

# **FACILITY CONDITION ASSESSMENT**

## St. Matthew's Episcopal Church

Snellville, GA March 2024



Dear Trisha,

Our team appreciates the opportunity to serve St. Matthew's Episcopal Church during this process. We have divided the following report into several sections:

- 1. Executive Summary
- 2. Fresh Eyes Observation
- 3. Operational Considerations
- 4. Campus Observation
  - a. Exterior
  - b. Interior
- 5. Mechanicals
- 6. OSHA, General Safety
- 7. General Observations
  - a. Custodial Opportunities
  - b. Maintenance Opportunities
- 8. Deferred Maintenance and Facility Operations Planning
- 9. Next Steps
- 10. Glossary of Common Terms
- 11. <u>Resources</u>

Thank you again for the opportunity to partner with and serve St. Matthew's Episcopal Church.



Patrick Hart Facility Stewardship Specialist



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## FACILITY INFORMATION

### St. Matthew's Episcopal Church

Name St. Matthew's Episcopal Church

Address 1520 Oak Road Snellville, GA 30078



### **EXECUTIVE SUMMARY**

Although the information provided in this assessment may feel overwhelming, it serves as a valuable starting point for addressing the identified issues. It is important to note that the rate of deterioration for the facility remains consistent at 3-4% per year. However, the St Matthew's facilities have not yet reached the critical point of deferred maintenance that would make recovery impossible. By promptly addressing the items outlined in the report, you can prevent further escalation of costs. If these issues are neglected or set aside for an extended period, the expenses for repairs and refurbishments may increase five to sevenfold. Taking proactive measures now will help mitigate future expenses and ensure the long-term functionality of the facility.

The following summary outlines key findings from the assessment process. We urge you to carefully consider each section and its potential impact.

#### HVAC

Throughout St. Matthew's facilities, 27 HVAC units were identified, including 13 outdoor condenser units and 14 indoor evaporator and furnace units. Among these, nine units have exceeded their expected service life, and an additional 15 will do so within five years. The remaining three units are projected to reach the end of their lifespan in 10 to 15 years. While each unit is expected to last at least 15 years with proper maintenance, it's advisable to plan for future replacement costs now. Regular maintenance and inspections for all HVAC units are strongly recommended to ensure continued functionality. Additionally, maintaining clear surroundings around outdoor units is crucial for optimal performance.

#### **Masonry Cleaning and Restoration**

The exterior masonry walls of both the Church and Parish Hall buildings display signs of organic growth, discoloration, and compromised mortar joints, while soil accumulation was observed on the lower walls of the storage shed near the playground. To maintain the building's integrity, prevent further damage, and improve appearance, we recommend a comprehensive approach including cleaning, crack repair, and tuckpointing on damaged mortar joints. Furthermore, the bell tower exhibits signs of water retention, possibly due to damaged mortar joints. We suggest engaging a masonry restoration contractor to assess the situation and recommend appropriate action.

#### **Doors and Windows**

The windows in the Church Building at St. Matthew's displayed signs of deterioration in frames and compromised glazing with visible cracking, requiring refurbishment including replacement of damaged framing, reglazing, and repainting. Additionally, many windows in the Education Building exhibited organic growth requiring cleaning, along with several seals needing replacement. Several doors need cleaning and repainting, with one door requiring replacement due to significant deterioration at the bottom.

#### Parking

The parking lots at St. Matthew's are in generally in satisfactory condition, except for areas with alligatoring and pothole damage. We recommend repairing these section and sealcoating the lots, along with repainting parking stalls. Sealcoating every 5 years is proposed due to mild winter weather and low traffic volume, with potential for extension through proper maintenance.

### FRESH EYES OBSERVATION

This report aims to provide feedback on the facility's condition based on observations made during the assessment, as well as impressions gathered from the perspective of a first-time guest.

Furthermore, Operational Cost Benchmarking and Deferred Maintenance projections are included to offer insights into staffing levels and expenditures required to elevate the observed issues to a "Class A" standard over the next fifteen years. The term "Class A" signifies the goal of revitalizing and refreshing all areas of the facility as reasonably possible, with a focus on addressing accessibility and safety concerns. It is a privilege to collaborate with you as you contemplate the next steps for your facility.

The choice of a fifteen-year timeline for the Deferred Maintenance projection is based on the standard lifespan of HVAC units, which tend to be replaced more frequently and at a higher cost compared to other items in a facility. In Capital Reserve Planning, it is essential to consistently set aside additional funds to cover the cost of replacing or repairing previously attended-to elements. Roofing and parking surfaces represent the other two critical components referred to as "The Big Three." These three types of items necessitate more frequent replacement, require substantial financial resources, and can significantly disrupt services if they fail. While not classified as part of "The Big Three," flooring represents the next significant capital reserve expense and requires careful planning in terms of timing its replacement.

Operational Observations are presented at the beginning of the report as they directly influence the facility's condition. The benchmark utility expenditure figures provide a broad overview of the facility's efficiency. These benchmarks indicate the average investment required per square foot for proper maintenance and cleaning of a building. Falling below the median benchmark puts the facility at risk.

As you navigate through the report, it is our hope that it will underscore the value and necessity of stewardship, highlighting how investing in what has been entrusted to us impacts not only the facility's life cycle but also its welcoming impression for first-time visitors.

# **OPERATIONAL CONSIDERATIONS**

The following is a snapshot based on the data provided.

### Utilities

### Annual Utility Cost Evaluation

These are costs related to fuel sources to operate your facility such as electric, gas, oil, etc. It does NOT include items such as water (unless your facility has hot water heating or a chiller), sewer, telephone, internet and the like. Our research has determined that in the United States, with some exceptions of extreme cost of living regions, the annual utility expenditures should be \$1.00 -\$1.50 per square foot, with the median being \$1.25. If you are spending more than \$1.25 per square foot and your facility is utilized approximately 6+ days a week, then there may be room for improvement. Conversely, if you are spending less than \$1.00 per square foot, this is not necessarily an indicator that you are being prudent with your utility spend. In fact, in most cases, we find that this level of spending reflects an under-utilization of your facility (i.e. only 2-3 day a week use). In these instances, there may still be opportunity for improvement.

#### Your Facility: \$2.95/SF



**NEEDS ACTION** 

#### Analysis

With the national average of \$1.00-\$1.50/SF, your utility consumption would indicate that you are exceeding this average. You may want to consider an energy audit as your electrical usage accounts for almost 64% of your annual utilities cost. If you could get to the top end of the range, you could save approximately \$17,000 annually.

### Custodial

# Annual Housekeeping/Custodial Cost Evaluation

These costs include labor and material to perform regular and ongoing custodial services, whether insourced or outsourced. It also includes larger custodial initiatives such as carpet extraction, tile waxing, glass cleaning, etc. Also included would be restroom paper products. The most recent Benchmark Report by Smart Church Solutions would indicate that a church should budget \$1.75 -\$2.50/SF annually for custodial expenses.

