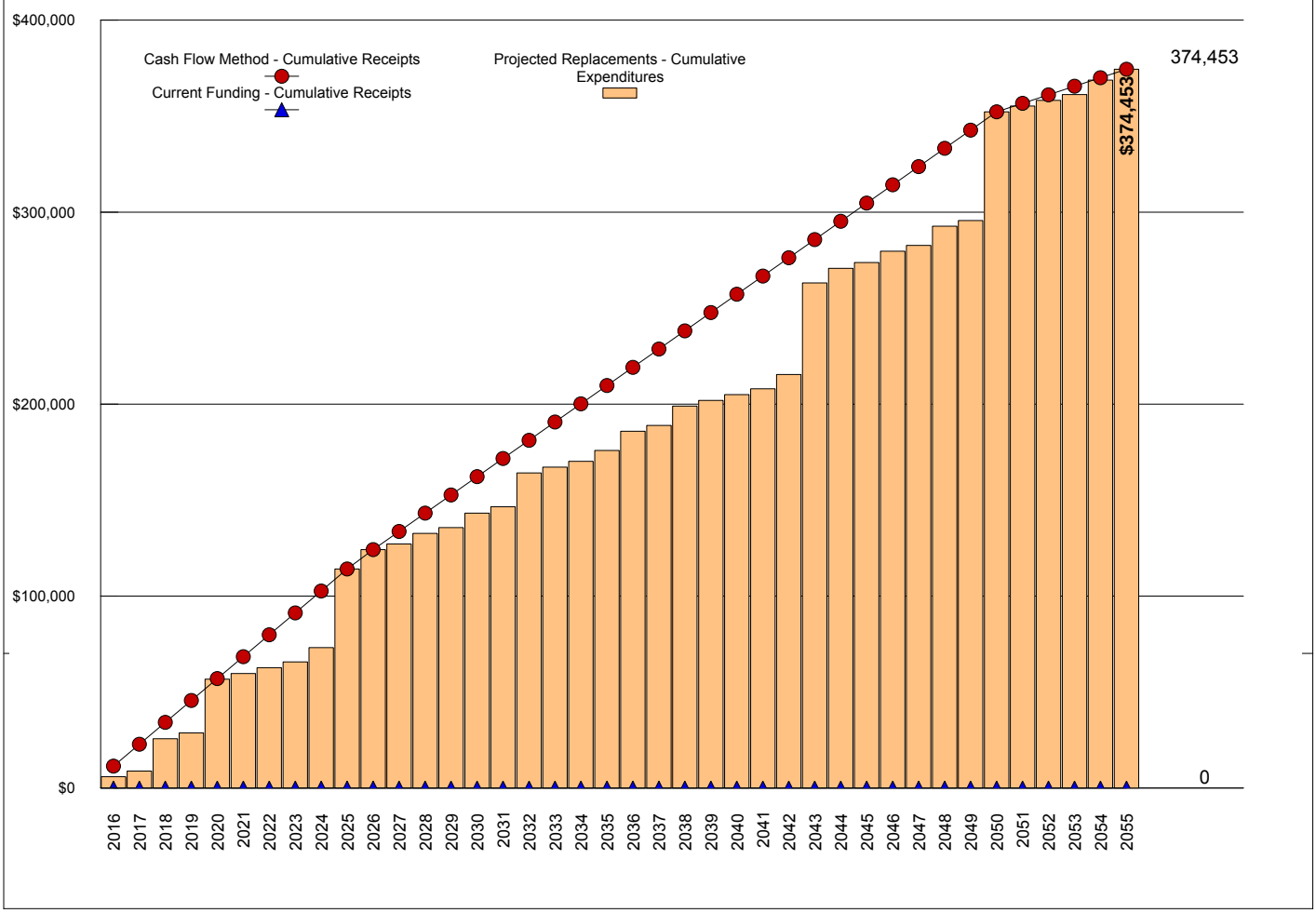
The Cemetery Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 13 Projected Replacements identified in the Replacement Reserve Inventory.

$11,411 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2016**

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

Cemetery reports a that the Township is currently not funding Replacement Reserves.
This Study contains the information necessary for the Township to develop a Funding Plan to address the $374,453 of Projected Replacements identified in the Replacement Reserve Inventory over the 40-year Study Period.

#1 - Cumulative Replacement Reserve Funding and Expenditures Graph



The Current Funding Objective as calculated by the Component Method (Fully Funded) is $56,481 making the reserve account 0.0% funded. See the Appendix for more information on this method.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Cemetery 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.

2016 | **STUDY YEAR**

The Township 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, 2016.

40 Years | **STUDY PERIOD**

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

NONE | **STARTING BALANCE**

The Township reports that no funds are attributed to Replacement Reserves

Level One | **LEVEL OF SERVICE**

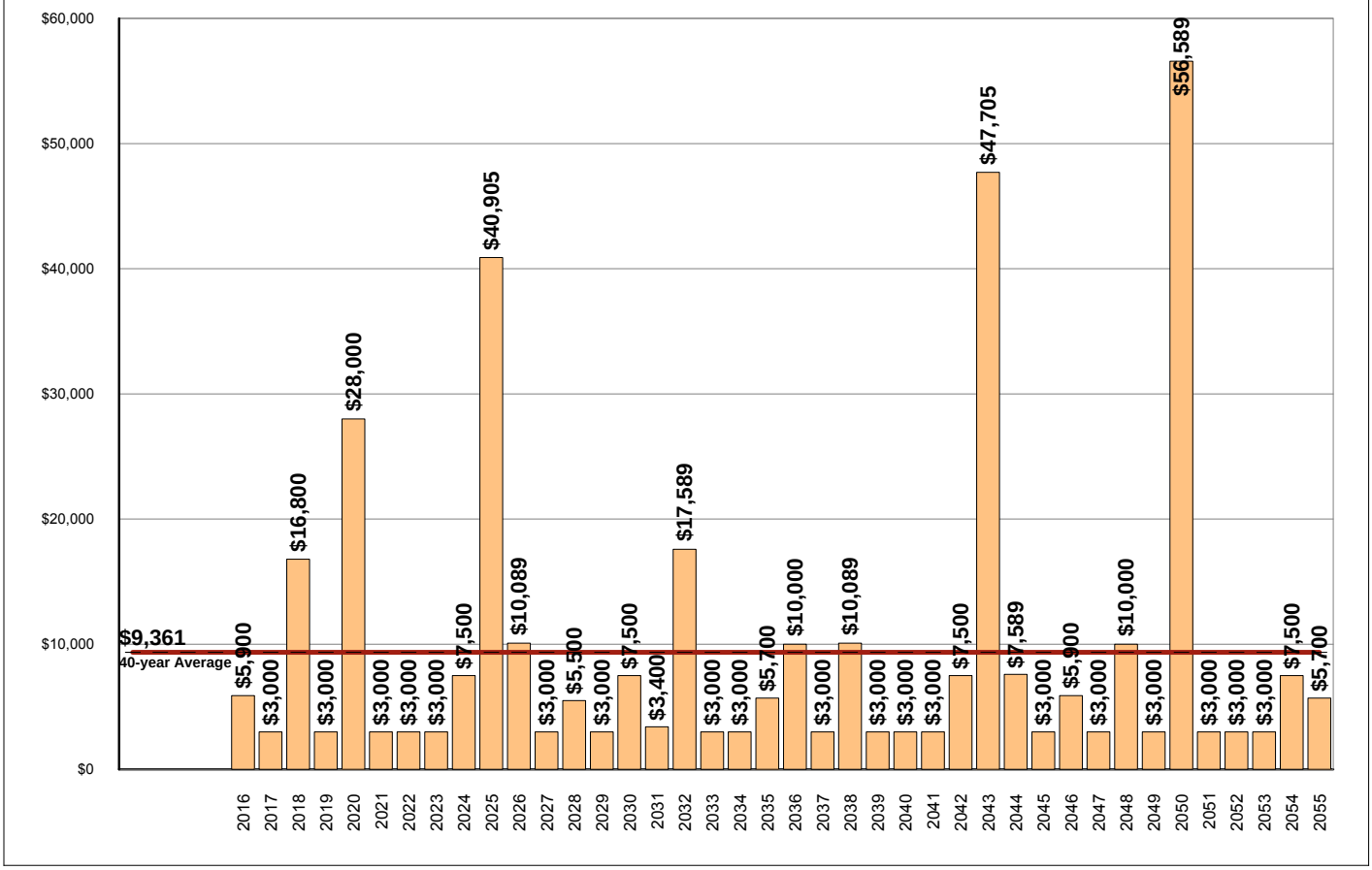
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level One Study, as defined by the Community Associations Institute (CAI).

$374,453 | **REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS**

The Cemetery Replacement Reserve Inventory identifies 13 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be $374,453 over the 40-year Study Period. The Projected Replacements are divided into 4 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 $9,361. Section C provides a year by year Calender of these expenditures.



UPDATING

UPDATING OF THE FUNDING PLAN

The Township 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

The annual expenditures that comprise the $374,453 of Projected Expenditures over the 40-year Study Period are detailed in Table 3. A year-by-year listing of the specific projects can be found beginning on Page C2.

