

# APPENDIX E

## Survey Summaries

### E.1 Summary

In order to effectively plan and design restrooms in an airport terminal, it is important to understand the perspective of the primary stakeholders—the passengers and the airport staff. Within these groups, however, are people with special needs or interests. Among the traveling public this includes those with disabilities, the elderly, infants, various genders, and different cultures. The airport’s personnel include planners, the trades – carpenters, plumbers, etc., and of course the cleaners. Tangentially are the tenants—concessions staff, airline employees, etc., vendors, and product manufacturers, to name a few. All are in a perpetual tug-of-war trying to balance the needs and expectations of the users with the operational structure and budget of the providers.

The research team determined that a sample of stakeholders was needed from a high level (37,000 feet perhaps?) as well as microscopic. The latter were assembled in a series of focus groups consisting of people with intimate experience related to restrooms in airport terminals. These focus groups and the findings are described in Appendix E.

A significant resource for this guidebook is the lessons airports have learned through their restroom projects. To that end, a survey was developed and sent to operations managers at airports around the country. The 43 questions compiled and distributed through Survey Monkey addressed the following:

- Master Planning
- Customer Service

- Maintenance
- Design Considerations

Respondents were also asked if they would be willing to share their design guidelines, restroom customer service surveys, standard operating procedures, and restroom layouts. Approximately 250 contacts were collected from the research team and sent an email with a link to the survey.

The research team also mined their personal and professional networks to survey how the typical traveler feels about the same issues asked of the airport managers on their survey. The comparison between the providers and the users would be interesting to see.

Recognizing the competition for people’s time and attention, a shorter survey than the airport managers was created (also in Survey Monkey) with just ten questions. Topics included top frustrations when visiting airport restrooms, finding the restrooms, personal comfort within restrooms, basic restroom amenities, desired extra restroom features, desired amenities near the restrooms, and then an open question requesting additional insights and ideas for improvements.

Figure E-1 shows the survey invitation emailed to the airport managers. A similar version was emailed to the Typical Traveler Survey recipients. The following pages show first the survey questions then tabulations of the responses for the two surveys.

**YOU ARE INVITED TO INFLUENCE  
AIRPORT RESTROOM EXPERIENCES**

**EASY TO FIND**

**SPACE TO MOVE**

**DRY PLACES FOR STUFF**

**CLEAN**

**AIRPORT RESTROOMS ARE OFTEN THE FIRST AND LAST IMPRESSION OF A DESTINATION... WE WANT YOURS!**

A national research team of industry experts led by Architectural Alliance of Minneapolis has been selected by the Transportation Research Board of the National Academies to create a Guidebook for Airport Terminal Restroom Planning and Design. This resource will help airport managers and designers address customer service issues like those illustrated to the left that are encountered by every traveler.

Passenger demographics are changing: more female travelers, aging population, people with disabilities and special needs, all with higher expectations for comfort, convenience, cleanliness, and space for carry-ons. There are few things more frustrating than a restroom closed for maintenance after a three-hour flight.

We are conducting a survey of Airport Managers to collect your experiences, insight, and ideas. What doesn't work? What innovations have worked well for your airport?

**Please cut and paste the following link and complete the survey by Friday, April 19, 2013:**

[www.surveymonkey.com/s/Airport\\_Terminal\\_Restrooms\\_Survey](http://www.surveymonkey.com/s/Airport_Terminal_Restrooms_Survey)

The survey should take 10-15 minutes. It consists of 33-36 questions covering the following restroom topics:

- Master Planning
- Customer Service
- Maintenance
- Design Considerations

Thank you!

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**ARCHITECTURAL ALLIANCE**

Figure E-1. Sample Survey Invitation.

## **Airport Managers Survey**

### E.2 Findings

A response timeframe of 2-1/2 weeks was provided. 27 responses, 11%, were received from 16 airports of all hub sizes (some airports had multiple managers take the survey). Large hubs were most prominently represented. Respondents held were predominantly directors and managers from a variety of departments including planning, customer service, maintenance, facilities, etc.

#### Master Planning

Most of the airports do not have a master plan for their restrooms. Likewise, few have design standards or guidelines for their restrooms. Group III – Narrowbody/Large Regional aircraft were the majority favorite FAA design group for gates at hubs of all sizes. Many of the respondents did not know the IATA Level of Service of their airport so the only conclusion derived was that Level of Service was not a driver of customer service at these airports. The large hubs tended to have more distance between their restroom locations, possibly because they have the space to provide larger restroom sets although the average number of fixtures (toilets and urinals) per restroom set is on the large side for all hub sizes.

#### Customer Service

Not surprising, the responding airports have seen an increase in women as well as elderly travelers. Otherwise the number of men, children, families, people with disabilities, and international travelers has remained steady. Comments are most frequently collected via surveys, comment cards, and the airport's websites. Most of the airports include restrooms in their annual customer service surveys. Yet contrary to the often passionate comments about airport restrooms from the focus groups and case studies, the respondents noted that complaints about restrooms are "as expected" and cleanliness "rare." This could be interpreted that the airports know that restrooms are a hot button so complaints are expected.

#### Maintenance

Here again there appears to be a disconnect between the comments from the typical travelers focus groups and surveys with the responses from the airport managers. The majority of the manager responses regarding common maintenance issues such as cleanliness, odors, noise, adequate waste

receptacles, etc. were that complaints were rare. A possible reason for this is that passengers often don't take the time to register their complaints to the airport unless the method is very convenient or the problem is significant.

The majority of airports reported that common issues such as vandalism, graffiti, non-operating plumbing fixtures, and burned out bulbs were rare. Few use any form of technology to monitor maintenance problems. Most respondents felt their restroom layouts worked well. About half of the airports had standard operating procedures (SOP) for maintenance. Blue Grass Airport provided a copy of their SOP for Restroom Maintenance and Care, which is included in Appendix G.

#### Design Considerations

There was consensus that planning strategies like restroom proximity to nodes (gates, concessions, etc.), high visibility, intuitive wayfinding, etc. are important to the traveler's experience. Floor finishes, toilet partition materials, sink/counter finishes, and quality mirrors have a significant impact on travelers as do soap dispensers, hand drying (dryers and towels), baby changing facilities, etc. Accessibility and ventilation were considered important to all respondents whereas the convenience of a shelf in the toilet stall and at urinals was generally moderately important, but definitely important at the sinks. Coat hooks at urinals were less important at sinks and urinals than in toilet stalls. The latter is not surprising considering urinal usage is easily accomplished with a coat on. Space for carry-ons in the stalls is important in stalls, less so at urinals, but having belongs in constant view is nearly universally important. Ironically, having a means for travelers to register comments was considered only moderately important.

Most sustainability efforts such as lowering energy use, water consumption, and waste management were important. The use of recycled materials was less so.

Only a few airports had accommodations for traveling mothers. One location had a Mother's Room on both the air and landside. Another only had one on the concourse.

## Airport Managers Survey

### E.3 Survey Questions

The following pages show the questions as seen by the Airport Managers Survey participants. There are followed by the survey results.

**1. Survey Information**

One of the biggest customer service issues airports face is the quality of the restroom experience for travelers. This survey will provide important data for the development of a Guidebook for Airport Terminal Restroom Planning and Design. This resource will be used by airport planners, designers, and managers like yourself so your input is essential to its usability.

The survey should take approximately 10-15 minutes to complete. It consists of 40-43 questions covering the following topics as they pertain to airport terminal restrooms:

- Master Planning
- Customer Service
- Maintenance
- Design Considerations

Several questions ask if you are willing to share information (design guidelines, restroom layouts, operating procedures, etc.) for reference and potential use in shaping the guidebook. We appreciate your participation in this effort. Any contributed information will be acknowledged in the book.

Please answer questions based on your airport's general philosophy rather than your personal views. If you are unable to answer a question, feel free to leave it blank.

