ACRP Problem Statement 18-07-04

Recommended Funding Amount: $350,000

Ancillary Airport Terminal Restroom Spaces Planning and Design

ACRP Staff Comments

As noted in the problem statement, the proposed research would address topics not covered in ACRP Research Report 130: Guidebook for Airport Terminal Restroom Planning and Design.

TRB Aviation Committees Comments

AIRPORT TERMINALS AND GROUND ACCESS COMMITTEE: Supported. The topic is relevant and timely and could build on ACRP Report 130: Guidebook for Airport Terminal Restroom Planning and Design with specific focus on ancillary functions; therefore, the funding and schedule could be reduced to reflect "add-on" to Report 130 versus a separate research subject. The research should also consider gender neutral, religious needs, and legal obligations.

Association Committee Comments

ACC (MEMBER): Clarity: Clear objective. Applicability: Excellent idea. Very applicable as many restrooms are adding these ancillary spaces as other airports are trying to keep up with the amenities for passengers. Urgency: Urgent issue as many airports are pursuing these updates now. Achievability: Absolutely. As stated, this sort of research has been done before for restrooms and this additional guide would be valuable.

Review Panel Comments

Recommended. Again, broad applicability seems unlikely but for a niche audience worthwhile, timely project for ACRP. Viable topic that is very practical and addresses issues currently in the forefront of terminal design. Very applicable. Many commercial airports struggle with restroom capacity, especially large hubs.

AOC Disposition

This problem statement received an average rating of 3.7 points out of a possible 5 points among voting AOC members. Approved and funded at $350,000 as ACRP Project 07-16.
Problem Statement Title
Ancillary Airport Terminal Restroom Spaces Planning and Design

Background
Customer satisfaction has become one of the primary drivers for the success of an airport and the restroom facilities are often the first and last impression of a destination. The ACRP 07-12 “Guidebook for Airport Terminal Restrooms Planning and Design,” currently in development, addresses customer service issues at these highly impressionable amenities. Absent in the original scope of this document, however, was ancillary spaces related to the restrooms. Specifically, spaces for service animal relief, lactation, nursing mothers, and showering for stopovers on intercontinental travel.

Service Animal Relief Areas (SARA)
Many airports have landside facilities, usually outdoors for pets, but rarely on the airside due to SIDA (Security Identification Display Area) complications. Recently, Guide Dog Users Inc. (GDUI) recommended to FAA that all American airports provide service animal relief areas in secure areas as a reasonable accommodation for travelers with disabilities for their service animals. These spaces require special materials, drainage, exhaust, and maintenance programs that are outside the norm of typical airport systems and operations.

Nursing Mothers Rooms
While nursing mothers will frequently find a semi-secluded spot out in public and use a nursing cover, a quiet space close to their gate with comfortable seating is welcome. In other facility types, it is common to have seating for multiple mothers, a place for baby changing with a sink, and sometimes a play area for older children accompanying their mothers.

Lactation Rooms
Lactation rooms require privacy, plumbing, and specific furnishings to accommodate the proper posture for pumping. Their location should be independent of the restrooms. A sink is required for cleaning the pumping equipment. Here too, baby changing is often provided.

Shower Facilities
Internationally, showers in airports are fairly common, especially where there is frequent long-haul transcontinental travel with layovers. For the weary traveler, perhaps on a multi-stop business trip, the opportunity to wash away travel-grime with a muscle-rejuvenating warm shower can be energizing. There is typically a fee for the use of showers to cover frequent upkeep.

There is scarce guidance for the quantity, location, and fit-out of these spaces. Further, there is little information on lifecycle costs, including implementation and maintenance, or the potential benefits of new technologies.

Objective
To provide a guidebook to help airport managers, planners, and designers plan and design spaces ancillary to public airport restrooms.

Proposed Tasks
1. Research of existing guidelines, installations, statutory requirements, and supporting organizations as well as from other industries to determine best practices and lessons learned.
2. Stakeholder outreach in the form of surveys, focus groups, and case studies on traveler expectations and industry best-practices for each type of space.
3. Development of planning and design criteria based on recommendations of collected data and input from supporting organizations.
4. Interim report and review to verify project findings and direction.
5. Creation of prototypical layouts.
6. Formulation of initial and life-cycle costs to aid in planning.
7. Development of guidebook draft for review.
8. Production of guidebook.

The guidebook should be organized to allow users to quickly identify relevant sections based on the size and of airport and be linked to the Guidebook on Airport Terminal Restrooms Planning and Design

**Estimated Funding**
The ideal team for this project would include an airport planner, architect/interior designer, mechanical/electrical engineers, stakeholder facilitator, and construction cost estimator. The estimated cost for this project is $350,000.

**Estimated Research Duration**
This project is expected to take 16 months.

**Related Research**
ACRP 07-12 "Guidebook for Airport Terminal Restrooms Planning and Design," due to be published at the end of 2014, has the most relevant research to this project. In the research for the airport restroom guidebook, guidance was scarce for ancillary spaces and the information void too vast to fold into that project. ACRP Report 25 on Airport Passenger Terminal Planning and Design, while not addressing the ancillary restroom spaces directly, would provide guidance on the strategies behind airport planning, which might offer insight in where ancillary spaces ought to be located.

**Process Used to Develop the Problem Statement**
This problem statement was drafted by the research team as part of the work plan for ACRP 07-12. It was submitted for review and comment by the ACRP 07-12 panel and the panel supports funding the project.

**Persons Submitting Problem Statement**
ACRP 07-12 Panel
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*Metropolitan Airport Commission*  
*Minneapolis-St. Paul International Airport*

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