ACRP 03-24 Air Cargo Facilities Development and Planning Guidelines

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The **Airport Cooperative Research Program (ACRP)** is an industry-driven, applied research program that develops near-term, practical solutions to problems faced by airport operators. ACRP is managed by the Transportation Research Board (TRB) of the National Academies and sponsored by the Federal Aviation Administration (FAA). The research is conducted by contractors who are selected on the basis of competitive proposals.
Study Objectives

- Develop guidelines for air cargo facility planning and development at airports, including collection of necessary data in support of this effort.
- Assist airport operators in crafting effective business policies and development decisions that meet the industry’s current and future technological, operational, and security challenges.
- Cost-effective, efficient, and environmentally compatible manner.
- Include updated metrics to help guide the overall air cargo development planning process.
- Beneficiaries: Airport owners and operators, airlines, integrated cargo carriers, developers, financial institutions, and others.
Study Team

• CDM Smith – Prime
• Webber Air Cargo
• Lynxs Group
• Freidheim Consulting
• Applied Real Estate Inc.
• RMJ & Associates
ACRP 03-24 Panel

- Fred Busch – DEN
- Michael Bednarz - PANYNJ
- Jason Bittner – Univ. Wisconsin, WTC
- Robert Caton - ProLogis
- Brandon Fried – Air Forwarders Association
- Curt Heaslet – FedEx Express
- Max Kiesling – Ricondo & Associates
- Larry Goldstein – ACRP Project Manager
- Three Liaisons – FAA, TRB, ACI
Work Plan Overview

• Industry overview
• Literature review
• Data collection plan
• Data collection
• Forecast techniques
• Data gap analysis/strategies
• Interim report
• Guidelines development
Literature Review

• Airport master planning processes
• Research on airport cargo planning
  – Air Cargo Facility Design Standards
  – Land Use and Access Requirements
  – Financial Considerations
  – Operational Issues
  – Security Considerations
  – Environmental Issues
• Reviewed 18 recent master plan documents
Industry Overview

- Integrators, freighters, pax airlines, forwarders
- Third party providers
Industry Overview, Continued

• Facilities type, location and layout
Industry Overview, Continued

- Facilities type, location and layout
  - Multi-tenant
  - Single-tenant
  - Pax airline belly cargo
  - Integrated express
  - Forwarders (off-airport facilities)
Data Collection

- Case study airports
  - 15 Participating Airports
  - Survey Completion
  - On site Interviews
  - Tenant visits
Data Collection, Continued

• Other airports
  – 35 Participating Airports
  – Survey Completion
  – Tenant surveys
Data Collection, Continued

• Survey Tools
  – Airport Planners Survey
  – Air Cargo Business Surveys
  – Air Forwarder Surveys

• Other Sources
  – Master plans, aerial photography,
  – Web sites, third party providers
  – Roundtable discussions – industry groups, airports
Data Collection, Continued

- Data collected thus far
  - Building size (all cargo buildings)
  - Throughput/cargo traffic
  - Utilization
  - Commodity types
  - Geographic location
  - Type of activity

- Air cargo business activity
Data Collection, Continued

• Data Gap Analysis
  – On going efforts
  – Database development
  – Gap realizations
  – Follow up techniques

• Data utilization
Next Steps

• Matrix development
  – Air cargo facility size
  – Tenant type
  – Average tonnage
  – Commodity types
  – Location
• Interim report to panel
• Guidelines development
Thank You!

Q&A

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