**2. GENERAL INFORMATION**

**1. The information you provide below will not be used outside of this ACRP project. You will only be contacted if you agree to share information about your facility requested in this survey.**

**Name:**

**Title/Role:**

**Airport Name:**

**Email Address:**

**Phone:**

**2. Indicate your FAA Airport Category:**

Category

Hub Size

**3. Indicate your IATA Level of Service for your Terminal(s):**

Level

LOS

**4. Indicate your airport's governance structure:**

Structure

Governance

Other (please specify)

## Airport Managers Survey

**3. MASTER PLANNING**

**5. Indicate the status of your current Restroom Program? (choose all that apply)**

Recently renovated one or more restrooms

Are planning to upgrade restrooms in the next 1-5 years

There are no plans for restroom modifications

**6. Describe the general capacity of your restrooms.**

Often Empty

Adequate

Often Have Lines

Additional Comments:

**7. On a typical single-loaded concourse or one side of a double-loaded concourse, how many gates are between each set of restrooms?**

**8. What is the FAA Airplane Design Group for your gates?**

Group I - Small Regional

Group II - Medium Regional

Group III - Narrowbody / Large Regional

Group IIIa - B757 (winglets)

Group IV - Widebody

Group V - Jumbo

Group VI - Super Jumbo

Additional Comments:

**9. What is the average number of toilets/urinals per gender at a typical AIRSIDE set of restrooms?**

Women

Men

**10. What is the average number of toilets/urinals per gender at a typical LANDSIDE set of restrooms?**

Women

Men

**11. The following three questions pertain to Design Day Peak Hour. If you don't have the data, type "?".**

1. What is your Design Day DEPARTING (Enplaning) Peak Hour

2. What is your Design Day ARRIVING (Deplaning) Peak Hour

3. What is your Design Day TOTAL Peak Hour

## Airport Managers Survey

### 4. MASTER PLANNING

**12. Do you currently have a master plan for your restrooms?**

- Yes
- No

### 5. MASTER PLANNING

**13. What aspects are included in your master plan?**

- Restroom Locations
- Prototype Layouts
- Fixture Counts
- Timeline for Modification
- Maintenance

**14. What planning resources do you use?**

- Aviation Industry Guidelines
- Aviation Planners
- Architects/Designers
- Internal Planners/Designers

Other (please specify)

**15. Does your airport have Design Standards or Guidelines for your restrooms?**

- Yes
- No

### 6. MASTER PLANNING

**16. Are you willing to share your guidelines? If yes, we will contact you.**

- Yes
- No

**Airport Managers Survey**

**7. CUSTOMER SERVICE**

**17. Indicate changes you have seen in traveler demographics:**

	Fewer	No Change	More
Women	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Men	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Families	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elderly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disabled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
International	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Additional comments:

**18. Rate the following customer service issues in terms of complaints**

	Frequent	As Expected	Rare
Parking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Security Process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aesthetics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wayfinding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Variety of Amenities (play areas, lounges, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concession Mix / Locations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restrooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cleanliness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

**19. How do you collect comments from travelers about your restrooms?**

**20. Is your restroom program included in your annual customer service survey?**

Yes

No

## Airport Managers Survey

### 8. CUSTOMER SERVICE

**21. Are you willing to share your most recent restroom survey results? If yes, we will contact you.**

- Yes  
 No

### 9. MAINTENANCE

**22. Rate the following restroom maintenance issues in terms of traveler complaints:**

	Frequent	As Expected	Rare
Cleanliness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Light Levels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Odors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Temperature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plumbing Fixture Operation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adequate Supply (paper towels, toilet paper, soap, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Baby Changing Stations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cleaning Efficiency (ease of cleaning)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adequate Waste Receptacles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional comments:

**23. Rate the following restroom maintenance issues in terms of occurrence:**

	Frequent	As Expected	Rare
Finishes (durability and ease of maintenance)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vandalism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graffiti	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Durability of Fixtures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non-operating Plumbing Fixtures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ease of Product Restocking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clogged Soap Dispensers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Burned Out Light Bulbs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:



**Airport Managers Survey****10. MAINTENANCE**

**24. Are you able to close a partial restroom when servicing?**

- Yes  
 No

**25. Do you provide access to plumbing chases and janitor's closets outside of the restroom spaces to avoid gender issues with maintenance staff?**

- Yes  
 No

**26. What is the preferred minimum clear width in your plumbing chases?**

**27. Do you use technology to monitor maintenance problems?**

- Yes  
 No

If yes, please describe:

**28. Do you have Standard Operating Procedures for restroom maintenance?**

- Yes  
 No

**11. MAINTENANCE**

**29. Are you willing to share your restroom Standard Operating Procedures? If yes, we will contact you.**

- Yes  
 No

**Airport Managers Survey**

**12. DESIGN CONSIDERATIONS**

**30. Do you have a restroom layout(s) in your terminal that works well?**

Yes  
 No

**13. DESIGN CONSIDERATIONS**

**31. Are you willing to have your restroom layout potentially included as a conceptual prototype in this guidebook? If yes, we will contact you.**

Yes  
 No

**14. DESIGN CONSIDERATIONS**

**32. PLANNING**

**Rate the importance of the following restroom components to the traveler's experience:**

	Important	Moderately Important	Not Important
Proximity to Nodes (gates, ticketing, baggage claim, concessions, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wayfinding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adjacent Family / Companion Care Room	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adjacent Drinking Fountains	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vestibule Entrance (no doors)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individual Toilet Compartments with Lavatory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Baby Changing Station	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Close Partial Restroom for Service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

**Airport Managers Survey**

**15. DESIGN CONSIDERATIONS**

**33. MATERIALS**

**Rate the importance of the following components to the traveler's experience:**

	Important	Moderately Important	Not Important
Wall Finishes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Floor Finishes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ceiling Finishes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Toilet Partitions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Door Hardware	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sink and Vanity Deck Finishes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mirrors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

**16. DESIGN CONSIDERATIONS**

**34. FIXTURES**

**Rate the importance of the following restroom components to the traveler's experience:**

	Important	Moderately Important	Not Important
Toilets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urinals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking Fountain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sinks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lights	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

**Airport Managers Survey**

**17. DESIGN CONSIDERATIONS**

**35. ACCESSORIES**

**Rate the importance of the following restroom components to the traveler's experience:**

	Important	Moderately Important	Not Important
Soap Dispensers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hand Dryers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Paper Towels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trash Containers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mirrors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Make-up Mirror	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Full Length Mirror	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Baby Changing Stations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sanitary Products Vending	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sanitary Disposal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adult Diaper Disposal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bio-hazard Disposal (e.g. Sharps)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shelf for Belongings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hook(s) for Bags, Coats, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

**Airport Managers Survey**

**18. DESIGN CONSIDERATIONS**

**36. COMFORT**

**Rate the importance of the following restroom components to the traveler's experience:**

	Important	Moderately Important	Not Important
Accessibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Touchless Environment (toilet and urinal flushing, faucets, soap dispensers, paper towel dispensers, hand dryers, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automatic Doors at Accessible Compartments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urinal Screens	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lighting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Daylight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heating/Cooling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ventilation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

**19. DESIGN CONSIDERATIONS**

**37. CONVENIENCE**

**Rate the importance of the following restroom components to the traveler's experience:**

	Important	Moderately Important	Not Important
Shelf in Toilet Stall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Space for Carry-on in Toilet Stall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coat Hook in Toilet Stall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trash in Toilet Stall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shelf at Urinal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Space for Carry-on at Urinal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coat Hook at Urinal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shelf at Sink	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coat Hook at Sink	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bottle Filler at Drinking Fountain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Security of Having Belongings in Sight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

**Airport Managers Survey**

**20. DESIGN CONSIDERATIONS**

**38. AMENITIES**

**Rate the importance of the following restroom components to the traveler's experience:**

	Important	Moderately Important	Not Important
Art	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Center for Passenger Needs (e.g. Flight Information, AED, Information Desk, Mother's Room, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adjacent Waiting Area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Simple Means for Traveler's to Register	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

**21. DESIGN CONSIDERATIONS**

**39. SUSTAINABILITY**

**Rate the following considerations:**

	Important	Moderately Important	Not Important
Energy Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water Consumption	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmentally Friendly Materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cleaning Supplies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recycled Materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waste Management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Light Control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**22. DESIGN CONSIDERATIONS**

**40. Does your terminal have a Mother's Room(s)?**

Yes

No

## Airport Managers Survey

23.

**41. How are the Mother's Rooms distributed? (e.g. one per concourse)**

**42. How do you control access to your Mother's Rooms (e.g. key, code to type in, etc.)?**

### 24. FINAL THOUGHTS

**43. Please comment on what features in a restroom planning and design guidebook like this would be most useful to you.**

## Airport Managers Survey

### E.4 Survey Responses

The following pages tabulate the question responses from the Airport Managers Survey participants. The table below summarizes the information collected from questions 2) through 4). The names listed submitted in question 1) have been kept confidential. However, the titles are used in the subsequent tables for context.

