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**THE ACCESSIBLE TOILET RESOURCE**

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## About The Authors

**Julienne Hanson** is Professor of House Form and Culture at the Bartlett, UCL, where she has been a teacher and researcher since 1975. She has recently profiled the UK's housing stock with the needs of older people in mind, investigated the layout and design of residential care homes in relation to quality of life issues and completed two linked studies of the housing, support and care needs of older people with visual impairments and the housing and support needs of vision impaired adults of working age. Current projects include mainstreaming 'telecare' services in the homes of older people, the design of culturally sensitive homes, remodelling sheltered housing and residential care homes to 'extra care' housing the provision of inclusive and sustainable public toilets in city centres. Julienne's role on the project, as Principal Investigator, was to devise the research project and develop the methodologies (personas, templates, toilet audit tool and case studies). She also contributed the section on inclusive design.

**Jo-Anne Bichard** was the Research Fellow on the Vivacity 2020 'Inclusive Design of Away from Home (Public) Toilets in City Centres' project, based at the Bartlett, UCL. Her background is in Social Anthropology and her previous research included ethnographic studies of neuro-imaging labs and perceptions of mental health, and ethnographic studies of public bathing practices including women's use of public space. During the course of the research Jo-Anne authored and co-authored over 20 journal and conference papers on the issue of access to toilets and represented and spoke about the research at many national and international events. She is currently undertaking her PhD at UCL on wider access issues with regards to away from home toilets and public space. Jo-Anne is now a Research Fellow at the Helen Hamlyn Centre for Inclusive Design based at The Royal College of Art where she continues her research in inclusive design.

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## VivaCity 2020

In order to live more sustainably, we must understand what urban sustainability encompasses and how we can realistically achieve this goal. The Engineering and Physical Sciences Research Council (EPSRC) has responded to the need for more sustainable city living by funding 12 research projects addressing the theme of urban sustainability. VivaCity 2020 is one of these projects.

VivaCity is seeking to understand how cities can be more sustainable and how those living in cities can live in a more sustainable way. It is looking at several specific aspects of urban sustainability and addressing these through a new understanding of the urban design decision-making process.

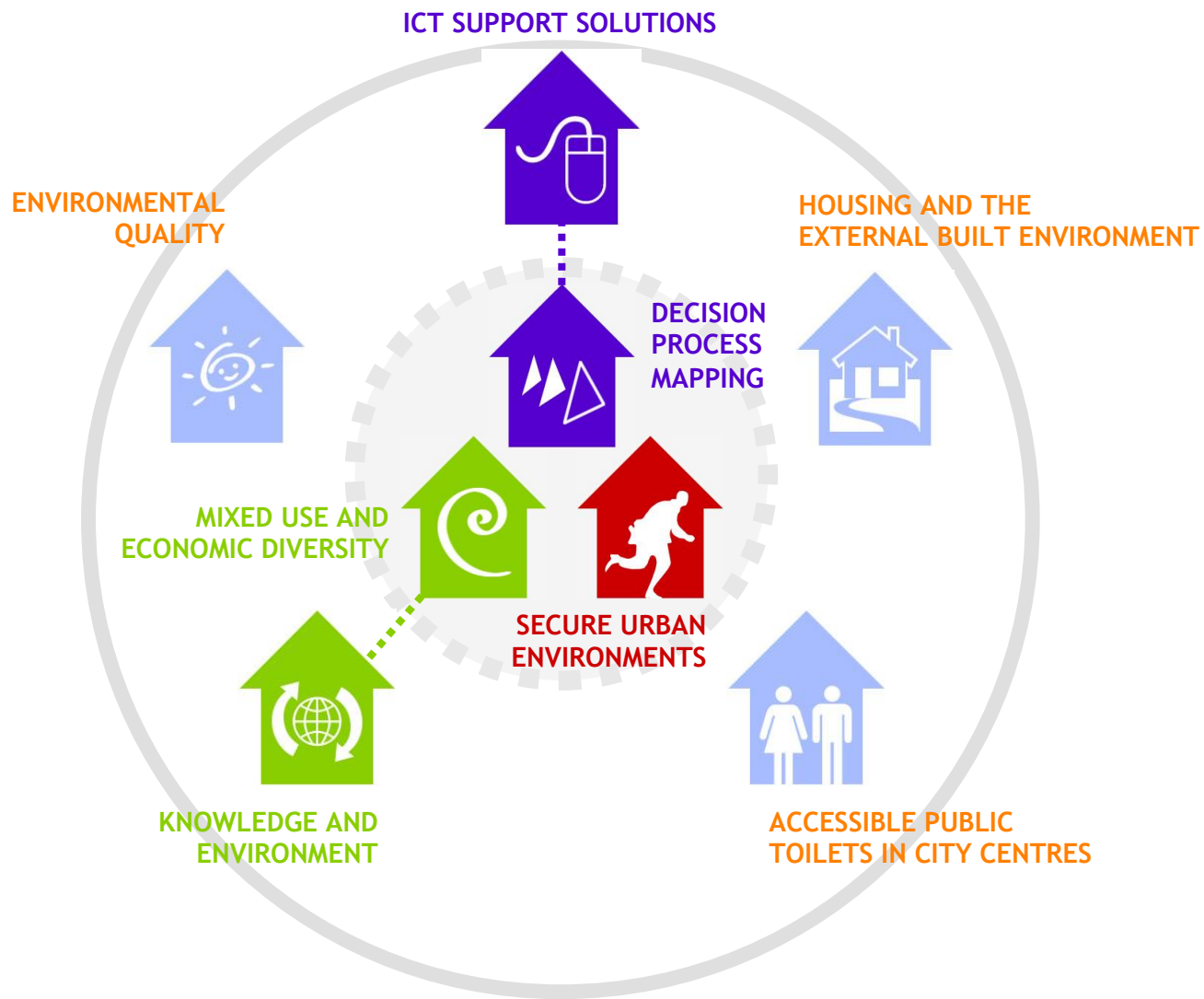
The first three years of VivaCity's five-year research programme have been devoted to collecting analysing and understanding data in eight key areas of urban sustainability:

1. The urban design decision-making process
2. Mixed use and economic diversity in cities

3. City centre crime and fear of crime
4. The relationship between perceptions of and actual environmental quality
5. How people's knowledge affects the development of the built environment
6. The relationship between housing needs and the types of housing provided in city centres
7. The relationship between the design and accessibility of public toilets and how people make use of the city
8. How ICT solutions can help city developers make more sustainable urban design decisions.

The aim of VivaCity is to support sustainable urban design that is socially responsible through the use of innovative practical and holistic decision making tools. The last two years of the project are therefore dedicated to integrating the research findings from these eight key areas to provide an overall picture of urban sustainability.

The tools will be built from an understanding of the patterns of human/environment interaction and so will resolve practical problems in the way the built environment is currently designed and managed, especially in relation to the twenty-four hour city.



VivaCity's key areas of urban sustainability

## Introduction

This **Accessible Toilet Design Resource** has been produced from new primary research carried out within VivaCity 2020, a large university-based research consortium that is developing tools and resources to support the design of socially inclusive cities. The consortium is funded by the Engineering and Physical Sciences Research Council (EPSRC). It was set up in 2003 and will complete its work in 2008.

The Resource is concerned primarily with the design of the **accessible toilet cubicle** that should be provided for customer or public use wherever there is standard toilet provision. Though it may make reference to other types of toilet cubicles, urinals, automatic public conveniences (APCs) or grouped toilet provision, the location and design of these facilities are not addressed in great detail here.

The location and design of accessible toilet facilities merits this independent, detailed scrutiny because it is essential to provide these facilities and to design them correctly, so that disabled people can participate on equal terms to able-bodied people in every aspect of city life.



A well-designed accessible toilet. (Greed 2006)

The unisex accessible toilet has, since its introduction in the 1970s, become one of the central symbols of an accessible environment. Within away from home toilet provision, it is essential for people who may need assistance from a caregiver of the opposite gender. However, many people with disabilities who do not require assistance may prefer to use accessible facilities within gender specific provision. Ideally therefore, a unisex accessible cubicle for wheelchair users and those who require assistance from a caregiver should be provided in addition to accessible cubicles in the men's and women's toilets.

In what follows, the terms 'public toilet' and 'away from home' toilet will be used interchangeably, to include both toilets provided by Local Authorities and toilets belonging to Private Providers for the use of their customers. The term 'accessible toilet' is used throughout this Resource to refer to the purpose-designed cubicle provided for the use of disabled people. This is frequently referred to in signage and by some disabled people themselves, as the 'disabled' toilet.

The Resource presents findings from a VivaCity 2020 work package that studied the inclusive design of away from home toilets in city centres. The research was carried out in London, Manchester and Sheffield, and was conducted over a three-year period from September 2003 to August 2006. Its main objective was to involve users in making design recommendations to architects,

designers, planners, manufactures and providers of away from home toilets. Well designed toilets for customer use are an important amenity within any building or urban environment and so the way they are designed should meet everyone's needs, yet users have rarely been consulted regarding the design of these facilities.

The research on which this guidance is based therefore sought to address the issue of user consultation by holding focus groups and one-to-one interviews, either face-to-face or over the telephone, with representatives from many different user groups. These included members of support groups for people with disabilities and chronic health conditions, families with young children, young people, older people and members of different faith communities. The Resource presents the headline findings from this research.

