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Maximizing Airport Facility Utilization and Efficiency with Common-Use Resources

he common-use facility allocation and management approach is an alternative to the traditional reliance on exclusive-use facilities. Common-use systems can increase the utilization and flexibility of a facility, and subsequently reduce costs, by providing an interface that allows the use of proprietary systems from multiple airlines. Although the principles and benefits involved in common-use resources are apparent, the application of common use should be carefully designed to optimize results. ACRP Report 30: Reference Guide on Understanding Common Use at Airports (2010) addresses the various business aspects, provides feasibility assessment techniques, and details standard practices of common use.

ACRP Report 30 details the essential considerations for implementation of common use in the operational areas of planning, design and construction, terminal operations, airside operations, facilities maintenance, and technology. The areas emphasize the importance of business justifications for common use, cooperation and trust among agencies and businesses, consideration of the effects of airport characteristics, common goals, and required resources.

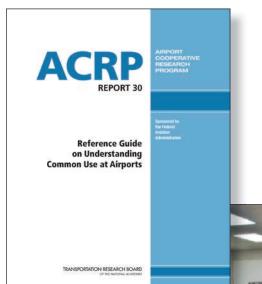
One popular and typically effective common-use function is gate operation. Common-use gates can add value, provide flexibility and functionality, increase gate position utilization, lower airline facility costs, and accommodate temporary needs. However, for these advantages to be realized, airlines must cooperate and coordinate activities, which can be encouraged by airport operator installations that are consistent with airline desires. Other examples of common-use airport applications include check-in counters, passenger processing, terminal services, curbside services, janitorial services, ramp control, cargo operations, ramp and ground handling, communications infrastructure, and business software systems.

ACRP Report 30 provides a roadmap for practitioners to implement the principles of common use. San Diego International Airport (SAN) is one airport that utilized the report to implement new business models for common use. The roadmap provides essential information about the basics of common-use practices for communicating with stakeholders, specifies assessment processes for common-use capabilities, and describes necessary steps to develop strategies for implementation.

Airport management at SAN convened the first meeting of their Action Committee for Common Use in January 2011. The purpose of the committee was to provide a forum for discussion and information exchange among the airport management, aviation consultants, airlines using the airport, and common-use experts (including one of the authors of *ACRP Report 30*). The initial committee meeting included 33 individuals and served as the opener for nine additional meetings.

In consonance with *ACRP Report 30*, the committee established goals to:
1) provide an effective communication forum; 2) outline policies and procedures;
3) ensure common-use implementation aligns with business strategies and goals;
4) establish criterion and measures; and 5) account for all stakeholders' interests. As a final product, the committee developed a comprehensive set of recommendations and considerations for common-use implementations.

In response to their use of the report, Peter Aarons, program manager of Airport Design and Construction at San Diego County Regional Airport Authority, remarked that, "ACRP Report 30 was



San Diego County Regional Airport Authority Action Committee for Common Use kickoff meeting.

Photo courtesy of SDCRAA.



Since 2006, an industry-driven, applied research program that develops near-term, practical solutions to problems faced by airport operators.

instrumental in our process for common use. Having a nationally recognized model to follow gave us the confidence and background information needed to assemble stakeholders, lead the discussion of implementing common-use business models, and move towards achieving our goals. The roadmap proved to be especially helpful for our airport."

The steps followed by SAN (consistent with *ACRP Report 30*) for common-use implementation include:

- 1. Conduct an audit of current activities and review common-use criteria.
- 2. Establish a committee comprised of stakeholders.
- 3. Perform cost-benefit analyses.
- 4. Formulate an implementation decision.
- 5. Create and refine common-use strategies.
- 6. Provide training and education.
- 7. Execute common-use strategies.
- 8. Review and refine strategies.
- 9. Document lessons learned.
- 10. Reconvene committee to review initial common-use implementation.
- 11. Reunite committee at regular intervals to improve common-use processes.
- 12. Disseminate findings to the aviation community to improve the state of the practice.

SAN has completed the majority of the process with ongoing efforts in Step 11 and a future goal of disseminating lessons learned in Step 12. The image below illustrates the steps of the roadmap for developing common-use processes.

The roadmap process can support an airport in developing and adapting common-use approaches into its own unique airport environment. Successful realization of common-use advantages is possible through open and effective communication with all users and by exploring qualitative and quantitative benefits for all stakeholders. Airport staff and businesses must understand the value and benefit of common-use approaches for processing passengers, receive support from executive leaders, and have processes in place to support collaborative decision making.

Legal and business arrangements are critical for airport operators who manage common-use facilities. *ACRP Report 30* provides essential details about fee structures and considerations for usage of the facilities. The considerations include cost distribution (by square footage or other measure), rates and charges (by landed weight, passengers, turns, or use),

The following business drivers need to be considered when looking at common-use implementation:

- Maximize existing facility utilization
- Avoid or defer capital costs
- Maximize facility flexibility
- Decrease the airport's cost of doing business
- Decrease the airline's cost of doing business
- Improve the quality of service to airlines
- Improve the quality of service to passengers
- Increase opportunities for airlines to add or expand service
- Gain a competitive advantage over other airports

ACRP Report 30: Reference Guide on Understanding Common Use at Airports

Initial

Consideration

Stakeholders Review
Common Use Benefits

Airport Reviews TRB
Common Use Criteria

Ongoing
Process

Check & Adjust
Align to
Industry Standards
e.g. CUPPS

Common Use

Common Use

Common Use

Common Use

Common Use

Create / Refine
Local Common Use
Strategy

Create / Refine
Local Common Use
Strategy

Check & Adjust
Align to
Industry Standards
e.g. CUPPS

Common Use

Common Use

Common Use
Strategy

Check & Adjust
Align to
Industry Standards
e.g. CUPPS

Common Use
Common Use
Sharing Lessons Learned with
Communication
A reiterative
process
Common Use
Process

Sharing Lessons Learned with
Community

A reiterative
process
Common Use
Action
Community

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Constant
change
and adaption

Developing a Roadmap for Airport Common Use

leasing arrangements and preferences, liability and safety, assets, competitive factors, customer service, marketing, and sustainability. Airport operators might also consider minimum use or takeback criteria, such as operations per gate per day, passengers per gate, seats, or departures per gate per day, which would set a minimum level of use for an airline to sustain gate usage.

Left: Illustration of the steps of the roadmap for developing common-use processes at airports.

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