

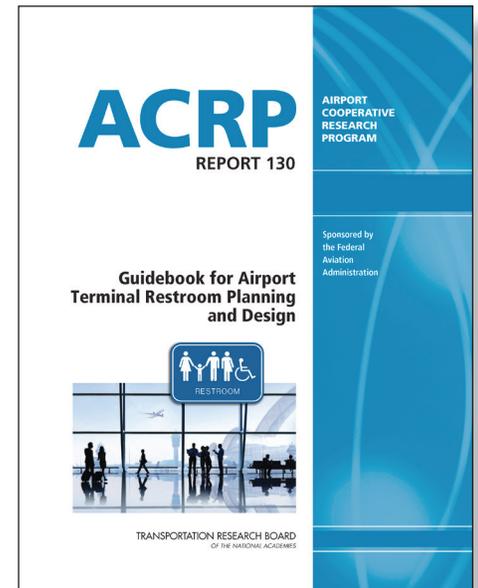
Improving Customer Experience at Airport Restroom Facilities

As passenger expectations and operational and maintenance needs change over time, airports are paying greater attention to restroom design when planning improvements to terminal facilities.

ACRP Report 130: Guidebook for Airport Terminal Restroom Planning and Design is a resource for airport staff as they work to provide quality restroom facilities for their customers. Every airport faces unique challenges and *ACRP Report 130* presents a variety of tools for airports and designers to use to meet those challenges. Rather than a comprehensive guide, the report aims to help airport practitioners navigate through creative hurdles and unforeseen issues.

The Austin–Bergstrom International Airport (ABIA) in spring 2013 began a terminal renovation project that included remodeling its restroom facilities. ABIA has partnered with consulting firms Sunland Group Inc., BLGY Architecture, and Corgan Associates on the restroom improvements since the project’s launch. The goals of the remodeling are twofold: to improve the convenience of the customers and the maintenance staff, while also improving visual aspects of the restrooms.

Rohini Kumarage, PMP, aviation project manager for the City of Austin, Texas, leads the renovation project and routinely references ACRP



research reports in her work. “ACRP has something on every topic we could think of,” says Kumarage. In her review of *ACRP Report 130*, published after ABIA completed some initial renovations, Kumarage found that many of the restroom remodeling plans aligned with the report’s guidance. Going forward, Kumarage continues to reference the report for additional ideas to ensure customer convenience in the terminal restrooms.

As outlined in *ACRP Report 130*, cleanliness and customer safety are two principal aspects in restroom design. To this end, ABIA followed the report’s recommendation to install touch-free automatic sensors to the toilets and sink faucets. A flip-down step at the sink allows children to wash their hands unassisted. The floor was replaced with a new terrazzo floor and base that is more durable and water resistant than the original ceramic tile and requires less maintenance. Hand dryers were installed next to the faucets



Above: Renovated terminal restroom at Austin–Bergstrom International Airport (ABIA). Airport staff referenced ACRP Report 130 to improve remodeling plans. The renovation features contemporary design materials including granite sink basins and countertops, wood veneer and stainless steel wall panels, and LED lighting strips. Photo courtesy of ABIA.

continued on page 2

Airport Terminal Restroom Planning and Design—continued

and above the sinks as recommended by the report to further protect against water damage to the floor.

Traffic flow is also an important aspect of restroom design. Based on recommendations from *ACRP Report 130*, ABIA added two new features to its remodeling plan: a grooming area and a full-length mirror. Both features offer convenience to customers in an area separate from the main stall area and free up space at the sinks. These features are typically placed along the exit path, but away from incoming and outgoing customers not using the grooming area or mirror.

Hooks for holding personal belongings are another new addition to the restrooms at ABIA. *ACRP Report 130* recommends a strong metal for secure mounting and placement either in the toilet stall or near the urinals and sinks. ABIA positioned hooks at the end of the sinks closest to the exits in order to help ensure that customers would not accidentally leave their personal belongings.

Restroom design also incorporated considerations for making maintenance easier. Heavy gauge metal stud framing was added to reinforce the walls and designed to provide adequate

spacing for personnel working in the plumbing chase. Due to the need for regular plumbing maintenance under the sinks, ABIA installed continuous stainless steel wainscoting to allow for full access, as well as removable metal ceiling panels and sliding panels for other high maintenance areas.

While restroom function is the highest priority when attending to customer convenience, aesthetics also play an important role in improving the customer experience. ABIA organized its redesign around clean modern lines and materials commonly used in contemporary interiors. Glass-encased wood veneer wall panels were installed between mirrors above the sinks to add warmth. Light paint colors were chosen to increase the perception of cleanliness. Long, narrow LED lighting strips were added to give the restrooms a modern look while also decreasing the amount of maintenance required. Six-foot tall toilet partitions, made from solid surface polyester/acrylic resin, were installed to increase customer privacy. The resin surface can be sanded when needed to remove graffiti and scratches.

The design for the sinks and countertops improved the aesthetics

Airport terminal restrooms are used by the full diversity of humanity in terms of mobility, age, gender, and culture. The further an airport goes to accommodate this spectrum, the more likely a traveler will choose one hub over another.

—ACRP Report 130:
Guidebook for Airport Terminal Restroom Planning and Design

as well as cleanliness and ease of maintenance. The sink basins have a unique washplane design, with two granite slabs forming a continuous trough with a center stainless steel slot drain. This keeps water away from the user and provides easy access for maintenance staff to clean the drain.

Lessons learned from the original restroom redesign and early renovation work prompted ABIA to make some adjustments to its remodeling plans. The updated redesign and remodeling plans also will be in line with the recommendations from *ACRP Report 130*. “ACRP offers such good reference materials; you can learn a lot from them,” says Kumarage. “It helped us think of practical ideas that will result in new restrooms that will meet customer needs and require less maintenance.”



Above: Remodeling improvements to the terminal restrooms at Austin–Bergstrom International Airport (ABIA) include solid surface sink basins with touch-free faucets and hand dryers (left photo), metal stall doors with full louvers (center photo), and updated wall treatments featuring locally available limestone and pecan wood materials. ABIA staff used *ACRP Report 130* to help guide their restroom redesign and remodeling plans. Photos courtesy of ABIA.

ACKNOWLEDGMENT OF SPONSORSHIP: This work was sponsored by the Federal Aviation Administration and was conducted in the Airport Cooperative Research Program, which is administered by the Transportation Research Board of the National Academies of Sciences, Engineering, and Medicine.

DISCLAIMER: The opinions and conclusions expressed or implied in ACRP publications are those of the research agencies. They are not necessarily those of the Transportation Research Board or the program sponsors.