Participants in focus groups and interviews were asked what they like to do in the city and how the lack of adequate toilet provision can be a barrier that inhibits or prevents access to the city centre. These sessions also dealt with each aspect of the design of an accessible toilet, from the entry and exit to the signage, the height of the WC pan, the soap dispenser and people's preferences in respect of the toilet paper dispenser and hand drying facilities. During the course of the study, a total of 548 people were either interviewed, or attended focus groups, answered surveys or wrote letters detailing their experiences of current provision in respect of away

from home toilets. This Resource is based on their collective experiences.

The Resource also illustrates how built environment professionals and user groups can use the tools developed during the research project to assess current provision. It should therefore be of interest to planners, architects, town centre and building facilities managers and the many different groups of users who benefit from accessible provision.

The tools can also be used when considering the design of future provision that is more inclusive and that more accurately reflects society's needs. Incorporating a range of different research methods, the tools included in this Resource also illustrate the wide-ranging needs of people with regard to toileting when away from home.

Unless otherwise acknowledged, all the photographs shown in the Resource have been taken by members of the research team. Because we did not find a single toilet that conformed to current best practice, the examples shown in the photographs, including this one, suffer from design defects and cannot be considered in all respects to be examples of good practice.



Our top scoring toilet. (Bichard 2005) VivaCity 2020

## The Inclusive Design of Away from Home Toilets Top Scoring Facility

The accessible toilet that scored the most points during our audit of 101 accessible facilities was one of two lavatories provided by the Magic Carpet Adventure Playground in Richmond upon Thames, a member of the local authority's Community Toilet Scheme.

The facility that offered right hand transfer scored 32 points for its inclusion of 32 out of 50 design features.

These included:

- Meeting the recommended minimum dimensions for the cubicle's depth and width. This facility measured 2500mm x 1500mm.
- The correct height WC pan (480mm)
- The correct height for the basin (720 mm)
- The flush on the transfer side of the cistern
- Four of the six recommended grab rails set at the correct heights.

However, areas of design where the facility could be improved included:

- Adjusting a height discrepancy of 30mm between the drop down rail and the horizontal wall rail, as having the two rails at different heights may be awkward for some users when transferring on and off the WC pan.

- The wall mirror was found to be too high and cannot be used by person seated in a wheelchair.
- The toilet paper was not housed in the recommended dispenser. Toilet rolls may be difficult for some disabled people to use, as they require grip and strength to access.
- Soap facilities were within reach but not fixed, presenting the possibility that they could fall on the floor and be out of reach or spill, becoming slip hazard.
- The alarm cord was set on the transfer side of the WC pan. Guidance suggests that it should be located on the side of the horizontal wall rail as, if the location is as shown in this facility, the cord can obstruct a person transferring from the wheelchair to the WC pan.
- The alarm cord was not long enough, and did not reach 100mm from the floor.
- The transfer space was obstructed by a bin.

In addition a baby change unit was included. Although not recommended in guidelines, we recognise that considering the nature of this provision (for a children's adventure playground) it was appropriate to include baby change facilities in the accessible cubicle, although the positioning of the baby change unit could have been made more accessible for parents who use wheelchairs.

## What this resource contains

The **Accessible Toilet Design Resource** aims to give all those who are interested in improving the design of away from home toilets the necessary tools to assess current levels of provision and to make design recommendations where appropriate.

The first half of the Resource provides background information on important **guiding principles** that surround the design and management of accessible and inclusively designed away from home toilets, including:

- Why sustainable cities need away from home toilets
- Disabled people and the need for accessible facilities
- Deficiencies in standard toilet provision
- Meeting the needs of disabled people through good design
- From special needs to inclusive design
- A hierarchy of accessible toilet provision
- Current designs

The Resource then goes on to consider some of the more contentious aspects of away from home toilets such as:

- Gendered or unisex inclusive provision
- To lock or not to lock
- Evening provision
- Management

- Sustainability

The second part of the Resource illustrates a number of specific **tools and resources** that can be used when assessing or designing accessible toilet provision. These include:

- **Personas** that communicate users' needs to providers, planners, architects and designers
- **Surveys** to establish people's perceptions of current provision, including which features of the accessible cubicle interviewees find most helpful and those they do not use
- **Toilet Audits** to assess current design standards and pinpoint any design weaknesses
- **Case Studies** of provision that illustrate examples of good (or bad) practice

Examples of all of these tools are included in the Resource. The Resource also reports important new **research findings** that emerged when the tools and resources were used to gather information about user needs and preferences in respect of the design of accessible away from home toilets. The research findings are robust and reliable, but user groups may like to augment them by using them as a model to carry out local research to strengthen their particular need for more accessible facilities.

## Who this Design Resource is for

This Accessible Toilet Design Resource has been produced for all who may have a professional or personal interest in away from home toilet provision. Local authorities and private providers may be interested in the **Personas** to address how current provision may not be accessible to all potential customers or they may wish to use **Surveys** to establish attitudes to current provision or the requirements of their client base. The **Audit Tool** may act as a checklist to compare current provision with that recommended in the relevant Building Regulations and British Standards. **Case Studies** may illustrate good practice that could be used as a model for new provision.

Built environment professionals, such as architects, planners and designers, may consider consulting the **Personas** as a first step in planning and designing toilet provision for public use. They may wish to discuss them with local user groups to identify additional fixtures and fittings that may be required, using **Surveys**. They may wish to adapt the **Design Templates** that have been produced to illustrate a range of accessible toilet cubicles, to suit their specific design requirements.

Users of away from home toilet facilities may find the **Personas** are suitable to communicate their own particular needs without embarrassment, or they may wish to produce a new one that describes their preferred

design solution. **Surveys** can be used to build the case for improved facilities locally. The **Audit Tool** may be used to highlight how current provision fails to meet individual or community needs. **Case Studies** may inspire users by illustrating what can be achieved by concerted action at a local level.

The Accessible Toilet Design Resource aims to compliment existing publications. It is recommended that built environment professionals or members of a user group who are considering the design of toilet facilities, should also consult the **Good Loo Design Guide** published in 2004 by the Centre For Accessible Environments as well as design guidelines laid out in **British Standard BS8300 (2001)** and **Approved Document M of the Building Regulations (2004)**.



## Key findings of this research

Of 101 toilets audited during this research **none** had incorporated all of the 50 design details noted in our Toilet Audit Tool, which was based on the design guidance of the British Standard BS8300 (2001) and Part M of the Building Regulations (2004).

The most common fixture found to be missing from accessible toilets (97%) was the inclusion of the colostomy shelf. This may be partly due to providers' reluctance to include a flat surface within the facility, due to the use of flat surfaces for illegal substance use.

The most common feature found to have been included in the accessible cubicle (98%) was lever operated mixer taps. However, in many facilities it was noted that the taps were often placed either in a central position or on the side of the basin furthest from the WC pan, placing the tap out of reach for users who may want to wash their hands whilst seated on the WC pan.

Nearly half of the people we surveyed who identified themselves as having mobility concerns (48%) found that the accessible cubicle lacked adequate turning space for their wheelchair.

Over a fifth (22%) of the accessible cubicles we audited were not of the recommended minimum depth (2200mm)

or width (1500mm) making them too small for the users they are primarily designed to accommodate.

30% of users found that grab rails were difficult to use.

Only 6% of cubicles we audited had all the correct configuration of grab rails fixed to the guidelines recommended measurements.

Over a third of users (36%) surveyed reported that they had difficulties with coat hooks, either that they were not included in the cubicle or had been placed at a height that was out of reach to users seated in wheelchairs.

In 87% of accessible cubicles audited we found that coat hooks had not been included or had been placed at a height that a seated user could not reach.

Nearly 40% of users surveyed reported that they had difficulty accessing toilet paper when using the accessible cubicle, either because the toilet paper dispenser was out of reach or was not the recommended design and therefore could not be used.

In 80% of accessible cubicles we audited, we found that the recommended single sheet toilet paper dispenser had not been installed. In many cubicles a large roll toilet paper dispenser had been used, which many able and disabled people report finding difficult to use.

## Part One – Design Principles

This section of the Resource contains the design principles on which all well-designed toilet facilities should be based. Public toilets offer a remarkably clear example of how the design of the built environment can either 'enable' or 'exclude' individuals and groups from city centres, and so the aim of the Resource is to enable 'access for all', but this objective is not easy to achieve.

Some disabled users prefer an enlarged cubicle in the separate sex toilets whilst others require a 'unisex' accessible toilet. The very existence of this 'third way' as an alternative to accessible mainstream provision can be regarded as a hangover from an era when designing for special needs rather than social inclusion was taken for granted. In defence of the accessible unisex toilet, however, it is fair to say that whilst people who can use the toilet independently prefer to use an enlarged cubicle in the separate sex toilets, those who need assistance to use the toilet especially where this is given by a spouse or a caregiver of the opposite gender, usually prefer a 'unisex' accessible toilet.

This is not the only bone of contention, however, and opinions differ on many other aspects of toilet design, such as where an adult and baby room should be provided. Some advocate that this should be placed within the unisex accessible toilet whilst others assert

that a separate adult and baby room should be located in the men's and the women's toilets. In some cases, people with visible disabilities have been known to challenge the rights of people with a 'hidden' disability to use the accessible toilet.