#3 - Table of Annual Expenditures - Years 1 through 40

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Projected Replacements	($5,900)	($3,000)	($16,800)	($3,000)	($28,000)	($3,000)	($3,000)	($3,000)	($7,500)	($40,905)
End of Year Balance	($5,900)	($8,900)	($25,700)	($28,700)	($56,700)	($59,700)	($62,700)	($65,700)	($73,200)	($114,105)
Cumulative Expenditures	($5,900)	($8,900)	($25,700)	($28,700)	($56,700)	($59,700)	($62,700)	($65,700)	($73,200)	($114,105)

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements	($10,089)	($3,000)	($5,500)	($3,000)	($7,500)	($3,400)	($17,589)	($3,000)	($3,000)	($5,700)
End of Year Balance	($124,194)	($127,194)	($132,694)	($135,694)	($143,194)	($146,594)	($164,182)	($167,182)	($170,182)	($175,882)
Cumulative Expenditures	($124,194)	($127,194)	($132,694)	($135,694)	($143,194)	($146,594)	($164,182)	($167,182)	($170,182)	($175,882)

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Projected Replacements	($10,000)	($3,000)	($10,089)	($3,000)	($3,000)	($3,000)	($7,500)	($47,705)	($7,589)	($3,000)
End of Year Balance	($185,882)	($188,882)	($198,971)	($201,971)	($204,971)	($207,971)	($215,471)	($263,176)	($270,764)	($273,764)
Cumulative Expenditures	($185,882)	($188,882)	($198,971)	($201,971)	($204,971)	($207,971)	($215,471)	($263,176)	($270,764)	($273,764)

Year	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
Projected Replacements	($5,900)	($3,000)	($10,000)	($3,000)	($56,589)	($3,000)	($3,000)	($3,000)	($7,500)	($5,700)
End of Year Balance	($279,664)	($282,664)	($292,664)	($295,664)	($352,253)	($355,253)	($358,253)	($361,253)	($368,753)	($374,453)
Cumulative Expenditures	($279,664)	($282,664)	($292,664)	($295,664)	($352,253)	($355,253)	($358,253)	($361,253)	($368,753)	($374,453)

Table #3 shows the annual costs for Projected Replacements and the cumulative annual expenditures for the Projected Replacements. Table #3 also shows the Starting Balance and Current Annual Funding if reported by Township. When this information is provided, Table #3 will calculate the consequences of continuing to fund Replacement Reserves at current levels over the 40-year Study Period.

This information is for use by the Township for the development of a Funding Plan. The Funding Plan is a critical planning tool if the Township is to provide timely and adequate funding for the $374,453 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period.

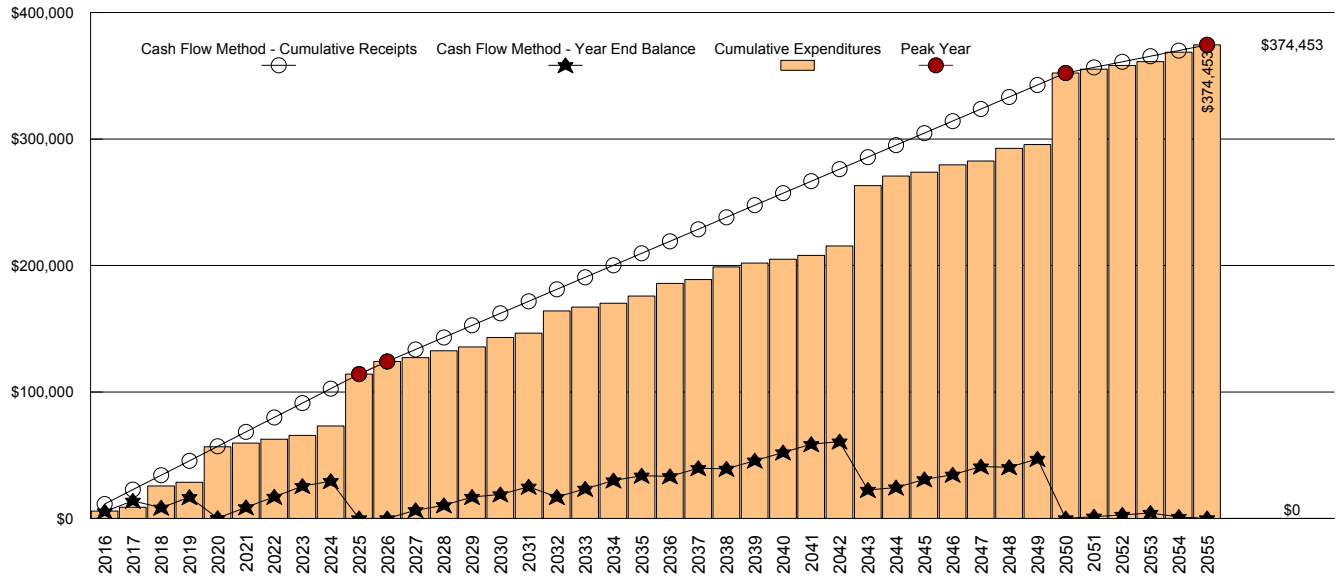
CASH FLOW METHOD FUNDING

$11,411 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2016**

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 $114,105 of replacements from 2016 to 2025. Recommended funding declines from $11,411 in 2025 to $10,089 in 2026. Peak Years are identified in Chart 4 and Table 5.
- Minimum Balance. The calculations assume a Minimum Balance of $0 in Replacement Reserves. This is approx. 0 months of average expenditures based on the $9,361, 40-year average annual expenditure.
- Cash Flow Method Study Period. Cash Flow Method calculates funding for $374,453 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2055 and in 2055, 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	1st Peak - 2025
Starting Balance										
Projected Replacements	($5,900)	($3,000)	($16,800)	($3,000)	($28,000)	($3,000)	($3,000)	($3,000)	($7,500)	($40,905)
Annual Deposit	$11,411	$11,411	$11,411	$11,411	$11,411	$11,411	$11,411	$11,411	$11,411	$11,411
End of Year Balance	$5,511	$13,921	$8,532	$16,942	$353	$8,763	$17,174	$25,584	$29,495	$0
Cumulative Expenditures	$5,900	$8,900	$25,700	$28,700	$56,700	$59,700	$62,700	$65,700	$73,200	$114,105
Cumulative Receipts	$11,411	$22,821	$34,232	$45,642	$57,053	$68,463	$79,874	$91,284	$102,695	$114,105
Year	**2nd Peak - 2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Projected Replacements	($10,089)	($3,000)	($5,500)	($3,000)	($7,500)	($3,400)	($17,589)	($3,000)	($3,000)	($5,700)
Annual Deposit	$10,089	$9,499	$9,499	$9,499	$9,499	$9,500	$9,500	$9,500	$9,501	$9,501
End of Year Balance	$0	$6,499	$10,498	$16,997	$18,996	$25,096	$17,007	$23,508	$30,008	$33,810
Cumulative Expenditures	($124,194)	($127,194)	($132,694)	($135,694)	($143,194)	($146,594)	($164,182)	($167,182)	($170,182)	($175,882)
Cumulative Receipts	$124,194	$133,692	$143,191	$152,690	$162,190	$171,689	$181,189	$190,690	$200,190	$209,692
Year	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**	**2044**	**2045**
Projected Replacements	($10,000)	($3,000)	($10,089)	($3,000)	($3,000)	($3,000)	($7,500)	($47,705)	($7,589)	($3,000)
Annual Deposit	$9,502	$9,502	$9,502	$9,503	$9,503	$9,504	$9,504	$9,504	$9,505	$9,505
End of Year Balance	$33,311	$39,813	$39,227	$45,730	$52,233	$58,737	$60,741	$22,541	$24,457	$30,962
Cumulative Expenditures	($185,882)	($188,882)	($198,971)	($201,971)	($204,971)	($207,971)	($215,471)	($263,176)	($270,764)	($273,764)
Cumulative Receipts	$219,193	$228,695	$238,198	$247,701	$257,204	$266,708	$276,212	$285,716	$295,221	$304,726
Year	**2046**	**2047**	**2048**	**2049**	**3rd Peak - 2050**	**2051**	**2052**	**2053**	**2054**	**4th Peak - 2055**
Projected Replacements	($5,900)	($3,000)	($10,000)	($3,000)	($56,589)	($3,000)	($3,000)	($3,000)	($7,500)	($5,700)
Annual Deposit	$9,505	$9,505	$9,505	$9,505	$9,505	$4,440	$4,440	$4,440	$4,440	$4,440
End of Year Balance	$34,567	$41,072	$40,578	$47,083	$0	$1,440	$2,880	$4,320	$1,260	$0
Cumulative Expenditures	($279,664)	($282,664)	($292,664)	($295,664)	($352,253)	($355,253)	($358,253)	($361,253)	($368,753)	($374,453)
Cumulative Receipts	$314,231	$323,736	$333,242	$342,747	$352,253	$356,693	$361,133	$365,573	$370,013	$374,453

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 belive 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.

$11,411 2016 - CASH FLOW METHOD RECOMMENDED FUNDING

The 2016 Study Year calculations have been made using current replacement costs (see Page B2), modified by the Analyst for any project specific conditions.

$11,771 2017 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2017 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $5,511 on January 1, 2017.
- All 2016 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $5,900.
- Construction Cost Inflation of 3.00 percent in 2016.

The $11,771 inflation adjusted funding in 2017 is a 3.16 percent increase over the non-inflation adjusted 2017 funding of $11,411.

$12,178 2018 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2018 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $14,192 on January 1, 2018.
- All 2017 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $3,090.
- Construction Cost Inflation of 3.00 percent in 2017.

The $12,178 inflation adjusted funding in 2018 is a 6.72 percent increase over the non-inflation adjusted 2018 funding of $11,411.

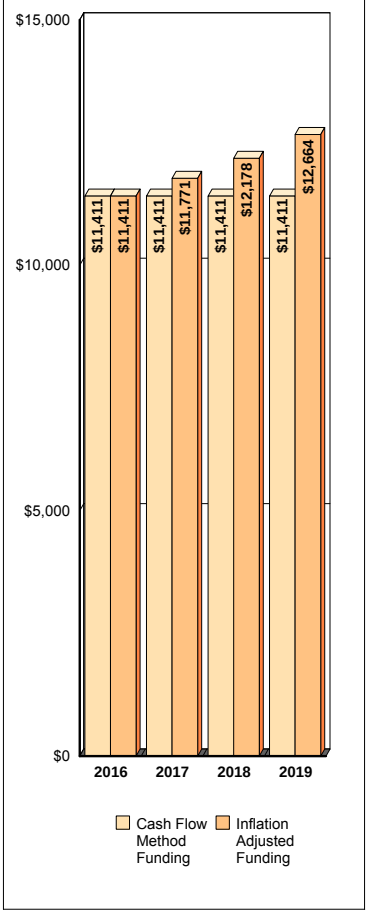
$12,664 2019 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2019 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $8,546 on January 1, 2019.
- All 2018 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $17,823.
- Construction Cost Inflation of 3.00 percent in 2018.

The $12,664 inflation adjusted funding in 2019 is a 10.99 percent increase over the non-inflation adjusted funding of $11,411.

#6 - Inflation Adjusted Funding



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 2017, 2018 and 2019 inflation adjusted funding calculations above, the 3.00 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 2016, based on a 1.00 percent interest rate, we estimate the Association may earn $28 on an average balance of $2,755, $98 on an average balance of $9,851 in 2017, and $114 on $11,369 in 2018. The Association may elect to use these funds to reduce annual funding.