### Your Facility: \$0.84/SF



**NEEDS ACTION** 

#### Analysis

Based on our studies, an appropriate range for custodial (labor, material, paper products, major cleaning like carpet extractions, window cleaning, etc.) should be in the \$1.75-\$2.50 range. You may want to re-look at this line item.

### **General Maintenance**

### General Maintenance Cost Evaluation

The costs associated with this are the labor and materials needed to perform corrective, routine and preventative maintenance whether insourced or outsourced. These costs do NOT include the salary costs of a Facility Manager unless they actually perform such duties in which case they should include the appropriate percentage of the facility managers cost based on the percentage of time performing such tasks. This category should also NOT include costs related to capital renewals or major projects completed. The most recent Benchmark Report by Smart Church Solutions would indicate that a church should budget \$2.50 - \$3.50/SF annually for General Maintenance expenses.

### Your Facility: \$3.63/SF



GOOD

### Analysis

This is tremendous. You are above the national average. At this rate you should be able to keep up with the deterioration rate of your facility by staying ahead of deferred maintenance.

### **Capital Reserves**

# Annual Designated Capital Reserves Evaluation

All components of your facility have a life cycle coupled with the inevitable responsibility to replace them at the end of life. Capital reserves are the annual money being set aside, systematically, similar to your personal retirement account to provide the funds needed at the time these elements reach the end of their useful life. Based on national research by Smart Church Solutions and IFMA, most facilities should be setting aside \$2.00-\$3.00 per square foot annually for capital reserve. This assumes that your capital reserve account can earn a 3-4% rate of return. The dollar per square foot can be greatly impacted by the age of the facility as well as the amount of deferred maintenance that exists.

#### Your Facility: \$0.00/SF



**NEEDS ACTION** 

#### Analysis

This is very concerning. While we know that it is often difficult to set aside monies for the future capital improvements in lieu of spending for ministry initiatives today, this is critical. Capital replacement is not an "IF" consideration but rather a "WHEN" and "HOW MUCH".

We have set up your Life Cycle Calculator module in eSPACE to help you track future capital needs to ensure you are able to adequately fund your Capital Reserve.

### Staffing

### **Facility Staff**

Staffing costs should include the compensation as well as benefits as well as the labor burden (FICA, etc). As stated above, it should not include the staffing cost of the Facility Manager unless they actually perform such duties in which case they should include the appropriate percentage of the facility managers cost based on the percentage of time performing such tasks. The most efficiently operated ministry facilities average 1 Full Time Equivalent (FTE) for every 35,000 SF of facilities. Not that this is ONLY related to general maintenance items and not custodial. Our research indicates that, on average, churches nationally report up to 50% of the time the maintenance team performs non-maintenance-related tasks. This reduces the overall ability to maintain the 1 FTE per 35,000 SF ratio. More detailed information is available in the 2020 Church Facility Operations Benchmarking Report.



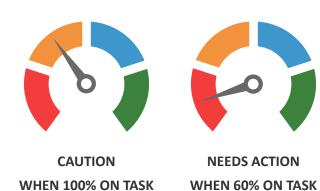
### Analysis

When benchmarking your current staffing levels, it would appear that you are understaffed in facilities. On-site observations, however, lead us to believe that your utilization of volunteers to handle facilities tasks is appropriate for the size and activity level of your facilities. Making full use of your eSPACE Work Order and Asset Management system to plan, assign, and track repairs and preventive maintenance tasks will help you to maintain workflow efficiencies.

### **Custodial Staff**

Staffing costs should include the compensation as well as benefits and overall labor burden (FICA, insurance, retirement contributions, etc.). It should not include the staffing cost of the Facility or Custodial Manager unless they actually perform general custodial duties, in which case, they should include the appropriate percentage of the manager's cost based on the percentage of time performing such tasks. The most efficiently operated ministry facilities average 1 Full Time Equivalent (FTE) for every 35,000 SF of facilities. Note that this is ONLY related to custodial staffing and not general maintenance. Our research indicates that, on average, churches nationally report up to 40% of the time the custodial team performs non-custodial-related tasks. This reduces the overall ability to maintain the 1 FTE per 35,000 SF ratio. More detailed information is available in the 2020 Church Facility Operations Benchmarking Report.

### Your Facility: 0.2



#### Analysis

The average number of custodial staff for a well-run organization is 1 Full Time Custodial Staff Employee for every 35,000SF. Based on your staffing level, it looks like you are doing a good job!

On-site observations also indicate that custodial staffing aligns well with your current level of activity. However, we recommend investing in custodial training opportunities for those responsible for cleaning to enhance efficiency and thoroughness in the cleaning processes.

### **EXTERIOR OBSERVATION**

Throughout the evaluation, the weather conditions were favorable, providing unrestricted access to all areas of the campus. In order to ensure comprehensive observations, various methods were employed, including visual inspections, digital photo documentation, and historical aerial images sources from Google Earth. This approach enabled examination of the roof sections that were otherwise inaccessible. Using conventional route guidance software, locating the facility was straightforward. A new family in the vicinity should encounter no challenges in promptly finding the church by employing similar navigation tools.

#### Signage

The church's monument sign is clear and legible, free from obstructions. However, the overall structure requires cleaning, wood repair, and repainting to restore its appearance.

Utilizing temporary banners is an effective method to highlight church events as they are more eye-catching than updates on the monument sign's reader board. However, the sign posts holding these banners are weathered and cracked, necessitating replacement with pressure-treated and water-sealed lumber.

While designated visitor parking is a considerate amenity, updating signage presents an opportunity to enhance hospitality and inclusivity by labeling spaces as "Guest" instead of "Visitor." Additionally, we commend your use of wayfinding signage to aid guests in navigating to St. Matthew's entrance points.

Two signs at St. Matthew's require replacement. The ADA sign in the south parking lot has faded, impeding readability, and the playground notice signage shows significant cracking.



Signage is readable and unobstructed

Signage displays buildup of soil and organic matter



Wood trim on signage requires repair and repainting

Temporary signage is a great way to draw at



Sign posts are cracked and weathered

Great to see designated guest parking



Wayfinding signage is helpful for directing guests

ADA signage is faded and sign post is rusted



Playground sign has cracked appearance

### Roofing

The initial data provided indicates that the dimensional shingle roofing of the facility was installed over three years ago. A review of aerial photos from Google Earth confirms that the roofing was likely replaced in 2019. Observations during the site visit revealed the roofing to be in good condition with no obvious deficiencies to the main structures. Typically, dimensional shingle roofing can last for up to 25 years with proper and diligent maintenance, indicating that St. Matthew's pitched roofs should remain durable until their projected lifespan concludes in 2044.

It is important to mention that the roof of the storage shed west of the Education Building showed considerable debris accumulation, and no gutters were observed on the structure. Keeping the roof clear of debris and installing gutters will aid in preserving the wood fascia and contribute to the longevity of the roof.



