

USG Sanctuary Ventilation Improvement Plan

10/15/21

The USG Building and Grounds (B&G) team of volunteers has been working diligently on improving ventilation in the building. With the potential for holding services indoors in the near future, the sanctuary ventilation is a high priority. This document outlines the current short and long term plans for improving sanctuary ventilation.

Short Term Plan

The short term mitigation plan includes the use of box fans with MERV-13 filters attached plus fans in the AC units. The box fans will be set up as either quad units with 4 filters attached or single filter fans with one filter attached. Four quad filter fans will be located in the transept or near the front of the sanctuary and four single filter fans will be either hung or situated on benches along the side aisles. One quad fan will be placed in the narthex. In addition, all four AC unit fans will be turned on low. CO2 measurements will be made with these fans in place, and if needed to increase air flow, an additional quad fan will be placed in the choir loft and/or the windows in the staircases going up to the choir loft can be opened.

Long Term Plan

From the results of a recent engineering study, the B&G team has concluded that it may be possible to renovate the heating system's four convectors with new fan motors that can pull in and warm outside air. With these convectors working, the air exchange rate will improve significantly, however, the air distribution may still need to be augmented with filter fans. The team is currently obtaining a cost estimate for this work. The earliest completion, assuming the team is able to move forward with this plan, is February 2022.