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 13 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B1.

REPLACEMENT RESERVE INVENTORY
GENERAL INFORMATION

Cemetery - Replacement Reserve Inventory identifies 14 items. Two types of items are identified, Projected Replacements and Excluded Items:

- PROJECTED REPLACEMENTS. 13 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 $123,894. Replacements totaling $273,764 are scheduled in the Replacement Reserve Inventory over the 40-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. 1 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 that $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 Township policy on the administration of Replacement Reserves. If the Township 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 Township.

  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 Township. These types of items are generally not the responsibility of the Township 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 14 items included in the Cemetery Replacement Reserve Inventory are divided into 4 major categories. Each category is printed on a separate page, Pages B3 to B6.

- 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.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- INVENTORY DATA. Each of the 13 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 1 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 Township 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.

SITE COMPONENTS AND BUILDING EXTERIOR
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
1	Asphalt pavement, mill and overlay	sf	19,950	$1.90	18	9	$37,905
2	Pavement, rejuvenator seal coat	sf	19,950	$0.23	6	10	$4,589
3	Gravel path, replenish	sf	18,000	$0.25	6	2	$4,500
4	Chip & seal parking area	ls	1	$2,500.00	10	2	$2,500
5	Wood fencing - board on board	ft	1,000	$25.00	30	4	$25,000
6	Misc. signage (allowance)	ea	1	$2,500.00	10	none	$2,500
7	Asphalt shingles/gutters & downspouts	sf	1,600	$4.25	25	2	$6,800
8	Rebuild/Restore exterior door (allowance)	ls	1	$2,700.00	20	19	$2,700
9	Preservation of Historic exterior components	ls	1	$3,000.00	1	none	$3,000
10	Window shutters (rebuilt in 2015)	sf	192	$125.00	35	34	$24,000

SITE COMPONENTS AND BUILDING EXTERIOR - Replacement Costs - Subtotal $113,494

SITE COMPONENTS AND BUILDING EXTERIOR
COMMENTS

- Preservation of historic exterior components includes the continuing restoration of windows, doors, siding and fascia.

BUILDING SYSTEMS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
11	Exterior building lights	ea	2	$200.00	15	none	$400
12	Heat pump, furnace (60,000 btu)	ea	1	$5,000.00	24	16	$5,000
13	Heat pump, compressor (5 ton)	ea	1	$5,000.00	24	16	$5,000

BUILDING SYSTEMS - Replacement Costs - Subtotal $10,400

BUILDING SYSTEMS
COMMENTS

VALUATION EXCLUSIONS
EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Memorial benches.	ls	1				EXCLUDED
	Electrical (allowance)	ea	1				EXCLUDED
	Storage shed - SOLD	ea	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 $2,000.00 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.

LONG-LIFE EXCLUSIONS
EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Sand stone stairs (full set)	ea	2				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.

PROJECTED ANNUAL REPLACEMENTS
GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 13 Projected Replacements in the Cemetery 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 Township 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 Township 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 Township and the visual evaluations of the Analyst. It has been prepared for the sole use of the Township 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 Cemetery Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Township.

PROJECTED REPLACEMENTS - YEARS ONE TO FIFTEEN

Item	2016 - STUDY YEAR	$
6	Misc. signage (allowance)	$2,500
9	Preservation of Historic exte	$3,000
11	Exterior building lights	$400
	Total Scheduled Replacements	$5,900

Item	2017 - YEAR 2	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2018 - YEAR 3	$
3	Gravel path, replenish	$4,500
4	Chip & seal parking area	$2,500
7	Asphalt shingles/gutters & d	$6,800
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$16,800

Item	2019 - YEAR 4	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2020 - YEAR 5	$
5	Wood fencing - board on bc	$25,000
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$28,000

Item	2021 - YEAR 6	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2022 - YEAR 7	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2023 - YEAR 8	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2024 - YEAR 9	$
3	Gravel path, replenish	$4,500
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$7,500

Item	2025 - YEAR 10	$
1	Asphalt pavement, mill and (	$37,905
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$40,905

Item	2026 - YEAR 11	$
2	Pavement, rejuvenator seal	$4,589
6	Misc. signage (allowance)	$2,500
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$10,089

Item	2027 - YEAR 12	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2028 - YEAR 13	$
4	Chip & seal parking area	$2,500
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$5,500

Item	2029 - YEAR 14	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2030 - YEAR 15	$
3	Gravel path, replenish	$4,500
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$7,500

PROJECTED REPLACEMENTS - YEARS SIXTEEN TO THIRTY

Item	2031 - YEAR 16	$
9	Preservation of Historic exte	$3,000
11	Exterior building lights	$400
	Total Scheduled Replacements	$3,400

Item	2032 - YEAR 17	$
2	Pavement, rejuvenator seal	$4,589
9	Preservation of Historic exte	$3,000
12	Heat pump, furnace (60,000	$5,000
13	Heat pump, compressor (5 t	$5,000
	Total Scheduled Replacements	$17,589

Item	2033 - YEAR 18	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2034 - YEAR 19	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2035 - YEAR 20	$
8	Rebuild/Restore exterior doc	$2,700
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$5,700

Item	2036 - YEAR 21	$
3	Gravel path, replenish	$4,500
6	Misc. signage (allowance)	$2,500
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$10,000

Item	2037 - YEAR 22	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2038 - YEAR 23	$
2	Pavement, rejuvenator seal	$4,589
4	Chip & seal parking area	$2,500
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$10,089

Item	2039 - YEAR 24	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2040 - YEAR 25	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2041 - YEAR 26	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2042 - YEAR 27	$
3	Gravel path, replenish	$4,500
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$7,500

Item	2043 - YEAR 28	$
1	Asphalt pavement, mill and (	$37,905
7	Asphalt shingles/gutters & d	$6,800
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$47,705

Item	2044 - YEAR 29	$
2	Pavement, rejuvenator seal	$4,589
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$7,589

Item	2045 - YEAR 30	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

PROJECTED REPLACEMENTS - YEARS THIRTY-ONE TO FORTY-FIVE

Item	2046 - YEAR 31	$
6	Misc. signage (allowance)	$2,500
9	Preservation of Historic exte	$3,000
11	Exterior building lights	$400
	Total Scheduled Replacements	$5,900

Item	2047 - YEAR 32	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2048 - YEAR 33	$
3	Gravel path, replenish	$4,500
4	Chip & seal parking area	$2,500
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$10,000

Item	2049 - YEAR 34	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2050 - YEAR 35	$
2	Pavement, rejuvenator seal	$4,589
5	Wood fencing - board on bc	$25,000
9	Preservation of Historic exte	$3,000
10	Window shutters (rebuilt in 2	$24,000
	Total Scheduled Replacements	$56,589

Item	2051 - YEAR 36	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2052 - YEAR 37	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2053 - YEAR 38	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2054 - YEAR 39	$
3	Gravel path, replenish	$4,500
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$7,500

Item	2055 - YEAR 40	$
8	Rebuild/Restore exterior doc	$2,700
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$5,700

Item	2056 (beyond Study Period)	$
2	Pavement, rejuvenator seal	$4,589
6	Misc. signage (allowance)	$2,500
9	Preservation of Historic exte	$3,000
12	Heat pump, furnace (60,000	$5,000
13	Heat pump, compressor (5 t	$5,000
	Total Scheduled Replacements	$20,089

Item	2057 (beyond Study Period)	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2058 (beyond Study Period)	$
4	Chip & seal parking area	$2,500
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$5,500

Item	2059 (beyond Study Period)	$
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$3,000

Item	2060 (beyond Study Period)	$
3	Gravel path, replenish	$4,500
9	Preservation of Historic exte	$3,000
	Total Scheduled Replacements	$7,500

CASH FLOW METHOD ACCOUNTING SUMMARY

This Cemetery - Cash Flow Method Accounting Summary is an attachment to the Cemetery - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 13 Projected Replacements listed in the Cemetery Replacement Reserve Inventory has been assigned to one of 2 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 $0 Beginning Balance (at the start of the Study Year) and the $34,232 of additional Replacement Reserve Funding in 2016 through 2018 (as calculated in the Replacement Reserve Analysis) to each of the 13 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by Chronological Allocation.
  - Allocation of the $34,232 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, 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 $0 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 Cemetery the Beginning Balance funds 0.0% of Scheduled Replacements in the Study Year.
  - The next step is the allocation of the $11,411 of 2016 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 Cemetery the Beginning Balance and the 2016 Replacement Reserve Funding, funds replacements through 2017 and partial funds (14.9%) replacements in 2018.
  - Allocations of the 2017 and 2018 Reserve Funding are done using the same methodology.
  - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

2016 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 13 Projected Replacements included in the Cemetery Replacement Reserve Inventory has been assigned to one of the 2 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $11,411 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 2016 being accomplished in 2016 at a cost of $5,900.

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 CF1

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 AND BUILDING EXTEF	1 to 35 years	0 to 34 years	$113,494		$11,011	($5,500)	$5,511
BUILDING SYSTEMS	15 to 24 years	0 to 16 years	$10,400		$400	($400)	

2017 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 13 Projected Replacements included in the Cemetery Replacement Reserve Inventory has been assigned to one of the 2 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 $5,511 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $22,821 from 2016 through 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 $3,000.

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 CF2

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 AND BUILDING EXTEF	1 to 35 years	0 to 33 years	$113,494	$5,511	$11,411	($3,000)	$13,921
BUILDING SYSTEMS	15 to 24 years	14 to 15 years	$10,400				

2018 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 13 Projected Replacements included in the Cemetery Replacement Reserve Inventory has been assigned to one of the 2 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 $13,921 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $34,232 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $16,800.

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.

2018 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS AND BUILDING EXTEF	1 to 35 years	0 to 32 years	$113,494	$13,921	$11,411	($16,800)	$8,532
BUILDING SYSTEMS	15 to 24 years	13 to 14 years	$10,400				

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CF4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $34,232 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 13 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $5,511 on January 1, 2017.
- Replacement Reserves on Deposit totaling $13,921 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $34,232 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $25,700.