The church and office roofing is in goodars in good condition



Dimensional shingle on Education Building is in good condition



Parish Hall roofing showed no deficiencies

Remove debris and consider adding gutters

### **Building Exterior**

While the overall exterior of the St. Matthew's facilities presents a satisfactory appearance, specific areas require immediate attention. This includes essential repairs to window frames, the repairing and repainting of wood trim and fascia, and addressing the accumulation of organic matter on masonry walls. Additionally, it is crucial to repair cracks and compromised mortar joints.

#### **Masonry Cleaning and Restoration**

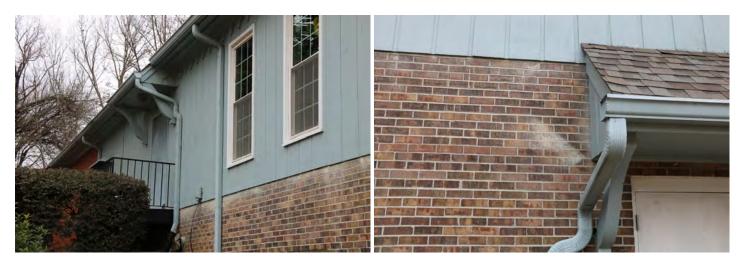
The exterior masonry walls of both the Church and Parish Hall buildings exhibit signs of organic growth and discoloration, as well as identified issues in the masonry and compromised mortar joints. Additionally, soil accumulation was observed on the lower walls of the storage shed near the playground. To uphold the integrity of the building envelope, prevent further damage, and enhance the overall appearance of the facilities, adopting a comprehensive approach is advisable. This involves cleaning, repairing cracks, and conducting tuckpointing on damaged mortar joints.

Moreover, the bell tower shows signs of water retention, potentially due to damaged mortar joints. We recommend having this part of the facility assessed by a masonry restoration contractor to determine the best course of action.



Accumulation of organic material on brickwork

Bell tower shows signs of moisture retention mortar joint damage



Brickwork exhibits discoloration beneath siding

Discoloration of brickwork



Soil accumulation on CMU walls

Inadequate repair of mortar joints



Compromised mortar joints and cracked bricks

Crack in brick



Significant crack at northwest corner of Parish Hall

Stain and accumulated soil on brickwork

#### **Doors and Windows**

The windows in the Church Building at St. Matthew's showed signs of deterioration in the window frames and compromised glazing with visible cracking. Therefore, refurbishment is necessary, including the replacement of damaged framing, reglazing, and repainting as needed. Additionally, many windows in the Education Building displayed organic growth that requires cleaning, along with several seals in need of replacement.

Several doors were found to require cleaning and repainting, with one door showing significant deterioration at the bottom, necessitating replacement.



Deteriorating window frame

Damaged window seal



Organic growth on window frame

Sanctuary windows display compromised glazing



Compromised glazing putty

Replace damaged handset hardware



Replace deteriorated door

Clean and repaint door



Clean doors and repaint as necessary

Sand damaged area and repaint door

#### Siding and Trim

During the assessment, deficiencies were identified with the siding and wood trim on the St. Matthew's facilities. Resolving these issues entails cleaning accumulated soil from the siding, repainting areas with peeling paint, replacing the wood trim around the attic vent on the east wall of the Office Building, and repairing and repainting fascia in several areas around the facility. Another area of concern is the deteriorating fascia and accumulated organic material observed on the brickwork of the east face of the Church Building where the eaves meet with brick walls without the benefit of any type of drain to channel stormwater away from the walls.



Siding shows soil accumulation and peeling paint

Frame of vent is disintegrating



Incomplete repair requiring touch up paint

Worn and faded paint on fascia



Deterioration on fascia and organic growth on masonry due to lack of roof drain

Deterioration of facia possibly from overflowing gutter

#### **Other Deficiencies**

During the assessment, numerous issues were noted that, once addressed, will help restore and maintain the facility's appearance to a like-new condition. These tasks include regular cleaning of the ceiling and fans in the pavilion near the playground, ensuring step areas are free of organic growth to prevent slipping injuries, relocating or removing chairs and debris near building walls, replacing weatherproof covers on exterior outlets, replacing worn lumber on picnic tables, and clearing webs and nests from exterior ceiling areas and window frames.

Furthermore, rust was noticed on handrails, necessitating repairs. Minor instances of surface rust can be remedied by sanding the affected area, applying rust converter, and then repainting the handrails. However, deeper areas of rust will likely require cutting out and replacing with new material.



Regularly clean the ceiling and fans in pavilion

Clean organic material from steps



Remove debris and equipment from along building walls

Relocate chairs to interior storage location



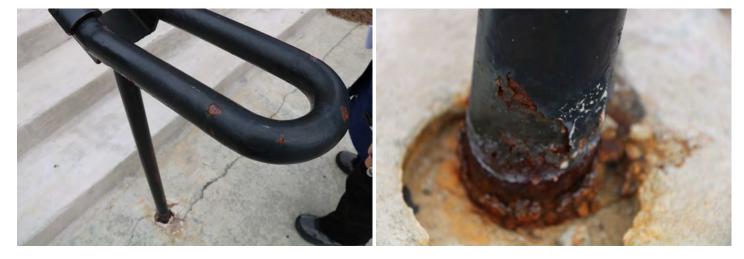
Ensure all exterior outlets have weatherproof covers

Replace worn lumber on picnic tables



Remove wasp/hornet nests from window frames

Clean webs from ceiling areas



Rust on handrails

Replace handrail portions with significant rust

### Landscaping

The landscaping at St. Matthew's is generally well-maintained, although a few areas could benefit from a thorough cleanup of debris and the trimming of bushes, trees, and shrubs to ensure a minimum distance of 36 inches from walls and roofs. These measures serve multiple purposes: improving building security, facilitating easier maintenance access, minimizing wear on masonry joints, deterring insect and rodent nesting, and ultimately enhancing the overall aesthetic appeal of the facilities.

Furthermore, discussions during the onsite visit revealed that the automated irrigation system requires repair. We recommend enlisting the services of a vendor experienced in sprinkler system installations to diagnose the issue and propose suitable repair solutions.

Furthermore, several areas were found to have inadequate drainage of stormwater away from the walls and foundations of the facilities. Addressing these concerns may involve cleaning out old underground drainage lines or installing new ones.



Remove lumber and landscape debris

Remove landscape debris piles



Trim tree branches back away from walls and roof areas

Trim bushes and shrubs back away from building walls



The area around HVAC units is free from vegetation

Trim vegetation along curb edge



Keep landscape trimmed along driveway for cleaner appearance

Cover exposed landscape fabric



Replace drain cover

Repair non-functioning irrigation system



Ensure storm drainage is routed away from buildings

Ensure storm water is directed away from foundations

### Parking

The parking lots at St. Matthew's are generally in good condition, aside from a few areas showing signs of alligatoring and pothole damage. We recommend repairing these sections and proceeding with sealcoating the lots, as well as repainting the parking stalls. Typically, sealcoating is recommended every 4 to 5 years, taking into account factors like weather conditions and traffic levels. Considering the winter weather conditions in the Snellville area and the volume of traffic on these lots, we suggest resealing every 5 years. However, with proper maintenance, it may be possible to extend this period by a few more years.