<b>GENERAL INFORMATION</b>		
	<b>3. IATA Level of Service</b>	<b>4. Airport's Governance Structure</b>
<b>Large Hub</b>		
DEN	C	Municipal
DFW	B	Authority/ Quasi-government
FLL	C	County
MCO	E	Authority/ Quasi-government
MSP	Don't Know	Authority/ Quasi-government
PHX	C	Authority/ Quasi-government
SAN	A	Authority/ Quasi-government
SLC	Don't Know	Municipal
<b>Medium Hub</b>		
AUS	B	Municipal
IND	Don't Know	Authority/ Quasi-government
PBI	Don't Know	Municipal
<b>Small Hub</b>		
LEX	Don't Know	Authority/ Quasi-government
SAV	Don't Know	Authority/ Quasi-government
SYR	Don't Know	Municipal transitioning to public authority in
TUS	C	Authority/ Quasi-government
<b>Non-hub</b>		
HTS	Don't Know	Authority/ Quasi-government
ROA	Don't Know	Commission



**Airport Managers Survey**

MASTER PLANNING															
	5. Status of Current Restroom Program			6. General Capacity of Restrooms			7. No. of Gates Between Sets	8. FAA Airplane Design Group for Gates							
	Recently Renovated	Planning Upgrade in 1 - 5 years	No Plans for Restroom Modifications	Often Empty	Adequate	Often Have Lines		Group I - Small Regional	Group II - Medium Regional	Group III - Narrowbody/Large Regional	Group IIIa - B757 (winglets)	Group IV - Widebody	Group V - Jumbo	Group VI - Super Jumbo	
<b>Large Hub</b>															
DEN - Deputy Mgr	x				x		8								x
DFW - VP Customer Service															
DFW - Asst VP Planning	x				x		500 ft. Ideal		x						
DFW - Infrastruct Contracts Mgr	x				x		8								
DFW - Infrastruct Service Mgr															
FLL - Dir of Cap Improv	x					x	5							x	
FLL - Dir of Ops															
FLL - Dir of Maint															
FLL - Principal Planner		x			x		10		x						
MCO - Dir of Airport Ops															
MSP - Asst Dir of Ops/Facilities															
PHX - Super Ops Planning	x				x		4		x						
SAN - Mgr Airport Planning															
SAN - Prog Mgr / Agency Owner															
SLC - Airport Architect															
SLC - Airport Maint Ops Super															
<b>Medium Hub</b>															
AUS - Mgr Eng and Const		x			x		4		x						
IND - Dep Dir of Planning & Dev															
PBI - Dep Dir															
PBI - Arch Field Rep															
<b>Small Hub</b>															
LEX - Dir of Eng and Maint		x		x			3		x						
SAV - Ops Mgr		x		x			3			x					
SYR - Commissioner of Aviation															
TUS - Mgr of Arch Serv	x				x		2					x			
TUS - Station Mgr															
<b>Non-hub</b>															
HTS - Airport Dir	x				x					x					
ROA - Terminal Mgr	x						Only 1 set		x						

**Airport Managers Survey**

MASTER PLANNING																						
	9/10. Average Toilets/Urinals Per Restroom Set				11. Design Day Peak Hour			12. Restroom Master Plan?		13. Aspects Included in Master Plan					14. Planning Resources Used			15. Design Standards or Guidelines?				
	Airside - Women	Airside - Men	Landside - Women	Landside - Men	Departing (Enplaning)	Arriving (Deplaning)	Total	Yes	No	Restroom Locations	Prototype Layouts	Fixture Counts	Timeline for Modification	Maintenance	Aviation Industry Guidelines	Aviation Planners	Architects/Designers	Internal Planners/Designers	Yes	No		
<b>Large Hub</b>																						
DEN - Deputy Mgr	12	16	8	8	140	140	180		x						x	x	x	x			x	
DFW - VP Customer Service																						
DFW - Asst VP Planning	10	12	6	8	0	0	0	x		x	x				x	x	x	x	x			x
DFW - Infrastruct Contracts Mgr																						
DFW - Infrastruct Service Mgr																						
FLL - Dir of Cap Improv								x		x		x	x			x	x					x
FLL - Dir of Ops																						
FLL - Dir of Maint																						
FLL - Principal Planner	17	22	18	22	18	18	18		x						x	x	x	x	x			x
MCO - Dir of Airport Ops																						
MSP - Asst Dir of Ops/Facilities																						
PHX - Super Ops Planning	4	4	4	4	450	750	750		x								x					x
SAN - Mgr Airport Planning																						
SAN - Prog Mgr / Agency Owner																						
SLC - Airport Architect																						
SLC - Airport Maint Ops Super																						
<b>Medium Hub</b>																						
AUS - Mgr Eng and Const	14	15	12	11			3500	x			x	x	x	x	x	x	x	x	x			x
IND - Dep Dir of Planning & Dev																						
PBI - Dep Dir																						
PBI - Arch Field Rep																						
<b>Small Hub</b>																						
LEX - Dir of Eng and Maint	10	10	10	10	1	1	1		x								x	x				x
SAV - Ops Mgr	10	10	6	6	12	17	17		x								x	x				x
SYR - Commissioner of Aviation																						
TUS - Mgr of Arch Serv	16	16	7	7																		
TUS - Station Mgr																						
<b>Non-hub</b>																						
HTS - Airport Dir	6	6	10	10					x													x
ROA - Terminal Mgr	8	10	5	5	600	1000	10000	x		x	x	x	x	x	x	x	x	x				x

**Airport Managers Survey**

CUSTOMER SERVICE	17. Changes Seen in Traveler Demographics														Additional Comments								
	Women			Men			Children			Families			Elderly				Disabled			International			
	Fewer	No Change	More	Fewer	No Change	More	Fewer	No Change	More	Fewer	No Change	More	Fewer	No Change			More	Fewer	No Change	More			
Large Hub																							
DEN - Deputy Mgr			x	x					x			x			x			x	This data represents averages and estimates that change with seasonal demands.  We continue to grow at a robust rate.				
DFW - VP Customer Service																							
DFW - Asst VP Planning		x				x			x						x			x					
DFW - Infrastruct Contracts Mgr																							
DFW - Infrastruct Service Mgr																							
FLL - Dir of Cap Improv		x				x			x						x			x					
FLL - Dir of Ops																							
FLL - Dir of Maint																							
FLL - Principal Planner			x			x			x						x			x					
MCO - Dir of Airport Ops																							
MSP - Asst Dir of Ops/Facilities																							
PHX - Super Ops Planning		x				x			x						x								
SAN - Mgr Airport Planning																							
SAN - Prog Mgr / Agency Owner																							
SLC - Airport Architect																							
SLC - Airport Maint Ops Super																		x					
Medium Hub																							
AUS - Mgr Eng and Const						x			x			x			x			x					
IND - Dep Dir of Planning & Dev																							
PBI - Dep Dir																							
PBI - Arch Field Rep																							
Small Hub																							
LEX - Dir of Eng and Maint			x			x					x				x			x					
SAV - Ops Mgr		x				x					x				x			x					
SYR - Commissioner of Aviation																							
TUS - Mgr of Arch Serv																							
TUS - Station Mgr																							
Non-hub																							
HTS - Airport Dir			x			x					x				x			x					
ROA - Terminal Mgr			x			x					x				x			x					





## Airport Managers Survey

MAINTENANCE														
22. Traveler Complaints Regarding Maintenance Issues														
Cleanliness			Light Levels			Odors			Temperature			Noise		
Frequent	As Expected	Rare	Frequent	As Expected	Rare	Frequent	As Expected	Rare	Frequent	As Expected	Rare	Frequent	As Expected	Rare
<b>Large Hub</b>														
DEN - Deputy Mgr			x			x			x			x		x
DFW - VP Customer Service														
DFW - Asst VP Planning			x			x			x			x		x
DFW - Infrastruct Contracts Mgr			x			x			x			x		x
DFW - Infrastruct Service Mgr														
FLL - Dir of Cap Improv	x					x			x					x
FLL - Dir of Ops														
FLL - Dir of Maint														
FLL - Principal Planner			x			x			x			x		x
MCO - Dir of Airport Ops														
MSP - Asst Dir of Ops/Facilities														
PHX - Super Ops Planning			x			x			x			x		x
SAN - Mgr Airport Planning														
SAN - Prog Mgr / Agency Owner														
SLC - Airport Architect														
SLC - Airport Maint Ops Super			x			x			x			x		x
<b>Medium Hub</b>														
AUS - Mgr Eng and Const			x			x			x			x		x
IND - Dep Dir of Planning & Dev														
PBI - Dep Dir														
PBI - Arch Field Rep														
<b>Small Hub</b>														
LEX - Dir of Eng and Maint			x			x			x			x		x
SAV - Ops Mgr						x			x			x		x
SYR - Commissioner of Aviation														
TUS - Mgr of Arch Serv														
TUS - Station Mgr														
<b>Non-hub</b>														
HTS - Airport Dir			x			x			x			x		x
ROA - Terminal Mgr			x			x			x			x		x

**Airport Managers Survey**

MAINTENANCE															
22. Traveler Complaints Regarding Maintenance Issues															
	Plumbing Fixture Operation			Adequate Supply (Paper products, soap, etc.)			Baby Changing Stations			Cleaning Efficiency (ease of cleaning)			Adequate Waste Receptacles		
	Frequent	As Expected	Rare	Frequent	As Expected	Rare	Frequent	As Expected	Rare	Frequent	As Expected	Rare	Frequent	As Expected	Rare
<b>Large Hub</b>															
DEN - Deputy Mgr			x			x			x			x			x
DFW - VP Customer Service															
DFW - Asst VP Planning			x			x			x			x			x
DFW - Infrastruct Contracts Mgr			x			x			x			x			x
DFW - Infrastruct Service Mgr															
FLL - Dir of Cap Improv	x			x					x			x			x
FLL - Dir of Ops															
FLL - Dir of Maint															
FLL - Principal Planner			x			x						x			x
MCO - Dir of Airport Ops															
MSP - Asst Dir of Ops/Facilities															
PHX - Super Ops Planning			x			x			x			x			x
SAN - Mgr Airport Planning															
SAN - Prog Mgr / Agency Owner															
SLC - Airport Architect															
SLC - Airport Maint Ops Super			x			x			x			x			x
<b>Medium Hub</b>															
AUS - Mgr Eng and Const			x			x			x			x			x
IND - Dep Dir of Planning & Dev															
PBI - Dep Dir															
PBI - Arch Field Rep															
<b>Small Hub</b>															
LEX - Dir of Eng and Maint			x			x			x			x			x
SAV - Ops Mgr			x			x			x			x			x
SYR - Commissioner of Aviation															
TUS - Mgr of Arch Serv															
TUS - Station Mgr															
<b>Non-hub</b>															
HTS - Airport Dir			x			x			x			x			x
ROA - Terminal Mgr			x			x			x			x			x

