Publicly Accessible Toilets

An Inclusive Design Guide
Gail Knight and Jo-Anne Bichard



Foreword

Professor Jeremy Myerson Director, Helen Hamlyn Centre for Design Royal College of Art

The focus on access to the built environment lies at the heart of inclusive design. Ensuring toilet provision is accessible and available to all - especially those with continence concerns - can be considered essential to ensuring that people can move freely about our cities, towns and countryside.

The Helen Hamlyn Centre for Design has, since its inception at the Royal College of Art in 1991, taken a keen interest in how the built environment can be improved for older people through inclusive design. Whilst there has been major design guidance on toilet design for people with disabilities, the needs of the ageing population and the management of continence have been somewhat overlooked.

Gail Knight and Jo-Anne Bichard have challenged this with their work on two research projects - RATs and TACT3 - which have engaged the views of more than 120 members of the public and providers of toilet facilities. By working with these two user groups, Knight and Bichard have identified a shared problem that design can address, namely the management of information on service provision.

The result of their research is The Great British Public Toilet Map, a web-based resource that provides information for users and providers on publicly accessible toilets, and an innovation that we hope will be of benefit to the wider community.

About the authors

Gail Knight is a Research Associate at the Helen Hamlyn Centre for Design, Royal College of Art. She graduated from the RCA in Industrial Design Engineering in 2007 and her MA dissertation focused on the role of the women's public toilet as a public-private space.

Gail is an award-winning designer whose idea for SatLav, realised by Westminster City Council, was incorporated into the Department of Communities and Local Government guidance on publicly accessible toilets. She was awarded a special commendation for her work on The Great British Public Toilet Map, the key deliverable for the TACT3 Challenging Environmental Barriers project.

Jo-Anne Bichard is a Co-Investigator of the TACT3 project, Principal Investigator of the RATs project and a Research Fellow at the Helen Hamlyn Centre for Design, Royal College of Art. Jo-Anne has spent many years incorporating an inclusive design perspective into design research on public toilets and has published nationally and internationally on the subject.

Jo-Anne is the co-author of the Accessible Toilet Resource (2007) and The Inclusive Design of Public Toilets in City Centres in Designing Sustainable Cities (2009) and is currently completing her PhD at University College London. Her thesis explores how the design of public lavatories has failed to cater to the needs of the public.

How to use this guide

This guide has been developed from an inclusive design philosophy. It aims to incorporate the needs, aspirations and desires of people of all ages, abilities and ethnicities, who will become the future users of its design outcomes.

'Publicly accessible toilets' refers to all toilets that the public can access without having to buy anything. This includes those in shopping centres, parks and transport hubs, as well as the public toilets and community toilet schemes provided by the local authority.

This research uses current examples of good and bad practice to illustrate solutions.

The guide has been developed for built environment professionals such as architects, planners and designers, and for providers of publicly accessible toilets, such as local authorities, to help them to make design decisions about their facilities.

We have also aimed this guide at members of the public who may be seeking examples of provision that is more accessible for all potential users, or how public toilets might be managed by the community. **Publicly Accessible Toilets – An Inclusive Design Guide** has been produced to complement the following resources:

The Accessible Toilet Resource a guide that focuses on the design of the accessible 'disabled' cubicle

At Women's Convenience A handbook on the design of women's public toilets

British Standard BS6465: Part 4 which has been developed especially for the design and management of public toilets

Details of these publications are given in the 'More Information' section at the end of this guide.

Contents

- 06 Why This Matters
- 07 Research
- 08 Profiles
- 12 Real Toilets
- 24 Paying for the Toilet
- 26 Why Women Queue
- 28 Community Case Studies
- 32 The Great British Public Toilet Map
- 34 Design Ideas
- 37 What Next?
- 38 More Information

Why This Matters

We live in an ageing society.

In order to maintain our health and wellbeing into old age we are encouraged to adopt healthier lifestyles. Many activities that support health and wellbeing take place outside of the home, from taking walks in the local park to meeting up with friends and relatives for social engagements.

Most design solutions for our ageing society have focused on the decline of eyesight, hearing, physical mobility and cognitive function. However, after dementia, the loss of continence is the greatest fear of many older people and often becomes the primary reason for people to move into managed care environments. Whilst urinary function reduces with age, it can also be diminished by medication taken for the management of chronic health conditions such as heart failure, some forms of cancer, Parkinson's and Alzheimer's disease.

Continence conditions have made many older people limit the amount of time they are away from home, and in some cases, can be a major contributory factor in stopping them from leaving home altogether. In 2008, Help the Aged (now Age UK) found that being incontinent is very distressing for older people, causing social isolation, embarrassment and discomfort for millions.

A report on public toilet provision (Help the Aged, 2007) found that 80% of respondents did not find it easy to locate a public toilet, 78% found public toilets not open when they needed them and over half (52%) agreed that a lack of provision prevented them from going out as often as they liked. So important is the issue of toilet provision for health and wellbeing of the global ageing population that the World Health Organisation has cited it as a major factor in their Age Friendly Cities Guide.

There are a number of socio-cultural factors that prevent wider dialogue about publicly accessible toilets: that we find the subject distasteful, that we are embarrassed to discuss these needs or that it is seen as 'funny'. Yet the issue of accessing and using a toilet when away from home is a serious barrier to wider participation in public life.

As our ageing society reframes the retirement age, working lives will be extended resulting in more people continuing to commute. Therefore it is essential in our infrastructure that we have access to toilets throughout the transport journey if we are to support the needs of the ageing body.

Research

The Helen Hamlyn Centre for Design at the Royal College of Art has undertaken two research projects on publicly accessible toilet provision.

RATs - Robust Accessible Toilets ESRC Connected Communities Programme

Robust Accessible Toilets (RATs) focuses on the issue of misuse of toilet facilities, and how the needs of the many have been overshadowed in the design process by the behaviour of a few. RATs aims to bring together two distinct design perspectives, those of Design Out Crime and Inclusive Design.

Publicly accessible toilet provision has never been more diverse, with a range of providers offering facilities in public buildings, stations, shopping centres, supermarkets and local businesses, as well as Automatic Public Conveniences (or 'Superloos') offered by local authorities. Where problems exist they are often specific to the type of facility, the environment and the community that use it.

