

Waynesville High School HVAC Replacement

Waynesville, OH

Construction Completion: 2013
Size: 40,000 SF
Tri-Tech Services: MES Engineering



Project Description

Waynesville High School was originally built in 1967. In 1997, a new school was constructed adjacent to the original building, which included a complete heating and air conditioning system throughout the new facility. However, the tempering systems in the original 40,000 s.f. facility were not upgraded, resulting in a portion of the facility that was not adequately controlled for creature comfort.

Tri-Tech first completed a study to determine the feasibility of incorporating a new thermal conditioning system in this original building. The study was used to evaluate code compliancy issues, options for tempering systems, opinions of costs for various systems, and life cycle and operational costs associated with each type of system. Challenges were realized because the original construction elements restricted typical design approaches for duct layout, pipe routings, and equipment support.

After the completion of the study and evaluation of the construction constraints, the school board opted for a design incorporating multiple rooftop systems oriented to maximize zone distribution while allowing for control to minimize operational costs. Our design included all mechanical, electrical, and structural elements required for the new systems, and implementing all current code requirements.

Tri-Tech completed the design, and then functioned as the Construction Administrator throughout the installation. The project had to be completed in a very tight time constraint during the summer vacation period, as the school building had to be operational on the first day of the new school year.