

# Reevaluating Barriers to a Successful Airport

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Over the last decade, the impetus for airport terminal area improvements has generally focused on security enhancements for passenger and baggage screening, but another trend has quietly continued: adherence to the Americans with Disabilities Act (ADA). Since 1990, the nations' airports and transportation centers have been working to make their facilities compliant with evolving accessibility standards.

## TRENDS

The ADA applies to facilities in the private sector (places of public accommodation and commercial facilities) and to public state and local government facilities. The Americans with Disabilities Act Accessibility Guidelines (ADAAG) have now been woven into building codes throughout the United States by city, county and state governments. The Department of Justice (DOJ) is currently in the process of adopting updated ADAAG guidelines. Although no date is presently set for their completion, many of the new provisions are requirements and clarifications consistent with the Architectural Barriers Act Accessibility Standards (ABAAS).

Another convergent trend within the Architectural Design Community has been the embodiment of "Universal Design" principles in buildings, people spaces, furnishings, equipment and hardware. The Canadian Transportation Authority (CTA) has integrated Universal Design principles into its own accessibility design standards for airports and other public transportation facilities. The seven principles of Universal Design (equitable use, flexibility of use, simple and intuitive design, perceptible information, tolerance for error, low physical efforts, and size and space for approach and use) attempt to codify and give guidance to a wide range of design characteristics that humanize and give ease of use to our built environment. The goal is not to reach just the average user, but the widest range of users possible.

## MINIMUM STANDARDS

The evolution of accessibility standards and Universal Design principles into airport development represents consultants' continuing aware-

ness of the need for solutions that provide persons of all abilities the freedom to travel independently. However, new considerations given to design need to address issues of public need in a seamless, rational and cost-efficient manner. For example, ADA guidelines related to carpeted or padded flooring on ramps require such carpet to have a "level loop, textured loop, level cut pile, with a pile height of 1/2 inch maximum." While this helps pushing a wheelchair up a ramp, this same ramp is now also more suitable for passengers pushing strollers or wheeling their luggage.

Put another way, accessibility guidelines should be viewed as "minimum standards," much like building codes that were put in place to protect the health, safety and welfare of the public.

Much progress has been made in providing accessible airport and transportation facilities, but there is still more to be done. The following are just a few examples of contemporary accessibility challenges that are now in need of further review for solutions at our airports.

### Self-service technology

The ongoing reduction in airline employees, elimination of paper tickets, and purchasing transactions by personal computer and eventually cell phone will continue to drive self service technology with respect to the check-in functions at airports. However, there are few standards related to accessibility governing the design or installation of airport self-service kiosks. For instance, a wheelchair cannot typically roll under the kiosk keyboard so that its passenger can face the device. Similarly, a sight impaired patron cannot feel the distinction between the "keys" beneath a solid glass screen. Newer self-service kiosks may have a plug-in port for listening devices, but the tactile and maneuvering issues have yet to be addressed.

### Way finding for the visually or hearing impaired

This continues to present some of the more complex communication issues for airports. Traditionally, many airports have poor public

address systems, varied ceilings heights and a multitude of hard surfaces resulting in a cacophony of competing sounds for even the most physically adept passengers. Communication solutions for persons with disabilities will require a more comprehensive look at how architectural design, interior finishes, acoustics, public address systems, environmental graphics, and electronic displays can more effectively aid all passengers in their way-finding. At least one item, the requirement for "where public address systems are used to convey information to the public, the same or equivalent information must be provided in a visual format," is now being prepared for ABA standards.

## CONCLUSION

Advances in medicine and an aging population are permitting a wider range of persons with disabilities to travel. It is up to airport planners and designers to adapt appropriately. If full accessibility is a planning priority and Universal Design principles are goals from the outset, the implementation cost is often minimal. However, if ignored or done improperly, inadequate accessibility in airports can deteriorate into a legal or public relations quagmire. Therefore, it is up to airport planners and designers to reevaluate present and future accessibility barriers that will need to be resolved. Ironically, when accommodations are made for the "least able" users of our airports, everyone benefits. Facilities and equipment are more user-friendly, more intuitive to navigate, less strenuous to traverse and can be used by more travelers through our airports. Most importantly, when our airports are easier to use, people will want to use them more, and that is good for business.

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Further information on ADA updates is available on DOJ's website at [www.ada.gov](http://www.ada.gov), and ABA standards can be found on the US Access Board's website <http://www.access-board.gov/ada-aba/aba-standards-gsa.cfm>