

## PROJECT PROFILE: SANCTUARY



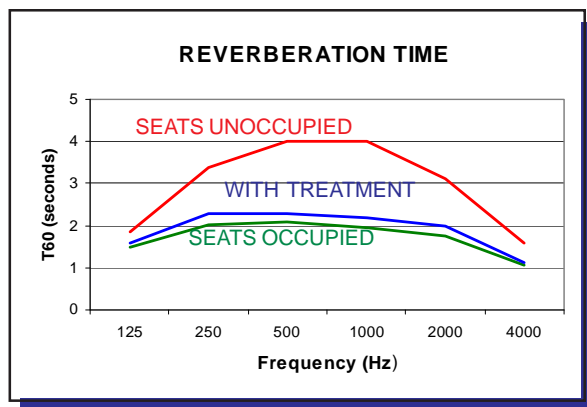
**PROJECT:** CHURCH of CORPUS CHRISTI  
Bismarck, North Dakota

Since the new Sanctuary opened, the Church 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 the acoustical differences within the space.
- 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.
- Explained to the Church and architect, the benefits and limitations of each acoustical option.



Summarized the room acoustics analysis 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 Mass.