

User Guide for ACRP WebResource 2: Airport Passenger Terminal Design Library



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Search for Documents

The home page is shown in Figure 1. The red boxes in the figure highlight where you can initiate a search from the home page: from the search box in the top right-hand corner of the home page, and from the Search Now button at the bottom of the page. Clicking on the Search Now button takes you to the search results page shown in Figure 2.

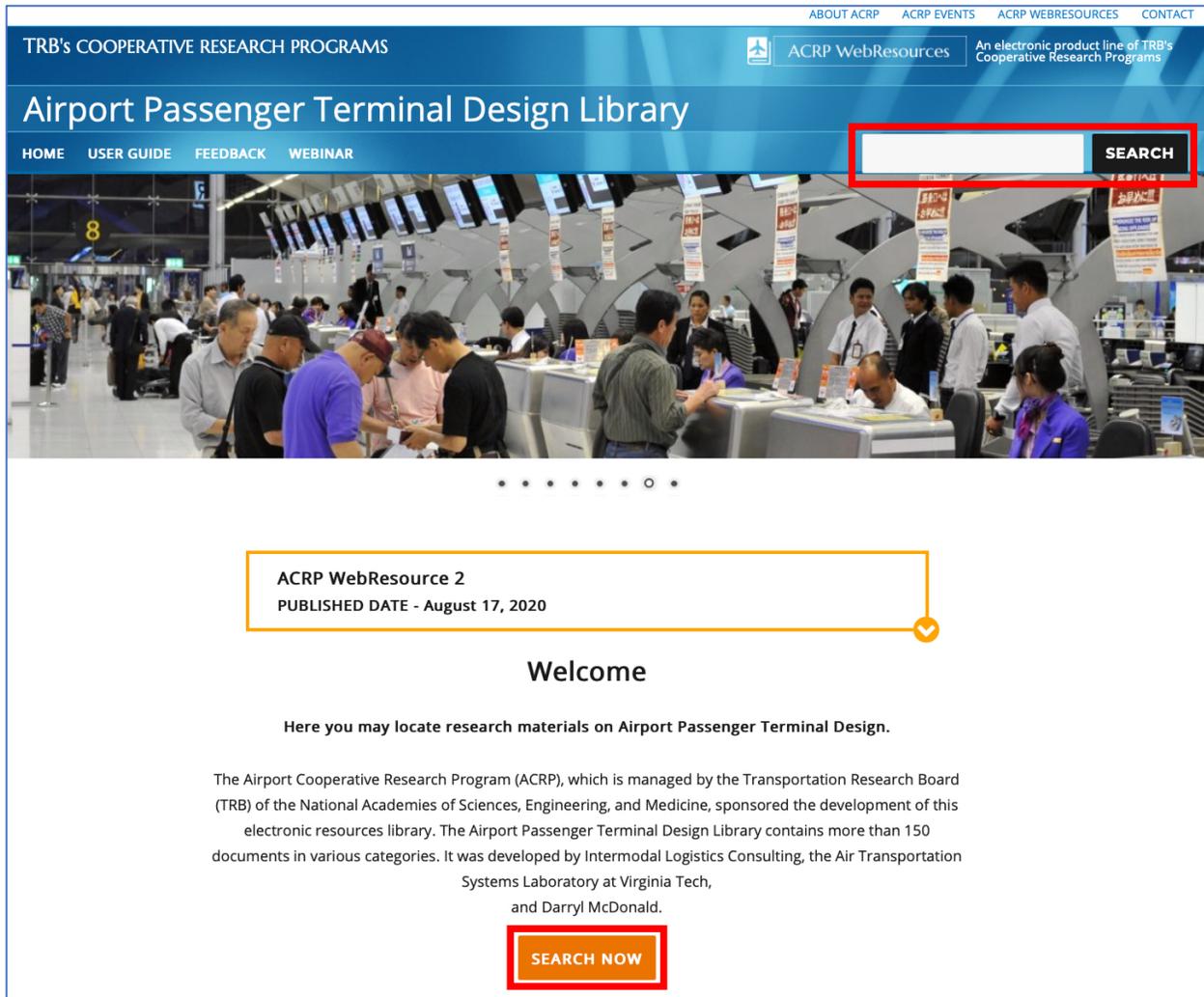


Figure 1: Home Page for Airport Passenger Terminal Design Library.