RATs has used interviews taken from the TACT3 project, and produced case studies of toilet provision in an urban neighbourhood, a village, and a London borough in order to better understand the location-specific problems and potential solutions. The research aims to bridge the gap between user-driven design needs and anti-crime advice, as some solutions can lead to legitimate users being designed out of facilities along with anti-social activities.

TACT3 - Tackling Ageing Continence through Theory, Tools and Technology New Dynamics of Ageing Programme

TACT3 has been funded by the New Dynamics of Ageing programme, 'a seven year multidisciplinary research initiative with the ultimate aim of improving quality of life of older people... the largest and most ambitious research programme on ageing ever mounted in the UK.'

As a collaborative research project between several academic and public sector organisations, TACT3 has explored the issue of continence management for older people through three key areas: the provision of continence management services; the development of user-centred assistive technologies; and the challenge of environmental barriers to continence. The Helen Hamlyn Centre for Design investigated this final area by looking at the provision of toilets when away from home.

The research was carried out over three years between 2008-2011. In year one we interviewed 101 people of all ages, abilities and backgrounds about the challenges that they face in using publicly accessible toilet provision. In year two we spoke to providers of publicly accessible toilets so that we could understand the challenges that they face in providing good quality toilet facilities. In the third and final year we explored design solutions that address the key challenges faced by members of the public and providers.

TACT3 is lead by Brunel University and includes the University of Sheffield, University of the West of England, Bristol Urological Institute, the University of Manchester, Dalarna Research Institute and the Helen Hamlyn Centre for Design at the Royal College of Art.

Profiles



YASMIN, Age 26 Sheffield, Trainee Teacher

Yasmin has had **Irritable Bowel Syndrome** for four years. When her condition flares up she needs to be able to **plan her day** knowing that she will have access to a toilet, and **privacy** from other people.

"Sometimes my mum will go and see what new places are like and report back to me... because it would just be a disaster if I went somewhere and they didn't have loos there. I would just come home again. I don't go places I don't know."

It can be very distressing for Yasmin if she finds that the toilets that she relies on are either **closed** or **unclean**.

"Even a map of the town might tell you where they are but it won't tell you what they're like, and if one was dirty but I have to go, well I have to go. I don't have a choice. So it's really annoying when there's no toilet roll, no soap. It's basics."

After her diagnosis she applied for a **RADAR key.** This allows her to unlock many accessible (disabled) toilets that are provided exclusively for RADAR key owners. The accessible toilet often offers a better facility for Yasmin than using one of the cubicles in the Ladies.

"it's quite embarrassing when you've got something like IBS ... you just want your privacy and you're more able to get that in a disabled toilet."

The other advantage of the accessible toilet is that it is often **vacant**.

"I'm not brave enough to explain that I can't wait as long and I don't think that people would really put up with it either ... they'll be like, 'Well you can queue like everyone else' but at the same time, well, some people can't wait that long unfortunately."

These four profiles represent strong characteristics and opinions that came out of interviews with the public. The profiles are fictitious; the quotes are real.



LEONARD, Age 82 Walthamstow, London, Retired Doctor

Leonard is 82. He has been using a **walking aid** for the last ten years and can comfortably walk around his local neighbourhood.

"I'm scared to go further because I'd have to go in a bus and I don't know where the toilets are."

If he is to spend a couple of hours out of the house then he will need local toilets that are **easily accessible**.

- "As long as there's a handrail on the stairs I'm alright, I just have to go slowly and hope that nobody sort of tries to rush behind me. It would be a big no-no for me if there was a flight of stairs with no handrail..
- ..but at that time when the call to nature has come and I'm trying to hold everything together, I don't need to be negotiating stairs at that point."

Some places where he would expect to find toilets do not provide adequate provision.

"Transport terminals are generally good but my local station doesn't have one.

Another place has a public loo but they keep it shut and you have to go and knock on a door and get the key and go and unlock it. What they will claim is that if they leave them unlocked they will get vandalised."

Leonard once had a bad experience where he was robbed in a public toilet. He now thinks that all toilets should have attendants.

"They should have a building, where there can be an attendant with cubicles and a safe environment."

He is frustrated about the **misuse** of some local toilets and the overall **decline** in provision.

"I went along to the police station and complained about it. Nothing happened, but the place got shut down. This is what worries me. People seem to forget that nature doesn't switch off just 'cause they close the toilets."

Designing with the need of these profiles in mind could help providers to improve their publicly acessible toilet provision.

Profiles



PAUL, Age 38 Shropshire, Photographer

Paul is married with **three young children.** When he is out with his family he has a very different experience of publicly accessible toilets compared to when he is by himself.

"I was quite amazed with one department store. They have, like, sofa areas where you can feed with your bottle, almost like a café but for people with babies. It's like a whole other world. People come in and go 'so how old is yours?""

He and his wife have found that their routines have changed depending on which places have child-friendly facilities. In particular, they've changed how and where they do their **shopping**.

"The out-of-town shopping centre is sterile and not a great shopping experience, but if you have a kid it is easier and makes you suddenly go less into town." His main problem is when he is looking after his 5-yearold daughter. He finds it uncomfortable to take her into the Mens with him because of people using the **urinals**.

"I remember one time when I was in a bit of a flap, and a lady offered to take her into the Ladies and look after her. I had a tiny twinge but then I thought "no, it'll be fine" and indeed of course it was. But that doesn't really occur very often"

"You have family changing rooms in many swimming pools and I feel that some thought might be given to family toilets."

Paul often feels that his only option when with his family is to use the accessible toilet. This provides both the space for the pushchair and the children, and a **unisex** facility for his daughter.

"I see it as accessible to disabled people rather than exclusive to, and it affords me a comfortable environment where I can take a young child. I think unisex toilets are the way forward."

These four profiles represent strong characteristics and opinions that came out of interviews with the public. The profiles are fictitious; the quotes are real.



JUDITH, Age 60 Barnes, London, Ex-Council Officer

Like many older people Judith has high blood pressure and has been prescribed **water tablets** to manage this. However this medication causes Judith to need to 'use the loo' more frequently.

"They make you go a bit often. So when I come out for the day I don't take mine. Tempting providence."

She keeps active by **running**, but the nearest park to her does not have any toilet facilities.

