

## Energy Saving Case Study

City of Webster City, Fuller Hall  
Webster City, IA



In 2009, amidst global economic downturns, Webster City, Iowa, faced significant budgetary constraints. With many public agencies heavily reliant on tax revenues, there emerged a crucial need to restructure and streamline operational costs.

Amongst these agencies, Fuller Hall, an integral facility for community recreation in the city, identified an avenue that had the most immediate potential for savings: energy cost reduction. Their strategy encompassed overhauling HVAC systems, introducing sophisticated control programs, and incorporating remote monitoring.

A notable fraction of Fuller Hall's budget was consumed by the indoor swimming pool's operational costs. One of the primary culprits driving up these costs was evaporation, a notorious issue for both indoor and outdoor pools. Covering pools while not in operation prevents water loss, heat loss, and chemical loss through evaporation. While outdoor pools have long benefited from the usage of covers to mitigate these issues, the practice was not widespread amongst indoor facilities.

# Discover the ALTA Difference

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Due to the many benefits of pool covers, the Fuller Hall Team began to investigate the ways an indoor pool cover could benefit their facility. They discovered that using covers indoors reduced evaporation, decreased humidity, and lessened the need to replace indoor air with unconditioned outdoor air.

During this meticulous research, the team at Fuller Hall discovered a significant gap in the market. While indoor pool covers could drastically cut down on evaporation, consequently reducing humidity and ventilation costs, their adoption rate at indoor facilities was low. This reluctance was traced back to the cumbersome nature of conventional pool covers. Typically stored on large deck reels, these manually operated covers required significant manpower, taking between 30 to 60 minutes to deploy or retract.

In their quest for a solution, Fuller Hall's team discovered an innovation from Alta Enterprises—a specialized wall-mounted, automated pool cover system crafted exclusively for indoor aquatic facilities. With the capability to deploy or retract in just 2-3 minutes at the touch of a button, it promised both efficiency and consistency.

Recognizing its potential, Fuller Hall implemented the system in November 2010. Constructed from laminated foam and polyethylene, Alta's pool covers provide a vapor barrier while maximizing insulation. Notably, the welded seams of the covers eliminate water intrusion due to their lack of punctured holes, providing a marked improvement over traditional sewn pool covers. The wall-mounted stainless steel reel system ensures durability with minimal human intervention, greatly reducing staff time.

Due to its placement, the indoor pool cover system also allows for a clear pool deck. Furthermore, every element of the system, from electronics to motors, is safeguarded within waterproof enclosures, attesting to its design for the rigorous demands of indoor aquatic environments.



# Discover the

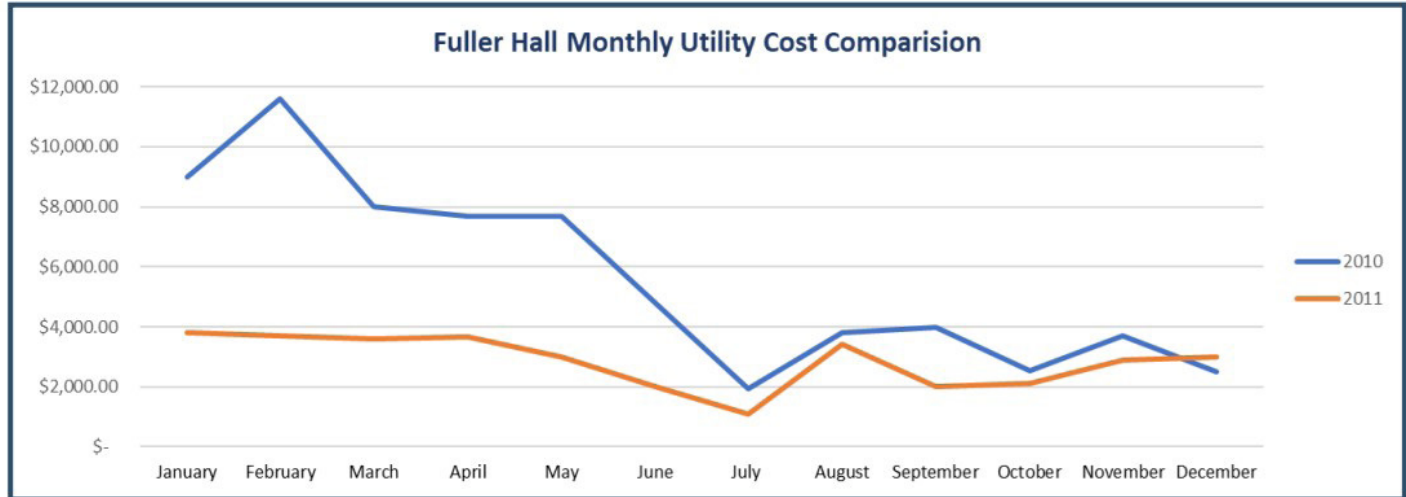


# ALTA

# Difference

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***“Since the installation, the staff has been tracking the monthly utility usage. After more than one year with the automated pool cover installed, the graph shown compares 2010 (without the cover) and 2011 (with the cover) utility costs. As you can see from the graph above, the pool cover and other energy ideas saved Webster City \$33,243.87 in just one full year (it’s actually 9 months since the pool is not in operation during the months of June, July, and August)! In addition to the energy savings (both electrical and water usage have been significantly reduced), the Webster City has other measurements of success: the pool has saved approximately \$1,000 by using fewer chemicals due to less evaporation; there is no more “motel smell” from chlorine when you walk in the front door, and; the equipment and ventilation system operates more efficiently due to the environment being less corrosive.”***

***Kent Harfst, Webster City, Assistant City Manager 2012***

On average the Alta System has saved Fuller Hall (Webster City) at least \$40,000 annually in energy and pool costs. Over the span of the past 10 years, the facility has performed routine maintenance, and in 2020 finally replaced their pool covers for the first time. This is a testament to the commitment of the Webster City maintenance staff.