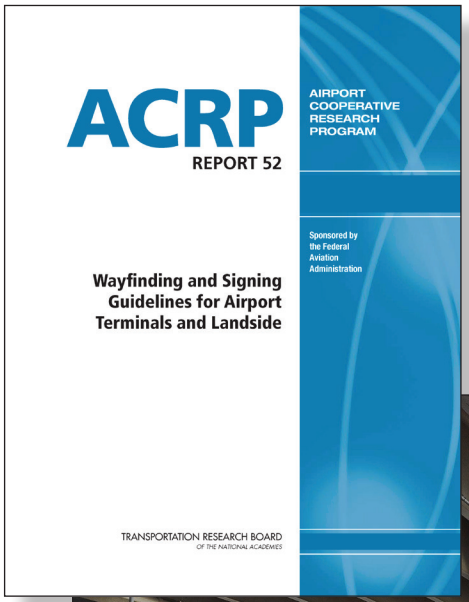
ACRP AIRPORT COOPERATIVE RESEARCH PROGRAM
IMPACTS on PRACTICE
September 2015
www.TRB.org/ACRP

Wayfinding and Signing Guidelines for Airports

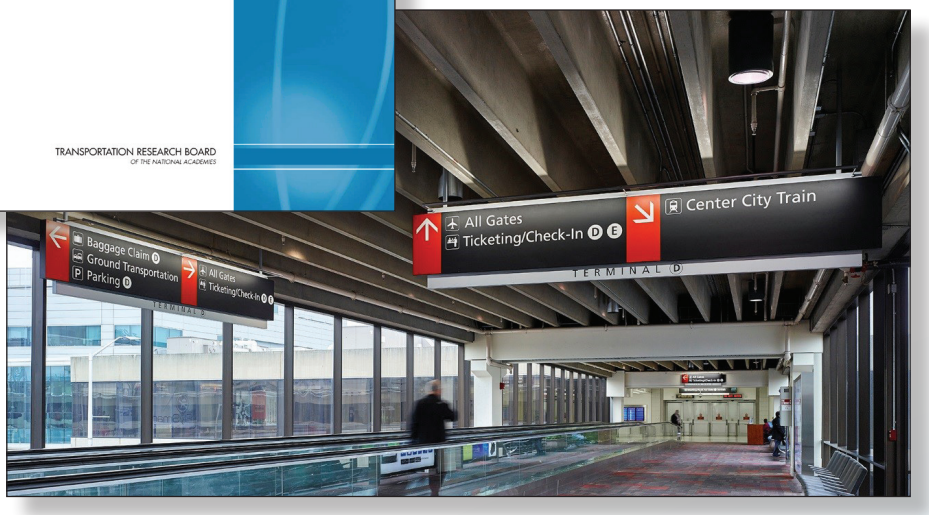
For most travelers, finding one's way to, from, and around an airport is a self-guided journey. This journey can be quite complex and sometimes confusing, particularly in large and unfamiliar airports. An airport's size, the variety of its service areas (gates, restrooms, baggage claim, car rental stations, etc.), the level of pedestrian congestion within a terminal, and the level of vehicular congestion outside a terminal all contribute to complex navigational challenges. It is essential for airports of all sizes to help ensure that customers are able to navigate the airport environment easily, safely, and confidently.



Wayfinding is a key element of an airport's overall customer service perspective. Research findings from 2007 (de Barros et al.) identified wayfinding as the fourth most significant variable among 21 customer service variables for connecting passengers, while research conducted in 2008 (Correia et al.) identified wayfinding as the third highest ranked among 10 levels of service variables. These research findings—and intuition—tell us that the more time and energy customers invest in finding their way to and around an airport, the less satisfied they are with the airport. Accordingly, effective wayfinding for airports is mission critical.

ACRP Report 52: Wayfinding and Signing Guidelines for Airport Terminals and Landside helps airports fulfill their mission by providing airport operators with the tools necessary to help passengers find their way in and around an airport.

The geography and logistics of each airport can vary greatly so the wayfinding solutions for each airport will also vary. In developing the report, documenting a solution for every conceivable wayfinding scenario was not practical. Therefore, *ACRP Report 52* focuses on providing airports with the tools for developing a wayfinding strategy. An important feature of the guidebook goes beyond what to do by adding an explanation of why these best practices and principles work and how to effectively apply them to meet unique wayfinding conditions and needs.



Above: New sign system design at Philadelphia International Airport (PHL) based on best practices from ACRP Report 52. *The new system features high contrast and legibility, even illumination in all conditions, and an arrow, symbol, and copy grid for consistent messaging. Image courtesy of PHL.*

Consider Philadelphia International Airport (PHL). In 2012, the airport initiated a major sign modernization project to help better serve the 30 million passengers who annually travel through the facility. The multi-million dollar project was based on the 3Cs of wayfinding as outlined in *ACRP Report 52*: continuity, consistency, and connectivity.