"I try to do 5km each day, you know. I go around the houses and then up past the Tesco, because at my age you need a toilet break!"

Judith often **cares for her mother**, who is in her late 80s. Each week she takes her to the supermarket and then into town for shopping. Sometimes Judith finds that her own need for a toilet can hamper the trip.

"...when I turned back again she had disappeared. I then had a real dilemma because on the one hand I needed the loo urgently; on the other I needed to know where my mother was"

Judith also has to think about her mother's needs.

"For mum too... to be honest, that's why I don't suggest that she joins a local pensioners group.

Because finding a toilet is the overriding thing – it's her one big concern."

She doesn't mind paying if it guarantees a cleaner toilet.

"I was invited to a hotel this weekend and that was lovely, they even had cologne, and big mirrors so you can do your makeup, and a very nice lady who you could tip. I was happy to put a pound in the dish."

"A lady a little older than me said 'Well the next time I am out shopping and I need the loo I am going to come here!"

Designing with the needs of these profiles in mind could help providers to improve their publicly acessible toilet provision.

This section uses examples from real toilets to describe ways to make publicly accessible toilet provision more inclusive for the wider population. Firstly, we will introduce some of the different types of toilet provision that may be new, problematic, or a cause of tension between different user groups.

These are:
Community Toilet Schemes
Automatic Public Toilets
Direct Access Toilets
Accessible Toilets

COMMUNITY TOILET SCHEMES

Many local authorities are starting Community Toilet Schemes, in which the local authority pays an annual fee to businesses to cover costs, allowing the public to use their toilets. These schemes can be a cost-effective way of supplementing existing public toilet provision, and are therefore increasingly popular with councils. However, informing the public (especially visitors) of the scheme and of the providers involved is more of a challenge.

"If (the business provider) has got a big poster for 'Hen's Nights' then next to it a Community Toilet Scheme sticker, they think it doesn't really go." Council Officer responsible for Community Toilet Scheme

- Signs announcing the community toilet scheme could be placed at 'entrance points' to the area, such as car parks, town centres and public transport hubs, so that visitors know what to look out for.
- Current schemes ask businesses to display a sticker in their window, to inform passers-by that their toilets are available, and of the types of toilet that they provide.
- Paper maps, directional signs and indicating community toilets on town centre maps are all good ideas. These should include details of the business's toilet facilities, the distance, and the opening hours.
- Many schemes also include toilets in council buildings, such as libraries and leisure centres.





AUTOMATIC PUBLIC TOILETS

"Lots of people don't like using APCs. I've never used one and I'm not sure I ever would! And they're very expensive. Very, very expensive..."

Council Officer

Automatic Public Toilets (APCs, or 'Superloos') have become a popular option for local authorities because they have been designed especially to prevent antisocial behaviour. However they remain unpopular with members of the public, especially older women, and parents have reported their children being frightened when using them.

"You feel silly standing outside having to read instructions on how to go to the toilet"

Woman in her 50s

- The instructions are too complex, which discourages potential users.
- Many people have had bad experiences due to poor information design or mechanical failure.
- They are often positioned in the middle of the street, which leaves people feeling vulnerable and exposed.

"Those ones in the market, I don't like 'em... they're so in your face. There's no privacy or dignity there. I was in one and it opened!"

Woman aged 76

However the APC does provide a clean, accessible, 24hour toilet facility. If these challenges can be resolved then the APC may have a future as a late-night toilet to supplement the overall toilet provision.





DIRECT ACCESS TOILETS

A recent development is the direct access toilet. Direct access toilets are fitted into custom-made buildings, or by modifying an existing toilet block. Each cubicle opens directly onto the street, with hand-washing facilities inside.



- Some direct access toilets have a coin mechanism in each cubicle door. This provides a way for local authorities to charge for the use of the toilets.
- They are preferred by the police as there is no opportunity for loitering in a communal area.
- A more flexible range of cubicle types can be offered, including male, female, unisex, wheelchair-accessible, adult changing ('Changing Places'), family and babychanging units, and a separate urinal.
- They are a suitable provision for parks, bus stations or busy town centres.
- They are less suitable for remote locations or as an isolated unit, as this is less cost-effective for cleaning and maintenance services who need to make regular visits.
- "I think that without an attendant (traditional public toilets) wouldn't be very desirable. But I believe in Cambridge they have a sort of carousel arrangement, with the doors facing outwards so there's no question of people hanging around inside." Woman aged 79 with poor mobility

ACCESSIBLE TOILETS

Accessible, or 'disabled', toilets are for people who require extra space, most notably people who use wheelchairs or need help from a carer. However, standard cubicles in the men's and women's facilities are also inaccessible to other groups, which increases the pressure on the often lone, unisex, accessible cubicle.

For example

- Pushchairs and buggies cannot fit through the door of the standard facility, or into the cubicle itself.
- Parents do not wish to leave their children unattended whilst they use the toilet.
- Carers who are caring for other adults may not wish to leave the other person unattended. `
- For parents and children of the opposite sex (and likewise for carers and those that they are caring for), the often unisex nature of the accessible cubicle can be the best solution
- Stairs can cause the standard cubicles to be inaccessible to many.
- The baby-changing facilities may be inside the accessible facility.
- People with incontinence may not be able to wait to queue for a standard toilet.
- The user may need access to a sink and to a disposal bin within the cubicle, which is more common in accessible cubicles.
- The user may need access to a sink in order to observe hygiene rituals in keeping with their faith or cultural practices.

If the standard cubicles were designed to meet more of these real requirements of users, it would reduce the pressure on the accessible toilet. The accessible cubicle would then be more readily available for anyone who requires the extra space.

"I've been shouted at by someone in a wheelchair for daring to take my child into the toilet with me" Woman, 37, with child age 3



Finding the Toilet

Finding the toilet quickly and discreetly is very important for many people, especially those with continence concerns.

"Because toilets don't make money they put them in the place where the shops don't want to go, which means they're hard to find."

Shopping Centre Architect



Printed maps that show the council's public toilets are useful, but the best maps also include publicly accessible toilets that are not council-managed, like those in train stations.



Council websites usually have information about the toilets within their boundaries. One improvement could be to provide links to the toilet page on neighbouring council websites.