View Search Results

The search results are presented as a list of documents (see Figure 2). For each document found, (1) an image of the document, (2) the title of the document, and (3) a few lines of text about the content of the document (usually from the document abstract) are presented. These three pieces of information are provided to assist you in deciding which documents you want to open and review further.

The screenshot displays the search results for the keyword "security". The page header includes "TRB's COOPERATIVE RESEARCH PROGRAMS" and "ACRP WebResources". The main title is "Airport Passenger Terminal Design Library". The search results are listed as follows:

- Results:** You searched for security
- Categories:** (Check/uncheck box to add/remove category filters.)
 - ACRP Publication (120)
 - Other Document (21)
 - Journal Article (19)
- Date Range:** 1980 — 2019

The search results list includes the following items:

- Image of Document:** A red box highlights the image of the first document, "TSA: Recommended Security Guidelines for Airport Planning, Design, and Construction".
- Document Title:** A red box highlights the title of the second document, "Guidebook on Best Practices for Airport Cybersecurity".
- Document Abstract:** A red box highlights the abstract text of the third document, "ACRP Report 25: Airport Passenger Terminal Planning and Design, Volume 1: Guidebook".

Figure 2: Screen Capture of Search Results.

Filter Search Results

Search results can be filtered by the type of document—ACRP Publications, Books, Journals, and Other Documents—and by the publication date. In Figure 3, the respective filters are shown under “Categories” and “Date Range” in the red box.

The screenshot shows the website interface for the Airport Passenger Terminal Design Library. At the top, there is a navigation bar with links for 'HOME', 'USER GUIDE', 'FEEDBACK', and 'WEBINAR'. A search bar is located on the right side of the navigation bar. Below the navigation bar, the page displays search results for the term 'security'. The results list several documents, each with a thumbnail image, a title, and a brief description. On the right side of the results, there is a filter area highlighted with a red box. This filter area contains two sections: 'Categories' and 'Date Range'. The 'Categories' section has a heading, a sub-heading '(Check/uncheck box to add/remove category filters.)', and a single filter option 'Other Document (20)' with an unchecked checkbox. The 'Date Range' section has a heading, a date range slider set to '1986 — 2018', and a 'RESET' button. A red arrow points from the text 'Search Filter Area' below the screenshot to the red box.

Figure 3: Ways to Filter Search Results.

View Document Abstract

You can view the document abstract, creator, date of publication, and other information by clicking the image title on the search results page (example highlighted in Figure 4). When you click on a title, the abstract page is displayed (Figure 5).