## Airport Managers Survey

MAINTENANCE	23. Occurrence of Maintenance Issues																							
	Finishes (Durability and Ease of Maintenance)			Vandalism			Graffiti			Durability of Fixtures			Non- operating Plumbing Fixtures			Ease of Product Restocking			Clogged Soap Dispensers			Burned Out Light Bulbs		
	Frequent	As Expected	Rare	Frequent	As Expected	Rare	Frequent	As Expected	Rare	Frequent	As Expected	Rare	Frequent	As Expected	Rare	Frequent	As Expected	Rare	Frequent	As Expected	Rare			
<b>Large Hub</b>																								
DEN - Deputy Mgr	x				x			x		x				x			x					x		
DFW - VP Customer Service																								
DFW - Asst VP Planning			x		x			x		x				x			x						x	
DFW - Infrastruct Contracts Mgr			x		x			x		x				x			x						x	
DFW - Infrastruct Service Mgr																								
FLL - Dir of Cap Improv	x				x			x		x				x		x							x	
FLL - Dir of Ops																								
FLL - Dir of Maint																								
FLL - Principal Planner		x			x			x		x				x			x						x	
MCO - Dir of Airport Ops																								
MSP - Asst Dir of Ops/Facilities																								
PHX - Super Ops Planning		x			x			x		x				x			x						x	
SAN - Mgr Airport Planning																								
SAN - Prog Mgr / Agency Owner																								
SLC - Airport Architect																								
SLC - Airport Maint Ops Super		x			x			x		x				x			x						x	
<b>Medium Hub</b>																								
AUS - Mgr Eng and Const		x			x			x		x				x			x						x	
IND - Dep Dir of Planning & Dev																								
PBI - Dep Dir																								
PBI - Arch Field Rep																								
<b>Small Hub</b>																								
LEX - Dir of Eng and Maint			x		x			x		x				x			x						x	
SAV - Ops Mgr			x		x			x		x				x			x						x	
SYR - Commissioner of Aviation																								
TUS - Mgr of Arch Serv																								
TUS - Station Mgr																								
<b>Non-hub</b>																								
HTS - Airport Dir		x			x			x		x				x			x						x	
ROA - Terminal Mgr		x			x			x		x				x			x						x	



**Airport Managers Survey**

MAINTENANCE												
	24. Finishes (durability and ease to maintain)		25. Access to Pipe Chase and Janitor's Closet Outside Restroom		26. Preferred Clear Width in Pipe Chase	27A. Use Technology to Monitor Maintenance Problems		27B. Describe Monitoring Technology	28. Standard Operating Procedures for Restroom Maintenance		30. Restroom Layouts That Work Well	
	Yes	No	Yes	No		Yes	No		Yes	No	Yes	No
<b>Large Hub</b>												
DEN - Deputy Mgr	x		x		4 ft.		x		x			x
DFW - VP Customer Service												
DFW - Asst VP Planning			x		36"		x		x			x
DFW - Infrastruct Contracts Mgr							x	Infor EAM				
DFW - Infrastruct Service Mgr												
FLL - Dir of Cap Improv			x				x			x		x
FLL - Dir of Ops												
FLL - Dir of Maint												
FLL - Principal Planner			x		3 ft.		x		x			x
MCO - Dir of Airport Ops												
MSP - Asst Dir of Ops/Facilities												
PHX - Super Ops Planning				x	?		x			x		x
SAN - Mgr Airport Planning												
SAN - Prog Mgr / Agency Owner												
SLC - Airport Architect												
SLC - Airport Maint Ops Super			x		24"		x		x			x
<b>Medium Hub</b>												
AUS - Mgr Eng and Const				x			x	MMS	x			x
IND - Dep Dir of Planning & Dev												
PBI - Dep Dir												
PBI - Arch Field Rep												
<b>Small Hub</b>												
LEX - Dir of Eng and Maint			x		30"		x		x			x
SAV - Ops Mgr				x			x			x		x
SYR - Commissioner of Aviation												
TUS - Mgr of Arch Serv												
TUS - Station Mgr												
<b>Non-hub</b>												
HTS - Airport Dir				x			x					x
ROA - Terminal Mgr				x			x			x		x



**Airport Managers Survey**

DESIGN CONSIDERATIONS																			
	33. MATERIALS: Importance of Restroom Components to Traveler's Experience																		
	Wall Finishes			Floor Finishes			Ceiling Finishes			Toilet Partitions		Door Hardware		Sink and Vanity Deck Finishes		Mirrors			
	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	
<b>Large Hub</b>																			
DEN - Deputy Mgr		x			x				x	x			x					x	
DFW - VP Customer Service																			
DFW - Asst VP Planning	x			x				x		x			x		x			x	
DFW - Infrastruct Contracts Mgr		x			x				x	x			x			x		x	
DFW - Infrastruct Service Mgr																			
FLL - Dir of Cap Improv	x			x				x		x			x		x			x	
FLL - Dir of Ops																			
FLL - Dir of Maint																			
FLL - Principal Planner	x			x				x		x			x		x			x	
MCO - Dir of Airport Ops																			
MSP - Asst Dir of Ops/Facilities																			
PHX - Super Ops Planning	x			x					x	x			x		x			x	
SAN - Mgr Airport Planning																			
SAN - Prog Mgr / Agency Owner																			
SLC - Airport Architect																			
SLC - Airport Maint Ops Super		x			x				x	x			x		x			x	
<b>Medium Hub</b>																			
AUS - Mgr Eng and Const		x			x				x				x		x			x	
IND - Dep Dir of Planning & Dev																			
PBI - Dep Dir																			
PBI - Arch Field Rep																			
<b>Small Hub</b>																			
LEX - Dir of Eng and Maint		x		x				x	x				x			x		x	
SAV - Ops Mgr	x			x				x					x		x			x	
SYR - Commissioner of Aviation																			
TUS - Mgr of Arch Serv																			
TUS - Station Mgr																			
<b>Non-hub</b>																			
HTS - Airport Dir		x		x				x					x		x				x
ROA - Terminal Mgr		x		x				x		x			x		x				x

## Airport Managers Survey

DESIGN CONSIDERATIONS														
	34. FIXTURES: Importance of Restroom Components to Traveler's Experience.													
	Toilets			Urinals			Drinking Fountains			Sinks		Lights		
	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important
<b>Large Hub</b>														
DEN - Deputy Mgr	x			x			x			x			x	
DFW - VP Customer Service														
DFW - Asst VP Planning	x			x			x			x			x	
DFW - Infrastruct Contracts Mgr	x			x			x			x			x	
DFW - Infrastruct Service Mgr														
FLL - Dir of Cap Improv	x			x			x			x			x	
FLL - Dir of Ops														
FLL - Dir of Maint														
FLL - Principal Planner	x			x			x			x			x	
MCO - Dir of Airport Ops														
MSP - Asst Dir of Ops/Facilities														
PHX - Super Ops Planning	x			x			x			x			x	
SAN - Mgr Airport Planning														
SAN - Prog Mgr / Agency Owner														
SLC - Airport Architect														
SLC - Airport Maint Ops Super	x			x			x			x			x	
<b>Medium Hub</b>														
AUS - Mgr Eng and Const	x			x			x			x			x	
IND - Dep Dir of Planning & Dev														
PBI - Dep Dir														
PBI - Arch Field Rep														
<b>Small Hub</b>														
LEX - Dir of Eng and Maint	x			x			x			x			x	
SAV - Ops Mgr	x			x			x			x			x	
SYR - Commissioner of Aviation														
TUS - Mgr of Arch Serv														
TUS - Station Mgr														
<b>Non-hub</b>														
HTS - Airport Dir	x			x			x			x			x	
ROA - Terminal Mgr	x			x			x			x			x	