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

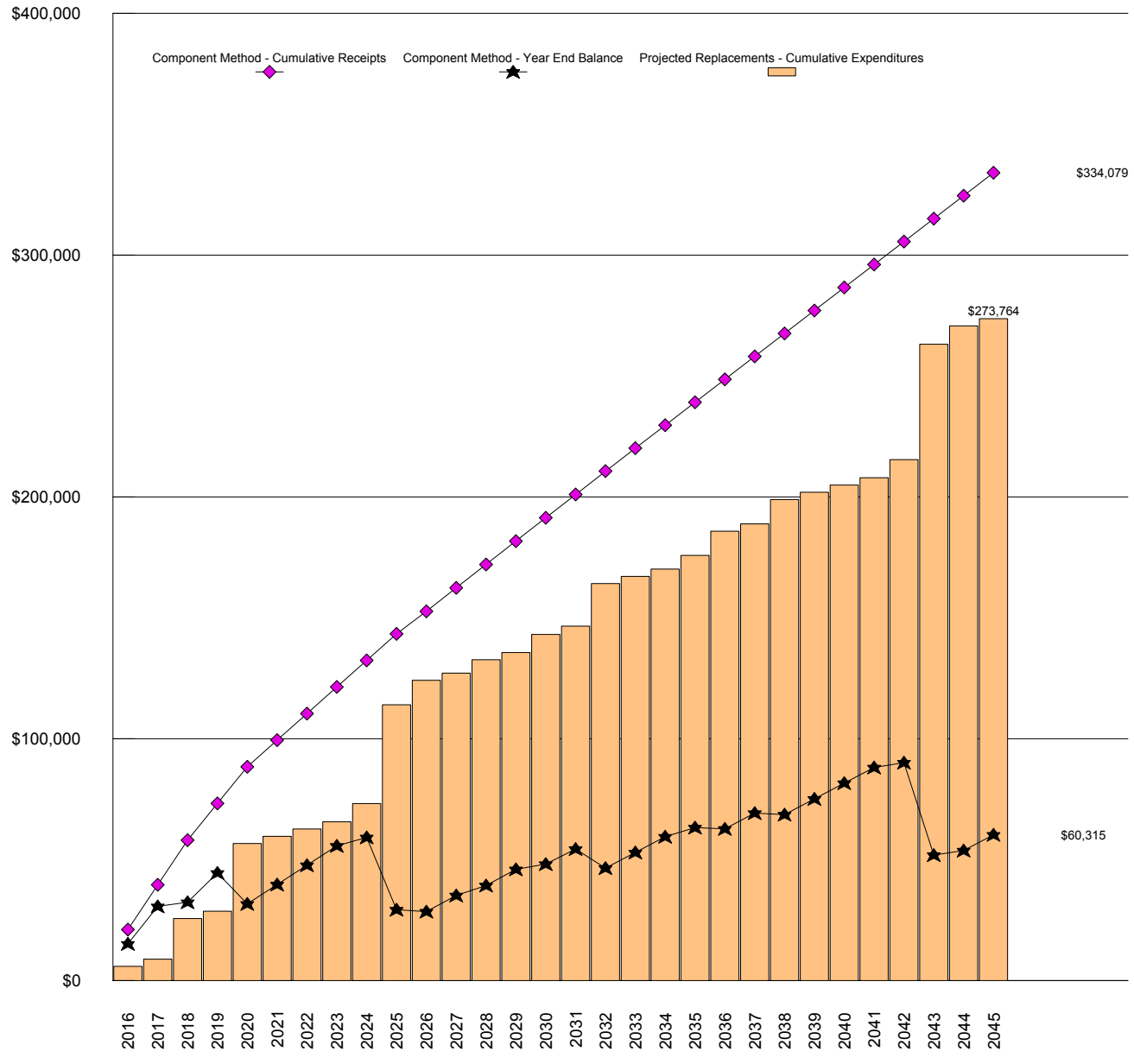
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS AND BUILDIN											
1	Asphalt pavement, mill and overlay	37,905										
2	Pavement, rejuvenator seal coat	4,589										
3	Gravel path, replenish	4,500		672		672	3,056		3,729	771	(4,500)	
4	Chip & seal parking area	2,500		374		374	1,698		2,072	428	(2,500)	
5	Wood fencing - board on board	25,000								4,939		4,939
6	Misc. signage (allowance)	2,500		2,500	(2,500)							
7	Asphalt shingles/gutters & downspouts	6,800		1,016		1,016	4,619		5,635	1,165	(6,800)	
8	Rebuild/Restore exterior door (allowar	2,700										
9	Preservation of Historic exterior compo	3,000		6,448	(3,000)	3,448	2,038	(3,000)	2,486	4,107	(3,000)	3,593
10	Window shutters (rebuilt in 2015)	24,000										
	BUILDING SYSTEMS											
11	Exterior building lights	400		400	(400)							
12	Heat pump, furnace (60,000 btu)	5,000										
13	Heat pump, compressor (5 ton)	5,000										

COMPONENT METHOD

$21,117 **COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2016.**

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 13 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



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 13 Projected Replacements. The total, $56,481, 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 ($0) by the Current Funding Objective ($56,481). At Cemetery the Funding Percentage is 0.0%

- Allocation of the Beginning Balance. The Beginning Balance is divided among the 13 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 Township has not accumulated $800 in Reserves (the Funding Objective), but rather at 0.0 percent funded, there is $0 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 $21,117, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2016).

  In our fence example, the $0 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 $500. Next year, the deposit remains $500, 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Beginning balance										
Recommended annual funding	$21,117	$18,493	$18,493	$15,165	$15,165	$10,999	$10,999	$10,999	$10,999	$10,999
Expenditures	$5,900	$3,000	$16,800	$3,000	$28,000	$3,000	$3,000	$3,000	$7,500	$40,905
Year end balance	$15,217	$30,710	$32,403	$44,568	$31,734	$39,732	$47,731	$55,729	$59,228	$29,322
Cumulative Expenditures	$5,900	$8,900	$25,700	$28,700	$56,700	$59,700	$62,700	$65,700	$73,200	$114,105
Cumulative Receipts	$21,117	$39,610	$58,103	$73,268	$88,434	$99,432	$110,431	$121,429	$132,428	$143,427
Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Recommended annual funding	$9,314	$9,662	$9,662	$9,662	$9,662	$9,662	$9,662	$9,490	$9,490	$9,490
Expenditures	$10,089	$3,000	$5,500	$3,000	$7,500	$3,400	$17,589	$3,000	$3,000	$5,700
Year end balance	$28,547	$35,208	$39,370	$46,032	$48,193	$54,455	$46,528	$53,018	$59,508	$63,298
Cumulative Expenditures	$124,194	$127,194	$132,694	$135,694	$143,194	$146,594	$164,182	$167,182	$170,182	$175,882
Cumulative Receipts	$152,740	$162,402	$172,064	$181,725	$191,387	$201,048	$210,710	$220,200	$229,690	$239,180
Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Recommended annual funding	$9,490	$9,490	$9,490	$9,490	$9,490	$9,490	$9,490	$9,490	$9,490	$9,490
Expenditures	$10,000	$3,000	$10,089	$3,000	$3,000	$3,000	$7,500	$47,705	$7,589	$3,000
Year end balance	$62,788	$69,277	$68,679	$75,169	$81,659	$88,149	$90,139	$51,924	$53,825	$60,315
Cumulative Expenditures	$185,882	$188,882	$198,971	$201,971	$204,971	$207,971	$215,471	$263,176	$270,764	$273,764
Cumulative Receipts	$248,670	$258,159	$267,649	$277,139	$286,629	$296,119	$305,609	$315,099	$324,589	$334,079

COMPONENT METHOD ACCOUNTING SUMMARY

This Cemetery - Component Method Accounting Summary is an attachment to the Cemetery - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 13 Projected Replacements listed in the Cemetery Replacement Reserve Inventory has been assigned to one of 2 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 $0 Beginning Balance (at the start of the Study Year) and the $58,103 of additional Replacement Reserve funding from 2016 to 2018 (as calculated in the Replacement Reserve Analysis) to each of the 13 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by the Component Method.
  - Allocation of the $58,103 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, by the Component Method.

2016 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 13 Projected Replacements included in the Cemetery Replacement Reserve Inventory has been assigned to one of the 2 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $21,117 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 2016 being accomplished in 2016 at a cost of $5,900.

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 CM1

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 AND BUILDING EXTEF	1 to 35 years	0 to 34 years	$113,494		$20,128	$5,500	$14,628
BUILDING SYSTEMS	15 to 24 years	0 to 16 years	$10,400		$988	$400	$588

2017 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 13 Projected Replacements included in the Cemetery Replacement Reserve Inventory has been assigned to one of the 2 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 $15,217 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $39,610 from 2016 through 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 $3,000.

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 CM2

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 AND BUILDING EXTEF	1 to 35 years	0 to 33 years	$113,494	$14,628	$17,878	$3,000	$29,507
BUILDING SYSTEMS	15 to 24 years	14 to 15 years	$10,400	$588	$615		$1,203

2018 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 13 Projected Replacements included in the Cemetery Replacement Reserve Inventory has been assigned to one of the 2 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 $30,710 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $58,103 from 2016 to 2018.
- 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 2018 being accomplished in 2018 at a cost of $16,800.

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.

2018 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS AND BUILDING EXTEF	1 to 35 years	0 to 32 years	$113,494	$29,507	$17,878	$16,800	$30,585
BUILDING SYSTEMS	15 to 24 years	13 to 14 years	$10,400	$1,203	$615		$1,818

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $58,103 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 13 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $15,217 on January 1, 2017.
- Replacement Reserves on Deposit totaling $30,710 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $58,103 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $25,700.

