Midway's New Consolidated Rental Car Center Relieves Terminal Congestion & Delivers Green Benefits

Chicago's Midway International Airport (MDW) created a new traffic pattern for travelers who rent vehicles with construction of a $55 million consolidated rental car center. The new facilities not only give the urban airport desperately needed space for current use and future development; they also add service options for customers and support the airport's agenda for long-term environmental improvements.

**factsfigures**

**Project:** Consolidated Rental Car Facility

**Location:** Midway Int'l Airport

**Owner:** Chicago Dept. of Aviation

**Cost:** $55 million

- Facilities: 5-story garage w/ 18,000 sq. ft. on ground level for customer service counters, rental car offices & public restrooms; quick-turn facility with 10 wash bays, 9 fueling islands, 18 fuel pumps & two 20,000-gallon underground fuel tanks

**Capacity:** 300 rentals, 300 returns/hour

**Project Architect/Designer:** The HOH Group

**General Contractor:** Walsh Construction Co.

**Precast Concrete Supplier:** Dukane Precast

**Benefits:** Airport gains 325 premium parking spaces in its main garage & terminal space for future passenger amenities.

The project, which has been in the planning stages for more than a decade, was completed this spring. The new center includes a 1,870-vehicle parking structure with customer service areas for eight rental car agencies and a new quick-turn operation, where rental vehicles are fueled, washed and cleaned.

"Our new facility greatly enhances the overall travel experience at Midway," says Chicago Department of Aviation
Commissioner Rosemarie S. Andolino. "It increases capacity for rental cars at Midway by more than 500% and also creates a more efficient and greener operating environment. Instead of multiple rental car company shuttles circulating the terminal roadways and driving around the community, there is now one bus operation between the terminal and the rental car center."

MDW sits in a high-traffic area on the city's densely populated southwest side, just minutes from downtown Chicago. Previously, rental car agencies were located in separate facilities in the terminal and on properties surrounding the airport. Travelers would either take agency-owned shuttles to offsite locations or pick up their vehicles in the terminal parking structure. As a result, there were numerous shuttles crisscrossing the surrounding neighborhood, adding to the area's traffic woes.

Relocating the rental car companies allowed MDW to gain valuable space in the terminal and add 325 premium parking spaces in the airport's main garage. The reclaimed terminal space can be used for future passenger amenities such as additional seating and concessions, notes Andolino. Now, customers take a five-minute ride to and from the new facility on shuttles owned and operated by the rental car companies.

The center includes two buildings: a five-level parking structure and an adjacent single-story quick-turn facility. The ground level of the garage includes 18,000 square feet of ground-level space for customer service areas and rental agency offices. The quick-turn facility contains 10 wash bays, nine fueling islands, 18 fuel pumps and two 20,000-gallon underground fuel tanks.

Together, the facilities are designed to handle 300 rentals and 300 returns per hour. They also form the "greenest" airport rental car center in the nation, say MDW officials.

**Sustainability was Key**

The quick-turn facility features several environmental elements, including a 17,000-square-foot vegetative green roof that captures storm water and helps improve air quality, wash bays that use recycled water, and solar panels on the fueling island canopy.

Shuttle buses are powered by bio-diesel fuel and travel on a dedicated airport road to and from the terminal; wind turbines generate power for the facility; an underground storm basin collects water for landscape irrigation; and the parking structure's white, reflective concrete roof helps reduce air conditioning in the summer.

Mark C. Miller, project architect with The HOH Group, notes that 90% of the project's materials were procured regionally - 54% from within a 250-mile radius. Bicycle racks and showers were also added to encourage rental car employees to bike to and from work.

"Going green is part of our culture at the Chicago Department of Aviation," Andolino explains. "Sustainability is not simply an 'add on' or afterthought; it is built into everything we do, and is equal to our other core missions, such as safety and security."

Based on ratings in the Chicago Department of Aviation's Sustainable Airport Manual, the project's design and construction received three and four green airplanes, respectively. According to Andolino, this is an impressive feat, given that earning even one green airplane is considered significant.

The Sustainable Airport Manual is a comprehensive guide created by the Chicago Department of Aviation to incorporate and track sustainability in various areas of airport operation, including planning, design and construction, as well as maintenance and concessions. The manual guides the implementation of sustainability initiatives at O'Hare and Midway, and is also used by several other airports around the world.

The new consolidated rental car center also incorporates many aspects of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program, notes HOH's Miller, and airport officials are seeking LEED certification for the project.

**More Space for More Service**
Enterprise Holdings, which represents Enterprise, Alamo and National car rental agencies, is enthusiastic about MDW's new facilities. "You cannot compare the two environments," says Barbara J. Mathey, the company's director of airport properties and relations. "We have more space, and it's a beautiful, vibrant facility."

Mathey is also keen about the center's emphasis on sustainability: "The ability to fuel and wash our cars next to the parking garage is reducing emissions, reducing traffic on the terminal roads and is making it more efficient to operate."

Joshua Blum, director of properties and concessions for Hertz, is similarly pleased with the new facilities. "Our old space was extremely undersized for the rental car market at Midway," Blum explains. "We've gotten space that's closer in size to what is needed, helps make it a more efficient operation and allows us to serve our customers better."

Customers, he adds, seem to like the "new way of doing business" at MDW. Previous space constraints often made it difficult to serve customers quickly during peak travel times. "Chicago has huge ebbs and flows in terms of passenger traffic," Blum explains. "Sometimes, it became an important balancing act. We're now able to implement customer service programs that we weren't able to implement before because we didn't have enough space. We now have our full package - our Gold Booth and our Gold Reader Boards - so customers can choose cars and upgrade on the fly, which just wasn't available to us under the old program at Midway."

Some Assembly Required

The parking structure, which was completed on time and on budget, is made of precast concrete. Individual pieces were designed by Dukane Precast and transported from its Chicago-area plants via semi trucks for assembly onsite.

"It was a pretty flawless project," reports Travis Parton, Dukane's director of business development. "What made the project go smooth was all of the upfront design and review that was done. That was the approach we used from day one, and it paid off."

Jeff Rodgers, project manager for Walsh Construction Co., notes that installing a stoplight at the site helped the work flow by easing traffic congestion into and out of the area. The site's overall small size, however, created other challenges. "Since it was a complete precast garage with over 2,200 pieces, we had to have significant space for the precast trucks to stage onsite," he explains. "But by doing this, we weren't able to start construction in some of the other areas until later, which was another challenge."

The project also came on the heels of the busiest year in MDW's 85-year history. In 2012, the airport served 19.5 million passengers. And despite the busy atmosphere, the project moved smoothly, notes Andolino.

"Construction of this facility was a tremendous success due to the great teamwork between the rental car companies, our design and construction contractors, elected officials in Chicago and what I like to call 'Team CDA'," Andolino says. "The end result is a fantastic new facility that truly benefits the airport community - especially the millions of travelers who fly through Chicago's busiest square mile: Midway International Airport."