Maps in the urban environment often miss out toilet information. This one shows the toilets and indicates the walking distance in minutes.



Directional signs for toilets are more useful if they include the distance, the opening times, the facilities available and if the toilets require any payment.



People need toilets at transport interchanges, so bus and train stations should have facilities. Bus stops should show toilets on a local area map, or have signs to nearby facilities.



Community Toilet Schemes need to be advertised in both printed maps and in signs and maps in the physical environment.



Lighting is a way of indicating whether a toilet is open or not.
Lighting facilities outside of opening hours attracts and misleads users.



The entrance to a toilet needs a clear sign to show where it is and what it is, particularly in large spaces like train stations and department stores.



A map at the entrance that shows other nearby toilets, including those in a community toilet scheme, can help people to plan ahead or to find alternatives if this toilet is closed.

ACCESSING THE TOILET

Everybody needs to use the toilet so they need to be made accessible and inviting to all potential users.

"Cabbies often complain about a lack of toilets but are really objecting to a lack of toilets with parking" City Council Officer



Toilets are more accessible if there is nearby parking for bikes, taxi services and private vehicles. This should include disabled parking spaces.



Barriers such as turnstiles can be difficult or impossible to use for people with wheelchairs, pushchairs or luggage. Attendants can spend a lot of time helping people through.



Many public toilets do not have doors to the main facility. A wall provides privacy for the people inside. This arrangement is better for access, safety and hygiene.



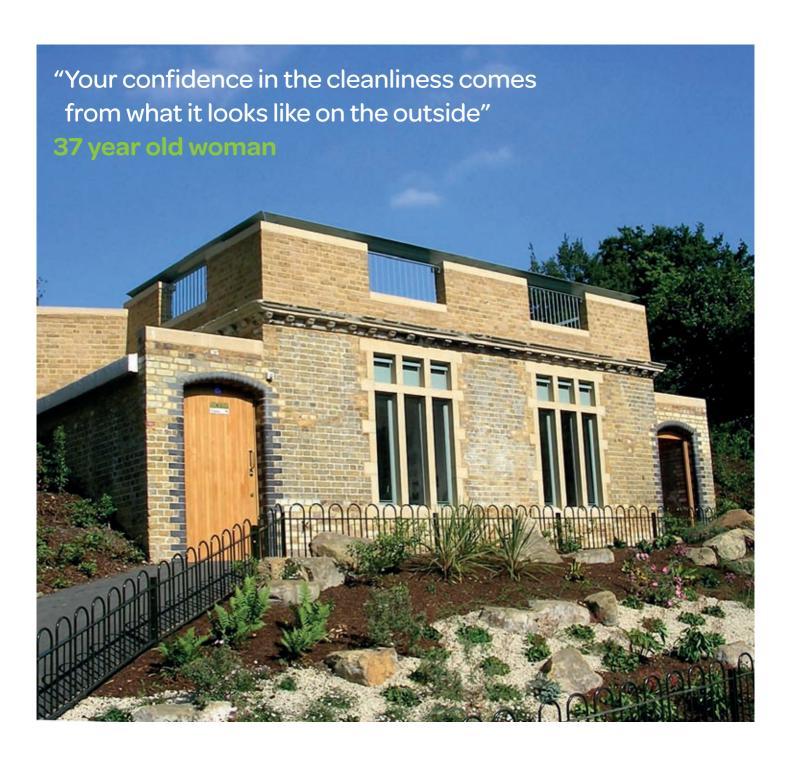
Public toilets that are well-maintained on the outside suggest a nice facility, and that the toilet is not 'public property' but rather it has an 'owner', which can help to reduce vandalism.



Seating is important for those who are less mobile and for those waiting for people inside. A local noticeboard or area maps could also encourage people to the building, improving natural surveillance.



Siting public toilets next to other 'waste services', such as communal bins, can give a negative attitude towards a facility that already has an image problem.



INSIDE THE TOILET

It is important that the inside of the toilet is well maintained. It must be clean, hygienic, safe and inclusive, and provide the privacy necessary for a personal activity in a public space. "If you go into the toilets there's pot purée, there's silk flowers, there's air freshener... I certainly believe that if you treat people well and make it like your own home then they behave much better"

Woman, 53, with urinary incontinence



Adding colour to a facility does not need to cost extra, and can make the toilet look nicer. It can also provide essential contrast between objects for people with visual impairments.



Providing space, a flat surface and mirrors for people to use will encourage users to stay longer, increasing the value of the facility and the natural surveillance.



Appropriate vending, such as these hair straighteners, could add value for users of the facility. Sensitive advertising can generate extra income.



Plants and flowers create a healthy environment and give the impression that the facility is cared for and visited regularly.



Gaps under cubicle doors and partition walls reduce privacy and leave the user vulnerable to theft.



If multiple urinals, sinks or hand-drying facilities are being provided, a range of heights will cater for people of all ages.



Simple things like a step stool can make adult facilities more accessible to small children.



Locks can be difficult for those with arthritis. An accessible door, one that can be shut, locked, unlocked and opened with a closed fist, should be provided for all cubicles.

"Some of them you are supposed to put your hands under the tap and the water comes on automatically, some of them you are supposed to push the top down, some of them you are supposed to turn round and some of them don't work."

Woman aged 74

"I absolutely hate those toilets where you've got a sanitary bin squashed up against one leg and a toilet roll dispenser squashed against the other. An extra ten centimetres would mean I don't have to touch those things."

Mother, 37, of a child aged 3



Local area maps are useful for people to plan their next move, especially if the maps show the location of other toilets.



Sharps bins are useful for people who need to inject medication. Safety pin or disposable razor symbols show other uses and reduce the association with drug use.



Offsetting the toilet within the cubicle would allow more space on one side for the necessary bin. Alternatively, a bin could be built into the cubicle wall.



Some men have Paruresis (Shy Bladder Syndrome). Dividers between urinals offer men more privacy.



A hook near to the toilet or sink keeps bags off the floor, safe from theft, and within reach for those that need to access personal belongings.



People carry lots of items in their hands: handbags, shopping, drink bottles, umbrellas, folders. A shelf keeps objects off the floor.



Bins are essential for people using continence pads. They must be provided for both men's and women's toilets.



There is a need for an all-purpose bin to take continence, menstrual and general waste, so that it can be provided inside the cubicle in the limited space that is available.