**Airport Managers Survey**

DESIGN CONSIDERATIONS															
35. ACCESSORIES: Importance of Restroom Components to Traveler's Experience															
	Soap Dispensers			Hand Dryers			Paper Towels			Trash Containers			Mirrors	Make-up Mirror	Full-length Mirror
	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important
<b>Large Hub</b>															
DEN - Deputy Mgr	x			x			x			x			x		
DFW - VP Customer Service															
DFW - Asst VP Planning	x			x			x			x				x	x
DFW - Infrastruct Contracts Mgr	x			x			x			x				x	
DFW - Infrastruct Service Mgr															
FLL - Dir of Cap Improv	x			x			x			x				x	
FLL - Dir of Ops															
FLL - Dir of Maint															
FLL - Principal Planner	x			x			x			x				x	
MCO - Dir of Airport Ops															
MSP - Asst Dir of Ops/Facilities															
PHX - Super Ops Planning	x			x			x			x				x	x
SAN - Mgr Airport Planning															
SAN - Prog Mgr / Agency Owner															
SLC - Airport Architect															
SLC - Airport Maint Ops Super	x			x			x			x				x	x
<b>Medium Hub</b>															
AUS - Mgr Eng and Const	x			x			x			x				x	
IND - Dep Dir of Planning & Dev															
PBI - Dep Dir															
PBI - Arch Field Rep															
<b>Small Hub</b>															
LEX - Dir of Eng and Maint	x			x			x			x				x	x
SAV - Ops Mgr	x			x			x			x				x	x
SYR - Commissioner of Aviation															
TUS - Mgr of Arch Serv															
TUS - Station Mgr															
<b>Non-hub</b>															
HTS - Airport Dir	x			x			x			x				x	x
ROA - Terminal Mgr	x			x			x			x				x	x

## Airport Managers Survey

DESIGN CONSIDERATIONS																	
35. ACCESSORIES: Importance of Restroom Components to Traveler's Experience																	
Baby Changing Station			Sanitary Products Vending			Sanitary Disposal			Adult Diaper Disposal			Biohazard Disposal (e.g. Sharps)		Shelf for Belongings		Hook(s) for Bags, Coats, etc.	
Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important
<b>Large Hub</b>																	
DEN - Deputy Mgr	x			x		x					x	x			x		x
DFW - VP Customer Service																	
DFW - Asst VP Planning	x		x			x			x				x	x			x
DFW - Infrastruct Contracts Mgr		x		x		x				x							
DFW - Infrastruct Service Mgr																	
FLL - Dir of Cap Improv		x		x		x			x			x			x		x
FLL - Dir of Ops																	
FLL - Dir of Maint																	
FLL - Principal Planner	x		x			x			x			x			x		x
MCO - Dir of Airport Ops																	
MSP - Asst Dir of Ops/Facilities																	
PHX - Super Ops Planning	x		x			x			x			x			x		x
SAN - Mgr Airport Planning																	
SAN - Prog Mgr / Agency Owner																	
SLC - Airport Architect																	
SLC - Airport Maint Ops Super	x		x			x			x			x			x		x
<b>Medium Hub</b>																	
AUS - Mgr Eng and Const	x		x			x			x			x			x		x
IND - Dep Dir of Planning & Dev																	
PBI - Dep Dir																	
PBI - Arch Field Rep																	
<b>Small Hub</b>																	
LEX - Dir of Eng and Maint	x		x			x			x			x			x		x
SAV - Ops Mgr	x		x			x			x			x			x		x
SYR - Commissioner of Aviation																	
TUS - Mgr of Arch Serv																	
TUS - Station Mgr																	
<b>Non-hub</b>																	
HTS - Airport Dir		x		x		x			x			x			x		x
ROA - Terminal Mgr	x		x			x			x			x			x		x

### Airport Managers Survey

DESIGN CONSIDERATIONS																					
36. COMFORT: Importance of Restroom Components to Traveler's Experience																					
	Accessibility			Touchless Environment			Automatic Doors at Accessible Compartments			Urinal Screens			Lighting		Daylight		Heating/ Cooling		Ventilation		
	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important
<b>Large Hub</b>																					
DEN - Deputy Mgr	x			x					x	x			x			x	x			x	
DFW - VP Customer Service																					
DFW - Asst VP Planning	x			x			x			x					x		x			x	
DFW - Infrastruct Contracts Mgr	x				x								x				x				x
DFW - Infrastruct Service Mgr																					
FLL - Dir of Cap Improv	x			x			x			x					x				x		x
FLL - Dir of Ops																					
FLL - Dir of Maint																					
FLL - Principal Planner	x			x				x		x			x			x			x		x
MCO - Dir of Airport Ops																					
MSP - Asst Dir of Ops/Facilities																					
PHX - Super Ops Planning	x			x			x			x			x			x			x		x
SAN - Mgr Airport Planning																					
SAN - Prog Mgr / Agency Owner																					
SLC - Airport Architect																					
SLC - Airport Maint Ops Super	x			x			x			x			x			x	x				x
<b>Medium Hub</b>																					
AUS - Mgr Eng and Const	x			x				x		x			x			x			x		x
IND - Dep Dir of Planning & Dev																					
PBI - Dep Dir																					
PBI - Arch Field Rep																					
<b>Small Hub</b>																					
LEX - Dir of Eng and Maint	x			x				x	x				x			x			x		x
SAV - Ops Mgr	x			x				x					x			x			x		x
SYR - Commissioner of Aviation																					
TUS - Mgr of Arch Serv																					
TUS - Station Mgr																					
<b>Non-hub</b>																					
HTS - Airport Dir	x			x			x			x			x			x			x		x
ROA - Terminal Mgr	x			x				x	x				x			x			x		x





**Airport Managers Survey**

DESIGN CONSIDERATIONS															
37. CONVENIENCE: Importance of Restroom Components to Traveler's Experience.							38. AMENITIES: Importance of Restroom Components to Traveler's Experience.								
Shelf at Sink		Coat Hook at Sink		Bottle Filler at Drinking Fountain		Security of Having Belongings in Sight		Art		Center for Passenger Needs (e.g. FIDS, AED, Info Desk, Mother's Room, Etc.)		Adjacent Waiting Area		Means for Travelers to Register Comments	
Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	
<b>Large Hub</b>															
DEN - Deputy Mgr		x				x	x					x		x	
DFW - VP Customer Service															
DFW - Asst VP Planning	x			x			x	x					x		x
DFW - Infrastruct Contracts Mgr		x			x			x		x				x	
DFW - Infrastruct Service Mgr															
FLL - Dir of Cap Improv		x			x			x		x					x
FLL - Dir of Ops															
FLL - Dir of Maint															
FLL - Principal Planner	x				x			x		x				x	
MCO - Dir of Airport Ops															
MSP - Asst Dir of Ops/Facilities															
PHX - Super Ops Planning	x				x			x		x				x	
SAN - Mgr Airport Planning															
SAN - Prog Mgr / Agency Owner															
SLC - Airport Architect															
SLC - Airport Maint Ops Super			x			x			x		x			x	x
<b>Medium Hub</b>															
AUS - Mgr Eng and Const	x					x		x				x			x
IND - Dep Dir of Planning & Dev															
PBI - Dep Dir															
PBI - Arch Field Rep															
<b>Small Hub</b>															
LEX - Dir of Eng and Maint		x				x		x						x	x
SAV - Ops Mgr	x					x		x						x	
SYR - Commissioner of Aviation															
TUS - Mgr of Arch Serv															
TUS - Station Mgr															
<b>Non-hub</b>															
HTS - Airport Dir	x					x		x						x	x
ROA - Terminal Mgr	x					x		x						x	

## Airport Managers Survey

DESIGN CONSIDERATIONS																								
	38. SUSTAINABILITY: Importance of the Following Considerations.																							
	Energy Use			Water Consumption			Environment Friendly Materials			Cleaning Supplies			Recycled Materials			Waste Management			Light Control					
	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important	Important	Moderately Important	Not Important			
<b>Large Hub</b>																								
DEN - Deputy Mgr	x			x					x			x			x			x			x			
DFW - VP Customer Service																								
DFW - Asst VP Planning	x			x			x			x			x			x					x			
DFW - Infrastruct Contracts Mgr	x			x			x			x			x			x					x			
DFW - Infrastruct Service Mgr																								
FLL - Dir of Cap Improv	x			x			x				x		x					x					x	
FLL - Dir of Ops																								
FLL - Dir of Maint																								
FLL - Principal Planner	x			x			x			x				x		x					x			
MCO - Dir of Airport Ops																								
MSP - Asst Dir of Ops/Facilities																								
PHX - Super Ops Planning	x			x				x		x				x		x					x			
SAN - Mgr Airport Planning																								
SAN - Prog Mgr / Agency Owner																								
SLC - Airport Architect																								
SLC - Airport Maint Ops Super		x		x				x			x			x			x							x
<b>Medium Hub</b>																								
AUS - Mgr Eng and Const	x			x				x			x			x			x						x	
IND - Dep Dir of Planning & Dev																								
PBI - Dep Dir																								
PBI - Arch Field Rep																								
<b>Small Hub</b>																								
LEX - Dir of Eng and Maint	x				x			x			x			x			x						x	
SAV - Ops Mgr	x				x			x			x			x			x						x	
SYR - Commissioner of Aviation																								
TUS - Mgr of Arch Serv																								
TUS - Station Mgr																								
<b>Non-hub</b>																								
HTS - Airport Dir	x			x				x			x			x			x						x	
ROA - Terminal Mgr	x			x				x			x			x			x						x	