During the site visit, ADA parking stalls were observed in both parking areas. However, the sign in the south parking area is faded and nearly unreadable. Additionally, much of the painted identification in ADA stalls is fading and due for repainting. We recommend reviewing ADA parking stalls to ensure that each stall and accompanying signage is in compliance with ADA guidelines.

ADA parking signage must follow these five requirements:

- 1. Be clear and visible to motorists
- 2. The bottom of the sign must be at least five feet off the ground
- 3. Have the international symbol of accessibility
- 4. Cannot be obstructed by vehicles or any other objects
- 5. Van-accessible signs must be clearly marked with text or a symbol

More information on ADA Accessible Parking can be found here:

#### ADA Handicapped Parking Rules & Regulations for Signs



Clean cracks and fill with sealer

Remove vegetation from cracks and fill with sealer



Repair compromised pavement at curbing

Repair areas of alligatoring



Repair areas with potholes

Faded ADA sign and rusted post



Painted ADA stall identification is fading

Suggest aligning parking signs to the same height

### Flatwork

The sidewalks throughout the St. Matthew's campus are generally in good condition, with only minor deficiencies. However, it is recommended to address the existing cracks to prevent further damage and minimize the risk of trip and fall accidents. By taking prompt action on these maintenance tasks, you can ensure a safe environment for all individuals accessing the campus. Regular repairs and upkeep of the sidewalks will contribute to overall safety and accessibility of the facility, providing peace of mind to guests and promoting a welcoming atmosphere.



Clean ice melt reside to prevent spalling

Grind down uneven transitions



Clean out cracks and fill with self-leveling concrete sealer

Pressure wash patio and fill joints with polymeric paver sand



Pressure wash sidewalks to remove soil accumulation

Trim vegetation back from walkway and step edges

### Playgrounds

Although the playground equipment is generally in excellent condition, the fence requires repairs for safety and aesthetics. Additionally, the wooden bench is in poor condition, necessitating the replacement of the wood slats and repainting of the metal ends.



Damaged fencing along ground

Rust on fence and gate rails



Fence posts appear loose

Wooden bench needs refurbishment

# INTERIOR OBSERVATION

### Signage

St. Matthew's facilities are equipped with abundant and strategically positioned wayfinding signs, facilitating easy navigation for guests without the need for assistance. However, it was observed that an occupancy sign has broken glass in the frame, which we recommendation replacing as soon as possible.



### Sanctuary



Stained and discolored carpet

Accumulated soil appears as discoloration



Discoloration of carpet likely due to inadequate vacuuming

Incomplete wall repair



Wall damage in need of patching and painting



Stains on wall possibly from water intrusion

### **Parish Hall**

Multiple issues were identified in the Parish Hall, such as worn parquet flooring showing signs of wear and beyond its expected lifespan, scratches on wood wainscot needing touch-up, mismatched ceiling repairs, an incomplete wall repair, a door requiring cleaning and painting, and the need for regular cleaning of ceiling vents. Additionally, several notes were noticed taped to one door, and we recommend replacing them with more permanent signage.



Parquet flooring appears worn and dull

Scratches on wood wainscot



Mismatched ceiling repairs

Incomplete wall repair



Replace notes on door with permanent signage

Remove unused Command Strips



Dirty door with chipped paint

Regularly clean ceiling vents

### **Education Building**

Multiple deficiencies were identified in the Education Building, encompassing peeling paint on numerous door and relite frames, minor wall damage necessitating repair, classroom sink areas requiring deep cleaning and ensuring the secure mounting and caulking of backsplash panels, stained ceiling tiles needing replacement, dirty ceiling vents, and the need to relocate an art drying rack that might obstruct emergency egress from a classroom. Additionally, many cupboards throughout the classroom areas display broken laminate covering on the doors and drawer fronts, posing a potential hazard to both students and teachers.



Peeling paint on door and relite frames

Chipped paint



Incomplete wall repair

Chipped sheetrock



Incomplete wall repair

Dirty sink area and splash panel is coming loose from wall



Dirty sink area

Dirty ceiling vent and tiles



Ceiling tiles not firmly resting on grid

Stained ceiling tiles



Art drying rack may inhibit access to door

Damaged laminate on cupboard doors



Broken laminate on drawer and door

Broken laminate on cupboard doors

## **Office Building**

The Office area presented a few minor concerns, mainly regarding safety and cleanliness. These include addressing stained carpeting, cleaning ceiling vents, performing minor repairs on a nicked chair rail, touching up doors with scratches in the finish, and securely anchoring tall shelves and cabinets to prevent tipping accidents and potential injuries.



Stained carpet

Ceiling vent in need of cleaning



Nicked chair rail

Scratched finish on doors



Tall shelving should be firmly secured to the wall

Shelving over 4 feet tall should be secured to the wall

## Undercroft

The Undercroft of the St. Matthew's facility displayed several deficiencies, including the need for door cleaning and repair/replacement of a faulty closer, removal of worn tape and adhesive residue from the flooring, cleaning of ceiling vents, addressing peeling paint likely caused by water intrusion through the exterior wall, installation of missing handle and lock hardware on a door, and consistent cleaning of a drinking fountain and stairwell.

Additionally, a long extension cord was found stretched across the floor of the youth area, posing a trip hazard and potential fire hazard depending on its usage. We strongly recommend removing the extension cord, if possible, and utilizing the nearest outlet for electrical equipment.



Cleaning door closer oil from door

Remove worn tape and adhesive residue from flooring



Clean ceiling vents regularly

Blistered paint from possible water intrusion



Missing door handle and lock

Dirty drinking fountain



Clean stairway regularly

Extension cord across room is a trip hazard

## **Kitchen & Breakroom**

The assessment of the kitchen and breakroom yielded satisfactory results, but also revealed several cleanliness-related shortcomings. Specifically in the kitchen, the ice maker, vent hood, appliance exteriors, sink areas, and flooring require thorough deep cleaning. It is imperative to adhere to the manufacturer's instructions for regular cleaning of ice makers.

Furthermore, although a first aid kit was available in the kitchen, it contained expired and insufficient supplies for treating cuts and burns, which is a pressing concern requiring immediate attention. We strongly recommend installing prominently placed first aid kits in all campus kitchen and break areas that adhere to OSHA guidelines (ANSI Z308.1-2015 standard).