CLEANING AND MAINTENANCE

The public toilet is for some people a place of work.

- Cleaning and maintenance staff need a place to park and a storage room for equipment.
- Attendants also need heating, and a place to sit.



Having the same cleaners for the same facilities helps to create a sense of ownership for the cleaners and better communication with the public.

"There is a suggestion to stop having full-time attendants. This is driven by budget cuts, but there is a legitimate argument. In the middle of winter there may not be any visitors around at all"

Park Manager

"She gets paid, she has a white net curtain which she has hung up in her office, nice bright and clean, you should have a look! And the toilet is clean and if it's raining they put down cardboard so it doesn't get all muddy. Nice toilet."

Woman aged 72, prescribed water tablets

"That's part of the beauty of having someone cleaning every toilet at every visit, he has to wait for each toilet to be empty, and therefore notices if someone's hiding in one."

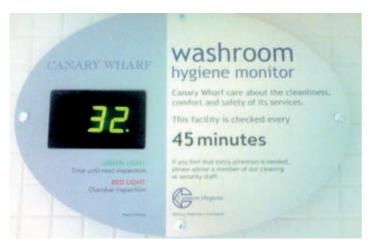
Cleaning Contractor

"Elsewhere in the station if you want to ask about a train you're unlikely to ask a cleaner, you'd find someone else, but in the toilets you've got no choice. So language is important. It should be a priority job."

London Station Manager

"At the time there was a lot of concern from council members about drug abuse. We certainly didn't want to provide an opportunity for that, so we felt quite strongly that it was attended."

City Council Officer



This countdown clock reassures people that the toilet is regularly visited, clean and well managed.



Communication between the public and cleaning staff could be improved by introducing the attendants, as in this Japanese facility.



Information signs could show different ways in which to get in touch, such as phone, text and email, to suit different needs.



Providers should request feedback from the public on their facilities, in order to show their commitment, and improve cleaning, maintenance and management.

Paying for the Toilet



There are two reasons given for charging for publicly accessible toilets.

- It helps to pay for the facility
- It makes the facility feel safer

"Just a small amount, 5 or 10p, and you would know you were safe in there. Because then you wouldn't get anyone and everyone drinking, smoking and doing naughty things which does happen sometimes."

64 year old man with poor mobility

It also raises expectations. If the public are paying for a facility then they expect to find a cleaner toilet.

"Whenever you put money in then it is clean; anywhere there is no money, it's not."

55 year old man with diabetes

However, there are many people who object to being charged to use publicly accessible toilets. Sometimes they feel that they've already paid for the facilities, either through taxes or other services.

"You've paid to get on this train the ridiculous amount of money that it costs, and then the station charge you 20p to go to the toilet. And they're the

ones that also provide the concessions so you can buy food and drink. That really bugs me actually." 40 year old woman

Mandatory payment requires some sort of barrier. This could be a gate, turnstile or coin-operated lock, but these mechanisms can prevent legitimate users from accessing the facilities. There is also the risk that these mechanisms can fail, rendering the facility out of order.

"The vast majority of calls are for the locks. People put money in and it doesn't work, or it's already iammed."

Maintenance Contractor

Sometimes people cannot use facilities because they do not have the right change.

"It is utterly ridiculous that you have to pay 20p. I mean hands up if you have even got a 20p coin on you, so for me if it is not free then it is not a public toilet"

48 year old woman with a child aged 8

There can also be unintended consequences for the provider.

"We would never charge for toilets in the [city entertainment district], as charging would encourage people to revert to street urination." City Council Officer

Supervising or manually operating a gate can take a lot of the attendant's time, so may not be profitable.

"If the machines are out of change, or they've got 5ps which the turnstiles don't take, the easiest thing is to let them through for free."

Station Manager

In the future, other forms of payment may be more convenient for the public, such as tokens, swipe cards (like TfL's Oyster card), or small payments via credit cards (like Visa Wave)

Revenue can also be raised in other ways, through advertising, sponsorship or vending.

Some councils waiver the fee for certain groups, like residents, older people, people with disabilities or council officers. It seems like a complicated decision to decide who should and shouldn't pay for the toilet, particularly in light of equality legislation.

"You can't say to someone you can't use the toilet because you can't afford to pay. You can't switch nature on and off."

Man aged 71 with poor mobility and prescribed water tablets



Why Women Queue

Queuing for the Ladies has become an accepted part of life that everyone simply 'puts up with'. However, the reason why this situation befalls women is a simple question of numbers.

There are two contributing factors:

Men often have more facilities for urination than women

The male and female sections of a publicly accessible toilet facility are often designed to have the same floor space. Women are provided with cubicles, whilst the men are provided with a combination of cubicles and urinals. As a urinal takes up less space than cubicles, this results in a men's toilet facility with more 'places to pee' than the women's toilet facility.

• It takes a woman longer to use a toilet than a man

The average time it takes a woman to use a cubicle has been measured at around 90 seconds. For a man, the average time to use a cubicle or urinal is half this (45 seconds) (Greed, 2003). There are a variety of cultural and biological reasons why women take longer, including anatomy, dress, menstruation, the likelihood of infection and continence conditions, and overall mobility (considering that a larger proportion of older people are female).

Number of men and women that can use a facility of equal male/female floor space, in a 5 minute period:



Even providing an equal number of 'places to pee' for men and women does little to redress the balance, still allowing twice as many male to female users in the same time period.

Only when women are provided with twice as many toilet facilities as men do we see an equal provision.

Number of men and women that can use a facility with 1:2 male/female 'places to pee', in a 5 minute period:



The numbers shown are merely used to illustrate why women are often found queuing for the loo, and assume a steady arrival of users, immediate turnaround of users, and that everyone takes the average time to use a toilet. Clearly this is not realistic.

However the ratios of men and women who can use each facility do reflect the reality of each situation.

'More toilets for women' is supported in the British Standard 6465 Part 4 (2010), which includes more accurate calculations on how many facilities to provide for different numbers of users, and in different situations (a publicly accessible toilet at a football match is unlikely to attract equal numbers of men and women).

Legislation requiring 2:1 female-male ratio is emerging in the USA. New York City Council passed a 'potty parity' law requiring 2:1 provision in all public buildings in 2005. In the UK the Equality Act 2010 might help raise levels of provision for women.

