

PROJECT PROFILE: AUDITORIUM



PROJECT: RED LODGE CIVIC CENTER
Red Lodge, Montana

The Civic Center hosts a wide variety of events including high-school athletics, concerts, the Red Lodge Music Festival and the Festival of Nations. However, audiences had difficulty understanding spoken words and announcements, particularly during sporting events. Because of garbled player introductions and a negative reaction of visiting crowds during a high-school volleyball tournament, the School District was persuaded to address the acoustical issues of the space. The District contacted Big Sky Acoustics to design solutions that would improve speech intelligibility, without sacrificing the enhancement of musical performances.

BSA's SERVICES AND SOLUTIONS:

- Measured the reverberation time at seven locations throughout the auditorium.
- Determined an optimum reverberation time goal to balance the many uses of the space.
- Developed a computer model of the auditorium and verified the accuracy by comparing the predicted and field-measured results.
- Used the computer model to determine the effectiveness of and locations for various acoustical treatments, and estimate the improvement in acoustical characteristics.
- Provided specific requirements for adding sound-absorbing material to the walls and ceiling to control reflections.
- Provided durable wall and ceiling treatment options in order to withstand potential abuse when used as a gym.

By designing solutions that balance the diverse acoustical needs, BSA helped improve the functionality of the Civic Center, enabling more events to be held there.