Finally, and importantly for ergonomics, people with different medical conditions require different detailed design features within the WC cubicle itself. The most fundamental challenge to dimensional coordination is the actual size and overall dimensions of the WC compartment, since these affect people's ability to access the WC in the first place.

Turning to a matter of detailed design, the height at which the top of the toilet seat is set, which was originally specified to permit easy transfer by a wheelchair user from the wheelchair to the toilet, is too high for people of short stature comfortably to use the toilet and yet it is too low for people with stiff or painful knee and hip joints to get up off the seat without discomfort.

Dimensional 'dissonances' of this kind between different user groups affect just about every design feature of the accessible toilet and it is simply not possible to optimise the design to suit everyone; someone will always be inconvenienced or excluded. From a design perspective, the accessible toilet cubicle is not so much the 'smallest room' as the 'most complex building'.

## Why Sustainable Cities Need Away From Home Toilets

It is estimated that the average person goes to the lavatory between five and eight times a day. For some people with chronic health conditions and disabilities, this need may occur more often. During periods away from home, people rely on toilet provision offered by a number of providers. Some areas of the city may have public facilities provided by local authorities. Other areas may have no public toilets, leaving people to rely on the toilets provided for customers by local businesses such as cafes, bars, pubs and fast food restaurants, many of whom will display 'toilets for customers only' signs.

Under the 1936 Public Health Act, local authorities were given the right to build and run public toilets. The Act also noted that a charge could be levied for use of these facilities, although this did not apply to urinals. Greed (2003) notes that under the terms of this legislation the provision of public toilets is discretionary as opposed to compulsory. She suggests that this legislative weakness, which does not require local authorities to provide toilets for use by the general public, has led to the closure of many public toilets that are owned and managed by local authorities.

People who require more space than is normally provided in an ordinary toilet cubicle, or who need the

assistance of grab rails when toileting, may find it difficult to find a facility that meets their requirements. For these people, the lack of suitable facilities can be critical to their participation in mainstream society. The implementation in October 2004 of Part III of the Disability Discrimination Act: Access to Goods, Facilities and Services (DDA), addresses the design of physical features within the built environment that are a barrier to access. This includes the provision of, and access to, suitable toilet facilities.

Sometimes referred to in literature, signage and by users as a 'disabled' toilet, an 'accessible' toilet is one large enough to accommodate a wheelchair user or someone who needs assistance in order to use the toilet. In addition, the cubicle will contain a number of carefully specified fixtures and fittings that allow people with a range of physical, sensory and cognitive impairments to use the facility safely, comfortably and with dignity.



More cities are providing green spaces for relaxation, especially in the summer months. Yet despite many people's increased liquid consumption in summer months, public convenience availability has declined. Peace Gardens, Sheffield (Bichard 2005) VivaCity 2020

## Deficiencies in standard toilet provision

Most standard away from home toilet provision is not well designed and may disadvantage or embarrass many able-bodied users. Because this is so, most standard toilets cannot be considered to meet the needs of the majority of potential users.

An essential feature of the male toilets that suffers from poor design is the urinal, which is often set at a height that is inconvenient for many men and boys to use. Likewise, in women's facilities there is rarely a lower WC pan set at a height that is suitable for young girls. Hand washing facilities in both the men's and women's facilities is often set too high for children to use without being lifted by an adult.

WC pans in standard toilets are often set too low for people with hip, knee or back problems. These people may not consider themselves to be disabled but they could benefit from a higher WC pan, and by the inclusion of grab rails within the cubicle. However, such fixtures and fittings rarely form part of standard male and female toilet provision.

Additionally, most toilet facilities are provided on an equal basis for men and women, yet research suggests that women take twice as long as men to use the toilet. Many men's facilities may have more than the equivalent provision for women as urinals take up less space than



Poorly-managed cubicles can be extremely unpleasant to use. (Photo courtesy of David Knowles, Bradco/W&G Sissons Ltd 2003) VivaCity 2020

cubicles. The resulting effect is a gender inequality within standard toilet provision, with men taking half the time and having as much as double the provision, which usually results in women being obliged to queue to use the toilets.

Many people who describe themselves as disabled do not necessarily require fully accessible cubicles but would like to see more and better-designed standard provision. For example, some visually impaired people report that they prefer to use a standard sized toilet cubicle, as there is less space in the cubicle within which to become disorientated and confused. Many people, including older people and those with a cognitive impairment, would benefit if standard provision was better designed and had improved way finding, colour contrast and signage.

The size of a standard toilet cubicle is inconvenient for many able-bodied users. Those who are particularly disadvantaged include pushchair users, who often have to choose between leaving children outside or folding up the pushchair and carrying it and the child (or children) into a tiny WC compartment. Previous research by Goldsmith (1997) found that many parents were unwilling to leave their children outside the toilet whilst they used the facility themselves. The alternative of including the child and leaving the pushchair outside the cubicle was considered risky, whilst attempting to fold it up and bring both it and the child into the cubicle with them was time consuming and inconvenient.

Speaking to parents during the course of this research, we found that many adopted different strategies for using toilets depending on the design of the facilities. Many parents admitted using the accessible toilets as they

were big enough for them to enter with a pushchair. An added benefit to using the accessible cubicle was that it was not partitioned and therefore did not allow children to 'escape'.

Parents commented that toileting with children could be problematic in a standard cubicle, as children often attempted to crawl under the partitions whilst the adults attended to their own needs. To counter this, where the only provision available comprised standard cubicles some mothers reported choosing the last cubicle in a row, leaving their child in the pushchair and toileting with toilet door open so they could keep an eye on their child. Such strategies serve to underline the inadequacy of standard toilet provision.



Urinals can be difficult for young boys to use. (Photo courtesy of David Knowles, Bradco/W&G Sissons Ltd 2003) VivaCity 2020

## **Disabled People and the Need for Accessible Facilities**

The most recent major audit of UK public toilet (local authority) provision carried out by the Audit Commission in 1996 found that of 10,000 public conveniences, only 3500 had facilities accessible by disabled people. In addition, only 1330 had adequate baby changing provision. Since then, the situation has worsened. Prior to the introduction of the DDA in October 2004, many local authorities around the UK closed their public toilets. In the first quarter after the DDA was introduced, 30 more facilities were closed in the UK.

Although repeated problems with vandalism and anti-social behaviour coupled with the cost of repairing damage to the facilities were often held to blame for these closures, the perceived and actual cost of making local authority provision accessible under the remit of DDA has also been given as a reason for withdrawing the service.

Another pressure that may result in toilet closures is central government budget monitoring, which involves setting targets and requiring local authorities to make spending cuts to meet these where necessary. One LA

representative commented that when money is being budgeted and the choice is between funding a primary school and keeping a public toilet open, the primary school will invariably be seen as the higher priority.

Toilet closures are occurring at a time when it is estimated that 10 million people in the UK have some form of disability. Of these 5% are estimated to require the use of a wheelchair. Whitfield (1997) suggests that 1.6 million people have continence concerns, and would benefit from improved access to public toilet provision.

The needs of all those who have at some point been diagnosed with cancer are now protected under the DDA's remit. People who use urostomy and colostomy bags have particular concerns, as their disability is centred on toileting, often involving a frequent and urgent need to use a toilet to empty or change their bag. Many people within this group of users have full physical mobility and, in the words of several of our contributors, they 'do not look disabled' so their need for well-designed and accessible facilities is often ignored.

Previous research (Kitchin & Law, 2001) has reported that the dearth of accessible toilet provision requires many disabled people to restrict their visiting patterns to areas of the city where they know there is an away from home toilet that meets their needs. They use the graphic metaphor of 'the bladder's leash' to describe the

restrictions that this places on people's freedom to explore the urban environment.

Our respondents reported similar patterns of restricted movement in the city due to their perception that current provision does not cater to their access needs. One informant with an artificial limb described herself as similar to a 'small little animal who keeps to her tracks' and never ventures out of her familiar route, due to not knowing if her toileting needs will be catered for. Older informants who did not consider themselves disabled but needed to use toilets more often than the norm reported that they often 'gave up and went home'. Others said that they limited the time they were out and about within their local area, because of the lack of public toilet facilities on the high street.

Even where facilities are provided, people were understandably reluctant to use them if they were perceived to be inadequate, either because they were dirty or because the facilities were located away from main areas of city life - down side streets, in underground subways, in uninhabited and unsupervised city parks - thus raising concerns about personal safety. Personal safety was also a major concern among teenagers, who reported knowing where the public toilets were in their city centre but avoiding them due to their poor reputation as places where one may be attacked.

Toilet cubicles specifically designed for disabled people do not necessarily cater for the wide spectrum of disabilities among potential users. For example, the current size of the accessible cubicle may only be suitable for wheelchair users who have a standard self-propelled or pushed wheelchair. Since the accessible toilet was first introduced in the 1970s, wheelchair design has improved to enable many more people to live independently, but toilet design has not kept pace with these changes. Many of today's powered wheelchairs are larger than the standard wheelchair that the accessible cubicle has been designed to accommodate. This has not been reflected in the design of accessible facilities, which may therefore be too small for users of large powered wheelchairs and their caregivers to access.

Finally, disabled people cannot rely upon being able to use an accessible toilet if they are fortunate enough to locate one close to the area of the city that they are visiting, because the design of each toilet is actually different. Despite the fact that the unisex accessible toilet is arguably one of the most tightly-specified architectural environments imaginable, providers generally do not follow the recommendations and guidelines that are available to ensure that the facility is accessible.

