

## PROJECT PROFILE: CHURCH SANCTUARY



**PROJECT:** CHURCH of CORPUS CHRISTI  
Bismarck, North Dakota

**CLIENT:** Church of Corpus Christi

Since its new sanctuary opened, the Church has received mixed comments about the acoustics in the space. Many people complained because they **could not understand spoken words**, but most people felt that the room **enhanced music**. Big Sky Acoustics was hired to sort through the comments, explain the reason behind them, and **develop acoustical solutions** to satisfy the congregation for a wide variety of Sanctuary uses.

### BSA's SERVICES and SOLUTIONS:

- Met with Church officials, the building committee and musicians to **hear each group's concerns** and comments about the acoustics of the Sanctuary.
- **Gave a presentation** that described acoustical principles in simple terms so the Church could clearly understand why they were receiving the acoustical comments.
- Determined that the **reverberation time varied significantly based on the occupancy** of the Sanctuary, which affected how easily people could understand speech and how the sound system was used.
- Analyzed and predicted how **various acoustical treatments**, such as wall panels, ceiling treatments, pew cushions, and hanging banners, could be used **to stabilize the reverberation time**, and explained the **benefits and limitations** of each option.
- **Summarized the study in a clear and concise report** so that the Church could make an informed decision about striking a balance between spoken words and music during Masses.