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	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS AND BUILDIN											
1	Asphalt pavement, mill and overlay	37,905		3,791		3,791	3,791		7,581	3,791		11,372
2	Pavement, rejuvenator seal coat	4,589		417		417	417		834	417		1,251
3	Gravel path, replenish	4,500		1,500		1,500	1,500		3,000	1,500	(4,500)	
4	Chip & seal parking area	2,500		833		833	833		1,667	833	(2,500)	
5	Wood fencing - board on board	25,000		5,000		5,000	5,000		10,000	5,000		15,000
6	Misc. signage (allowance)	2,500		2,500	(2,500)		250		250	250		500
7	Asphalt shingles/gutters & downspouts	6,800		2,267		2,267	2,267		4,533	2,267	(6,800)	
8	Rebuild/Restore exterior door (allowar	2,700		135		135	135		270	135		405
9	Preservation of Historic exterior compo	3,000		3,000	(3,000)		3,000	(3,000)		3,000	(3,000)	
10	Window shutters (rebuilt in 2015)	24,000		686		686	686		1,371	686		2,057
	BUILDING SYSTEMS											
11	Exterior building lights	400		400	(400)		27		27	27		53
12	Heat pump, furnace (60,000 btu)	5,000		294		294	294		588	294		882
13	Heat pump, compressor (5 ton)	5,000		294		294	294		588	294		882

BASEBALL FIELD

Baseball Field. The Bob Hall Memorial Field is a community baseball field and park. Ball field maintenance responsibility is shared with a baseball association.

Asphalt Pavement. The Township is responsible for the parking areas. In general, the asphalt pavement is in poor condition, with wide cracking and significant distress in many locations and with incipient potholes and full-depth pavement failure.

The Township should consider installing a gravel surface to replace the asphalt. A non-paved surfaced will reduce maintenance cost and slow traffic in the drive areas.

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EXECUTIVE SUMMARY

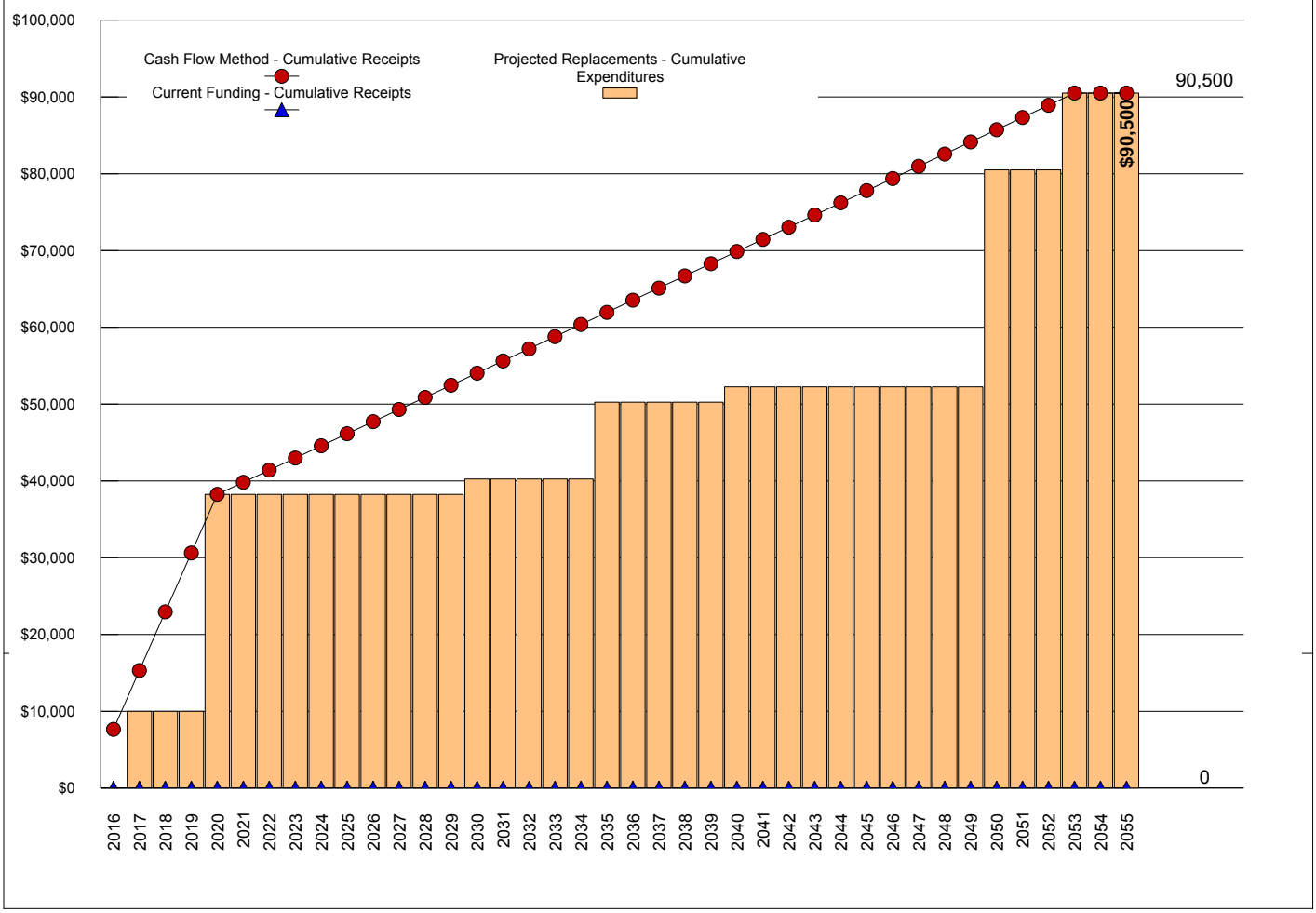
The Bob Hall Memorial Field Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 3 Projected Replacements identified in the Replacement Reserve Inventory.

$7,650 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2016**

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

Bob Hall Memorial Field reports a Starting Balance of $0 and Annual Funding totaling $0.
Current funding is inadequate to fund the $90,500 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period. See Page A3 for a more detailed evaluation.

#1 - Cumulative Replacement Reserve Funding and Expenditures Graph



The Current Funding Objective as calculated by the Component Method (Fully Funded) is $31,764 making the reserve account 0.0% funded. See the Appendix for more information on this method.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Bob Hall Memorial Field 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.

2016 | **STUDY YEAR**

The Township 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, 2016.

40 Years | **STUDY PERIOD**

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

$0 | **STARTING BALANCE**

The Township reports Replacement Reserves on Deposit totaling $0 at the start of the Study Year.

Level One | **LEVEL OF SERVICE**

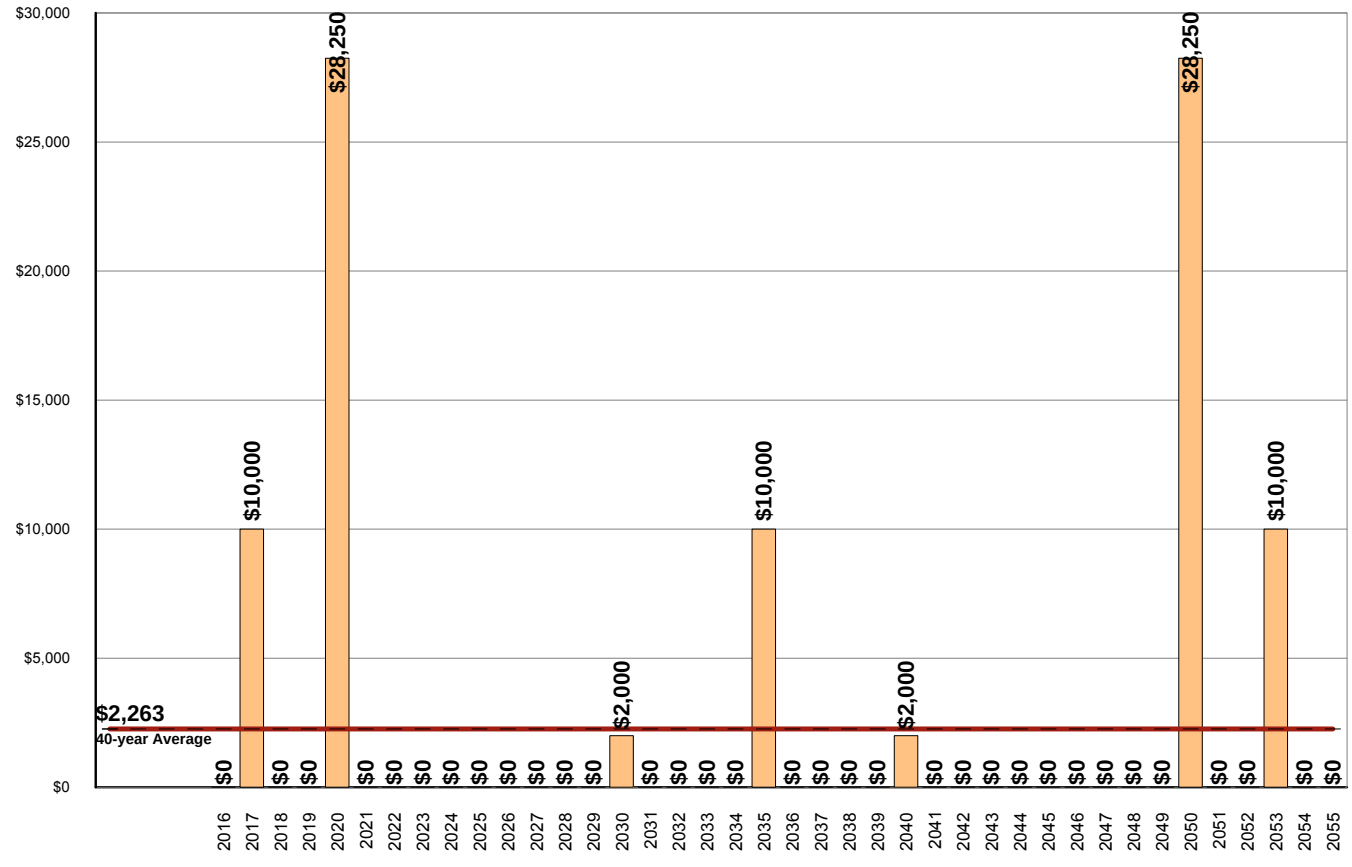
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level One Study, as defined by the Community Associations Institute (CAI).

$90,500 | **REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS**

The Bob Hall Memorial Field Replacement Reserve Inventory identifies 3 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be $90,500 over the 40-year Study Period. The Projected Replacements are divided into 2 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 $2,263. Section C provides a year by year Calender of these expenditures.