Even providers such as chain stores and multiples, whose premises tend in other aspects to be highly standardised, have accessible customer toilets that reflect local circumstances. Thus, a disabled user who relies on past experience and assumes that the premises of a familiar service provider will be accessible when visiting an unfamiliar town or city could discover that the cubicle in that location is not of an adequate size or does not contain essential fixtures and fittings.



Despite building regulations and guidelines, the accessible toilet may not be accessible to the users it is intended for. This toilet not only has a baby change unit included, but is too small for a wheelchair user to turn in. (Richard 2006) VivaCity 2020



## Meeting the Needs of Disabled People Through Good Design

During the course of this study, we conducted surveys with 301 people, 90 of whom identified themselves as having mobility concerns. We found that:

- 72% of people who consider themselves to have some form of disability will use a public toilet, if one is available. However, 58% describe the condition of public toilets as bad and 73% do not find public toilets comfortable to use.
- 89% reported a preference for using 'private' provision toilets in businesses such as supermarkets, cafes etc.
- 91% of respondents felt that there was inadequate provision in the evening, which consequently not only limited their access to the city centre but also the times of day when they could be away from home. For these people, the lack of adequate provision effectively placed a curfew on their use of the city centre.
- APCs have become a popular response by local authorities to the need for evening provision of toilets, but many people find them inaccessible. 83% of people with mobility concerns reported

they would not use an automatic public convenience. In interviews, many disabled users said they would rather go home or attempt to use the toilets on the top floor of a department store, than use an on-street APC.

- The issue of toilets locked under the RADAR scheme continues to be controversial. Many disabled people welcome the scheme, as it guarantees that a toilet will be available, free from vandalism and of an adequate state of cleanliness. Although many local authorities operate accessible toilets under the RADAR scheme, many do not. Consequently one area may have locked toilets whilst an adjacent area does not. Our survey found that 57% of disabled people did not have a RADAR key, and 61% felt that toilets should not be locked.
- The accessible toilet is unisex by design, catering for both genders as well as for caregivers who are of the opposite gender to the user. 37% of respondents reported preferring the unisex cubicle. Those who required assistance of a caregiver of the opposite sex said they preferred unisex provision as it provided a 'legitimate' space for their caregiver. Women with disabilities said they preferred unisex provision, as the availability of the toilet often did not require them to queue.

- However, 63% of respondents said they would prefer accessible toilets to be available within gendered provision. Some users felt such provision was more in line with equality, commenting that ‘they don’t make able bodied men and women use the same toilet’. Some male respondents preferred an accessible cubicle within the men’s toilets, because they had experienced having to queue for the unisex facility.
- The issue of adequate provision often made people with disabilities think twice about leaving home. 30% reported that a lack of adequate toilets prevented them from going out, whilst 28% reported that a lack of provision sometimes prevented them from being away from home for as long as they would like.
- The issue of baby changing facilities (that are not themselves accessible) is another controversial aspect of the design of accessible facilities. 97% of disabled respondents felt that baby changing should be provided in a separate facility.
- Respondents were also asked if there were any features of the design of the toilet they found problematic. 85% reported that at least one feature of the accessible toilet made it difficult for them to use.

These findings from our survey, summarized below could be used to initiate an open discussion within a disabled user group about the design of the accessible cubicle and its limitations.

<ul style="list-style-type: none"> <li>• 48% found the cubicle lacked adequate turning space for their wheelchair</li> <li>• 38% reported difficulty flushing the toilet, either due to the choice of toilet flush handle or the positioning of the flush handle.</li> <li>• 38% found the toilet paper dispenser difficult to access, either due to it being out of reach or not of the recommended design.</li> <li>• 38% found door locks difficult to use.</li> <li>• 36% reported using difficulties using taps.</li> <li>• 36% reported difficulties with coat hooks, either due to the lack of coat hooks provided in cubicles or when provided the coat hook being out of reach of the user.</li> <li>• 34% reported difficulties using hand-drying equipment.</li> <li>• 33% reported difficulty using the soap dispenser.</li> <li>• 30% found grab rails difficult to use.</li> <li>• 29% reported difficulties accessing adequate bins in toilets.</li> <li>• 27% found door handles difficult to use.</li> <li>• 26% reported difficulties using the WC pan due to its position (left handed or right handed transfer preferences).</li> <li>• 26% found the door weight too heavy to open.</li> <li>• 25% reported difficulty using the hand wash basin.</li> <li>• 25% found the cubicle did not provide adequate space for themselves and an assistant.</li> <li>• 21% reported the WC pan was too low.</li> <li>• 21% reported difficulties using toilets due to the absence of a shelf.</li> <li>• 21% found the door width too narrow.</li> <li>• 17% of users reported that the WC pan was too high for them.</li> </ul>
<p><b>Difficulties reported by disabled people when using an accessible cubicle</b></p>

## The ITAAL Survey

The charity and awareness-raising group ITAAL (Is There An Accessible Loo) was set up in 1997 to represent the toileting needs of people with disabilities and their caregivers, and was supported by the Centre For Accessible Environments (CAE). ITAAL's membership was predominately made up of people (mainly women) who used wheelchairs and their caregivers. In 2005, ITAAL conducted a detailed survey with its members to assess the provision of 'away from home' toilets and their suitability for wheelchair users. With members' permission, ITAAL passed on 72% of the returned surveys to the VivaCity Consortium, for analysis and use within the research.

Constructed by people with disabilities, the survey asked detailed questions concerning which form of provision (public or privately operated) its members most relied upon, and the specific design difficulties members experienced with regards to access. The results of the survey offer a snapshot of how current provision is failing to meet people's needs, specifically those who require the assistance of one or more caregivers.

### **Public and Private Provision**

When asked which form of provision respondents relied upon within their local area, 43% answered that they

relied most on the facilities operated by supermarkets. The second most relied upon form of provision was that offered by shopping centres (16.5%), whilst public conveniences came third (15%).

These figures illustrate that members of the public, especially those with disabilities, rely heavily on private sector providers for away from home toilet provision. In this respect, the onus has shifted from the 'public' sector to those facilities operated by businesses. The reliance on 'private' provision was also evident in responses to a question as to which form of provision respondents relied upon when travelling. Almost half (48%) responded that when travelling outside their local area, the facilities operated by supermarkets were those most relied upon.

### **Suitability for use**

When asked which aspect of the design of accessible toilet facilities prevented respondents from using away from home toilets, nearly a quarter (24%) reported 'lack of space' whilst 27% responded that the lack of a hoist or adult changing table prevented them from using current provision. Further analysis of these figures by age revealed worrying gaps in the form of provision offered to people who require the assistance of one or more caregivers when toileting. The lack of adequate space within the BS8300 unisex accessible toilet was reported

to prevent use by 89% of respondents under 35, and 96% of respondents under 35 could not use facilities that did not include an adult changing table or hoist.

### **Access to the built environment**

The need for a suitable facility that included adult changing provision was mostly noted in the under 35 age group. The provision for access to facilities, goods and services under the DDA (2004), resulted in many providers building or modernising accessible toilets. However, the spirit of the legislation in providing 'reasonable access' for all disabled people, is not necessarily reflected in the design guidance of the BS8300 and the Building Regulations, especially concerning disabled people who require assistance when toileting. Of the ITAAL respondents under 35 who require adult changing facilities, 92% responded that the lack of adequate toilet facilities "very often" prevented them from going out.

In addition, an important aspect of adult changing provision is the increased lifespan of many people with disabilities. The ITAAL survey highlights that those born with severe disabilities are living longer and consequently they and their parents and caregivers require suitable toilets for use away from home. In addition, those who have become disabled through illness or life events are also living longer and, whilst currently most will be independent, many may need the help of a caregiver at

some point in their lives and so may require the space and specialised fixtures and fittings of adult changing provision.

The ITAAL survey amongst its members provides much-needed insight into the toileting requirements of many people with disabilities. Such design requirements have currently been taken up by the 'Changing Places' campaign <http://www.changing-places.org/>, which at time of writing is campaigning to raise public awareness and consequently increase provision of adult changing facilities.



The majority of accessible toilets do not cater for adults with disabilities who require assistance from one or more carers for toileting. (Richard 2006) VivaCity 2020

## ITAAL Survey – at a glance

- 96% of ITAAL members aged under 35 require adult changing facilities.
- 92% of the under 35s reported the lack of provision 'very much' prevented them from going out.
- 89% of those under 35 cannot use accessible toilets due to lack of space
- 68% spent between 30-60 minutes researching information about toilets before leaving home
- 48% reported supermarket toilets as the most relied upon when travelling
- 44% reported that venue opening times prevented them accessing RADAR locked toilets.
- 43% require assistance from a helper when toileting
- 43% report supermarket toilets as the closest in their local area
- 40% of respondents had complained about toilet facilities within the last 6 months.
- 37% of respondents did not have or had never heard of the RADAR key scheme.
- 36% require adult changing facilities.
- 32% used medium sized or larger powered wheelchairs.
- 24% reported that they could not use current accessible toilets due to lack of space.
- 13% of those with hidden disabilities reported being challenged when using the accessible toilet.
- Only 9% reported that they knew of facilities with provision for adult changing.
- 6% reported being unable to use accessible toilets when needed due to their use by 'able-bodied' people.



