

PROJECT PROFILE: **MULTIPURPOSE ROOMS**



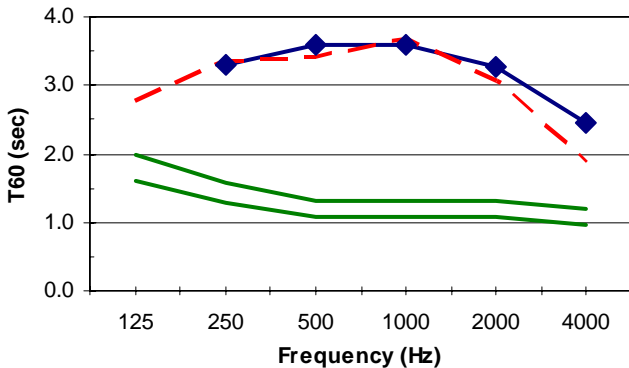
PROJECT: WEST SIDE and EAST SIDE
ELEMENTARY SCHOOLS
Worland, Wyoming

CLIENT: CTA Architects Engineers

The East Side Elementary multipurpose room had recently been renovated, but the teachers complained about excessive noise levels and difficulty understanding spoken words. The District wanted to improve the room acoustics of the East Side space, and avoid similar problems when renovating the West Side Elementary multipurpose room.

BSA's SERVICES AND SOLUTIONS:

- ◆ Completed a room acoustics analysis of the two existing multipurpose rooms.
- ◆ Visited the schools and conducted reverberation time measurements.
- ◆ Developed computer models to analyze the reverberation times and acoustical characteristics of each space, and verified the models using the field-measured data.
- ◆ Determined optimum reverberation time (T_{60}) goals to control overall noise levels, balance speech intelligibility and enhance music.
- ◆ Determined that treating the ceilings would be the most cost-effective method for reducing the reverberation times.
- ◆ In separate reports, provided the District with numerous options and manufacturers to treat the ceilings, and compared the effectiveness and cost of the acoustical treatments.



—◆— Measured (empty)
- - - Predicted (empty)
— T60 Goal