## Airport Managers Survey

DESIGN CONSIDERATIONS					
	40. Does Your Terminal Have a Mother's Room(s)?		41. How Are Mother's Rooms Distributed?		42. How Do You Control Access to Mother's Room?
	Yes	No	One Landside/ One Airstide	One on the Concourse	Free Access with Lock
<b>Large Hub</b>					
DEN - Deputy Mgr		x			
DFW - VP Customer Service					
DFW - Asst VP Planning	x				x
DFW - Infrastruct Contracts Mgr					
DFW - Infrastruct Service Mgr					
FLL - Dir of Cap Improv		x			
FLL - Dir of Ops					
FLL - Dir of Maint					
FLL - Principal Planner		x			
MCO - Dir of Airport Ops					
MSP - Asst Dir of Ops/Facilities					
PHX - Super Ops Planning	x		x		
SAN - Mgr Airport Planning					
SAN - Prog Mgr / Agency Owner					
SLC - Airport Architect					
SLC - Airport Maint Ops Super		x			
<b>Medium Hub</b>					
AUS - Mgr Eng and Const		x			
IND - Dep Dir of Planning & Dev					
PBI - Dep Dir					
PBI - Arch Field Rep					
<b>Small Hub</b>					
LEX - Dir of Eng and Maint		x			
SAV - Ops Mgr		x			
SYR - Commissioner of Aviation					
TUS - Mgr of Arch Serv					
TUS - Station Mgr					
<b>Non-hub</b>					
HTS - Airport Dir	x				
ROA - Terminal Mgr	x			x	x

## Typical Traveler Survey

### E.5 Findings

The research team received 184 responses during the two weeks the survey was open. They came from all over the country, and one as far away as Thailand. Almost twice as many males as females took the survey. One transgender person participated. Ages ranged from the 20s to 80s, with a fairly even distribution in each of the first ten-year groups. In this sampling, the respondents rarely, if ever, traveled with children or people with special needs (such as persons with disabilities, infants, or the elderly). Only four traveled with children and two of the elderly had mobility issues. Most people traveled alone.

Over half of those between ages 31 and 60 had some level of frequent flyer status. Slightly more of the people traveled for business than leisure. For business, a third made less than five trips per year. 17% made more than 20. Predictably, the majority of leisure and family trips were less than five per year.

#### Frustrations When Visiting Airport Restrooms

Of the choices listed, the most common frustrations were cleanliness, odors, and dispensers for paper towels, toilet paper, and soap being empty. Additional comments were quite varied and insightful: need for more space, need a place for belongings, issues with paper products, etc.

#### Finding the Restrooms

Wayfinding was an important consideration. The majority of the responses indicated that signage was at least moderately important. Similarly, the distance of the restrooms from gates, concessions, baggage claim, etc. and being able to see the restroom from a distance was an important aspect of locating restrooms.

#### Comfort Within Restrooms

All of the restroom aspects related to passenger comfort within the restrooms—maneuvering space, touchless environment, privacy, accessibility, and having your belongings in sight—were considered at least moderately important.

#### Basic Restroom Amenities

Expectations included coat hooks, a shelf for belongings, and space for carry-ons at the sinks, toilets,

and urinals as well paper dispensers and trash. These were all highly desired, although coat hooks and carry-on space at the urinals was less important. There was a slight preference for foam versus liquid soap. The preference for paper towels versus hand dryers was fairly split. However, the majority of additional comments pertained to hand dryers indicating experiences that were indifferent or negative.

#### Extra Restroom Features

A variety of “extras” such as a full-length mirror, calming music, daylight, outlets, etc. were listed. Some responses appeared to reflect the personal needs of the individuals as reflected in responses regarding biohazard disposals, adult diaper disposals, dressing rooms, and adult changing tables, which were all otherwise deemed unimportant. The additional comments section revealed a design consideration that is often overlooked: it’s often difficult to get close to the mirrors for grooming, brushing teeth, etc. Related to this was the comment that brushing your teeth with warm water does not work well. Then there was the plea, “Please god, do NOT add any more noise.”

#### Amenities to Have Near Restrooms

Related amenities such as Family Rooms, Companion Care Rooms, and drinking fountains were generally important to have near the restrooms. Conveniences, like vending machines and a waiting area were less important. Flight information near the restrooms was considered a useful amenity. There was some confusion about the difference between lactation and nursing rooms. Having them near the restrooms was not considered important.

#### Other Insights and Ideas for Improvement Related to the Design of Airport Restrooms

Many thoughts were shared around a few common issues. Space was lacking in both the stalls for circulation throughout the restrooms. People bump into each other with their belongings and have no place to put their belongings when using the restroom. Related to this is the lack of fixtures, which creates lines, thus making circulation even more difficult. A big theme was cleaning, or more often, the lack of it, and fixtures needing repair.

**Typical Traveler Survey**

**1. About You:**

**Gender**

**Age**

**Special Needs**

**"Home" Airport**

**Airline Status (none, elite, etc.)**

**2. Flying trips per year:**

	1-5	6-10	11-20	20+
Business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**3. Who do you travel with in a typical year (percentage of the time - e.g. 50)?**

**Alone**

**Companion (significant other, co-worker, etc.)**

**Kids**

**Person with Special Needs (disabilities, baby, elderly, etc.)**

**Typical Traveler Survey**

**4. Top frustrations when visiting airport restrooms (select only three):**

- Cleanliness
- Light Levels
- Odors
- Temperature
- Noise
- Plumbing Fixture Operation
- Adequate Supply (paper towels, toilet paper, soap, etc.)
- Adequate Waste Receptacles
- Looks Dated

Additional Comments:

**5. Rate the importance of the following regarding finding the restrooms:**

	Very Important	Moderately Important	Not Important
Distance from gates, ticketing, baggage claim, concessions, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visibility from a Distance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Signage to the Restrooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

**Typical Traveler Survey**

**6. Rate the importance of the following regarding comfort within the restrooms:**

	Very Important	Moderately Important	Not Important
Maneuvering Space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Touchless Environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urinal Partitions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Belongings in Sight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accessibility for Travelers with Disabilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

**7. Rate the importance of the following regarding basic restroom amenities:**

	Very Important	Moderately Important	Not Important
Shelf in Toilet Stall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Space for Carry-on in Toilet Stall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coat Hook in Toilet Stall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trash in Toilet Stall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shelf at Urinal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Space for Carry-on at Urinal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coat Hook at Urinal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shelf at Sink	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coat Hook at Sink	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liquid Soap Dispensers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Foam Soap Dispensers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hand Dryers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Paper Towels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adequate Trash Container (s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

**Typical Traveler Survey**

**8. Rate the importance of these extra restroom features:**

	Very Important	Moderately Important	Not Important
Make-up Mirror	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Full Length Mirror	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biohazard Disposal (e.g. Sharps)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outlet by Sink	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adult Diaper Disposal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A way to Register Complaints / Comments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dressing Room	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calming Music	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warm Water for Hand Washing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adult Changing Table	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Daylight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:



**Typical Traveler Survey**

**9. Rate the importance of having the following near the restrooms:**

	Very Important	Moderately Important	Not Important
Family Room: primarily for adult with child(ren)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Companion Care Room: primarily for adult with adult companion with special needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lactation Room	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nursing Room	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking Fountains	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vending Machines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flight Information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waiting Area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

**10. Please share any other insights or ideas for improvement related to the design of airport restrooms:**

## Typical Traveler Survey

### E.6 Survey Responses

The following pages tabulate the question responses from the Typical Traveler Survey participants.

