TRI-TECH
Built On Integrity

1785 S. Metro Parkway
Centerville, OH 45459

"Established in 1977"

Dayton Masonic Center Retro-Commissioning

Dayton, OH

Commissioning Completion: 2010
Size: 180,000 SF

Project Description

Constructed in 1925, the Dayton Masonic Center is multi-level facility consisting of more than 180,000 square feet.

Due to the escalating fuel costs, the trustees requested an energy analysis of the overall facility. In addition, a preliminary design was requested to determine the feasibility and cost of implementing an air-conditioning service to the building. Tri-Tech provided retro-commissioning services in the facility, primarily utilizing mechanical systems designed and installed in 1954.

Tri-Tech performed field investigation of the existing mechanical and electrical systems to evaluate the systems and perform testing as required for the commissioning testing checklist.

Tri-Tech discovered that a substantial portion of the pneumatic actuators and controls throughout the building were inoperable. Tri-Tech identified other deficiencies in some of the exhaust systems. Overall control of the systems was managed through manual and personnel input, creating subjective and inefficient operations of the facility.

Tri-Tech published a final commissioning report listing the current condition and deficiencies of the existing mechanical systems. Tri-Tech proposed upgrades to the electrical system, a preliminary design on an energy efficient upgrade to the facility, a replacement design for an upgraded steam-boiler system, and preliminary dialogue about a full Building Management System (BMS).