UPDATING

UPDATING OF THE FUNDING PLAN

The Township 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 $90,500 of Projected Expenditures over the 40-year Study Period and the impact of the Township 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Starting Balance	$0									
Projected Replacements		($10,000)			($28,250)					
Annual Deposit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
End of Year Balance	$0	($10,000)	($10,000)	($10,000)	($38,250)	($38,250)	($38,250)	($38,250)	($38,250)	($38,250)
Cumulative Expenditures		($10,000)	($10,000)	($10,000)	($38,250)	($38,250)	($38,250)	($38,250)	($38,250)	($38,250)
Cumulative Receipts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements					($2,000)					($10,000)
Annual Deposit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
End of Year Balance	($38,250)	($38,250)	($38,250)	($38,250)	($40,250)	($40,250)	($40,250)	($40,250)	($40,250)	($50,250)
Cumulative Expenditures	($38,250)	($38,250)	($38,250)	($38,250)	($40,250)	($40,250)	($40,250)	($40,250)	($40,250)	($50,250)
Cumulative Receipts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Projected Replacements					($2,000)					
Annual Deposit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
End of Year Balance	($50,250)	($50,250)	($50,250)	($50,250)	($52,250)	($52,250)	($52,250)	($52,250)	($52,250)	($52,250)
Cumulative Expenditures	($50,250)	($50,250)	($50,250)	($50,250)	($52,250)	($52,250)	($52,250)	($52,250)	($52,250)	($52,250)
Cumulative Receipts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Year	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
Projected Replacements					($28,250)			($10,000)		
Annual Deposit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
End of Year Balance	($52,250)	($52,250)	($52,250)	($52,250)	($80,500)	($80,500)	($80,500)	($90,500)	($90,500)	($90,500)
Cumulative Expenditures	($52,250)	($52,250)	($52,250)	($52,250)	($80,500)	($80,500)	($80,500)	($90,500)	($90,500)	($90,500)
Cumulative Receipts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

EVALUATION OF CURRENT FUNDING

The evaluation of Current Funding (Starting Balance of $0 & annual funding of $0), 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 3 Projected Replacements identified in the Replacement Reserve Inventory and that the Township will continue Annual Funding of $0 throughout the 40-year Study Period.

Annual Funding of $0 is approximately 0 percent of the $7,650 recommended Annual Funding calculated by the Cash Flow Method for 2016, the Study Year.
Evaluation of the 3 Projected Replacements calculates an average annual expenditure over the next 40 years of $2,263. Annual funding of $0 is 0 percent of the average annual expenditure.
Our calculations identify funding shortfalls in 39 years of the Study Period with the initial shortfall in 2017. The largest shortfall, $-90,500, occurs in 2040. All shortfalls can be seen and evaluated in Table 3 above.

In summary, Current Funding as reported by the Township and shown above, does not provide adequate funding for the $90,500 of Projected Replacements scheduled in the Replacement Reserve Inventory over the Study Period.

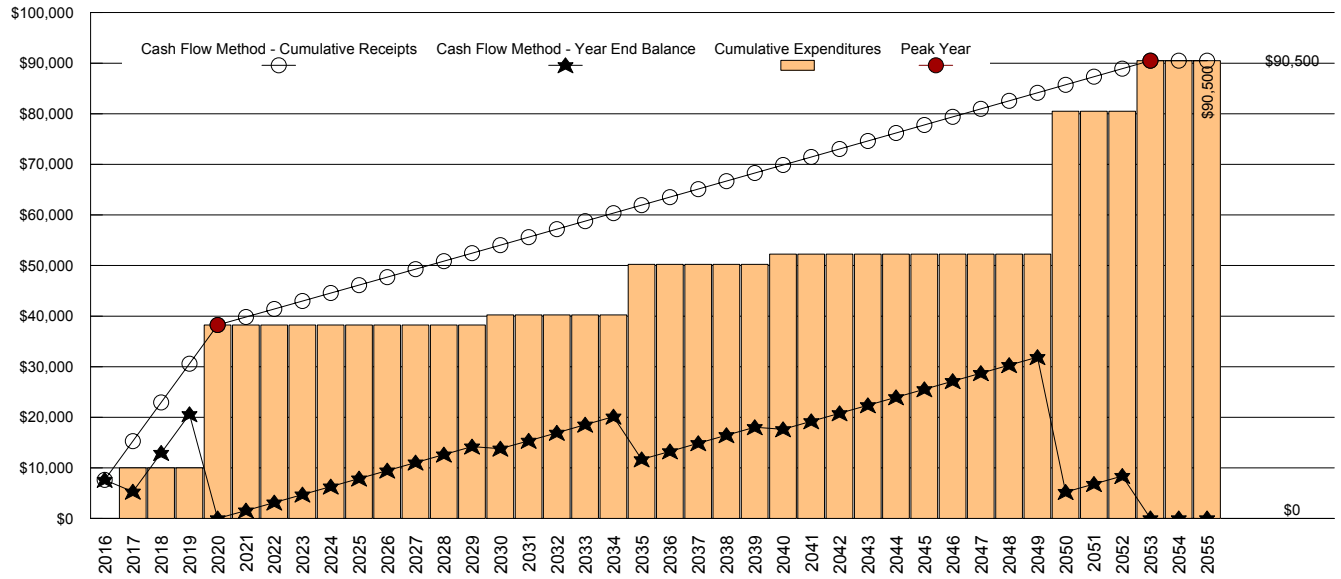
CASH FLOW METHOD FUNDING

$7,650 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2016**

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 2020 with Replacement Reserves on Deposit dropping to the Minimum Balance after the completion of $38,250 of replacements from 2016 to 2020. Recommended funding declines from $7,650 in 2020 to $1,578 in 2021. Peak Years are identified in Chart 4 and Table 5.
- Minimum Balance. The calculations assume a Minimum Balance of $0 in Replacement Reserves. This is approx. 0 months of average expenditures based on the $2,263, 40-year average annual expenditure.
- Cash Flow Method Study Period. Cash Flow Method calculates funding for $90,500 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2055 and in 2055, 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	2016	2017	2018	2019	1st Peak - 2020	2021	2022	2023	2024	2025
Starting Balance	$0									
Projected Replacements		($10,000)			($28,250)					
Annual Deposit	$7,650	$7,650	$7,650	$7,650	$7,650	$1,578	$1,578	$1,578	$1,578	$1,579
End of Year Balance	$7,650	$5,300	$12,950	$20,600	$0	$1,578	$3,156	$4,734	$6,313	$7,891
Cumulative Expenditures		$10,000	$10,000	$10,000	$38,250	$38,250	$38,250	$38,250	$38,250	$38,250
Cumulative Receipts	$7,650	$15,300	$22,950	$30,600	$38,250	$39,828	$41,406	$42,984	$44,563	$46,141

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Replacements					($2,000)					($10,000)
Annual Deposit	$1,579	$1,579	$1,580	$1,580	$1,580	$1,581	$1,581	$1,582	$1,582	$1,583
End of Year Balance	$9,470	$11,049	$12,629	$14,209	$13,789	$15,370	$16,951	$18,533	$20,115	$11,697
Cumulative Expenditures	($38,250)	($38,250)	($38,250)	($38,250)	($40,250)	($40,250)	($40,250)	($40,250)	($40,250)	($50,250)
Cumulative Receipts	$47,720	$49,299	$50,879	$52,459	$54,039	$55,620	$57,201	$58,783	$60,365	$61,947

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Projected Replacements					($2,000)					
Annual Deposit	$1,583	$1,584	$1,584	$1,585	$1,585	$1,585	$1,586	$1,586	$1,587	$1,587
End of Year Balance	$13,280	$14,864	$16,448	$18,033	$17,618	$19,203	$20,789	$22,375	$23,961	$25,548
Cumulative Expenditures	($50,250)	($50,250)	($50,250)	($50,250)	($52,250)	($52,250)	($52,250)	($52,250)	($52,250)	($52,250)
Cumulative Receipts	$63,530	$65,114	$66,698	$68,283	$69,868	$71,453	$73,039	$74,625	$76,211	$77,798

Year	2046	2047	2048	2049	2050	2051	2052	2nd Peak - 2053	2054	2055
Projected Replacements					($28,250)			($10,000)		
Annual Deposit	$1,587	$1,587	$1,588	$1,588	$1,588	$1,588	$1,588	$1,588		
End of Year Balance	$27,135	$28,723	$30,310	$31,898	$5,236	$6,824	$8,412	$0	$0	$0
Cumulative Expenditures	($52,250)	($52,250)	($52,250)	($52,250)	($80,500)	($80,500)	($80,500)	($90,500)	($90,500)	($90,500)
Cumulative Receipts	$79,385	$80,973	$82,560	$84,148	$85,736	$87,324	$88,912	$90,500	$90,500	$90,500

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 belive 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.

$7,650 2016 - CASH FLOW METHOD RECOMMENDED FUNDING

The 2016 Study Year calculations have been made using current replacement costs (see Page B2), modified by the Analyst for any project specific conditions.

$7,937 2017 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2017 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $7,650 on January 1, 2017.
- No Expenditures from Replacement Reserves in 2016.
- Construction Cost Inflation of 3.00 percent in 2016.

The $7,937 inflation adjusted funding in 2017 is a 3.75 percent increase over the non-inflation adjusted 2017 funding of $7,650.

$8,228 2018 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2018 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $5,287 on January 1, 2018.
- All 2017 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $10,300.
- Construction Cost Inflation of 3.00 percent in 2017.

The $8,228 inflation adjusted funding in 2018 is a 7.55 percent increase over the non-inflation adjusted 2018 funding of $7,650.

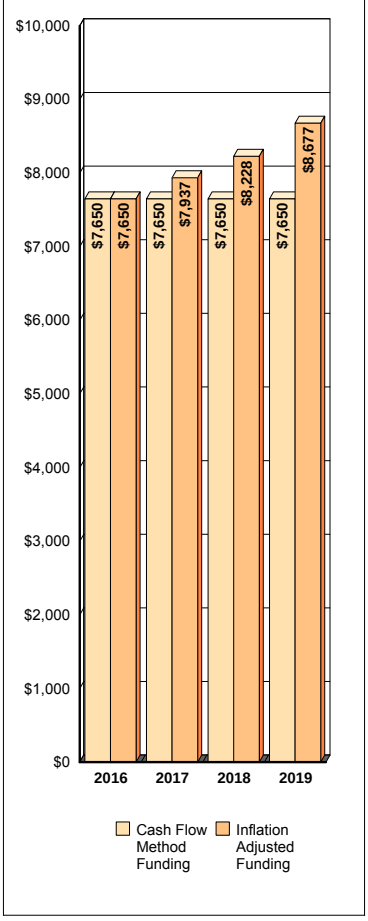
$8,677 2019 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2019 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $13,515 on January 1, 2019.
- No Expenditures from Replacement Reserves in 2018.
- Construction Cost Inflation of 3.00 percent in 2018.