The majority of ITAAL members under 35 require adult changing facilities such as a height adjustable changing bench. (Bichard 2006) VivaCity 2020

## From Special Needs to Inclusive Design

The history of the design and provision of the accessible toilet reflects wider attitudes to access in the built environment for people with disabilities. Throughout the twentieth century, the **medical model** of disability, which views the disabled body as an 'abnormal' body that should be cured through medical intervention, was also enshrined within the design professions. As such, many aspects of design were an afterthought in the design process, 'added-on' to the normal provision that had already been designed to meet the needs of able bodies, so that buildings and places could also be made accessible to clients with 'special needs'.

Design for 'special needs' addressed the requirements of all groups who did not fit into a 'general needs' category, or rather the anthropometric stereotype based on a young fit healthy (usually white) male rather like the designer himself. From this point of view, women, children, older people, and people with physical, cognitive or sensory impairments were seen as requiring tailored design solutions that addressed their 'special needs'. This way of thinking often led to unattractive and stigmatising environments and products that announced people's disability and continued to ascribe difference to the disabled body.

The special needs approach was particularly prevalent in the philosophy that led to the unisex corner accessible (disabled) toilet that is the standard solution to accessible toilet provision. The introduction of the purpose-designed toilet for disabled people in the late 1970s meant that the standard toilet facilities in public buildings and town centres need not be accessible. The approach epitomised the UK's attitude to access and social inclusion that was prevalent at the time, which was to assume that 'normal' provision should be supplemented by provision to serve the 'special needs' of the disabled.

*"An inclusive environment is one in which all users, whatever their abilities, are able to carry out their day to day activities comfortably, effectively and safely without being restricted by the poor design, maintenance or management of the built environment. The principles of inclusive design aim to accommodate the broadest range of bodily shapes, dimensions and movements, in the belief that designers and manufacturers should ensure that buildings, products and services address the needs of the widest possible audience. A key outcome for inclusive design should therefore be to alleviate environmental pressure and architectural disability, and also to achieve a greater measure of social justice".*  
(Professor Julienne Hanson)

Today, greater stress is placed on the inclusive design of the entire built environment. This has resulted from a

greater understanding of the **social model** of disability, which asserts that though individuals may have impairments this should not prevent them from being able to live a fulfilling life. The social model focuses on the physical, social and attitudinal barriers that prevent a person with a disability from becoming an active and fully-included member of society. However, despite the fact that many aspects of the built environment are now designed inclusively, toilet facilities continue to be segregated not only between gendered bodies but also between the able and the disabled body.

This research has attempted to address the issue of separate toilet provision based exclusively on bodily ability. Toilet provision may continue to be segregated by gender and to reflect the wide spectrum of the body's ability. Yet there is a need to recognise that there are alternative approaches to provision.

*"I've been challenged coming out of the disabled loo, they just don't realise I need the loo as much as them, I just don't look disabled"* (Cancer survivor)

Many people who do not consider themselves disabled would benefit from the assistance of a grab rail and so these could be provided in some standard or slightly enlarged cubicles. Increasing the size and making improvements to the design of the current unisex accessible toilet intended for wheelchair users would permit its use by people with profound and multiple

disabilities, who up until very recently had no toilet facilities that catered to their specific needs and the needs of their caregivers.

The origin of the unisex accessible cubicle lies in the fact that many disabled users are accompanied by a caregiver of the opposite gender. If only gendered toilets are provided, this may cause embarrassment to the caregiver who is assisting the disabled user. However, wherever possible accessible toilets should also be situated within the gendered toilet facilities for men and women, so that the needs of independent disabled people who prefer to use gendered provision but require the extra space and fittings of an accessible cubicle, can also be met.

*"I'm concerned by the abuse of the disabled toilet, I'm not talking about vandalism... but the use of our toilets by able bodied people"* (Wheelchair user)

Design guidelines recommend that baby-change facilities should not be included in the accessible toilet cubicle. Many people's disabilities may involve an urgent need to use the lavatory that cannot be planned or prepared for. Such needs may conflict with the use of accessible toilets for baby-changing. Baby-changing can take more than a few minutes and consequently can engage the cubicle for a considerable time. Where baby-changing is available it should be separate and fully accessible to able bodied and disabled parents.

However, where space is at a premium, it has become customary to place baby-changing facilities within the accessible cubicle. Whilst a disabled parent may need to use baby-changing facilities, where this is the only accessible facility it may not be the most appropriate solution. To avoid placing additional pressure on the accessible cubicle, a separate adult and baby room may be preferable. As with the accessible facility, this should be sensitive to gender issues so that it will work equally well for a father to change his baby as for a mother and her baby.

An exception to the exclusion of baby-change facilities in accessible cubicles should also be made where toilet provision is 'universal', and for all potential users. Universal provision is found where there is space for only one toilet in a building, for example in small businesses such as cafes and restaurants. These cubicles are fully accessible to people who use wheelchairs and also may include a standing height basin for able-bodied users. Such provision may also include baby-changing facilities that should also be accessible to disabled parents.

For similar reasons of gender, parents with slightly older children who are independent but not yet old enough to use away from home toilets on their own (below the age of about eight years old) may find it difficult to manage in standard provision. A father will not be comfortable taking his daughter into the male toilets, but will not be welcome in the ladies' toilets. A mother may not experience any

problem when taking her young son into the ladies' toilets, but the boy might be embarrassed to use them. A family toilet will meet these needs.

By pinpointing users' needs, we have identified common or **generic** requirements that link what some may consider to be quite different disabilities and health conditions, which we believe can be at the forefront of a more inclusive approach to the design of toilet facilities for public use. These will be described later on in the Resource.

Design templates for a wide range of inclusive and accessible toilets have also been provided in the Resource, to prompt discussions and suggest suitable solutions. They should be used in conjunction with the concept of a hierarchy of toilet provision, which will be presented next.



Where only one 'universal' toilet is provided baby changing should also be accessible to disabled parents. This is a universal accessible toilet with an inaccessible baby change and no additional standing height basin. (Richard 2005) VivaCity 2020



## A Hierarchy of Accessible Toilet Provision

Inclusive design tries to address the needs of all society's members, so that no one is excluded because of poor design quality based on an inadequate understanding of user needs. However, one of the key criticisms of the inclusive design philosophy is that it is impossible to design a 'one size fits all' solution. This is especially so in the case of toilet provision for public use.

As we have already seen, a 'generic' design solution like the unisex accessible cubicle, that is intended to serve everyone's needs, is likely to prove inadequate for many potential users. This Resource therefore offers a range of solutions, each of which will meet the needs of a different proportion of the population. Providers should consider who their customers are, and select from a range of toilet cubicles that will offer sufficient choice to include all the potential users of their facilities.

There is a need to address the wide-ranging needs of all people when away from home. This has been one of the central aims of this research. By talking directly with users, this research has been able to identify a **hierarchy of provision** in respect of away from home toilets. This can be used to inform debates about the number and types of accessible toilet cubicles that should be provided in any particular context.

This illustrative hierarchy recognises that it will not be possible or affordable to provide every type of toilet in each and every location. It suggests that, when considering the urban situation, an inclusive solution may require four distinct levels of provision to reflect the different spatial catchments and diverse user-profiles of a large, metropolitan authority.

At the most local level, there is a need for many thousands of small, inclusively-designed and accessible 'toilet pods' built to the generous space standards of a Universal cubicle, to serve every local gathering place, park or local meeting point. Each may only serve a few hundred people each week, but collectively the pods would provide a basic safety net across the city so that no one is more than a few hundred metres away from a local **community facility** if they need one.

Where more people congregate, such as on the high street, at a neighbourhood centre or in an 'urban village', basic inclusively-designed, gendered facilities are required that include both standard provision, and enlarged cubicles and that also provide at least one unisex accessible toilet and a baby-changing area. A large city might require need many hundreds of these **neighbourhood facilities**, depending on local needs.