1. ABOUT YOU															
Age	21-30			31-40		41-50		51-60		61-70		71-80		81-90	
Gender	F	M	T	F	M	F	M	F	M	F	M	F	M	F	M
Responses	13	25	1	16	25	18	28	15	30	4	6		2		1
<b>Special Needs</b>															
Travel w/child	2			2					1	1					
6'-2" and 22 # - Need space to move													1		
Wheelchair for long walking distances												1			
Mobility issues														1	
<b>Home Airport</b>															
MSP	5	14		13	11	8	6	6	12	1					
BKK	1														
DTW		1													
ORD					2	1	1		2						
STL	3	2		1			1	1	2						
MCO					1										
MSN					2				1						
MKE		2			3		2	1							
DFW	1						1								
PHX	1								1						
MCI		2													
BNA				1		2	2	1	2		1		1		
BOS		1		1			1								
CVG		2			1	1		1	1		1				
DRO					1										
SFO	1						1								
IAH					1			2							
DCA	1								2						
SEA					1		1								
MEM		1													
RDU						1	1								
PWM					1										
DEN					1	2	3	1	1	1					
PDX					1	1									
IAD						1				1					
SNA						1			1		1				
DAL							1								
DLH								1	1						
BOI							1								
GOT					1		1								
PIT									1						
TPA					1		2								
HNL								2	1	1	1				
MHT								1							
ATL			1							1					
TRI										1					
BWI											1				
DCA												1			
SDF													1		
BJI														1	
N/A					1		1								
<b>Airline Status</b>															
Sky Priority (Delta)	1														
Elite		1		2	7		7	2	4	1	1				
Gold Elite (Delta)	1				1		1	1	2						
A-List	1								1						
Platinum		1				1	1				1				
Gold Medallion		1			2										
Platinum Elite (Delta)		1													
Expert				1											
Diamond (Delta)						1									
Premier						1	1	1	1						
Silver Elite								1	2						
Frequent Flier						1	2		2						
Eurobonus Gold									1						
SWA A+									1						
United Premier Gold												1			
United Million Miler Platinum							1								
Silver Medallion															1
Gold Medallion	1	21	1	13	15	14	14	11	16	3	3		2		1





**Typical Traveler Survey**

Age	21-30			31-40		41-50		51-60		61-70		71-80		81-90	
Gender	F	M	T	F	M	F	M	F	M	F	M	F	M	F	M
Responses	13	25	1	16	25	18	28	15	30	4	6		2		1

<b>5. FINDING THE RESTROOMS</b>															
Distance of restrooms from gates, ticketing, baggage claim, concessions, etc.															
Very important	7	12	1	15	11	16	20	12	12	3	3		1		
Moderately important	5	12		1	11	2	8	3	17	1	3		1		
Not important	1	1			1										
N/A					2				1						
Visibility of restrooms from a distance															
Very important	9	15	1	12	17	12	15	11	17	3	3		1		
Moderately important	4	9		3	3	6	13	4	11	1	3		1		
Not important		1		1	3				1						
N/A					2				1						
Signage to the restrooms															
Very important	12	16	1	13	17	15	16	14	19	4	6		1		
Moderately important	1	7		3	3	3	11	1	10				1		
Not important		2			3		1								
N/A					2				1						
Additional Comments:															
Distance from gates most important		1													
Distance not important as you can see signs in the distance		1													
It should never be a 5 minute walk to a bathroom from anywhere in the airport. In many cases it is.									1						
Some airports, ex. LaGuardia, restrooms are too small and hard to find									1						
Men's vs. Women's signs often confusing										1					

## Typical Traveler Survey

Age	21-30			31-40		41-50		51-60		61-70		71-80		81-90	
Gender	F	M	T	F	M	F	M	F	M	F	M	F	M	F	M
Responses	13	25	1	16	25	18	28	15	30	4	6		2		1

6. COMFORT WITHIN RESTROOMS															
<b>Maneuvering space</b>															
Very important	11	16	1	13	16	16	24	13	12	4	3		1		
Moderately important	2	8		3	7	2	3	2	16		3		1		
Not important		1					1		1						
N/A				2				1							
<b>Touchless environment</b>															
Very important	6	13	1	8	15	10	15	3	13	3	4		1		
Moderately important	5	6		7	6	6	13	11	15	1	2		1		
Not important	2	6		1	4	2		1	1						
N/A				2				1							
<b>Urinal Partitions</b>															
Very important	2	10	1	2	10	2	14	3	11	1	4				
Moderately important	2	11		4	9	1	12		16		2				
Not important	9	4		7	4	7	1	8	2	2			1		
N/A				3	2	6	1	4	1	1			1		
<b>Belongings in sight</b>															
Very important	11	20	1	14	18	17	25	15	27	4	6		2		
Moderately important	1	4			4		3		2						
Not important	1	1		1											
N/A				1	3	1			1						
<b>Accessibility for travelers with disabilities</b>															
Very important	4	8	1	8	7	10	13	6	13	1	4		1		
Moderately important	6	13		5	14	4	11	5	14	2	2		1		
Not important	3	4		2	2	3	3	2	2	1					
N/A				1	2	1	1	2	1						
<b>Additional comments</b>															
Counter space with no sinks. Before/after flights, women tend to be in the restroom fixing their hair, makeup, clothes, etc in front of a mirror and it is helpful to have the area to do that and not be in the way of people at the sinks.	1														
Stalls are too small to get in with a carry-on						1			1						
Maneuverability in the restrooms is difficult						1									
Automated towel dispensers and automated sinks do not give an adequate amount of product							1								
No place to put things at sinks. Counters are always wet and small.								1							
I'm not disabled but don't like to see other struggle.								1							
Need to have a hook for purse and space for carry on luggage. Use handicapped when possible for the space.									1						

**Typical Traveler Survey**

Age	21-30			31-40		41-50		51-60		61-70		71-80		81-90	
Gender	F	M	T	F	M	F	M	F	M	F	M	F	M	F	M
Responses	13	25	1	16	25	18	28	15	30	4	6		2		1

<b>7. BASIC RESTROOM AMENITIES</b>															
<b>Shelf in toilet stall</b>															
Very important	6	6		9	4	10	12	4	12	4	2		1		
Moderately important	5	13		4	11	4	15	9	14				1		
Not important	2	6	1	3	6	4	1	2	2		1				
N/A					4				2						
<b>Space for carry-on in toilet stall</b>															
Very important	11	16	1	15	18	17	19	13	24	3	6		2		
Moderately important	1	9		1	3	1	8	2	5	1					
Not important	1				1										
N/A				3		1		1							
<b>Coat hook in toilet stall</b>															
Very important	11	21	1	15	15	17	26	13	24	3	5		2		
Moderately important	1	4		1	7	1	2	2	4		1				
Not important	1								1						
N/A				3					1	1					
<b>Trash in toilet stall</b>															
Very important	6	1	1	12		6	2	4	3	1					
Moderately important	5	6		2	11	9	6	5	8	2	2		1		
Not important	2	18		2	11	1	19	6	15	1	4		1		
N/A					3	2	1		4						
<b>Shelf at urinal</b>															
Very important	1	5		1	2	1	6		4						
Moderately important	2	14	1	4	14	2	15	2	15	1	3		1		
Not important	10	6		7	6	8	5	8	10	2	3		1		
N/A				4	3	7	2	5	1	1					
<b>Space for carry-on at urinal</b>															
Very important	2	14		2	8	2	12	1	10	1	3				
Moderately important	1	7	1	3	11	2	13	1	14		1		2		
Not important	10	4		7	3	8	3	8	5	2	2				
N/A				4	3	6		5	1						
<b>Coat hook at urinal</b>															
Very important	2	2	1			1		1	1						
Moderately important	1	4		3	4	3	6	1	7	1					
Not important	10	19		8	18	8	20	7	21	2	6		2		
N/A				5	3	6	2	6	1						
<b>Shelf at sink</b>															
Very important	3	10	1	6	5	11	13	5	5	3					
Moderately important	8	11		3	9	4	9	7	18	1	2		1		
Not important	2	4		7	8	3	6	3	6		4		1		
N/A					3				1						
<b>Coat hook at sink</b>															
Very important	1	3	1	3		3		4	1						
Moderately important	5	4		6	5	4	7	4	11	3					
Not important	7	18		6	17	9	19	6	17		6		2		
N/A				1	3	2	2	1	1	1					
<b>Liquid soap dispensers</b>															
Very important	4	5	1	5	6	8	12	5	9	1	3		1		
Moderately important	4	11		4	11	6	10	8	15	3	3				
Not important	5	9		7	5	2	5	2	4				1		
N/A				3	2	1		2							
<b>Foam soap dispensers</b>															
Very important	2	8		11	7	5	10	6	7	1	2				
Moderately important	6	11	1	3	12	7	12	3	17	3	3		1		
Not important	5	6		1	3	5	4	5	5		1		1		
N/A				1	3	1	2	1	1						
<b>Hand dryers</b>															
Very important	3	9	1	11	10	6	13	4	9		1		1		
Moderately important	6	12		4	8	5	8	7	9	4	2				
Not important	4	4		1	4	7	6	4	11		3		1		
N/A					3		1		1						
<b>Paper towels</b>															
Very important	8	13		9	6	13	15	10	13	4	4		1		
Moderately important	2	7	1	6	11	4	6	4	12		2		1		
Not important	3	5		1	5		5	1	3						
N/A					3	1	2		2						
<b>Adequate trash containers</b>															
Very important	10	15	1	14	9	14	21	11	21	4	5		2		
Moderately important	2	9		2	13	3	7	4	7		1				
Not important	1	1													
N/A				3	1			2							

**Typical Traveler Survey**

Age	21-30			31-40		41-50		51-60		61-70		71-80		81-90	
Gender	F	M	T	F	M	F	M	F	M	F	M	F	M	F	M
Responses	13	25	1	16	25	18	28	15	30	4	6		2		1