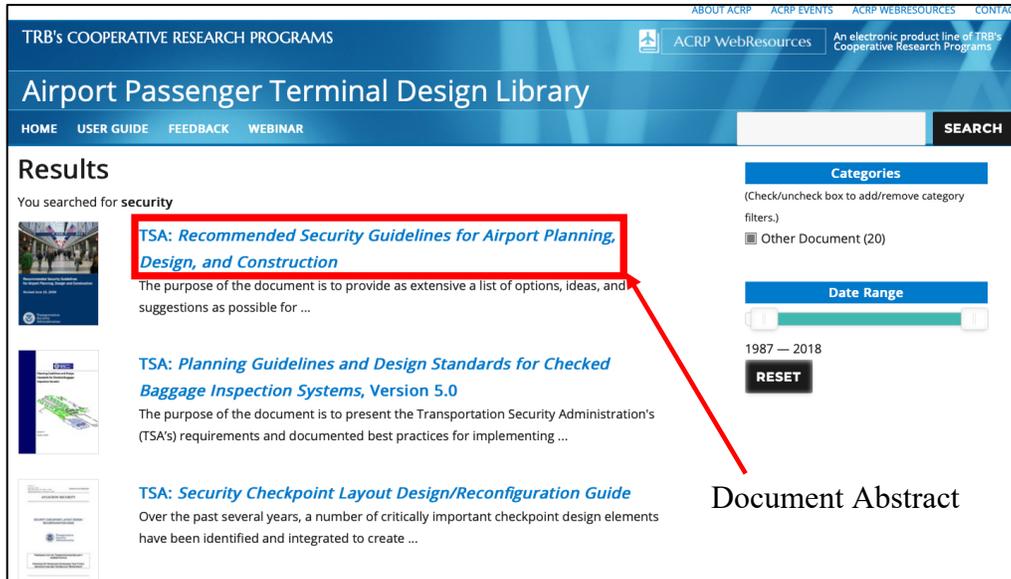


Figure 4: Document Title Links to Abstract Page.

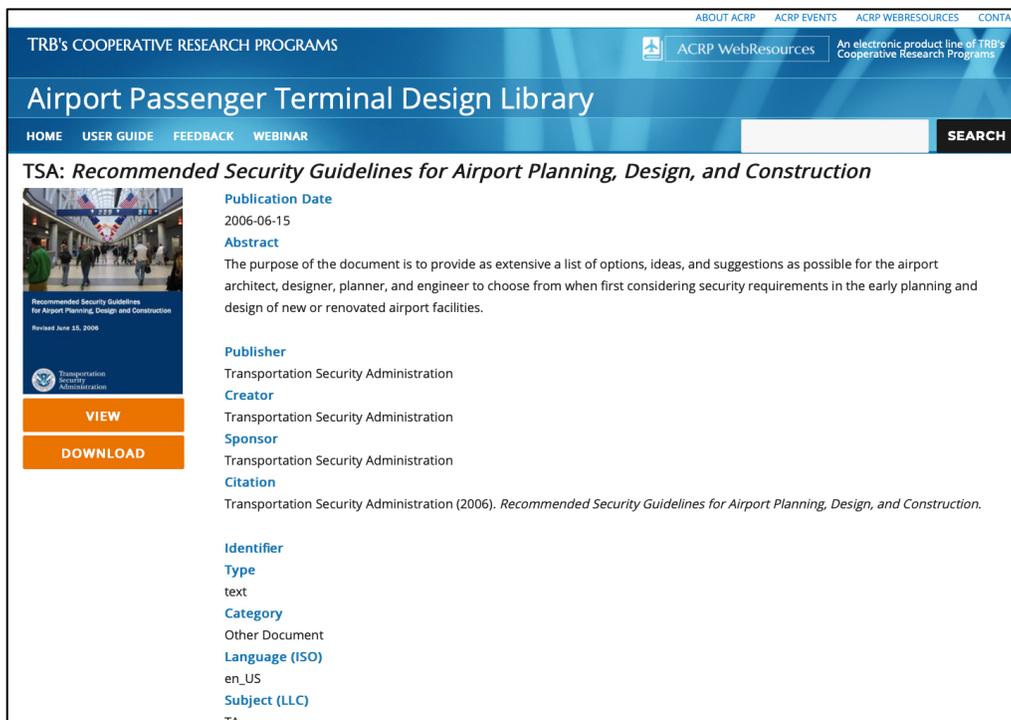


Figure 5: Abstract Page.

View Document

The View and Download buttons provide two ways to open a document from the abstract page (see Figure 6). Clicking on the View button will open the document in a separate browser tab (Figure 7). Clicking on the Download button will download the document to your device (Figure 8).



Figure 6: Library Document Page.