The $8,677 inflation adjusted funding in 2019 is a 13.43 percent increase over the non-inflation adjusted funding of $7,650.

#6 - Inflation Adjusted Funding



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 2017, 2018 and 2019 inflation adjusted funding calculations above, the 3.00 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 2016, based on a 1.00 percent interest rate, we estimate the Association may earn $38 on an average balance of $3,825, $65 on an average balance of $6,468 in 2017, and $94 on $9,401 in 2018. The Association may elect to use these funds to reduce annual funding.

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 3 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B1.

REPLACEMENT RESERVE INVENTORY
GENERAL INFORMATION

Bob Hall Memorial Field - Replacement Reserve Inventory identifies 3 Projected Replacements.

- PROJECTED REPLACEMENTS. 3 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 $38,250. Replacements totaling $52,250 are scheduled in the Replacement Reserve Inventory over the 40-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. None of the items included in the Replacement Reserve Inventory are 'Excluded Items'. Multiple categories of items 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 that $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 Township policy on the administration of Replacement Reserves. If the Township 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 Township.

  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 Township. These types of items are generally not the responsibility of the Township and are excluded from the Replacement Reserve Inventory.

- CATEGORIES. The 3 items included in the Bob Hall Memorial Field Replacement Reserve Inventory are divided into 2 major categories. Each category is printed on a separate page, Pages B3 to B4.

- 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.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- INVENTORY DATA. Each of the 3 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.

- REVIEW OF EXPENDITURES. This Replacement Reserve Study should be reviewed by an accounting professional representing the Township 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.

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	Asphalt pavement,convert to gravel	ls	1	$10,000.00	18	1	$10,000
2	6' Chain link fence	ft	750	$35.00	30	4	$26,250
3	Park bench	ea	5	$400.00	10	4	$2,000

SITE COMPONENTS - Replacement Costs - Subtotal $38,250

SITE COMPONENTS
COMMENTS

- Remaining Economic Life is based in part on the age of the installation, the quality of the installation and the condition of the installation. Where the age of the installation is not known it is estimated.

- The Township should consider converting the asphalt parking lot to gravel with a small asphalt approach way in approximately two years.

VALUATION EXCLUSIONS
EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Bleachers - Baseball Federation	ea	2				EXCLUDED
	Team bench - Baseball Federation	ea	2				EXCLUDED
	PLT sign structure, text and/or graphic	sf	40				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 $2,000.00 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.

PROJECTED ANNUAL REPLACEMENTS
GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 3 Projected Replacements in the Bob Hall Memorial Field 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 Township 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 Township 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 Township and the visual evaluations of the Analyst. It has been prepared for the sole use of the Township 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 Bob Hall Memorial Field Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Township.

PROJECTED REPLACEMENTS - YEARS ONE TO FIFTEEN

Item	2016 - STUDY YEAR	$
No Scheduled Replacements		

Item	2017 - YEAR 2	$
1	Asphalt pavement,convert to	$10,000
Total Scheduled Replacements		$10,000

Item	2018 - YEAR 3	$
No Scheduled Replacements		

Item	2019 - YEAR 4	$
No Scheduled Replacements		

Item	2020 - YEAR 5	$
2	6' Chain link fence	$26,250
3	Park bench	$2,000
Total Scheduled Replacements		$28,250

Item	2021 - YEAR 6	$
No Scheduled Replacements		

Item	2022 - YEAR 7	$
No Scheduled Replacements		

Item	2023 - YEAR 8	$
No Scheduled Replacements		

Item	2024 - YEAR 9	$
No Scheduled Replacements		

Item	2025 - YEAR 10	$
No Scheduled Replacements		

Item	2026 - YEAR 11	$
No Scheduled Replacements		

Item	2027 - YEAR 12	$
No Scheduled Replacements		

Item	2028 - YEAR 13	$
No Scheduled Replacements		

Item	2029 - YEAR 14	$
No Scheduled Replacements		

Item	2030 - YEAR 15	$
3	Park bench	$2,000
Total Scheduled Replacements		$2,000

PROJECTED REPLACEMENTS - YEARS SIXTEEN TO THIRTY

Item	2031 - YEAR 16	$
No Scheduled Replacements		

Item	2032 - YEAR 17	$
No Scheduled Replacements		

Item	2033 - YEAR 18	$
No Scheduled Replacements		

Item	2034 - YEAR 19	$
No Scheduled Replacements		

Item	2035 - YEAR 20	$
1	Asphalt pavement,convert to	$10,000
Total Scheduled Replacements		$10,000

Item	2036 - YEAR 21	$
No Scheduled Replacements		

Item	2037 - YEAR 22	$
No Scheduled Replacements		

Item	2038 - YEAR 23	$
No Scheduled Replacements		

Item	2039 - YEAR 24	$
No Scheduled Replacements		

Item	2040 - YEAR 25	$
3	Park bench	$2,000
Total Scheduled Replacements		$2,000

Item	2041 - YEAR 26	$
No Scheduled Replacements		

Item	2042 - YEAR 27	$
No Scheduled Replacements		

Item	2043 - YEAR 28	$
No Scheduled Replacements		

Item	2044 - YEAR 29	$
No Scheduled Replacements		

Item	2045 - YEAR 30	$
No Scheduled Replacements		

PROJECTED REPLACEMENTS - YEARS THIRTY-ONE TO FORTY-FIVE

Item	2046 - YEAR 31	$
No Scheduled Replacements		

Item	2047 - YEAR 32	$
No Scheduled Replacements		

Item	2048 - YEAR 33	$
No Scheduled Replacements		

Item	2049 - YEAR 34	$
No Scheduled Replacements		

Item	2050 - YEAR 35	$
2	6' Chain link fence	$26,250
3	Park bench	$2,000
Total Scheduled Replacements		$28,250

Item	2051 - YEAR 36	$
No Scheduled Replacements		

Item	2052 - YEAR 37	$
No Scheduled Replacements		

Item	2053 - YEAR 38	$
1	Asphalt pavement,convert tc	$10,000
Total Scheduled Replacements		$10,000

Item	2054 - YEAR 39	$
No Scheduled Replacements		

Item	2055 - YEAR 40	$
No Scheduled Replacements		

Item	2056 (beyond Study Period)	$
No Scheduled Replacements		

Item	2057 (beyond Study Period)	$
No Scheduled Replacements		

Item	2058 (beyond Study Period)	$
No Scheduled Replacements		

Item	2059 (beyond Study Period)	$
No Scheduled Replacements		

Item	2060 (beyond Study Period)	$
3	Park bench	$2,000
Total Scheduled Replacements		$2,000

CASH FLOW METHOD ACCOUNTING SUMMARY

This Bob Hall Memorial Field - Cash Flow Method Accounting Summary is an attachment to the Bob Hall Memorial Field - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 3 Projected Replacements listed in the Bob Hall Memorial Field Replacement Reserve Inventory has been assigned to one of 1 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 $0 Beginning Balance (at the start of the Study Year) and the $22,950 of additional Replacement Reserve Funding in 2016 through 2018 (as calculated in the Replacement Reserve Analysis) to each of the 3 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by Chronological Allocation.
  - Allocation of the $22,950 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, 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 $0 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 Bob Hall Memorial Field the Beginning Balance funds all Scheduled Replacements in the Study Year through 2016 and provides partial funding (0%) of replacements scheduled in 2017.
  - The next step is the allocation of the $7,650 of 2016 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 Bob Hall Memorial Field the Beginning Balance and the 2016 Replacement Reserve Funding, funds replacements through 2016 and partial funds (76.5%) replacements in 2017.
  - Allocations of the 2017 and 2018 Reserve Funding are done using the same methodology.
  - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

2016 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 3 Projected Replacements included in the Bob Hall Memorial Field Replacement Reserve Inventory has been assigned to one of the 1 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $7,650 in the Study Year.
- 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 CF1

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	10 to 30 years	1 to 4 years	$38,250	$0	$7,650		$7,650

2017 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 3 Projected Replacements included in the Bob Hall Memorial Field Replacement Reserve Inventory has been assigned to one of the 1 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 $7,650 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $15,300 from 2016 through 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 $10,000.

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 CF2

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	10 to 30 years	0 to 3 years	$38,250	$7,650	$7,650	($10,000)	$5,300

2018 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 3 Projected Replacements included in the Bob Hall Memorial Field Replacement Reserve Inventory has been assigned to one of the 1 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 $5,300 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $22,950 from 2016 to 2018.
- 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.

2018 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	10 to 30 years	2 to 17 years	$38,250	$5,300	$7,650		$12,950

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CF4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $22,950 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 3 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $7,650 on January 1, 2017.
- Replacement Reserves on Deposit totaling $5,300 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $22,950 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $10,000.