Clean exterior of ice maker

Clean ice machine to remove organic growth



Clean dust and grease from shelf above stove

Clean exterior of dishwasher



Clean grill top and surrounding areas

Clean exterior and replace broken handle



Clean exterior surfaces of stove and ovens

Vent hood in need of deep cleaning



Dirty sink area

Broken safety latch on knife drawer



Broken laminate on counter edge

Dirty grout and floor tile

### Restrooms

The current condition of the restrooms within the St. Matthew's facility has been assessed as satisfactory. However, it was observed the restrooms are not receiving adequate cleaning attention, particularly around toilet areas, along the base of walls, and near light switches. In order to address these concerns, we recommend adopting and appropriately utilizing a microfiber mop system, which can substantially enhance the cleanliness of your restrooms.

Additionally, it was noted that some of the restrooms my lack proper accessibility for individuals with physical limitations, particularly for those who require the use of a wheelchair. To establish a more inclusive and accessible restroom environment, it is imperative to conduct a thorough review of the restrooms and stalls to ensure there are no hindrances to access for individuals with physical impairments. ADA accessible stalls should be equipped with outward-opening doors and sufficient dimensions to enable easy movement of wheelchairs within the stall. Implementing these adjustments will foster an inclusive and inviting restroom space for individuals of all abilities.

Furthermore, several areas were identified where the vinyl cove base is detaching from the wall. This poses challenges in maintaining restroom cleanliness, as these areas can become breeding grounds for bacteria.



Reposition toilet and recaulk

Dirty flooring and base of toilet



Dirty base of toilet and flooring

Dirty grout and caulking



Dirty urinal

Dirty wainscot and base boards



Accumulation of soil on base boards

Dirty light switch and wainscott



Detached cove base

Stained ceiling tiles and dirty ceiling vents



Laminate edge of partition panel is loose

Toilet paper dispenser is coming loose from the wall



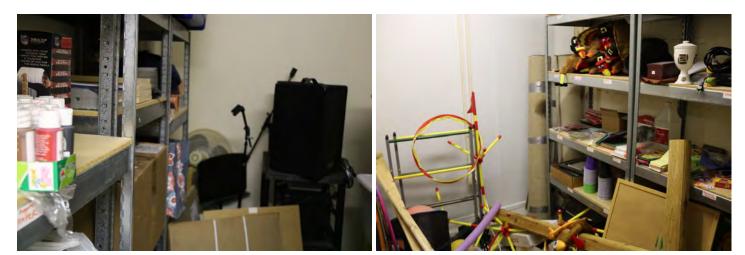
Missing roller on toilet paper dispenser

Cabinet may access for wheelchair users

#### Storage

Storage management can be a challenge for many churches, yet St. Matthew's benefits from a reasonable amount of dedicated storage space. However, the current utilization of this space isn't optimal. We advise assessing all storage zones across the campus, keeping only essential items, and considering donating or disposing of items that have remained unused for extended periods. This action will optimize storage areas and enhance accessibility to necessary items.







# MECHANICALS

Throughout the St. Matthew's facilities, a total of 27 HVAC units were identified, comprising 13 outdoor condenser units and 14 indoor evaporator and furnace units. Among these, nine units have reached or surpassed their expected service life, and an additional 15 units will reach the end of their life cycle within the next five years. The remaining three units are anticipated to reach the end of their lifespan in 10 to 15 years. While each unit is expected to have a lifespan of at least 15 years with proper maintenance, it is prudent to plan for future replacement costs now. Regular maintenance and inspections for all HVAC units are strongly recommended to ensure their continued functionality. Additionally, it is crucial to maintain clear surroundings around outdoor HVAC units, keeping them free from debris and vegetation for optimal performance.

The Mechanical room was inspected and found to be clean and unobstructed. It was encouraging to see signage indicating that Mechanical Rooms should not be used for storage.

Furthermore, two concerns were raised regarding electrical panels located in publicly accessible areas. We recommend keeping the doors of these panels locked to deter unauthorized access. Additionally, we suggest repositioning the freezer in the kitchen to maintain access to the panel in case of emergencies.





## OSHA, GENERAL SAFETY

The site visit revealed several safety concerns that we believe should be addressed as soon as possible to prevent injury and reduce liability. Many of these items would typically be managed by maintenance personnel or volunteers.

**Emergency Evacuation** - Although the presence of Emergency Evacuation maps within the facility was noted, we strongly advise the installation of such maps in all classroom and gathering spaces. These maps should be positioned in a manner that ensures their readability and depicts the exit path from each room or area where they are displayed. Furthermore, it is imperative to refrain from storing items in emergency exits routes, as these obstructions could hinder evacuation procedures during emergency situations.

**Emergency Exit Lighting and Emergency Spot Lighting -** During the on-site evaluation, emergency fixtures underwent random testing to assess the backup battery's capability to illuminate the fixture when the primary power supply was disconnected. Several of the tested fixtures did not pass this assessment. It is imperative to perform monthly checks on emergency fixtures to ensure they remain illuminated for a minimum of 30 seconds. Furthermore, an annual test should be carried out to confirm the fixtures can provide illumination for 90 minutes, simulating a extended emergency scenario.

Maintaining a comprehensive log of both monthly and annual test results is recommended. This can be easily tracked in your eSPACE account by including these tasks as part of your preventative maintenance schedules. This practice helps in monitoring testing procedures and could potentially lead to reduced insurance costs, depending on your insurance provider, when presenting the testing records. In cases where backup batteries fail, we strongly recommend promptly replacing them to maintain the effectiveness of the emergency lighting system.

Life Safety Equipment - A first aid kit was observed in the facility, however it contained expired supplies. To ensure preparedness, we recommend replenishing all first aid kits with supplies that adhere to OSHA guidelines, specifically following the ANSI Z308.1-2015 standard for first aid supplies.

<u>AED equipment</u> was inspected and all pads and batteries were observed to be within their expected life cycle. All pads and AED batteries should be inspected regularly and replaced as they reach the expiration dates printed on their labels.

<u>Fire extinguishers</u> throughout the facility were randomly checked to ensure compliance with regular testing and documentation requirements. It is commendable that annual testing and documentation have been maintained. However, it is important to note that monthly inspections and documentation are also necessary. These inspections can be conducted by staff or volunteers rather than a Fire Safety service company. The backside of each annual testing tag is specifically designed to allow for the documentation of monthly inspections. We recommend establishing monthly and annual fire extinguisher inspections as part of a preventative maintenance task in your eSPACE Work Order and Asset Management System.

Additional information on fire extinguisher inspection can be found here:

Guide to Fire Extinguisher Inspection, Testing and Maintenance

**General Safety** - Tall shelving (over four feet tall) was observed in several areas throughout the facilities that did not appear to be securely anchored to the wall. To ensure safety and prevent potential tip-over injuries, it is essential to properly fasten tall furnishings such as cabinets and shelves to the wall.