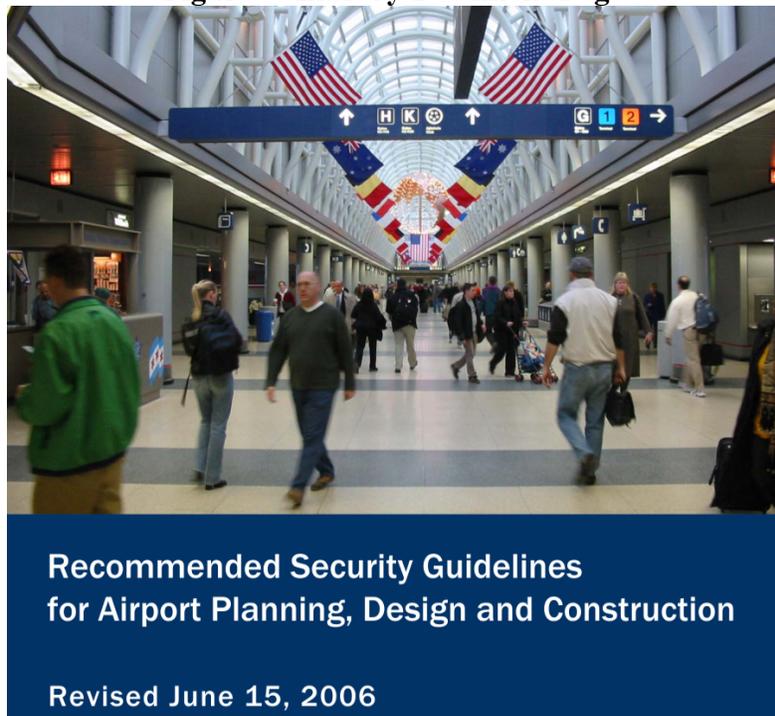


Figure 7: Document in Separate Browser Tab.

TRB's COOPERATIVE RESEARCH PROGRAMS

ACRP WebResources

Airport Passenger Terminal Design Library

HOME USER GUIDE FEEDBACK WEBINAR

SEARCH

TSA: Recommended Security Guidelines for Airport Planning, Design, and Construction

Publication Date
2006-06-15

Abstract
The purpose of the document is to provide as extensive a list of options, ideas, and suggestions as possible for the airport architect, designer, planner, and engineer to choose from when first considering security requirements in the early planning and design of new or renovated airport facilities.

Publisher
Transportation Security Administration

Creator
Transportation Security Administration

Sponsor
Transportation Security Administration

Citation
Transportation Security Administration (2006). *Recommended Security Guidelines for Airport Planning, Design, and Construction*.

Identifier

Type
text

Category

VIEW

DOWNLOAD

Download Document

Downloaded Document

Recommended...pdf

Show All

Figure 8: Download Document to Device.

Obtaining Copyright-Restricted Documents

ACRP does not have copyright permission to include the full text of some documents that are referenced in the library. For such documents, a one-page summary (an example is shown in Figures 9 and 10) is provided in the library in place of the copyright-restricted document. The one-page summary provides enough information to allow you to request or purchase a copy of the publication as needed.

TRB's COOPERATIVE RESEARCH PROGRAMS

ACRP WebResources An electronic product line of TRB's Cooperative Research Programs

ABOUT ACRP ACRP EVENTS ACRP WEBRESOURCES CONTACT

Airport Passenger Terminal Design Library

HOME USER GUIDE FEEDBACK WEBINAR SEARCH

Agent-based modelling and analysis of security and efficiency in airport terminals

Publication Date
2019

Abstract
Both security and efficiency are important performance areas of air transport systems. Several methods have been proposed to assess security risks and estimate efficiency independently, but only few of these methods identify relationships between security risks and efficiency performance indicators. To analyze security, efficiency, and the relationships relations between them, an agent-based methodology was proposed in this work. This methodology combines an agent-based security risk assessment approach with agent-based efficiency estimation. The methodology was applied to a case study that analyzes security regarding an Improvised Explosive Device (IED) attack, different commonly used efficiency performance indicators in the aviation domain, such as queuing time for passengers, and the relationships between them. Results showed that reducing security risks and improving efficiency were not always conflicting objectives. Reducing the number of passengers before the security checkpoint was found to be an effective measure to reduce security risks and improve efficiency aspects. Furthermore, results showed that airports should attempt to spread passengers across the available space as much as possible to reduce the impact of an IED attack. © 2019 Elsevier Ltd

Publisher
Elsevier Ltd

Creator
Janssen, Stef, et al.