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

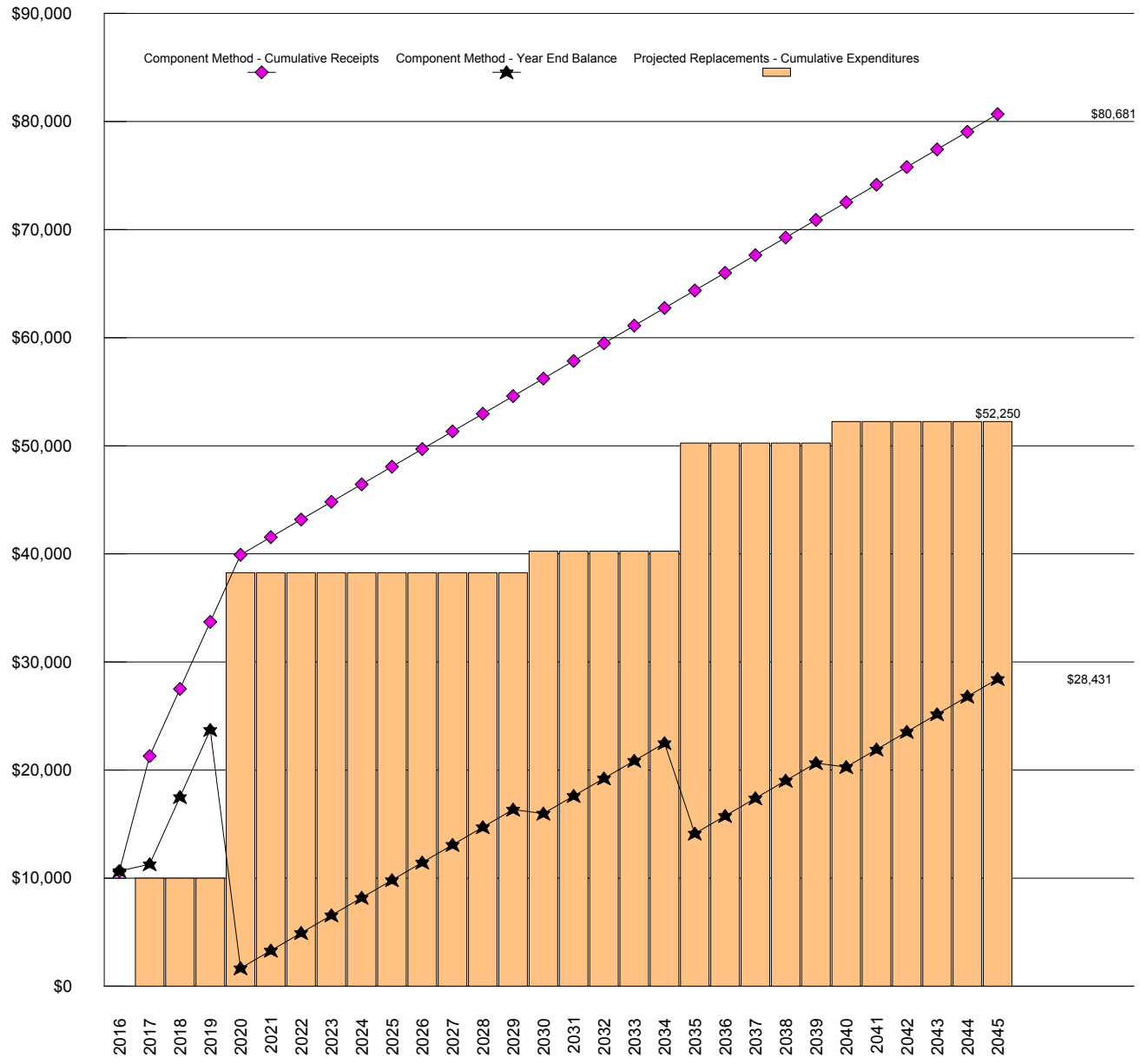
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement,convert to gravel	10,000		7,650		7,650	2,350	(10,000)				
2	6' Chain link fence	26,250					4,925		4,925	7,108		12,033
3	Park bench	2,000					375		375	542		917

COMPONENT METHOD

$10,650 **COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2016.**

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 3 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



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 3 Projected Replacements. The total, $31,764, 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 ($0) by the Current Funding Objective ($31,764). At Bob Hall Memorial Field the Funding Percentage is 0.0%

- Allocation of the Beginning Balance. The Beginning Balance is divided among the 3 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 Township has not accumulated $800 in Reserves (the Funding Objective), but rather at 0.0 percent funded, there is $0 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 $10,650, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2016).

  In our fence example, the $0 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 $500. Next year, the deposit remains $500, 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Beginning balance	$0									
Recommended annual funding	$10,650	$10,650	$6,206	$6,206	$6,206	$1,631	$1,631	$1,631	$1,631	$1,631
Expenditures		$10,000			$28,250					
Year end balance	$10,650	$11,300	$17,506	$23,711	$1,667	$3,297	$4,928	$6,558	$8,189	$9,819
Cumulative Expenditures		$10,000	$10,000	$10,000	$38,250	$38,250	$38,250	$38,250	$38,250	$38,250
Cumulative Receipts	$10,650	$21,300	$27,506	$33,711	$39,917	$41,547	$43,178	$44,808	$46,439	$48,069

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Recommended annual funding	$1,631	$1,631	$1,631	$1,631	$1,631	$1,631	$1,631	$1,631	$1,631	$1,631
Expenditures					$2,000					$10,000
Year end balance	$11,450	$13,081	$14,711	$16,342	$15,972	$17,603	$19,233	$20,864	$22,494	$14,125
Cumulative Expenditures	$38,250	$38,250	$38,250	$38,250	$40,250	$40,250	$40,250	$40,250	$40,250	$50,250
Cumulative Receipts	$49,700	$51,331	$52,961	$54,592	$56,222	$57,853	$59,483	$61,114	$62,744	$64,375

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Recommended annual funding	$1,631	$1,631	$1,631	$1,631	$1,631	$1,631	$1,631	$1,631	$1,631	$1,631
Expenditures					$2,000					
Year end balance	$15,756	$17,386	$19,017	$20,647	$20,278	$21,908	$23,539	$25,169	$26,800	$28,431
Cumulative Expenditures	$50,250	$50,250	$50,250	$50,250	$52,250	$52,250	$52,250	$52,250	$52,250	$52,250
Cumulative Receipts	$66,006	$67,636	$69,267	$70,897	$72,528	$74,158	$75,789	$77,419	$79,050	$80,681

COMPONENT METHOD ACCOUNTING SUMMARY

This Bob Hall Memorial Field - Component Method Accounting Summary is an attachment to the Bob Hall Memorial Field - Replacement Reserve Study dated Revised April 27, 2015 and is for use by accounting and reserve professionals experienced in Township funding and accounting principles. This Summary consists of four reports, the 2016, 2017, and 2018 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2016, 2017, and 2018. Each of the 3 Projected Replacements listed in the Bob Hall Memorial Field Replacement Reserve Inventory has been assigned to one of 1 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 $0 Beginning Balance (at the start of the Study Year) and the $27,506 of additional Replacement Reserve funding from 2016 to 2018 (as calculated in the Replacement Reserve Analysis) to each of the 3 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 2016 through 2018.
  - Allocation of the $0 Beginning Balance to the Projected Replacements by the Component Method.
  - Allocation of the $27,506 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2016 through 2018, by the Component Method.

2016 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 3 Projected Replacements included in the Bob Hall Memorial Field Replacement Reserve Inventory has been assigned to one of the 1 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 $0 as of the first day of the Study Year, January 1, 2016.
- Total reserve funding (including the Beginning Balance) of $10,650 in the Study Year.
- 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 CM1

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	10 to 30 years	1 to 4 years	$38,250	$0	$10,650		$10,650

2017 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 3 Projected Replacements included in the Bob Hall Memorial Field Replacement Reserve Inventory has been assigned to one of the 1 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 $10,650 on January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $21,300 from 2016 through 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 $10,000.

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 CM2

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	10 to 30 years	0 to 3 years	$38,250	$10,650	$10,650	$10,000	$11,300

2018 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 3 Projected Replacements included in the Bob Hall Memorial Field Replacement Reserve Inventory has been assigned to one of the 1 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 $11,300 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $27,506 from 2016 to 2018.
- 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.

2018 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	10 to 30 years	2 to 17 years	$38,250	$11,300	$6,206		$17,506

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM4 below details the allocation of the $0 Beginning Balance, as reported by the Association and the $27,506 of Replacement Reserve Funding calculated by the Cash Flow Method from 2016 to 2018, to the 3 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 $0 on January 1, 2016.
- Replacement Reserves on Deposit totaling $10,650 on January 1, 2017.
- Replacement Reserves on Deposit totaling $11,300 on January 1, 2018.
- Total Replacement Reserve funding (including the Beginning Balance) of $27,506 from 2016 to 2018.
- 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 2016 to 2018 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $10,000.

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	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance
	SITE COMPONENTS											
1	Asphalt pavement,convert to gravel	10,000	0	5,000		5,000	5,000	(10,000)		556		556
2	6' Chain link fence	26,250	0	5,250		5,250	5,250		10,500	5,250		15,750
3	Park bench	2,000	0	400		400	400		800	400		1,200

EXCLUSIONS

Exclusions. This report is limited to specific items listed in the inventory. Items not listed are inherently excluded and not factored into the calculations, graphs, or tables. Items to be excluded are determined by one of the following conditions: directed to be excluded, low value (less than $500), items with long service life, items owned by the State or Federal Government, Items owned by a utility, items included in an operational budget.

- Roads
- Street signs
- Traffic control devices
- Building interiors
- Building foundations
- Heavy Equipment
- Maintenance equipment and tools
- Vehicles
- Furniture, fixtures and office equipment
- Operational property, files
- Computers and network infrastructure
- Electrical service
- Cable, telephone, and internet service
- Signage

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. O ur 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

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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 Township have a limited life and require periodic replacement. Therefore, it is essential the Township 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 Township 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.

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 Township should obtain the advice of its accounting professional as to which method is more appropriate for the Township. 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 Township 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 Township) 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 Township 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 Township. 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 Township's accounting professionals. We are dependent upon the Township 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 Township 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 Township 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 Township 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 Township 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 Township'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/81ch7kjt

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/81ch7kjt

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

http://bcove.me/fazwdk3h

clients?

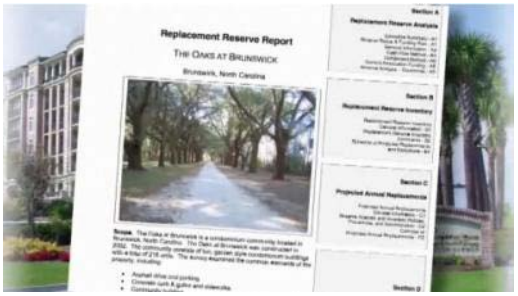
What is my role as a Board Member?
Will a Reserve Study meet my community's needs?

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

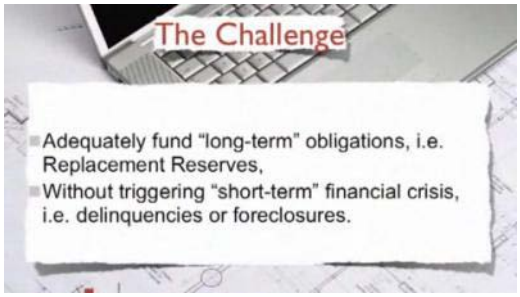
Where do the numbers come from?
Cumulative expenditures and funding, what?

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