**Chemical Storage and Safety Data Sheets** - No Safety Data Sheets (SDS) were observed on campus during the inspection. SDSs contain crucial details about chemical properties, hazards, and safety measures for handling, storing, and transporting each chemical. As per OSHA regulations, employers must ensure immediate accessibility of SDSs to employees for all hazardous chemicals present in their workplace.

Employers have several options to comply with this requirement. They can maintain SDSs in a binder or digitally on computers, ensuring easy access for employees within their work area. Having a contingency plan for emergencies or power failures to swiftly access SDSs is crucial. To ensure compliance, employers may designate specific individuals to procure and manage SDSs. If an SDS for a certain chemical is unavailable, employers should promptly contact the manufacturer to acquire it.



Orientation of evacuation maps may cause confusion

Emergency exit is obstructed



Fire pull station is obstructed

Emergency Exit light with failed back-up battery



Expired first aid supplies (10/2019)

Current Annual Certification tag



Incomplete monthly inspection log

ANSUL fire suppression last inspected in 2012



Ensure that cords for blinds are out of reach of children

Improper use of extension cord and power strips

## CUSTODIAL OPPORTUNITIES

The condition of custodial closets serves as a reliable indicator of the overall cleaning standards in a facility. Upon observation, the custodial closets at St. Matthew's displayed inconsistencies in terms of cleanliness and organization. While the facilities may initially appear clean and well-maintained, closer examination reveals areas that could benefit from improvement.

It appears that string mops have been frequently used as cleaning tools throughout the facility. However, it is important to note that string mops are not particularly effective in achieving the highest levels of cleanliness. To enhance overall cleaning efficiency, we recommend transitioning to a color-coded microfiber cleaning system, encompassing wiping cloths, flat mops, and dusters.

No Safety Data Sheets (SDS) were observed during the inspection and improper labeling and storage of chemicals was noted. Proper labeling and storage are critical to prevent adverse and hazardous reactions. It is essential to ensure that chemical bottles are labeled with manufacturer-provided labels containing all necessary cautions and safety information.

In certain areas, high dusting on partition tops, vent covers, and ceiling fans, appeared to be lacking. Moreover, detailed cleaning in corners and crevices seemed to be overlooked, suggesting a hurried approach to cleaning. To address these concerns, we strongly encourage investing in providing comprehensive training to ensure efficiency and thorough cleaning processes.

More information can be found here:

Welcome to Your Dirty Clean Building

ISSA Cleaning Standard PDF Download



Hang cleaning implements hung on wall

String mops should be replaced with microfiber



Improperly stored chemicals

Clean up utility sink and surrounding area

## **MAINTENANCE OPPORTUNITIES**

The committed team of volunteers at St. Matthew's effectively maintains the facilities in good repair. However, aligning the maintenance schedule with the necessary upkeep as your facility ages presents challenges. To streamline these efforts, we recommend creating ample workspace for volunteers away from public areas and establishing a well-organized storage area within the facility stocked with supplies and tools.

Moreover, we have initiated the setup of your eSPACE Work Order and Asset Management System account and encourage you to fully utilize the system for developing and tracking preventative maintenance schedules. This includes ensuring regular inspections of emergency exit lighting, first aid kits, AED equipment and pads, backflows, and water and fire sprinkler shut-off valves, which can be consistently conducted and documented. Additionally, the work order system should facilitate the submission of repair needs, tracking and documenting repairs, and equipment life cycle planning, providing a comprehensive approach to facility stewardship at St. Matthew's.





# DEFERRED MAINTENACE AND FACILITY OPERATIONS PLANNING

St. Matthew's Episcopal Church								
Preliminary Deferred Maintenance and Project Assessment - 2024								
То	tal Campus Potential Capital I	Reserve Needs	\$459,033	Over the next 1-15 years				
*NOTE: This is not an exhaustive or inclusive list. However, it is a reasonable guide as to the amount of monies that are needed to address deferred maintenance.								
Capital Group	ltem	Location	Potential in Current Year Dollars	Time Frame	Notes			
HVAC	Trane Z131X27BF	CU-11 Ground	\$2,250	Immediately	HVAC unit has exceeded expected service life.			
HVAC	American Standard 736548D4F	CU-6 Ground	\$6,000	Immediately	HVAC unit has exceeded expected service life.			
HVAC	American Standard 9113P992F	CU-8 Ground	\$6,000	Immediately	HVAC unit has exceeded expected service life.			
HVAC	Trane 9463YNS7G	HU-12 Interior	\$7,500	Immediately	HVAC unit has exceeded expected service life.			
HVAC	American Standard 09503LX17G	HU-10A Interior	\$7,500	Immediately	HVAC unit has exceeded expected service life.			
HVAC	American Standard 9434JE97G	HU-10B Interior	\$4,950	Immediately	HVAC unit has exceeded expected service life.			
HVAC	American Standard Unknown 1	HU-9A Interior	\$7,500	Immediately	HVAC unit has exceeded expected service life.			
HVAC	American Standard Unknown 2	HU-9B Interior	\$4,950	Immediately	HVAC unit has exceeded expected service life.			
HVAC	American Standard 9424XK91G	HU Interior	\$15,000	Immediately	HVAC unit has exceeded expected service life.			
Plumbing	Rheem RN 0197A11460	Interior	\$2,380	Immediately	Water heater unit has exceeded expected service life.			
Plumbing	Rheem HP 0904B18652	Interior	\$2,100	Immediately	Water heater unit has exceeded expected service life.			
Plumbing	RUUD RUNG 1099GG02520	Interior	\$7,125	Immediately	Water heater unit has exceeded expected service life.			
Parking	Repair and Reseal Parking Lot	Parking Lot (south)	\$79,311	Immediately	Reseal approximately 57161 square feet of asphalt in the parking lot.			
Parking	Restripe Parking Lot	Parking Lot (south)	\$691	Immediately	Repaint parking stalls, stripes, and directional markings.			