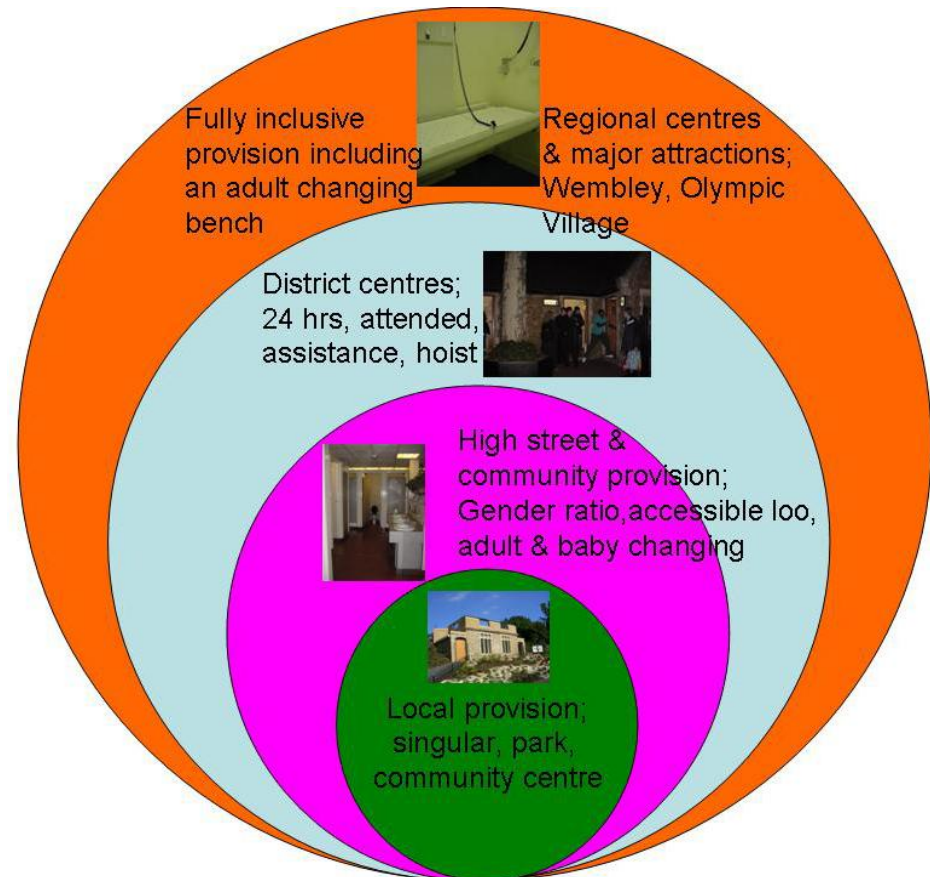
At the **district level**, every city should provide substantial away from home facilities to cater for the greater and

more diverse footfall that is attracted to concentrations of mixed uses and urban amenities. These should be sited in locations that are well-integrated into the urban fabric and easily accessible on foot and by car to local people and visitors alike. These district level facilities that regularly attract hundreds of thousands of people, need to offer a wider range of cubicle choices, including family toilets, and to be attended and open 24 hours.

Finally, at the small number of strategic and central locations or amenities within the metropolitan region that attract millions of visitors annually (tourist attractions, shopping malls) fully-inclusive toilets should be provided to serve the **metropolitan region**, so that the most profoundly disabled people can get out and about within the wider urban region in the secure knowledge that they will be within reach of an accessible toilet if they need one.



Some neighbourhood facilities do not feel welcoming whilst others are attractive. (Richard 2006) VivaCity 2020



Hierarchy of toilet provision – size of circle indicates extent of catchment

## Principles of Accessible Toilet Design

This section of the Resource presents the principles that inform the design of accessible toilets, in the order in which they will naturally occur when locating and using an accessible toilet. It will cover the following points:

- Finding a toilet
- Doors
- Transfer space
- Grab rails
- WC pans
- Toilet paper dispensers
- The flush
- Hand washing
- Hand drying
- Fittings
- Alarm systems
- Lighting

Some of these principles are applicable to the design of all toilets.



Well designed and managed accessible facilities will provide toileting that is safe and comfortable, with privacy and dignity and in the knowledge that good hygiene standards are being followed. (Bichard 2006) VivaCity 2020

## Finding a toilet

Many people with disabilities spend a considerable amount of time enquiring about accessible toilet facilities before they leave home. All too often, they are told that a business provides accessible facilities, only to discover on arrival that the toilets can only be accessed by way of steps (unsuitable for those with reduced physical mobility), that the toilet is too small for their particular type of wheelchair or that it is unable to accommodate a caregiver or assistant.

Some local authorities provide maps of their facilities. Although such maps may indicate the location of accessible provision, often they do not include any further details such as the size of the cubicle.

When consulted, many users said that details of accessible facilities including a photograph and the overall dimensions of the cubicle would be helpful when enquiring about toilets. This would be especially useful when enquiring about access over the internet.

When visiting an unfamiliar area, many people have noted that the signage to show the way to the public toilets is poor. For those whose disability or health condition may require them to use the toilet at short notice, signage that points the way, indicates the metric distance to the facility

and provides information about whether the toilet is accessible to RADAR key users would be helpful.



Locked accessible toilet will not be available in the evening to those who do not have a key (Bichard 2004) VivaCity 2020



Some signage has not been updated and will not meet current legibility standards (Bichard 2005) VivaCity 2020

There are a number of different signs that indicate or describe public toilets, including 'toilets', 'public conveniences' 'ladies' 'gentlemen' and 'public lavatories'. It would be more helpful and less confusing if providers were to standardise the terminology that describes their facilities. For many people with cognitive disabilities, 'toilet' is a recognisable word, followed by the appropriate and recognisable symbols for gendered facilities.

Checklist:

- How long did it take to find toilet facilities?
- What signage was there?
- What other information about the toilets was there? e.g. Internet, map.
- Did the information show cubicle sizes?
- Did the information include pictures of the provision?
- Were the toilets locked?
- If so, were instructions provided to ask for the key?



Some facilities look unwelcoming and will be avoided by users. (Photos courtesy of Terry Gallagher)

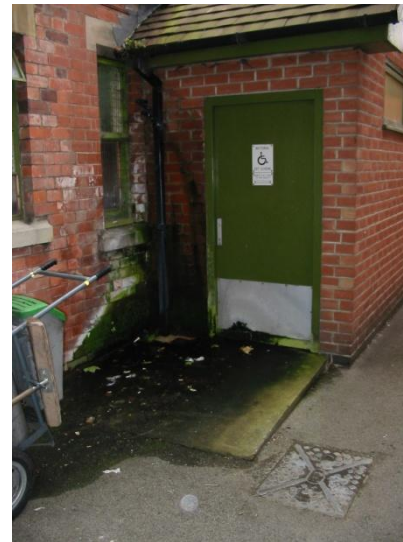
## Doors

### Widths & Openings

If there are doors on the route to the toilet it is essential that they follow recommended access standards, so that they can be easily opened by people who require an accessible toilet. It is important that the weight of the door and the door closer are not too heavy for people that have limited upper body mobility or limited arm strength to use. The Good Loo Design Guide recommends that the door opening pressure should be no greater than 20 newtons.

The clear opening door width should be a minimum of 800mm. This will allow most types of wheelchairs and scooters to get through.

It is strongly recommended by the Good Loo Design Guide, British Standard BS8300 and the ADM of the Building Regulations, that accessible cubicles have a door that opens outwards. There are two main reasons for this. Firstly, it can be considered an issue of safety. If someone using the cubicle were to fall, they may do so in front of the door and prevent it from opening in the event that assistance needs to be provided. Secondly, many people who use wheelchairs find that an inward opening door protrudes into the space required for manoeuvring the wheelchair inside the cubicle.



Ramped access should provide a level surface at the top so that the user is not on a slope whilst attempting to open the toilet door. (Photo courtesy of Terry Gallagher)



These toilets are downstairs and so not accessible. (Richard 2005) VivaCity 2020

## Door Handles & Locks

Door handles should be of a lever type that can be opened with one hand or a closed fist.

One of the most important aspects of toileting is that the user is able to lock the door of the toilet cubicle. Users have commented that being unable to lock the cubicle door leaves them feeling vulnerable, and could lead to them rushing to use the toilet, possibly increasing the risk that they might fall. Toileting is a very private matter and privacy should be ensured through a locking system that is accessible to all potential users.

Design guidance recommends that lever action locks should be used for locking the accessible cubicle. These should require a minimum of pressure to lock and open. Many users find that small lock fittings are difficult to grip. In addition, whilst some users may be able to lock the toilet door, they may experience difficulties in releasing the lock and so become trapped in the cubicle.

Bolts or locks that require firm grip or pressure should not be installed in the accessible cubicle. Recent design innovations have included a three stage electronic locking system that automates the closing of the door, locks the door and then opens the door. Many people find these automatic locking devices confusing, and there have been numerous reports of people opening the cubicle door, either from the inside or the outside, whilst

the toilet is in use. Some people therefore report avoiding facilities with an automatic locking system. People with cognitive disabilities, dyslexia, tourists and those who do not speak English as a first language, all may find the instructions for a three stage locking system difficult to understand and operate.



Strong door lock (Bichard 2004)  
VivaCity 2020



Poor quality door lock (Bichard  
2004) VivaCity 2020

## Transfer Space

The transfer space next to the WC pan is essential for people who use a wheelchair to manoeuvre into for transfer from their wheelchair onto the WC pan. People who use a wheelchair have a variety of positions from which they prefer to transfer. The position that each user adopts to transfer will be based on their strength, ability and personal comfort.

In nearly 70% (69%) of the accessible cubicles we audited, the transfer space was blocked by bins or chairs. For users who need this space, the storing of bins or furniture in the transfer space means that a wheelchair user may be unable to use the accessible toilet. Some users are able to move bins, but most would not be able to move furniture. People who have limited arm strength may try to use the toilet with the bin in the way. This could put them at risk from an awkward transfer position. It is therefore important that the transfer space is kept free of objects at all times.



