

Away From Home (Public) Toilet Design: identifying user wants, needs and aspirations.

CWUAAT

University of Cambridge, Dept. of Engineering 12th April 2006

<u>Ms Jo-Anne Bichard, UCL</u>

Professor Julienne Hanson, UCL

Dr Clara Greed, UWE





The Inclusive Design of 'Away from Home' (Public) Toilets in City Centres

- Real time research
 Sept 2003 June 2006
- User centred, consulted with 200 users through interviews and focus groups around the UK.
- Personas
- Case studies of provision in London, Manchester & Sheffield.
- Toilet Audit Tool.
- Audits of 140 premises.
- Audits of 47 Accessible toilets.





'The bladder's leash'

'The bladder's leash' – Kitchin & Law (2001) describes restricted mobility of people with disabilities in regards to wider access to built environment. Especially absence of accessible toilets

Results in:

- Limiting time 'away from home'
- Revisiting places where there are accessible toilets
- Time researching if adequate facilities available

Curtails freedom of movement and choice. Socially excludes

Offers paradigm case to test society's willingness to embrace a more socially inclusive approach to design.





Standard Toilet Provision

Standard public toilet provision

- not well designed:
- Urinals set at inconvenient height for some men & boys.
- Standard height WC pans uncomfortable for young girls.
- Too low for people with back, knee or hip conditions
- Cubicle too small for parents with young children.
- Management of toilets often neglected.
- Dirty, broken, distressing to use.





Accessible Toilet Provision

- 1979 purpose designed unisex public toilets
- RADAR key scheme, locked to prevent mis-use.
- •Tailored to needs of wheelchair user
- Can not be relied on to cater for needs of all disabled people.
- Design revisions incorporated fixtures & fittings for range of user needs.
- 'Disabled' toilet icon for disability rights & access.
- Provision ensured standard facilities need not be accessible.





Users

- Previous research predominately within mobility impairments (Goldsmith 1997, Feeney, 2003).
- Lacey 2004 Visually impaired
 - find accessible toilet difficult to navigate
- Extended consultations to include
 - continence concerns (ostomists, IBS etc).
 - cognitive impairments (autism)
- Preliminary investigations with providers revealed known about users of standard provision.
 - families with young children
 - teenagers
 - older people
 - people from minority ethnic and faith communities.

Within an inclusive agenda these groups have also been consulted on the design of public toilets.





Personas

- Using focus groups and one-to-one interviews we have developed 'personas' of different users.
- Personas voice how design failings restrict movement.
- Portrait of fictional person based on shared experience of group.
- Describes visit to city centre, what they like to do and ease or difficulty of toilet design.
- Suggest design adaptations to meet personas requirements.
- Includes coded design template highlighting areas of concern.
- Wish list of user needs, analysed to show if need is design, management or planning concern.
- Approx 40 personas covering range of abilities and ages.



L



Persona - David

Local Provision / Older Men

David is 75 and has lived in the same town most of his life. He likes to visit the town centre to meet friends, and attend functions organised by local community groups. David likes to keep active within his community, but is increasingly finding being away from home, for extended periods of time, is becoming more and more difficult due to the lack of public toilets.

David has noticed that as he ages he needs to use the toilet more and more frequently. At the same time, he has noticed that the local authority has been closing more and more facilities, especially those close to bus and train stations. Within his local area, the few remaining toilets are located in parks. Although this is convenient during daylight hours, at night time the parks are closed and therefore unavailable.

As David gets older he feels he can not go further afield due to the lack of public toilets, consequently he is beginning to feel cut off from certain places he would frequently visit a few years ago. He even has difficulty visiting some areas close by as toilet provision he once counted on has been closed. This has forced David to rush home just to use the loo. He would like to visit a particular shop that he has frequented for many years, but the lack of toilets within the area and along the travel route means that he can't.

David now avoids taking train journeys even for short distances as there are no toilet facilities available on stations and those on trains tend to be unreliable. He used to enjoy travelling into the city centre to visit museums and wander around, but now finds this increasing difficult to do, due to a lack of facilities on route. Sometimes the community group will organise a day trip. David likes to go along but purposely doesn't drink anything, especially before the journey, so that he won't have to use the toilet. David feels that he does not need 'deluxe' facilities, and would welcome APCs if it meant more toilets would be available.

⁺UCL

V:va 2020

David feels toilet facilities with basic but good urinals that didn't flood, would be ideal. A basic cubicle with grab rails would also be helpful, as would the provision of a coat hook on the cubicle door. David prefers air hand dryers as they save on paper towels which often make the toilet look messy. However David feels that many hand dryers do not work properly and he often leaves the toilet with damp hands. This can become quite painful in winter, a time when David often has to use the toilet more.

As more of the public toilets in his local area close David relies on facilities in local stores. However, he also feels this is beginning to chain him to certain areas and prevent him from visiting further afield. David finds it ironic that as an active 75 year old he is encouraged to do many things but finds that he can not simply because travelling even for short distances is difficult without public toilet provision.



David was created in co-operation with

Enfield Borough Over 50s Forum



Air hand dryers in good working order. M



Toilet Audit Tool

- Toilet audit tool developed based on Design guidance BS8300 & Approved Document M.
- Has enabled us to build quantitative data regarding design of current provision, highlighting where design fails to adhere to guidelines.
- Details which fixture and fitting is most commonly included and excluded.
- Has 50 point scoring system to assess if facility has followed design recommendations.
- Have audited 140 premises, 63 had accessible toilets, 47 gave permission to audit (6 Public, 41 'Private').