- Continuity—PHL wanted the wayfinding system to be the common thread providing continuity in a diverse architectural environment as passengers navigate from one space to another.
- Consistency—PHL viewed wayfinding as an information dissemination initiative and an opportunity to consistently and clearly communicate information that can be used throughout the passenger's journey.
- Connectivity—PHL needed their wayfinding system to deliver the right message at the right location at the right time.

The most significant element of the PHL project was improved signage. The airport established a new standard for signs—based on *ACRP Report 52* guidance—which included such features as increased lettering size, revised placement, and improved lighting. With new standards established, the airport proceeded to replace approximately 2,000 old signs

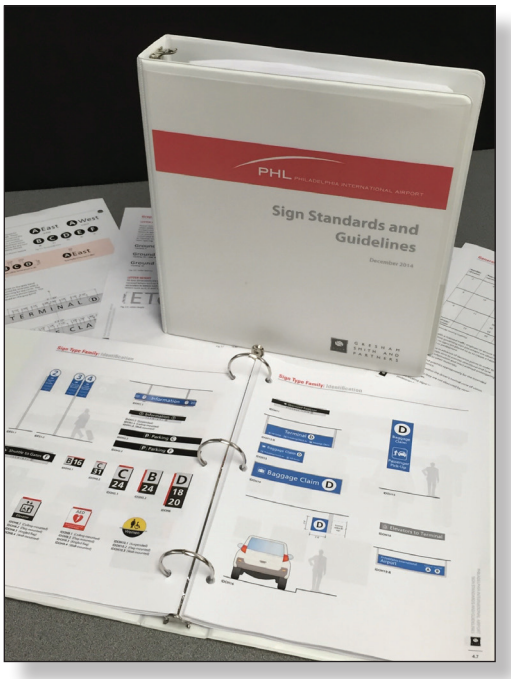
continued on page 2

and add approximately 3,000 new signs throughout the facility.

PHL had one somewhat unique wayfinding issue—arriving passengers must cross the street to claim their luggage. Baggage claim areas at PHL are located on the opposite side of the airport's main access roads and rail corridor from its terminal buildings, which presented the airport with a non-intuitive wayfinding challenge. Utilizing guidance and recommendations from *ACRP Report 52*, PHL officials implemented a series of projects that now make it easier and less confusing for passengers to journey from the arrival gate to baggage claim.

Airport officials in Ft. Lauderdale, Florida, have challenges similar to those addressed in Philadelphia.

Marc Gambrill, director of Capital Improvement Projects for the Broward County Aviation Department, has been affiliated with the Fort Lauderdale-Hollywood International Airport (FLL) for nearly a decade and is excited about the terminal modernization and wayfinding initiatives currently underway at FLL. "The continued growth of passenger traffic at FLL has created significant wayfinding challenges for us. We have over 5,000 signs at FLL—most of which are outdated and in need of enhancement—and we want to make sure our signs are communicating the information needed by our customers," said Gambrill.



Above: Based on ACRP Report 52 *guidance, Philadelphia International Airport (PHL) developed well-documented Sign Standards and Guidelines as an essential element for maintaining a high level of consistency with the new airport wayfinding program and to perpetuate the integrity of the sign system. Image courtesy of PHL.*

In 2012, officials at FLL engaged Gresham, Smith and Partners—the authors of *ACRP Report 52*—to undertake a comprehensive wayfinding initiative for the airport. Of particular importance to the airport was the need for signage consistency among the airport's three domestic and one international terminal. Utilizing guidance from *ACRP Report 52*, Gambrill and his FLL colleagues recently began implementation of a multi-million-dollar wayfinding project in their terminals.

Airports outside the United States are also using the guidance afforded in *ACRP Report 52*. Changi Airport in Singapore is one of the largest commercial hubs in Southeast Asia and it is also the only airport in Singapore. There are no domestic flights; all passengers are traveling internationally, which presents unique passenger processing and circulation wayfinding challenges. Officials from Changi Airport recently engaged the authors of *ACRP Report 52* to develop a systematic approach to a more positive wayfinding experience for the airport's annual 53 million passengers.

Whether the emphasis is on roadways, parking facilities, ground transportation or the terminal, *ACRP Report 52* is THE single resource for airports to review and follow in order to effectively and efficiently develop their airport wayfinding plans and implement their wayfinding projects.

ACRP Report 52 provides an up-to-date single resource for airport operators to consult as they review, update, enhance, or develop their airport wayfinding and signing plan. The guidelines focus on four areas of the airport: (1) roadways—both on-airport, and off-airport access roads; (2) parking; (3) curbside and ground transportation; and (4) terminal. In addition, the guidelines discuss developing a wayfinding strategy; the use of technology and visual displays; and color, fonts, and sizes.

References:

- De Barros, A.G., Somasundaraswaran, A.K. & Wirasinghe, S.C. (2007) *Evaluation of level of service at airports for transfer passengers*. Journal of Air Transport Management Vol. 13 No. 5, pp. 293-298.
- Correia, A.R., Wirasinghe S. and De Barros, A.G. (2008), *''Overall level of service measures for airport passenger terminals''*, Transportation Research Part A: Policy and Practice, Vol. 42 No. 2, pp. 330-346.

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.