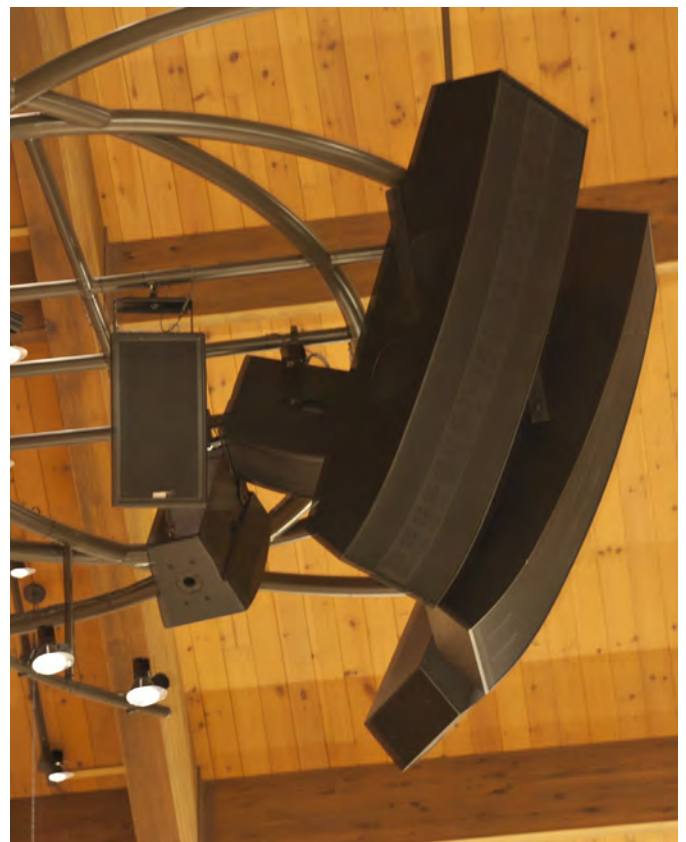


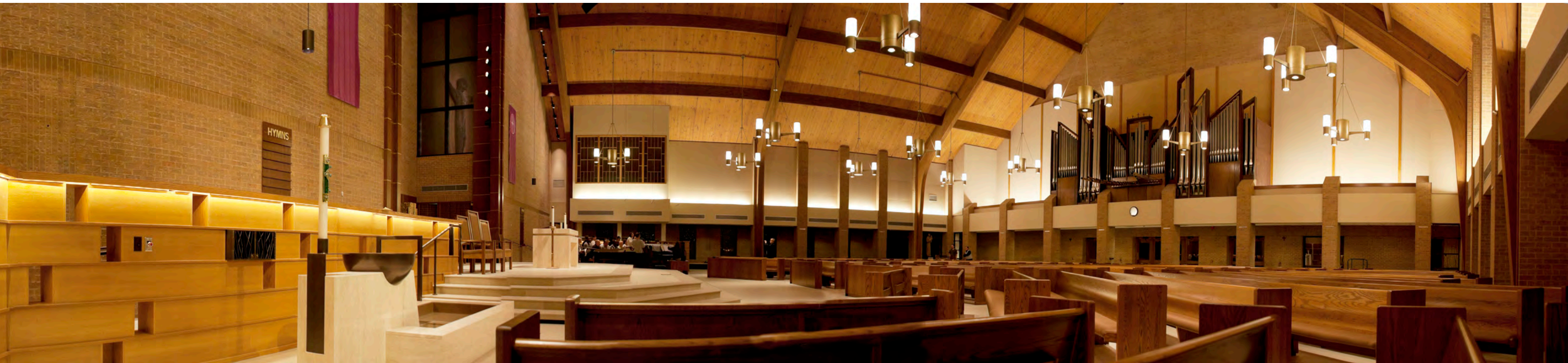
St. Patrick Catholic Church Renovation

Spoken word clarity and congregational participation in worship were two key elements of the St Patrick Church ReNEWal project. Originally built in 1981, the space's technology and acoustics were both in need of an update.

Using a combination of measurements of the existing space and other similar local spaces as well as computer modeling, acoustic recommendations were made to increase support of music and congregational participation.

Creating the acoustically livened space also presented a challenge - ensuring uniform coverage and clarity of the spoken word. Using properly positioned, directional speakers we were able to achieve the goal. The sound system combines simple touch screen control of microphones used for speaking with the full functionality of a digital mixing console for music.





The audio system was designed around two main requirements

- **Clarity of the spoken word** - the core microphones must be reliable and require no dedicated operator to function as well as be clearly understood throughout the room.
- **Versatility of the system** - the musicians need to use a system that is flexible and able to meet the demands of a dynamic music program and yet must be easy to use.

The spoken word and music system combine and are output through a single center cluster. The system focusses on covering areas where sound is needed and in keeping it off of reflective surfaces so as not to produce unwanted echoes. This created the ability to meet the acoustic goals of a more live space while maintaining the intelligibility and clarity that are required.