<b>7. BASIC RESTROOM AMENITIES</b>															
<b>Additional comments</b>															
Having a hook in the Toilet Stall is essential. I was recently in an airport restroom that did not have one. My carry on was a backpack, but it did not fit on the provided shelf within the stall. I had to place it on the floor instead.	1														
Like having hand sanitizer option too.		1													
I like the foam soap better than the liquid soap. Having a place to put carry-on luggage and bags is very important when travelling. There seems to never be a place to pull your luggage at the urinal except behind you and it kind of blocks the path for others to walk around to get to the next stall. I've seen some airports with a large area near the door that I've seen travelers place their bags out of the way. However, I would prefer to bring my luggage in the toilet stall with me. As for the urinal, my bag can sit further away, as long as I can see it.		1													
Hand dryers (if they work) don't cause mess or a line. Towels are great but in busy airports they always run out of the trash is overflowing					1										
Hand dryers are preferred to towels only if they are quick and quiet					1	1		1							
If there's a door you have to touch to get out, trash container by the door					1	1									
Towel dispensers with a crank are difficult for people with arthritis					1	1									
Non scented soap is also extremely important as a strong scent can linger and can be unpleasant.					1	1									
Hand dryers almost never work well					1	1									
Coat hook by the sink is a good idea, especially if it is strong enough to hang a bag on.					1	1									
I don't need both kinds of soap, but one is essential. I also don't need both hand dryers and paper towels but one is essential.								1							
Look at the studies on hand dryers... they are not the best way to go.									1						



**Typical Traveler Survey**

Age	21-30			31-40		41-50		51-60		61-70		71-80		81-90	
Gender	F	M	T	F	M	F	M	F	M	F	M	F	M	F	M
Responses	13	25	1	16	25	18	28	15	30	4	6		2		1

<b>8. EXTRA RESTROOM FEATURES</b>															
<b>Make-up mirror</b>															
Very important	4	1		3	1	8	1	4	1	1					
Moderately important	4	4		5	3	7	9	6	9	2	2				
Not important	5	20	1	8	18	3	17	5	19	1	4		2		
N/A				3		1		1							
<b>Full length mirror</b>															
Very important	7	3		3	3	7	6	2	1		1				
Moderately important	3	11		10	8	8	9	11	16	2	2				
Not important	3	11	1	3	11	2	12	2	12	2	3		2		
N/A				3	1	1		1							
<b>Biohazard Disposal (e.g. Sharps)</b>															
Very important	2	2	1	4	3	3	6	2	2	1					
Moderately important	4	7		4	6	6	11	4	14	1	3				
Not important	7	16		7	13	7	10	9	13	2	3		2		
N/A				1	3	2	1		1						
<b>Outlet by Sink</b>															
Very important	1			2	1	2	1								
Moderately important	3	8		4	4	7	9	4	3	2					
Not important	9	17	1	10	16	8	17	11	26	2	6		2		
N/A				4	1	1		1							
<b>Adult Diaper Disposal</b>															
Very important	1	1		4	1	2	3								
Moderately important	2	6	1	3	4	2	9	7	7	1	2				
Not important	10	18		9	17	10	15	8	22	3	4		2		
N/A				3	2	1		1							
<b>A way to register complaints/comments</b>															
Very important	2	1		2	2	5	4	2	2	1	1				
Moderately important	3	7	1	5	10	7	9	9	12	2	5		1		
Not important	9	17		9	10	5	14	4	14	1			1		
N/A				3	1	1		2							
<b>Dressing room</b>															
Very important	2			2	2	3	2	3							
Moderately important	6	7	1	6	7	8	7	5	7	3	2				
Not important	5	18		10	13	7	18	8	19	1	4		2		
N/A				3	1			1							
<b>Calming music</b>															
Very important	2			1	2	2	4	2	1	1					
Moderately important	6	7	1	5	8	3	9	4	11	1	1		2		
Not important	5	18		9	12	12	15	9	17	2	5				
N/A				1	3	1		1							
<b>Warm water for hand washing</b>															
Very important	8	12	1	11	10	13	16	8	15	2	3		2		
Moderately important	4	11		3	10	4	10	7	12	1	1				
Not important	1	2		2	2		1		2	1	2				
N/A				3	1	1		1							
<b>Adult changing table</b>															
Very important	2			3	2		2								
Moderately important		4	1	2	6	2	9	2	9						
Not important	11	21		10	14	14	16	13	20	4	6		2		
N/A				3	2	1		1							
<b>Daylight</b>															
Very important		9	1	4	3	5	1	1	1						
Moderately important	6	6		7	10	8	16	4	11	2	2		1		
Not important	7	10		8	8	7	7	10	17	1	4		1		
N/A				1	3				1						







**Typical Traveler Survey**

Age	21-30			31-40		41-50		51-60		61-70		71-80		81-90	
Gender	F	M	T	F	M	F	M	F	M	F	M	F	M	F	M
Responses	13	25	1	16	25	18	28	15	30	4	6		2		1

<b>10. OTHER INSIGHTS OR IDEAS FOR IMPROVEMENT RELATED TO THE DESIGN OF AIRPORT RESTROOMS</b>															
Quiet, quiet, quiet, quiet, quiet, quiet, quiet, quiet							1								
TP Dispensers higher!!!!							1								
When having a large carry-on in stall, need to make sure the door can actually open and close with the carry-on within the stall. so either have more handicap access or have out-swinging doors to facilitate actually having room to open and close the door to keep laptop bags/carry-on within the stall and still be able to stand while opening/closing door.							1								
Tired of bathrooms that need rehab and aren't getting it. Partitions that have been drilled all over to rehang doors, hooks, etc. they are beat up because too small for suitcases that are constantly being pushed on and against. DEN good example almost all bathrooms are original construction. Need to remodel. A few new bathrooms in the terminal.							1								
As many touchless features as possible, and if doors are required, make them outswing on exiting so that you do not have to pull the door to exit							1		1						
Top priorities: stalls that are large enough to bring suitcases and carry-ons in with you; hooks that are strong enough to hold heavy bags/multiple bags; unscented soap in soap dispensers; good lighting; mirrors that you can actually get close to (for those of us with poor vision); easy in/out access to the restroom; easy to tell if a stall is occupied or unoccupied (without having to bend over to look for feet under the door; sanitary; paper towels or really good hand dryers (even then, sometimes it's really nice to have paper towels if you are trying to wipe off a little kid's sticky face or hands); enough stalls so there's not a long line; wide enough entry ways and aisles inside so that if there is a line, it's easy for people to exit without tripping over the people and suitcases of those waiting in line. I really like the plastic seatcovers on the toilets at O'Hare Airport - you simply wave your hand over the sensor before you sit down, and the plastic cover advances so that you know you are always getting a hygenic seat, but you don't have the mess that comes with disposable paper seat covers. Thank you for doing this survey - the quality of airport bathrooms can really be annoying for travelers.							1								
I think having big signs to know where the restrooms are and having arrows pointing to where the restrooms are. Cleanliness would be my no. 1 concern.							1								
Just need to get in and out seamlessly without having to go against traffic. A dry spot to put down belongings. A trash container that is not already full. No doors is best.								1							
Adequate space for 2 travelers to pass each other entering/exiting the restroom with rollerbags, etc.								1							

**Typical Traveler Survey**

Age	21-30			31-40			41-50		51-60		61-70		71-80		81-90	
Gender	F	M	T	F	M	F	M	F	M	F	M	F	M	F	M	
Responses	13	25	1	16	25	18	28	15	30	4	6		2		1	

<b>10. OTHER INSIGHTS OR IDEAS FOR IMPROVEMENT RELATED TO THE DESIGN OF AIRPORT RESTROOMS</b>																
Find a better way to control odors.								1								
Space is important in the stalls, around the sinks and in and out of the restroom. Inadequate number of stalls causes lines that block the doors and cause egress issues especially when you are pulling a bag. Air flow and ventilation are of course very important.									1							
Having adequate number of toilets/restrooms and all of them in working order.									1							
Need to build restrooms large enough (i.e. number of toilets) to accommodate deplanement rush to avoid waiting lines									2							
I haven't been in an airport restroom yet where I could handle my bags or change my clothes without using the handicapped stall. Hanging hooks are very important in the winter and in an enclosed changing area. A fold down shelf for a bag would save the back and keep the traveler off the floor during a clothes change as well.										1						
Everything should be hands free. If door on main entry an automatic door operator with hands free actuators										1						
Functionality, storage, simplicity but easy to clean and maintain for the airport.										1						
Generally happy with restrooms in any airport I've been to - problems arise from uncaring/sloppy travelers										1						
Signage at a distance is covered by other signs that are closer										1						
Cleanliness, well lit, and areas for luggage are most needed										1						
Maintenance, cleanliness is the most important to SNA. Everything needs to be in working order and clean.										1						
More space in stall. Privacy at urinals. Faucets, toilets and soap dispensers that actually work since some touchless unites end up being more frustrating than helpful.											1					
Good construction support of toilet partitions so they close properly and don't wobble. Cleanliness.											1					
Entry wide enough for wheelchair and other people entering and leaving														1		