Capital Group	ltem	Location	Potential in Current Year Dollars	Time Frame	Notes
Parking	Repair and Reseal Parking Lot	Parking Lot (east)	\$29,935	Immediately	Reseal approximately 21575 square feet of asphalt in the parking lot.
Parking	Restripe Parking Lot	Parking Lot (east)	\$576	Immediately	Repaint parking stalls, stripes, and directional markings.
Interior Project	Flooring	Parish Hall	\$24,000	Immediately	Refinish or replace approximately 3200 square feet of wooden parquet flooring in the Parish Hall. Allowance of \$7.50 per square foot.
Exterior Project	Wall Cleaning	Parish Hall, Office Building, Education Building, and Storage Shed	\$3,482	Immediately	Clean soil, organic material, and stains from masonry on Parish Hall (west wall), Education Building (north wall), and Storage Shed, as well as siding on the Office Building (north wall).
Exterior Project	Masonry Restoration	Bell Tower, Parish Hall, and Education Building	\$32,067	Immediately	Clean, remove caulking from motor joints, tuckpoint, and repair cracks and damaged bricks.
Exterior Project	Siding, Trim, and Door Refurbishment	Church Building, Bell Tower, Office Building, and Parish Hall	\$3,050	Immediately	Replace damaged sections of fascia, clean and repaint fascia, gables, doors, and siding where necessary.
Exterior Project	Window Refurbishment	Church Building	\$6,270	Immediately	Reglaze windows in Church Building.
			\$252,637	Immediately	
HVAC	American Standard 1023328F3F	CU-13 Ground	\$3,000	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.
HVAC	American Standard 102840H23F	CU-12 Ground	\$4,500	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.
HVAC	Trane 102958CEYA	CU-10 Ground	\$9,000	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.
HVAC	Trane 102955TPYA	CU-9 Ground	\$9,000	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.
HVAC	American Standard 736548D4F	CU Ground	\$11,250	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.
HVAC	Carrier 2121 E19459	CU Ground	\$7,500	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.
HVAC	Trane 1025xxxxxx	HU-5A Interior	\$4,500	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.
HVAC	American Standard 10372U6R2F	HU-5B Interior	\$4,500	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.
HVAC	AllStyle Coil Company 10H04281S	Interior	\$7,500	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.
HVAC	American Standard 10323PEH4F	CU-3 Ground	\$3,750	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.

Capital Group	Item	Location	Potential in Current Year Dollars	Time Frame	Notes		
HVAC	Trane 10185XE05G	Interior	\$3,000	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.		
HVAC	Trane 101452GL5G	Interior	\$3,000	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.		
HVAC	Trane 10143WTK5G	Interior	\$3,000	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.		
HVAC	Trane Unknown 3	Interior	\$3,000	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.		
HVAC	Trane 1036207U5G	Interior	\$4,000	1-5 Years	HVAC unit is approaching end of expected service life in 1 to 5 years.		
				Needed in the next 1 to 5 years			
Parking	Reseal Parking Lot	Parking Lot (south)	\$25,722	5-10 Years	Reseal approximately 57161 square feet of asphalt		
Parking	Restripe Parking Lot	Parking Lot (south)	\$691	5-10 Years	Repaint parking stalls, stripes, and directional markings.		
Parking	Reseal Parking Lot	Parking Lot (east)	\$9,709	5-10 Years	Reseal approximately 21575 square feet of asphalt		
Parking	Restripe Parking Lot	Parking Lot (east)	\$576	5-10 Years	Repaint parking stalls, stripes, and directional markings.		
				Needed in the next 5 to 10 years			
HVAC	Carrier 2121 E19459	CU Ground	\$7,500	10-15 Years	HVAC unit is approaching end of expected service life in 10 to 15 years.		
HVAC	Trane 20512397TA	CU-1 Ground	\$22,500	10-15 Years	HVAC unit is approaching end of expected service life in 10 to 15 years.		
HVAC	Trane 21071585TA	CU-2 Ground	\$22,500	10-15 Years	HVAC unit is approaching end of expected service life in 10 to 15 years.		
Parking	Reseal Parking Lot	Parking Lot (south)	\$25,722	10-15 Years	Reseal approximately 57161 square feet of asphalt		
Parking	Restripe Parking Lot	Parking Lot (south)	\$691	10-15 Years	Repaint parking stalls, stripes, and directional markings.		
Parking	Reseal Parking Lot	Parking Lot (east)	\$9,709	10-15 Years	Reseal approximately 21575 square feet of asphalt		
Parking	Restripe Parking Lot	Parking Lot (east)	\$576	10-15 Years	Repaint parking stalls, stripes, and directional markings.		
				Prepare to have this amount in a Capital Reserve Account in ten to fifteen years			
F	Potential Capital Reserve Needs			Over the next fifteen years			
	*NOTE: This is not an exhaustive or inclusive list. However, it is a reasonable guide as to the amount of monies that are needed to address deferred maintenance.						

# **NEXT STEPS**

Collecting information holds no value unless it is followed by a course of action. We strongly encourage you to carefully reflect on the provided information and prayerfully devise a plan of action to enhance the entrusted responsibilities.

As you absorb the assessment, we recommend giving thoughtful consideration to the underlying purpose of your ministry and envisioning where you aspire to be in the future. This "Fresh Eyes" perspective on your campus will ideally unveil areas where positive changes can be made to benefit all who enter.

We are grateful for the opportunity to carry out this facility condition assessment for St. Matthew's Episcopal Church. Our intention is for this information to serve as a valuable resource as you continue to care for the congregation's property at St. Matthew's. If you have any questions, require further clarification, or are interested in exploring the array of resources Smart Church Solutions offers to support your facility stewardship, please take a look at the resource section at the back of this report or feel free to reach out to us. We are here to assist you.

Sincerely.

Patrick Hart, CCFM Facility Stewardship Specialist

# **GLOSSARY OF COMMON TERMS**

#### AED

An automated external defibrillator is a portable electronic device that can treat through defibrillation, the application of electricity that stops the arrhythmia, allowing the heart to reestablish an effective rhythm.

#### AHU

Air Handling Unit - is the composition of elements mounted in large, accessible box-shaped modules, which house the appropriate ventilation requirements for purifying, air-conditioning, or renewing the indoor air in a building or premise.

#### Alligatoring

Also called alligator cracking and perhaps misleadingly fatigue cracking, it is a common type of distress in asphalt pavement.

#### Asbestos

Any of several minerals (such as chrysotile) that readily separate into long flexible fibers, that cause asbestosis and have been implicated as causes of certain cancers, and that have been used especially formerly as fireproof insulating materials.

#### Backflow preventer

It is a device used to protect potable water supplies from contamination or pollution due to the backflow of water.

#### BAS

Building Automation System - a computer-based control system installed in buildings that control and monitors the building's mechanical and electrical equipment such as ventilation, lighting, power systems, fire systems, and the like.

#### Caulking

The material used to seal small gaps between building materials.

#### CMU

Concrete Masonry Unit - These are often called "concrete blocks" or "Cinder blocks".

#### **Deferred Maintenance**

The practice of postponing maintenance activities such as repairs on both real property (i.e., infrastructure) and personal property (i.e., machinery) to save costs, meet budget funding levels, or realign available budget monies.

#### Efflorescence

It is the migration of a salt to the surface of a porous material (i.e., Brick, concrete, and CMU), where it forms a visible coating. The process involves the dissolving of an internally held salt in water or occasionally in another solvent. The water (or another solvent), with the salt contained in the solution, migrates to the surface, then evaporates, leaving a coating of the salt.

#### Façade

The vertical presentation of a facility or space.

#### Fascia

It is a visible vertical frieze or band under a roof edge that forms the outer surface of a cornice.

#### HEPA

High-efficiency particulate air is an efficiency standard of air filters.

#### HVAC

Heating, Ventilation, Air Conditioning

#### Incandescent

It is an electric light with a heated wire filament that then glows.

#### Infrared Images

It is a technology to measure the temperature of an object.