Statutory Code of Practice Section 11.3 states that 'A wide range of services are covered by the act including permitting access to and use of any place which members of the public are permitted to enter. Among the services which are covered are those provided to the public, or a section of the public, by local authorities, such as toilet facilities...'



Community Case Studies

VILLAGE TOILETS Menter Bro Aled: Llansannan, North Wales

In 2009 the community council in the Welsh village of Llansannan held a community-wide appraisal to understand the needs, wants and aspirations of residents. It transpired that the issue many people were concerned about was the threatened closure of the village's public toilets.

To try to stop this action, the village began negotiations with Conwy County Borough Council, which was very welcoming to their request to take over the ownership of the toilet facilities. However, there were a number of overheads that the community council would have to take on – chiefly raising the monies to pay the annual rates (£1800). So the village decided to register as a limited company with charitable status, 'Menter Bro Aled', which would make them eligible for grants and for discounts on the rates.

They successfully applied for a 100% rate rebate and negotiated £4000 from the local authority towards restoring the provision to a working standard, a sign of Conwy Council's support for this local initiative.

The village faced some problems in restoring the toilets. Weather damage meant that new roof tiles were needed, plumbing had to be repaired and windows replaced. However, they found that the damage was mostly superficial, as the building itself was only about 25 years old.

Village activists who were involved in the building trade provided many of the necessary skills for the restoration of the building, and work was carried out on a voluntary basis. Cleaning of the toilets is also voluntary by the landlady of the local pub.

The toilets have been in local ownership for a year now and there have not been any problems with anti-social behaviour, despite concerns about graffiti. They find the toilets are used extensively, especially by delivery and service drivers, as well as walkers and other tourists passing through.

Word has spread of the toilets to other areas and it has become a 'toilet to be seen'. It is considered an important element in attracting visitors to the village's shops and services.

In light of this experience of taking over the toilets, Menter Bro Aled are now looking at other community-based initiatives. Said one member of the community council, "As it happens for us, there was no choice – we either did it ourselves or have no toilets. And once you go down that lane of having these facilities close, the village will deteriorate".



NEIGHBOURHOOD PROVISION Clapton Improvement Society: Brooksby's Walk Toilets

Clapton is located in Hackney in East London, one of the 2012 Olympic boroughs. The area of Clapton, whilst considered one of the most disadvantaged in the UK, has a strong and vibrant community with a network of neighbourhood activists.

In 2011 neighbourhood activists noticed that the closed public toilet facilities on Brooksby's Walk had been accessed and left open. On investigation, they found that the facilities inside were in good order and decided to clean them up.

A new market has just begun in the area drawing custom for members of the community and visitors. As there were no other public toilet facilities in the neighbourhood, the activists felt that public toilets would relieve some of the pressure put on local small businesses for toilet provision.

One of the activists commented that even as they were cleaning up the toilets for opening, people were "coming in asking if they could use the toilets – so we knew there was a need."

By May the toilets were ready and the neighbourhood activists decided to open the facilities by turning the ladies toilets into unisex provision and holding 'Events in the Gents'. The first event drew up to 50 people and monies raised were put towards managing and maintaining the toilets.



Unfortunately, the local authority did not agree with this community-based initiative and sealed the toilets after the first event. However, support from local businesses and a petition of 750 signatures generated enough interest for the local authority to offer a 'peppercorn lease' to the community group to take over the public toilets. They have drawn up a business plan that includes income generation from holding local 'Events in the Gents'.

When considering how to address possible anti-social behaviour within the facilities, neighbourhood activists drawing on 30 years experience of working with the community proposed that 'if it's community-owned and community-managed it won't get damaged' as people know who the facilities belong to. In contrast, 'public sector' facilities are faceless and lack a sense of ownership.

SEE CLAPTON IMPROVEMENT SOCIETY www.claptonimprovementsociety.org BROOKSBY'S WALK TOILETS www.claptonimprovementsociety.org/

brooksbys-walk-toilets/

Community Case Studies

PUBLICLY ACCESSIBLE TOILET PROVISION London Borough of Wandsworth

The TACT3 and RATs research projects carried out a study on toilet provision in the London Borough of Wandsworth and found that numbers increased from nine automatic public toilets provided by the council to 112 publicly accessible toilets. A publicly accessible toilet is a toilet that the public can use without having to buy anything.

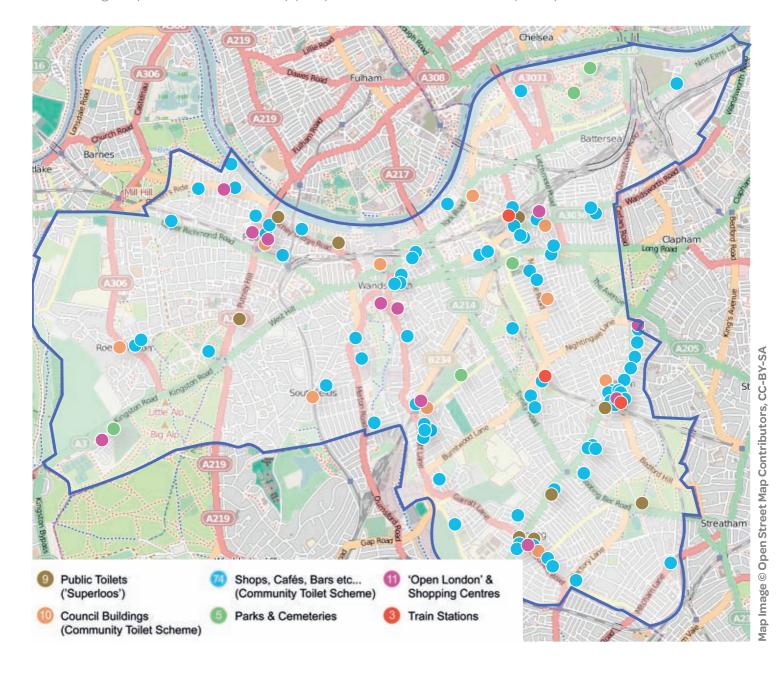
The central problem of publicly accessible toilet provision is that many people do not know which toilets they can use.