Sponsor

Citation
Janssen, S., Sharpanskykh, A., & Curran, R. (n.d.). Agent-based modelling and analysis of security and efficiency in airport terminals. Transportation Research Part C: Emerging Technologies,100, 142-160. <https://doi-org.ezproxy.lib.vt.edu/10.1016/j.trc.2019.01.012>

Identifier
0968090X

Type
text

Category
Journal Article

Language (ISO)
en_US

Subject (LLC)
TA

VIEW

DOWNLOAD

Figure 9: Example Summary Page for Copyright-Restricted Documents.

www.engineeringvillage.com
Abstract results: 1
Downloaded: 2/11/2020

1. Agent-based modelling and analysis of security and efficiency in airport terminals

Janssen, Stef (1); Sharpanskykh, Alexei (1); Curran, Richard (1)

Source: *Transportation Research Part C: Emerging Technologies*, v 100, p 142-160, March 2019; **ISSN:** 0968090X; **DOI:** 10.1016/j.trc.2019.01.012; **Publisher:** Elsevier Ltd

Author affiliation: (1) Delft University of Technology, Kluyverweg 1, HS Delft; 2629, Netherlands

Abstract: Both security and efficiency are important performance areas of air transport systems. Several methods have been proposed to assess security risks and estimate efficiency independently, but only few of these methods identify relationships between security risks and efficiency performance indicators. To analyze security, efficiency, and the relationships relations between them, an agent-based methodology was proposed in this work. This methodology combines an agent-based security risk assessment approach with agent-based efficiency estimation. The methodology was applied to a case study that analyzes security regarding an Improvised Explosive Device (IED) attack, different commonly used efficiency performance indicators in the aviation domain, such as queuing time for passengers, and the relationships between them. Results showed that reducing security risks and improving efficiency were not always conflicting objectives. Reducing the number of passengers before the security checkpoint was found to be an effective measure to reduce security risks and improve efficiency aspects. Furthermore, results showed that airports should attempt to spread passengers across the available space as much as possible to reduce the impact of an IED attack. © 2019 Elsevier Ltd (61 refs)

Main heading: Airport security

Controlled terms: Airport buildings - Autonomous agents - Benchmarking - Computational methods - Efficiency - Explosives - Risk assessment - Risk management - Risk perception - Simulation platform

Uncontrolled terms: Agent-based methodologies - Agent-based modelling - Airport terminals - Conflicting objectives - Improvised explosive devices - Performance indicators - Security risk assessments - Security risk managements

Classification Code: 402.2 Public Buildings - 913.1 Production Engineering - 914.1 Accidents and Accident Prevention - 971 Social Sciences

Funding text: The authors thank Koen Langendoen for his insightful comments that helped improve this paper.

Database: Compendex

Compilation and indexing terms, Copyright 2020 Elsevier Inc.

Data Provider: Engineering Village

Figure 10: Example Summary Page for Copyright-Restricted Documents.

Navigate the WebResource Template

The header and footer stay constant as you navigate through this WebResource. Figure 11 shows the WebResource 2 header. The white bar at the top (showing About ACRP, ACRP Events, etc.) provides links to ACRP content on the main TRB website. The rest of the header provides the project title, menu bar, and search box. The footer (Figure 12) contains links to ACRP Oversight Committee, TRB Executive Committee, and Websites of ACRP’s parent organizations: TRB and the National Academies of Sciences, Engineering, and Medicine.

ABOUT ACRP ACRP EVENTS ACRP WEBRESOURCES CONTACT

TRB's COOPERATIVE RESEARCH PROGRAMS

ACRP WebResources An electronic product line of TRB's Cooperative Research Programs

Airport Passenger Terminal Design Library

HOME USER GUIDE FEEDBACK WEBINAR SEARCH

Figure 11: Header of Airport Passenger Terminal Design Library.

The National Academies of SCIENCES · ENGINEERING · MEDICINE

TRB Executive Committee ACRP Oversight Committee

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TRB TRANSPORTATION RESEARCH BOARD

Figure 12: Footer of Airport Passenger Terminal Design Library.