Before the building renovation and new organ project, First Presbyterian Church, Birmingham suffered from a common American acoustic defect; a too low reverberation period caused by the presence of sound absorbing carpets and wall panels. Further, music rendition was poor, due to the side oriented organ chambers, with sound trapping side passages adjoining the Chancel. The smooth, curved ceiling form also created sound “hot spots”, tonal focusing, and “echo” type effects.

Acoustic re-design features include all hard surface flooring, sound reflective and diffusing wall surface treatments, and coffered ceiling reflectors. Choir singers now have tiered risers in an ensemble “horse-shoe” format to facilitate tonal blend and projection. Chancel walls are angled and detailed to blend tone and direct reinforced musical sound toward the nave. All interior surfaces are hard and structurally dense to assure reinforcement of sound energy across the full frequency range.

The new Nichols & Simpson organ is encased at the front wall of the room, such that both choir and organ sing from the end of the long axis of the space.

Custom designed wind ducts were installed to deliver nave temperature make-up air to the organ blower, while preventing blower noise from being heard in the worship space.

The sound system includes line array speakers, selected for their ability to provide speech clarity in the room with a now generous reverberation period. The system also has full recording and playback capabilities.