Franchised high street chains in particular cause confusion, as one business manager may decide to join the community toilet scheme, yet the same named outlet in another part of the borough may have a 'customer use only' policy.

A few national non-franchised stores have entered into goodwill agreements with the Mayor of London's 'Open London' scheme. They do not receive a payment for their participation. Consequently it is not possible to require the participants to display signs.

People often expect toilets to be provided at bus, tube and train stations, however provision is inconsistent in Wandsworth. The train stations that do provide toilets do so on the platform-side, so it could be argued that they are only available to 'customers'.

Wandsworth Council only provide information on the facilities that the council manage (including the community toilet scheme). No public body provides information that includes all of Wandsworth's publicly accessible toilets.



LOCAL TRANSPORT AND PARK PROVISION London Borough of Lewisham

The London Borough of Lewisham is located in South East London. In 2008 its population was estimated to be around 262 000. It has the highest number of green flag parks in London and the highest proportion of Caribbean residents in inner London. Every November, Lewisham holds London's largest fireworks display on Blackheath. The Borough has 20 train stations on the mainline and London Overground line, and three Dockland Light Railway (DLR) stations.

Currently, no information exists on Lewisham's public toilet provision, but observation of areas in the borough found that the provision was serviced by Automatic Public Conveniences.

Members of Lewisham Pensioners' Forum told of how they often rely on the toilet provision of chain stores and fast food restaurants, as they know these will be clean and well managed. Other facilities they relied on were those in the local civic centre, although some mentioned that they had been denied access on occasions.

The two key areas where the participants felt toilet provision was vitally needed were in the parks to support them when they take exercise, and within the borough's transport network.

Although Lewisham has a good reputation for park provision, members told how toilet provision within some parks was woefully inadequate. They added this not only caused problems for them but also for children. One member commented on the approaching school summer holiday 'it's going to be mayhem if there's not toilets available'.

Many of the forum's members spoke of once well-maintained toilet facilities by local train stations, being closed down. This made travelling within the borough very difficult, especially for those who have continence concerns.

Some members of the forum told how they didn't go out as much or as far as they would like because of the lack of toilets at local train stations. As one member stated 'very seldom do I go out unless I'm sure there are going to be toilets somewhere'.

In addition it was raised that any toilet provision had to be well maintained, with hooks and shelves for coats and bags, soap and hot water for hand drying, and a sense that the toilets were cared for.





The Great British Public Toilet Map

THE GREAT BRITISH PUBLIC TOILET MAP

The provision of public toilets is fragmented. There are 406 councils in the UK who are responsible for public toilet provision (although there is no statutory requirement for local authorities to provide public toilets at all).

However information about where public toilets are, when they are open and who they are accessible to is essential for people with continence concerns, to improve their quality of life.

A significant step would be a national map and database of public toilets that anyone could access in order to create local, regional, customisable or online maps and smartphone applications. However with so many councils responsible for public toilets, the information to create this is currently not available.

A Key outcome of the TACT3 research project will be The Great British Public Toilet Map, a public participation website to improve information about the UK's public toilets. The Great British Public Toilet Map aims to encourage local authorities to provide and maintain public toilet information as Open Data.

The purpose of the map is to show which councils publish Open Data about their public toilets. Toilet data that exists is shown on the map so that people can find facilities.

If a council does not publish Open Data about their public toilets, users will be able to contact the council to explain why this information would be useful, with the help of a sample letter. The website will be live from September 2011, initially for the London area.

OPEN DATA

Many local authorities provide some information about their public toilets on their council website. However this is not a place where people go to when they need to find a public toilet. Visitors to an area, who do not have prior knowledge of public toilet locations, are unlikely to know which council area they are in.

Open Data is part of the government's commitment to greater transparency. It refers to data that can be freely used, re-used and redistributed by anyone. This allows the public to not only use the data, but to collate, combine and enhance it, and display the information in maps and applications that are better-designed around the needs of the user.

THE AUSTRALIAN PUBLIC TOILET MAP

The Australian Government's Department of Health & Ageing launched the National Public Toilet Map (www.toiletmap.gov.au) in 2001, as part of the National Continence Management Strategy. It now contains details of over 15,000 publicly accessible toilets with data provided by over 1000 local councils and other organisations.

The website currently attracts 100 000 visitors each month and visits have grown by 700% since 2004. The up-to-date toilet map data is available as Open Data from www.data.gov.au, where it is being used by organisations to create toilet-finding smartphone applications.





USES FOR DATA

There are numerous ideas that could be developed if UK public toilet data existed.

THE PUBLIC COULD

- Find toilets that suit their needs more easily.
- Help the councils by providing feedback on the data
- Rate and review facilities, so that others know what to expect.

THE COUNCILS COULD

- Use their own data within their internal systems in order to provide maps about their own and adjacent areas.
- See more people using their facilities, increasing the value of the provision and warding off anti-social behaviour that takes place when public toilets are underused.
- Compare their own provision with similar councils across the UK, then share best practice.

FINALLY, COMMUNITIES, CAMPAIGNERS AND RESEARCHERS COULD

- Use the data to campaign for more suitable public toilet provision.
- Evaluate toilet provision against information on population demographics, anti-social behaviour, or council expenditure.
- Compare public toilet provision across the UK, and compare aspects of the provision such as accessible toilets or night-time toilets.

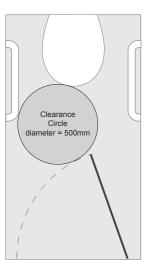


Design Ideas

AGE-FRIENDLY CUBICLES

The age-friendly cubicle would incorporate some elements from the ambulant cubicle. It would be slightly wider then most existing cubicles and it would include handrails on either side of the toilet. The door locks are 'accessible' (can be opened with ease by a closed fist), the toilet paper dispenser can be accessed by someone with arthritic hands, and the flush is of a lever design (wall inset flush systems can be difficult for people with arthritis to operate). Coat and bag hooks are essential, and, where space allows, shelves are recommended.