Although considered to be a 'welcoming touch', this transfer space is blocked by two stools which may cause access and transfer difficulties for many users. (Bichard 2006) VivaCity 2020



The provision of a suitable bin is essential in accessible toilets, but bins should not be placed in the transfer space. (Bichard 2006) VivaCity 2020



## Grab Rails

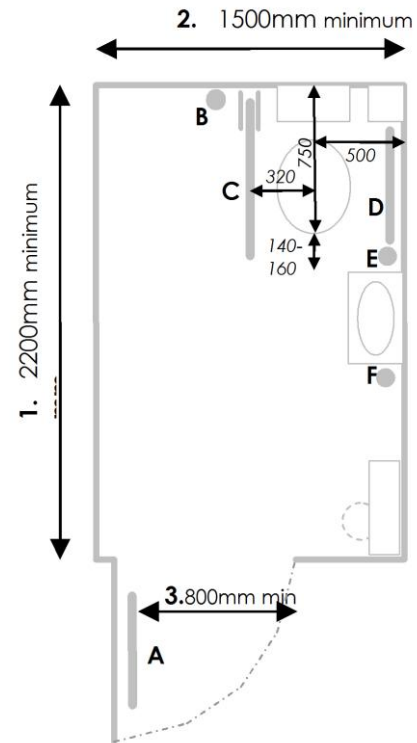
Grab rails are fixtures that enable many disabled people to use the accessible toilet. Grab rails are used by people to help them:

- transfer out of a wheelchair and onto the WC pan,
- lower themselves onto the WC pan,
- balance whilst toileting standing and facing the WC pan,
- balance whilst sitting on the WC pan,
- push themselves up to a standing position, after using the toilet,
- pull themselves up after toileting,
- slide themselves across to transfer back to their wheelchair after toileting,
- balance after toileting, whilst getting dressed.

Some users may only require one of the rails found in the cubicle. Other users may need all of the rails for, as one respondent commented, “*you can never have enough rails*”. Yet, as a result of using the toilet audit tool, we did not find even one facility that had included all the recommended grab rails and had installed them at the recommended heights.

It is essential for each and every grab rail to be fixed at the recommended height, as this has been calculated as the best possible position for most users. If grab rails are too high, users may not be able to reach them and/or use

them for support, balance or leverage. This may make the cubicle difficult to use and could possibly pose a risk to the user. Colour contrasted grab rails should be used, to aid navigation for people who use a wheelchair or walking aid, or who have a visual impairment.



Positioning of grab rails A to F

The first grab rail shown on the toilet audit tool is identified as **grab rail A**. It is also known as the **horizontal door rail**. It should be affixed 680mm from the floor finish and be 600mm long. This grab rail is mostly used to close the toilet door. It is especially useful for those wheelchair users who can reach behind them to pull the door closed, without having to manoeuvre backwards or to turn around to reach the door handle. If this grab rail is absent or not set at a height that is within reach, users may have great difficulty in closing the toilet door behind them. This can be especially awkward if there is an urgent need to use the toilet.



Grab rail A. (Bichard 2005)  
VivaCity 2020

**Grab rail B** is the **vertical grab rail** affixed to the wall at a height of 800mm from the bottom of the rail. The rail should be 600mm long. This rail is required by some users when transferring onto and off the WC pan, and is also helpful to users who are able to pull themselves up off the toilet seat.



Grab rail B. Note bin incorrectly placed in transfer space.  
(Bichard 2005) VivaCity 2020

The **drop down rail** is identified as **grab rail C** on the audit tool. It has been recommended by the Good Loo Design Guide that this rail is not of the variety that requires being lifted from a 'locked' position before it is pulled down, as it can be awkward to 'lift and pull' the rail while seated on the WC pan. It is essential that the drop down rail is firmly affixed to the wall and that it does not 'wobble' in use. The drop down rail should be affixed at a minimum of 320mm from the middle of the WC pan. This will enable most users to reach, use and replace the rail whilst seated on the toilet. When lowered, the height of the drop down rail should be 680mm from the finished floor level.



Grab rail C. Stainless steel is not the best material for this rail. (Bichard 2005) VivaCity 2020

**Grab rail D** on the audit sheet is the **horizontal wall rail**. It should be fixed at a height that matches the drop down rail; that is, at 680mm from the floor. If the drop down rail and horizontal wall rail are not set at the same height, some users may have difficulty with balance, or lowering themselves onto and pushing themselves off the WC pan. This rail should also be 600mm long.



Grab rail D. (Bichard 2005) VivaCity 2020

The **vertical wall rail, grab rail E**, allows those users who prefer, to pull themselves up after using the toilet. In addition, this rail also offers balance and support to people who may need it when standing to wash their hands after toileting.

The other **vertical grab rail, grab rail F** may also be used for balance and support when hand washing, or for support when hand drying if a hot air dryer affixed within recommended guidelines is preferred. Both rails should be 600mm long and be affixed to the wall at 800mm from the finished floor to the bottom of the rail.



Grab rails E and F. (Bichard 2004) VivaCity 2020

Some users who participated in the research commented that, initially, they only used one of the grab rails but that as they have become older they have begun to rely on the other rails within the cubicle. For many people, the total absence or inappropriate fitting of one or more rails can make the accessible toilet extremely difficult to use.



These modern toilets show a good configuration and use of grab rails. (Bichard 2004) VivaCity 2020

## WC Pans

The height of the WC pan can be considered one of the more controversial aspects of toilet cubicle design. The ADM of the Building Regulations, BS8300 and the Good Loo Design Guide recommend that the height from the finished floor level to the top surface of the WC seat should be 480mm. This height is recommended as it is considered to be same height as the majority of wheelchair seats.

However, some users prefer a higher WC pan, either due to the fact that they use a wheelchair with a higher seat, or because they have hip and/or knee conditions. These individuals may need to carry their own toilet seat riser to lift their position when seated to a height that is more comfortable for them to use. To cater for this need it is recommended that the WC pan be of a make and model that supports risers. Other users prefer a lower WC pan. This may be due to their height and stature.

In our study, we found that only 34% of the WCs audited had a WC pan installed at the recommended height. In nearly three quarters of the accessible facilities, the WC pan was too low. The consequence of having a WC pan that is too low can be that users with back, hip or knee injuries or conditions may risk injury when dropping down onto the toilet seat. In addition, where the WC seat is set at an incorrect height, the ratio between the height of the

toilet pan and the height and the placement of the grab rails may make it difficult for users to transfer onto and off the toilet as well as push or pull themselves up after use.

It is recommended that the WC pan is placed at 500mm from the side wall and 750mm from the back wall. Such measurements have been recommended as a result of users' needs to hold onto grab rails on the side wall, as well as the need to sit further back on the WC pan for catheterising or self-evacuation.



Where backrests are provided attention should be made to remove the toilet seat lid. (Bichard 2006) VivaCity 2020

The **hand wash basin** should be installed between 140-160mm away from the WC pan. This allows people to wash their hands whilst still seated on the WC pan. This may be necessary for those users who need to self-evacuate, to ensure they do not contaminate themselves, their clothes or their wheelchairs.

**Backrests** are recommended, especially where the cistern is built into a duct and hidden. However, it is important that the backrest does not come forward too far, so as to prevent the toilet seat from rising and staying up, for those who wish to urinate facing the WC pan.

Many users of accessible toilets may be seated on the WC pan for longer than a standard cubicle user. A backrest may also be more comfortable for users who need to sit further back on the pan than is normal for toileting. Cisterns can also be used to lean against, although, a cistern with an overhanging lid may be uncomfortable for users who have to lean back for a considerable amount of time.

Toilet lids are not recommended, as they can get in the way of a safe transfer. It is important that the toilet seat is made of a high quality, strong material, as some users may 'bump down' onto the seat. In addition it is important that the seat is securely fastened and does not 'wobble' or shift in use, as this can be dangerous for a wheelchair user at the point of transfer. Transfer from a wheelchair onto the WC pan often involves dragging the body across

from the wheelchair to the toilet seat, and hence the toilet seat has to safely resist the pressures and forces that are exerted as people move one way or the other.



Toilets without backrests may be difficult for some users. The toilet lid may impede transfer. (Richard 2005) VivaCity 2020

## Toilet Paper Dispenser

The recommended toilet paper dispenser is of a design that allows single sheets to be accessed. These should not be packed too tightly, because it will then require a strong grip to pull the sheets of paper out of the dispenser. Toilet rolls are not recommended, as they may take a certain amount of grip, strength and arm movement to tear a length of paper off for use. Large toilet roll dispensers are also not recommended, as often the end of the toilet roll can become 'lost' inside the dispenser. This may be impossible for people with limited dexterity to find and / or grip. In addition, large roll dispensers may impede the space around the grab rail and make it difficult for users to access.

The placing of the toilet paper dispenser must also be carefully considered. It should be placed at a height 800-1000mm from the floor to the bottom of the dispenser, and at the front of the WC pan at approximately 750mm from the back wall. This ensures that users of the toilet do not have to bend or reach behind themselves to access the toilet paper.



Single sheet dispensers (circled) are the preferred option for toilet paper dispensers. Large 'drum' type dispensers are not recommended. (Bichard 2006) VivaCity 2020

## The Flush

Flushing the toilet is one of the most important aspects of using away from home facilities. In general, people have no wish to leave a mess for the next user. However, for some users flushing the toilet can be impossible due to the type of toilet flush installed, and where on the cistern it is fixed. One user commented:

*“After going to the loo I found I couldn’t reach the flush. I had to go to customer services and apologise for the mess I’d left in the toilet but that I couldn’t reach to flush it. It was so embarrassing, I hated leaving the loo like that and I hated having to ask a stranger to flush it for me”*  
(Female wheelchair user)

In 42% of the toilets we audited, the toilet flush was located in the wrong place and/or did not incorporate a flush handle that could be considered accessible or of the recommended design.