#### LVP/LVT

Luxury Vinyl Planks and Luxury Vinyl Tile are durable and affordable alternatives to hardwood flooring and other natural floorings.

#### LED

Light-Emitting Diode – This technology is used in many forms of lighting.

#### Life Safety

Any interior building element that is designed to protect and evacuate the building population in emergencies, including fires and earthquakes, and less critical events, such as power failures.

#### Lintel

A horizontal support of timber, stone, concrete, or steel across the top of a door or window.

#### Microfiber

It is a synthetic fiber finer than one denier or decitex/thread, having a diameter of less than ten micrometers.

#### Organic Buildup

Is the term for the visible deposit of mold, mildew, or another live staining present on either interior or exterior surfaces that can be diminished with a surfactant, water, and agitation.

#### <u>OSHA</u>

Occupational Safety and Health Administration is a significant regulatory agency of the United States Department of Labor that originally had federal visitorial powers to inspect and examine workplaces.

#### OSHA – Authority

• 1975.4(b)(4) - Non-profit and charitable organizations. The basic purpose of the Williams-Steiger Act is to improve working environments in the sense that they impair, or could impair, the lives and health of employees. Therefore, certain economic tests such as whether the employer's business is operated for the purpose of making a profit or has other economic ends, may not properly be used as tests for coverage of an employer's activity under the Williams- Steiger Act. To permit such economic tests ... is in disregard of the clear mandate of Congress to assure "every working man and woman in the Nation safe and healthful working conditions ...". Therefore, any charitable or non-profit organization which employs one or more employees is covered under the Williams-Steiger Act and is required to comply with its provisions and the regulations issued thereunder. ...

- 1975.4(c) Coverage of churches and special policy as to certain church activities
  - 1975.4(c)(1) Churches. Churches or religious organizations... are considered employers under the Act where they employ one or more persons in secular activities. As a matter of enforcement policy, the performance of, or participation in, religious services (as distinguished from secular or proprietary activities whether for charitable or religion-related purposes) will be regarded as not constituting employment under the Act. Any person, while performing religious services or participating in them in any degree is not regarded as an employer or employee under the Act, notwithstanding the fact that such person may be regarded as an employer or employee for other purposes for example, giving or receiving remuneration in connection with the performance of religious services.
  - 1975.4(c)(2) -Examples. Some examples of coverage of religious organizations as employers would be: ... and administrative, executive, and other office personnel employed by religious organizations. Some examples of noncoverage in the case of religious organizations would be: Clergymen while performing or participating in religious services; and other participants in religious services; namely, choir masters, organists, other musicians, choir members, ushers, and the like.

#### OSHA - Common Violations (NAICS Code 813110)

- 1. Hazardous Communication. 19101200
- 2. Respiratory Protection. 19103134
- 3. Ladders Safety and Inspection. 19100023
- 4. Bloodborne pathogens. 19101030
- 5. Duty to have fall protection and falling object protection. 19100028
- 6. Maintenance, safeguards, and operational features for exit routes. 19100037
- 7. Vehicle-mounted elevating and rotating work platforms. 19100067
- 8. Head protection. 19103135
- 9. Portable fire extinguishers. 19100157
- 10. General. 19100303
- 11. Aerial lifts. 19260453
- 12. Duty to have fall protection. 19260501
- 13. Asbestos 19261101
- 14. Elevator Inspection (NFPA and OSHA) (NFPA 13, NFPA 70, NFPA 72, NFPA 101)
- 15. Emergency Equipment Inspection (signs with battery backup, which require a 30-second monthly and 90-minute annual test.)

#### RTU

A Roof Top Unit is a packaged unit installed on the roof. These packaged units contain all air conditioning and heating components.

#### <u>Soffit</u>

Soffit is the material between the roof's eaves where the fascia and gutters are placed on the wall.

#### Single-Ply Roofing

The term is given to roofing types consisting of primarily a single ply of water-resistant material on the roof to prevent water intrusion. Types include:

- PVC (Poly Vinyl Chloride)
- EPDM (Ethylene Propylene Diene Monomer)
- TPO (Thermoplastic Polyolefin) TPE, (Thermoplastic Polyolefin Elastomer)
- PIB (Polyiso Butylene)

#### Urethane Sealant

Types of sealants mainly used in horizontal joints or non-sagging, vertical applications. These include Isolation joints, roofing, foundations, gutters, and expansion and control joints.

#### UV

(Ultraviolet) is a form of non-ionizing radiation emitted by the sun and artificial sources.

#### VCT

Vinyl Composition Tile.

#### Water infiltration

The flow of water from aboveground into the subsurface or buildings.

#### Window gasket

Lengths of rubber that lock into place to provide a secure seal between the stationary glass and a body panel.

## RESOURCES

- a. <u>Church Facility Management Solutions</u> Facebook Group Join hundreds of other "Facility Stewards" sharing ideas, asking questions, and striving to be the best steward of the facilities that have been entrusted to them.
- b. <u>eSPACE Facility Management Software</u> The most comprehensive Facility and Event Management suite of software designed with your church in mind.
- c. <u>Life Cycle Calculator</u> Nearly every component of your facilities will have to be replaced or significantly modified at some point during its effective life cycle. Do you have a plan to address the inevitable? The Life Cycle Calculator sets you on the right path to being the best steward of the facilities entrusted to you.
- d. <u>Church Facility Budgeting</u> eBook Where do you start when it comes to church facility budgeting? This question has risen to the top of many inquiries we receive at Smart Church Solutions. That's why founder Tim Cool wrote this eBook to provide you with specific steps and considerations for budgeting.
- e. <u>The Four Buckets of Church Facility Budgeting</u> eBook Operational budgeting is not rocket science, but it must be intentional. This eBook breaks down the Four "buckets" that need to be considered when developing your facility and operational budgets.
- f. <u>2020 Church Facility Operations Benchmarking Report</u> Smart Church Solutions performed a Church Facility Operations Benchmarking Assessment to evaluate how churches of comparable size and operational tempos perform. Data collection occurred through a survey sent nationally through multiple outlets. Once we qualified the data for accuracy and completeness, we analyzed the results.
- g. <u>Facility Stewardship Manual</u> This 275-page manual provides all the know-how and tools you need to be an intentional and proactive steward of your facility. Filled with facility checklists, best practices, templates, applicable real-life experiences, and examples, the intentional Facility Stewardship Manual will guide you and your team on how to efficiently and effectively manage your facility.
- h. <u>Preventive Maintenance Checklist</u> The art of preventive maintenance involves noticing small problems and fixing them before major ones develop. This "checklist" of items should be on every church's "radar" as a minimum baseline for maintaining their facility.
- i. <u>Capital Reserve Planning</u> Almost every component of your facilities will have to be replaced at some point. Do you have an action plan? INTENTIONAL organizations plan today for tomorrow's costs. That's why it's critical you establish a capital reserve account now.