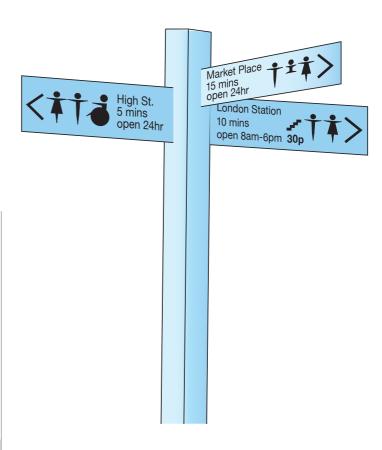
Ideally the age-friendly cubicle would become the standard toilet cubicle. This would allow growing numbers of older people to access suitable toilet provision and relieve pressure on the unisex accessible 'disabled' toilet.





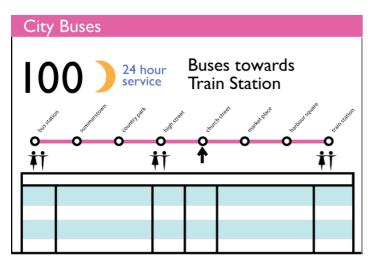
DIRECTIONAL SIGNS

This pedestrian fingerpost includes all relevant information: direction, walking distance, pictograms of the facilities, opening hours, stepped-access and payment. Providing the public with more information allows the user to decide whether the facility would suit their needs.



PUBLIC TRANSPORT INTEGRATION

Public toilet information should be integrated into the transport network. Maps, route diagrams and timetables could include details about which stops have public toilets within the station, or near to (and signposted from) the bus stop.



COMMUNITY TOILET SCHEMES

Community toilet schemes are difficult to communicate to the public. Councils list participants on their websites and some provide paper maps. Whilst these may reach residents, they are unlikely to help those visiting an area for work or pleasure.

This idea shows information provided via a high-quality sticker applied to a lamppost or other existing street furniture. This would be a low cost, pedestrian-level design solution to providing local and directional information, that can be easily and cheaply replaced or updated, should the participants or their details change.





Design Ideas

TEXTING FEEDBACK

With budget cuts reducing the number of full-time toilet attendants, more use could be made of the public and their technology for reporting immediate problems relating to cleaning and maintenance.

Many people of all ages have access to mobile phones. Texting a number to report a problem, as with this traffic light feedback system implemented by the Mayor of London, provides a simple, private and low-cost form of communication for the public that could lead to a better public toilet provision.



What Next?

This Inclusive Design Guide has focused on the need to address design issues in publicly accessible toilets. This refers to all toilet facilities that are accessible to members of the public, operated by a range of providers (local authorities, transport operators and businesses).

It has attempted to forge two distinct design approaches, that of Inclusive Design, with a focus on the needs of older people and people with disabilities through working in partnership with these groups to provide equitable access for all, and Design Out Crime which aims to deter opportunities for criminal behaviour, but which, in many cases, and particularly in design solutions relating to publicly accessible toilets, also deters access to legitimate users.

In the last decade, the decline of public toilet provision has been surreptitiously linked with a wider decline in civilised society and general public good. It cannot be denied that the Victorian and Edwardian era of public sanitation mass construction echoed a wider trend of philanthropic urban design.

However, what is often forgotten in these reminiscences is that there were very few toilets at home or in the public space. Unfortunately, this perspective has continued into our modern era. The arrival of the 2012 Olympics in London is being compared with the Beijing Games in which the national and city governments went on a toiletbuilding spree. Whilst some new facilities were built in the city centres, the majority of Beijing's toilets were built in areas that had no domestic sanitation; these were toilets for the residents to use, as well as visitors.

Today in the UK, whilst there has been a noticeable decrease in provision operated by local authorities (the 'public toilet'), there are toilets in most businesses that offer some form of customer service (cafés, supermarkets, department stores, food outlets).

What is missing is a sense of access to these facilities. The barriers to publicly accessible toilets of the 21st century are not merely physical but cultural. We have to ask ourselves if we have a 'right' to access all of these toilets?

Toilets for use by the public are costly to maintain, both financially and environmentally. Waterwise estimate that 30% of water used in the home is for flushing toilets, and more public facilities will add to this burden on resources. Tough environmental decisions are required to address the future of public toilet provision. We must ask - is there a need for more toilets, or a need for more rights of access to toilets, designed sustainably, and with all users in mind?

Jo-Anne Bichard and Gail Knight (2011)

More Information

The Accessible Toilet Resource (2007) Hanson, J, Bichard, J & Greed, C.

This comprehensive guide was developed from a threeyear research project that looked at the toileting needs of people with disabilities as well as carers and families. It focused on the problems of access in the unisex accessible 'disabled' toilet cubicle.

Available to download from http://eprints.ucl.ac.uk/4847/

At Women's Convenience: A Handbook on the Design of Women's Public Toilets (1990) Women's Design Service. A landmark publication that highlighted the design discrepancy within female public toilet provision.

Nowhere to Go (2007) Help the Aged Report by Help the Aged that highlighted the impact of the lack of public toilet provision for older people.

Incontinence and Older People: Is there a link to social isolation? (2007) Help the Aged

Report by Help the Aged that explores the challenges older people with continence face in managing the condition.

Inclusive Urban Design: Public Toilets

(2003) C. Greed.

Comprehensive book that examines the socio-cultural perspective to toilet provision as well as cubicle design, and wider planning strategies.

Improving Public Access to Better Quality Toilets:

A Strategic Guide (2008) Department of Communities and Local Government.

Strategic guide for local authorities to review the importance of public toilet provision.

Improving Public Access to Toilets: Guidance on Community Toilet Schemes and SatLav (2008)

Department of Communities and Local Government. Comprehensive guide for local authorities to help set up partnerships with businesses in community toilet schemes.

British Standard BS 6465-4 (2010) Sanitary installations. Code of practice for the provision of public toilets.

Guidance from the British Standards Institute on the provision of public toilets including formulae for calculating provision numbers for footfall, as well as cubicle design, layout and suitable gender parity.

Public Toilets in London (2011) London Assembly Report on London's public toilets including details of the open data initiative to collect information about provision.

Publicly Available Toilets Problem Reduction Guide

(2010) Hertfordshire Constabulary Crime Prevention Design Service and the British Toilet Association Design guide that focuses on possible design and management solutions to problems of anti-social behaviour in publicly accessible toilets.

Good Loo Design Guide (2004) Centre for

Accessible Environments

Comprehensive design guidance that includes excellent illustrations of how people with disabilities navigate the space of the toilet cubicle.

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