DCL

		IIT I OOI	14.Suitable access route to WC?	Y/N
Date:	Dimensions:		15. Suitable signage to WC?	Y/N
	1. Depth 2200mm min?	Y/N	16. Is WC near to male and female WC?	? Y/N
Auditor name:	2. Width 1500mm min? 3. Door 800mm min?	Y/N Y/N	17. Doors on route easy to open?	Y/N
	4. Grab rail heights:		18. WC door easy to open?	۲/۲
	A (horiz. door) 680mm? Y B (vertical) 800mm? Y C (drop down) 680mm? Y D (horizontal) 680mm? Y E (vertical) 800mm? Y F (vertical) 800mm? Y	Y/N Y/N Y/N	19. Outward opening door?	Y/N
		Y/N Y/N Y/N	20. Lever type door lock?	Y/N
		Y/N	21. Is there a colostomy shelf?	Y/N
	A,B.D.E & F 600mm long?	Y/N	22. Is there a General use shelf?	Y/N
	Fittings:		23. Backrest/cistern to lean on?	Y/N
	6. WC pan height (top of seat) 480mm?	Y/N	24. Toilet paper single sheet dispenser?	Y/N
	7. Basin height: 720 –740?	Y/N	25. Lever tap to basin?	Y/N
	8. WC pan from side wall 500?	Y/N	26. Automatic tap	Y/N
	9. WC pan from back wall 750?	Y/N	27. Soap facilities within reach?	Y/ N
	10. Drop down to WC pan 320?	Y/N	28. Paper towels within reach?	Y/N
	11. WC pan - basin140-160mm?	Y/N	29. Grab rails grippable & sturdy?	Y/Ւ
	1600mm min (to top)?	Y/N	31. Drop-down rail easy to use and sture	dy?
3.800mm /	13. Height of <u>wall</u> mirror 600mm – 1600mm?	Y/N	31. Alarm system?	Y/N Y/ľ
A			Cord to floor? Reset button within reach of WC?	Y/Ւ Y/Ւ



Toilet Audit Tool

Cubicle size

- 33 facilities had the recommended width of 1500mm
- 35 facilities did not have the recommended depth of 2200mm
- Most common feature that adhered to design guidance was the door width of 800 mm 44/47



Grab rails

- 40 facilities had sturdy grab rails
- 32 facilities had grab rails of the recommended length of 600mm
- Whilst nearly all facilities would have grab rails, not one would have all the recommended grab rails fixed at either the recommended height or spacing.
- The vertical grab rail on the other side of the sink was found to be missing in 38 facilities.



<u><u></u></u>

Door 800mm
 GR Sturdy

WC Door

Toilet Audit Tool

Design Features Conforming to ADM



V:vaCity2020

≜UCL

Toilet Audit Tool

Fixtures and Fittings

- 36 / 47 toilets had not fitted the recommended height WC pan of 480mm
- 32 facilities had not installed the WC pan at the correct position of 750mm from the back wall.
- 1 / 47 facilities had fitted a shelf for users with colostomies / urostomies
- 20 facilities had the flush on the transfer side, yet 13 had the transfer space obstructed by bins.
- 36 facilities, whilst having alarms, did not have the cord reaching the floor.
- 39 facilities did not have the correct distance between WC pan and sink of 140-160 mm
- 42 facilities had no coat hook.





<u><u></u></u>

Colostomy Shelf GR A 680mm

GR D 680mm Hgt Wall Mirror

Toilet Audit Tool

Design features that Fail to Conform to ADM



V:vaCity2020

Toilet Audits

BS8300 / ADM accessible WC is a tailored product, justified on the ground that the majority of users would be able to use it.

However

- Providers, especially in the private sector do not understand what is entailed in the design of an 'accessible' toilet.
- Nor do they realise that the precise technical specification is critical for wheelchair users.
- All of the so-called 'accessible toilets' we surveyed had major design flaws in respect of ADM.
- Grab rails used as a 'token gesture'.

It is clear from the variation in design, sizes, placing of handrails etc that the current design specifications fail to cater adequately for users.



Access Vs Fortress

- WC target for 'non-toileting' behaviours
- Inclusion of design features such as a shelf disliked by providers due to issues of flat surfaces and substance misuse.
- Installation of 'blue lights' prevent substance mis-use.
- Blue lights render facility unusable for people with visual impairments, ostomists, those who use walking aids.

Access replaced by fortress design strategy. Keeping out minority at the expense of the majority.







≜UCL

To Conclude

- Accessible toilet symbolic of access.
- 'Special needs' opposed to inclusive design.
- Continued separation of able from disabled.
- Toilets in built environment used by everyone.
- Toilet audits show lack of standardisation means many people can not count on toilets being accessible.
- Forced to 'make do' with level of provision.
- Successful design not merely getting the specification right.
- Unveils fundamental social processes that regulate relationships between different users.
- Cross boundaries into acceptable & unacceptable behaviour.







Away From Home (Public) Toilet Design: identifying user wants, needs and aspirations.

Thank you for your attention

CWUAAT

University of Cambridge, Dept. of Engineering 12th April 2006

Ms Jo-Anne Bichard, UCL

Professor Julienne Hanson, UCL

Dr Clara Greed, UWE