To address the spoken word requirements an auto mixing system was designed. It includes the wireless microphones for the priests and deacons, the Ambo and floor pockets distributed throughout the space. They are controlled through an intuitive touch screen interface. They are designed to be "set and forget" microphones that will work day in and day out without the need for an operator.

To provide flexibility for the parish's musicians the system was designed around a portable mixing cart containing a digital console. Floor pockets were distributed throughout the choir area which all connect to the console via a single network cable. This allows the cart to be connected near the musicians or placed in the back of the church for special events.



To transform the space, which was acoustically unresponsive for the desired experience, we performed extensive testing on site and developed a calibrated acoustic model of the space. This allowed us to demonstrate to the client how changing specific elements of the space would impact the acoustics. Our predicted results were compared to measured results from several other Catholic churches with which members of the church were familiar to further illustrate to the client how their new space would perform.

QUICK FACTS

Seat Count

800

Completion

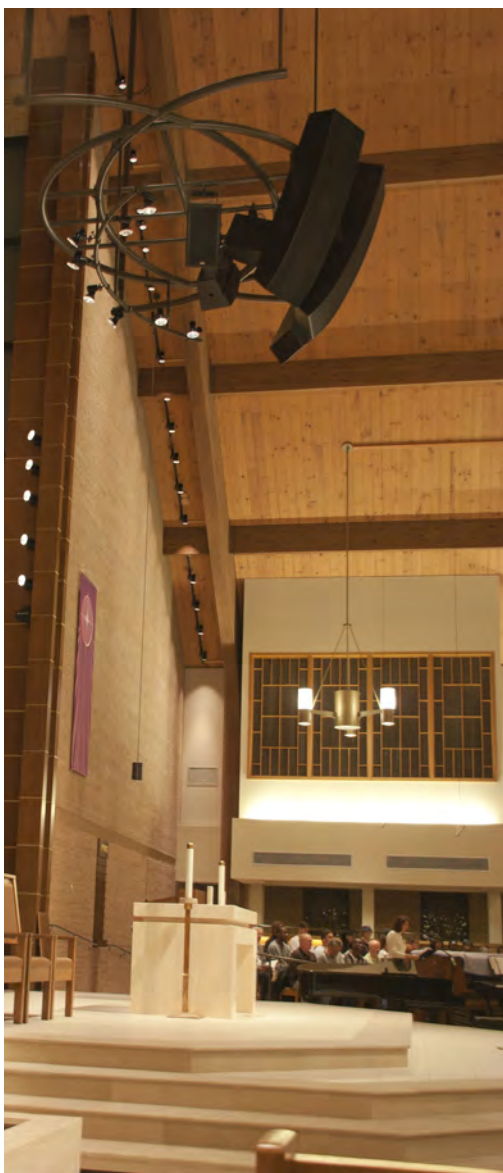
2011

Architect

Good Fulton & Farrell
Halff Associates

Design Consultants

Idibri



EQUIPMENT

Speaker System & Processing

1 Middle Atlantic SR-40-32
2 BSS Blu-160
1 BSS BLU-BOB
1 BSS BLU-BIB
2 BSS Blu-10
1 Netgear JFS516
2 Lab.Gruppen C48:4
1 Lab.Gruppen C28:
1 Lab.Gruppen C16:4
1 Lab.Gruppen C10:4X
1 Lab.Gruppen NLB-60E
2 Innovox HLA-20
1 HLA-20-218
1 EAW KF394
2 EAW KF364
2 JBL CBT-50LA
2 JBL Control 29
2 EAW SMS2124
1 Listen Technologies Assistive Listening System

Loose Inventory

2 EAW JF-8
2 Whirlwind SK55G12
2 Whirlwind SK515G12
2 Whirlwind SK525G12
1 Earthworks PM40 Piano Microphone System
2 Countryman DT10 Direct Box
1 Sennheiser MD421 Microphone
2 Shure SM81-LC Microphone
6 Shure Beta 87A Microphone
2 Shure Beta 57
4 Whirlwind 15' XLR Microphone Cables
4 Whirlwind 25' XLR Microphone Cables
2 Whirlwind 50' XLR Microphone Cables
4 Ultimate Support Live SB
2 Ultimate Support Live T
6 K&M Stands 211/1 Boom

Portable Mixing Cart

1 SoundCraft Compact Stagebox
1 SoundCraft Si Compact Cat5
1 SoundCraft SiCompact-24
1 SoundCraft Si Compact Cat5
1 Surgex SX1115 RT
1 Denon DN-620
1 Denon ND-F650R

Wireless Microphones

4 Sennheiser EM500-G3
1 Sennheiser ASA1/NT
2 Sennheiser A-2003-UHF
3 Sennheiser SK2000
3 Countryman E6
1 Sennheiser SKM500-935G3

Choir Microphones

2 Rode NT5 (Matched Pair)
1 Rode NT4 Stereo XY Microphone

Ambo and Cantor Mics

2 Earthworks FMR500