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## MARYVILLE COMMUNITY CENTER



### OWNER:

Maryville Parks & Recreation

### MECHANICAL CONTRACTOR:

St. Joseph Heating & Cooling

40  
ACRE

35,224  
SQ FT FACILITY

Nestled in Nodaway County, Missouri, on the west edge of Northwest Missouri State University's (NWMSU) campus, is the newly renovated Maryville Community Center (MCC). Serving a population of nearly 11,000 residents, including students from NWMSU and Northwest Technical School, this community center provides a variety of programming and workout facilities for its surrounding neighbors. Initially opened in 2002, the MCC needed new, more reliable equipment to replace their outdated rooftop units that had hit the end of their life cycle. Maryville Parks & Recreation sought a quarter cent tax increase bond from the city for community center improvements, which passed. With a three-court gymnasium, an extensive weight room, and multiple aerobic studios designed for spin, yoga, and other fitness classes, the existing HVAC system was not providing enough cooling and ventilation to the areas. BCS knew indoor air quality and humidity controls were a top priority for the comfort and health of MCC patrons and provided an innovative solution.

Working closely with the MCC director of facilities, BCS was able to pinpoint several areas of improvement. Replacing the four rooftop units was mandatory. The 5th unit that serviced the gymnasium was a large pain point for the community center. BCS's application engineers confirmed the proper tonnage to the design conditions and reconfigured the unit in order to optimize the AAON equipment and ensure they would run much more efficiently. BCS reviewed the roof plan and curb adapter layouts to allow more accessibility and allow for easier serviceability to the units. Many Maryville Parks and Recreation staff members also hold office space within the MCC. BCS upgraded the controls system to optimize individualized zone comfort in those meeting and personal office areas. With the new Siemens building automation system, the building manager can now optimize energy usage by scheduling around building operations and times of high occupancy load. With demand control ventilation and proper scheduling, BCS was able to help reduce energy consumption for the owner while simultaneously maximizing the 25-year life expectancy of their new equipment, resulting in significant cost savings.

The improvements to the MCC HVAC system and building automation controls were valuable investments for the community center's future. Maryville Parks & Recreation board members and MCC guests can now expect reduced maintenance, increased longevity of equipment, the highest levels of energy efficiency, and maximization of comfort and health for the local community.