

GRAND OLE OPRY

Acoustic study and recommendations to adjust the room acoustics of this iconic 4,400-seat hall in collaboration with upgraded sound reinforcement systems. The house was originally designed with acoustics for music without sound reinforcement. In adapting the hall for 21st Century functionality, study intent was to address concerns regarding excessive ambient noise levels and sound energy coming from the performers' monitors on stage.

In accommodating the new sound system designed to create stereo imaging throughout the house and provide exceptional vocal clarity, acousticians needed to assess existing acoustic elements and modify. Challenges included overcoming the steeply raked balcony which seats 2,000 and wraps more than 170 degrees around the stage. The ceiling is more than 30m above the main floor and is somewhat reflective, with more reflections created by angled brick walls flanking the rear of the balcony. Panels in the grid above the forestage directed sound from the stage into the audience areas. With the gradual change to fully amplified sound, these panels were directing stage monitor sound into the audience area, reducing intelligibility and compromising response of the sound system.

AD's assessment and recommendations led to room enhancements which included replacing these panels with acoustically absorptive materials. These enhancements achieved a stronger environment for the performer and audience experience.

CLIENT Grand Ole Opry

> LOCATION Nashville, TN

PROJECT TYPE Study / Renovation

COMPLETE Original Construction: 1974 Renovation Opening: 1995

> **SEAT COUNT** 4,400

> > SCOPE Acoustics