1. Evaluation of roadway guide signs at Pearson International Airport in Toronto, Canada

Smahel, Thomas (1); Smiley, Alison (1)

Source: Transportation Research Record, n 2185, p 63-70, December 1, 2010; ISSN: 0361-1981; DOI: 10.3141/2185-09; Publisher: National Research Council

Author affiliation: (1) Human Factors North Inc., 174 Spadina Avenue, Toronto, ON M5T 2C2, Canada

Abstract: A new terminal building resulting in the expansion of the road network was built at Pearson International Airport in Toronto, Canada. A laboratory study was carried out to assess the effectiveness of the proposed guide signs. Participants’ decision times and the accuracy of the lane choices selected to reach a provided destination were measured as they responded to a sequence of road signs guiding them into and out of the airport presented on a desktop computer. The key results were as follows: participants showed high response accuracies and fast response times for signs for airport entry, the split between terminals, and the split between arrivals and departures; signs listing the airport terminals for nine airlines on each sign were associated with excessive response times; the split to parking at the arrivals-departures parking decision point was misunderstood by one-third to one-half of drivers, who assumed that they could continue to the curbside, expecting to find parking there; and the current widely used car rental pictogram was poorly understood, and a new alternative design was preferred by participants. (6 refs)

Main heading: Traffic signs

Controlled terms: Airports - Automobiles - Distributed computer systems - Motor transportation - Roads and streets

Uncontrolled terms: Airport terminals - Alternative designs - Car rental - Decision points - Desktop computer - Fast response - Guide signs - High response - International airport - Laboratory studies - Response time - Road network - Road signs - Terminal buildings - Toronto, Canada

Classification Code: 406 Highway Engineering - 406.2 Roads and Streets - 431.4 Airports - 432 Highway Transportation - 662.1 Automobiles - 722.4 Digital Computers and Systems

Database: Compendex

Compilation and indexing terms, Copyright 2015 Elsevier Inc.

Data Provider: Engineering Village