The recommended placement of the toilet flush is on the open, transfer side of the cistern. This enables a user who cannot reach round and flush the toilet whilst seated on the WC pan, to transfer back to their wheelchair and reach the flush from there, or for men who may prefer to urinate facing the WC pan to manoeuvre themselves within the transfer space to reach the flush.

The flush handle should be of a ‘paddle’ or ‘spatula’ design. This enables the majority of users with limited hand use to be able to flush the toilet. Many users who may have some arm strength but limited co-ordination in their hands may use their elbow instead of their hand. It is therefore important that the height of the flush handle should be no higher than shoulder height when seated. Higher flushes may be unusable for those who have limited reach, or who have limited movement or strength in their arms.



The paddle flush is on the transfer side. (Bichard 2005)  
VivaCity 2020



When the cistern is enclosed, a pad or push button flush can be used to flush the toilet. However, it is important that those responsible for choosing these fixtures and fittings are aware that a push button flush may need to be operated by a fist, with a minimum of pressure. It should therefore not be of any variety that is inset into the wall. Accessible push button or pad flushes should be installed on the transfer side, and at a height that can be reached whilst seated either on the WC pan or in a wheelchair.

Sensor flushes are considered by some users to be a hygienic option for away from home toilets. However, such options can be problematic for people with disabilities. For users who may be seated on the toilet for a considerable time, the flush may be activated by the user's movements whilst toileting. This can cause mild annoyance to the user and it can also be considered unsustainable from a water management perspective. In addition, users with cognitive disabilities may find the absence of a familiar flush handle confusing and for some the inability manually to flush the toilet may be perceived as distressing.



Sensor and automatic flushes can be disconcerting for users of accessible facilities. (Bichard 2004) VivaCity 2020

## Hand washing

The majority of users consulted during our research reported that they did not wash their hands whilst seated on the WC pan, preferring to transfer back to their wheelchairs first, as often the transfer itself involves holding onto grab rails and even the toilet seat. Hand washing was undertaken once back in the wheelchair.

The recommended height of the hand wash basin stipulates that this should be set at a minimum height of 720-740 mm, and that the basin itself should not be enclosed by a stand or by ducting, as this would prevent a wheelchair user from being able to get their wheelchair close to the basin. The distance that the basin protrudes from the wall should also be considered as, if the basin is too large, it may impinge on the wheelchair turning space and so interfere with a wheelchair user's transfer onto the WC pan.

People who use urine bottles have commented that in many toilets, the hand wash basin is not big enough to rinse out the urine bottle after use. In addition, some basins may be too small and shallow for adequate hand washing. Where a small basin is coupled to a strong pressure flow from the tap, this is likely to result in water being splashed over the floor, which can be extremely hazardous to users.



Handwash fixtures and fittings (Richard 2005) VivaCity 2020

## Taps

Design guidance recommends that taps should be lever handled, so that they can be operated with a minimum of effort and grip. Ideally, the tap should be able to be turned on and off with the elbow. The tap should also be a mixer tap and clearly indicate in which direction the lever should be turned, to produce a hotter or cooler temperature. Many users require hot water not only for hand washing but also to clean areas of their body after toileting. The provision of hot water is also important for people with conditions such as arthritis, where sensitivity to water temperature can cause pain in the joints, especially if only cold water is available in periods of cold weather.

Like sensor flushes, sensor taps with a prescribed amount of water flow, are often seen as a hygienic and water saving option for hand washing. However, a number of access issues arise if this variety of tap is installed within the accessible cubicle. People who may require more water than the prescribed amount may not be able to adequately clean themselves. Those with limited arm and / or hand movement, co-ordination and strength may have difficulty placing their hands under the sensor. People with cognitive disabilities may not recognise, and so consequently not use, hand washing facilities that do not include familiar taps.

The placing of the tap on the basin is also important. The lever handle of a mixer tap needs to be reached by a user when seated on the WC pan. It therefore needs to be located on the corner of the hand wash basin that is closest to the WC.



Basin taps should be lever handled. This push button model is not recommended as it requires dexterity and strength to operate. (Bichard 2006) VivaCity 2020

## Soap Dispenser

Soap dispensers need to be of a variety that can be operated with one hand, and preferably with a closed fist. Dispensers that require a significant degree of manual dexterity or grip should be avoided within the accessible cubicle.

The placing of the soap dispenser is extremely important. If placed incorrectly so that it can drip onto the floor, leakage can become a slip hazard to users. If the soap dispenser is placed on the same side of the basin as the tap, it is more likely to be accessible so that it can be reached by a person who may be seated on the WC pan.



Soap dispensers that are push button operated are not recommended as they require co-ordination, dexterity and in some cases strength to operate. (Richard 2006) VivaCity 2020



This soap dispenser could be considered accessible to most users. (Richard 2005) VivaCity 2020

## Hand Drying

### Paper Towels

The inclusion of paper towels within the accessible cubicle was only found in 12% of the facilities audited. Paper towels may be inaccessible to users with limited arm strength or dexterity, due to the need to grip and pull them from the paper towel dispenser. However, many users of an accessible cubicle require or prefer to use paper towels. Therefore, a dispenser type of provision should be considered as opposed to the fixture being omitted altogether.

Paper towels are not only used for hand drying, but also to cleanse and dry other areas of the body after toileting. Cleaning the stoma is an important part of post-surgery care, as it can become infected and cause health complications. However, using toilet paper for stoma cleansing is not recommended, due to its thinness and tendency to disintegrate when wet. Some people with stomas therefore prefer to use paper towels for cleaning and drying the stoma during the changing or emptying of a bag or pouch.

### Warm Air Dryers

Warm air dryers should be affixed to the same wall as the hand wash basin, but on the far side from the WC pan.

Dryers that have sensor operation should not be placed close to the WC pan as they are likely to be set off by movement and thereby startle the user.

The unit should be at a height of 800-1000mm from the bottom of the unit where the air flows to the floor. This height is considered reasonable for people with limited arm strength to raise their arms to, when using hot air for hand drying. However, for people with limited arm strength, alternative forms of hand drying, such as paper towels may be preferable.



Hand dryers that require considerable dexterity should be avoided. (Bichard 2005)  
VivaCity 2020

A hot air dryer should not be the only method of hand drying available in the accessible cubicle. Some users find the noise from the hot air dryer distressing. Caregivers of people who have had a stroke report that hot air dryers can startle and distress the person being cared for. Parents report that hot air dryers often frighten children, and it has been suggested that such fixtures may also distress some children with disabilities.



Paper towels should be provided in addition to warm air dryers. Note incorrect positioning of soap dispenser. (Bichard 2006) VivaCity 2020

## Ventilation

Good ventilation is an important aspect for toileting in comfort. However, due to the enclosed nature of the accessible toilet cubicle, ventilation can sometimes be poor. Odours from toilet use as well as bins can make toileting in poorly ventilated and enclosed spaces extremely unpleasant, especially for users who may need to use the cubicle for long periods when toileting.

Solutions to ventilation problems often include perfumed air fresheners to mask odours. However, those with a high chemical content can be problematic for users who may have respiratory conditions such as asthma. Natural or artificial ventilation is preferable to the masking of odours.



Perfumed ventilation may be problematic for users with respiratory conditions. (Bichard 2006) VivaCity 2020

## Fittings

### Shelves

Along with the height of the WC pan, shelves are considered to be another controversial fixture within the away from home toilet cubicle. Of the toilets we audited during our research, 97% did not include a colostomy shelf. In addition 90% of facilities did not include a general shelf, although provision for a colostomy and general shelf has been included in design guidance since 2001. Designers and providers are reluctant to include shelves within the toilet cubicle itself, due to their association with illegal substance use. However, many users of accessible toilets require a shelf or flat surface for toileting.

People who use colostomy, ileostomy, or urostomy pouches require a flat surface to lay out their replacement bag and any cleansing items they prefer to use, such as moisturised cleansing tissues. Some users find the top of the toilet cistern adequate for this purpose, so long as it is not domed or sloping. In addition, a general shelf is used to lay out any other necessities users may have whilst toileting, including catheter equipment, bags containing equipment, continence pads before changing, as well as gloves that wheelchair users may use especially in wet and cold weather.

Design guidance recommends that the colostomy shelf should be placed close to the WC pan at a height of 950mm. A general use shelf is also recommended. This should be placed at a height of approximately 700mm. Both shelves should be placed outside the clear wheelchair transfer space as, if they protrude into the space, this may impede a person's ability to turn their wheelchair when using the accessible toilet.



One of the few examples of a shelf, but not in the right position. (Bichard 2005) VivaCity 2020



Mirrors should be placed at a height that can be used by a person seated in a wheelchair. This mirror has been placed too high. (Bichard 2006) VivaCity 2020

## Mirrors

A mirror is often a design detail that is omitted from the accessible cubicle, but they are essential for many users. For people with stomas, a mirror - especially one that is full length - helps them to assess if their pouch has been placed adequately. A full length mirror also helps users - both ambulant and those who use wheelchairs - to check that they have dressed and / or adjusted their clothes

appropriately. A full length mirror should not extend fully to the floor as it may be damaged by wheelchair footrests.

A mirror located above the hand wash basin may be used for the reapplication of make-up and to check one's face and hair when away from home. The inclusion of a mirror in standard toilet facilities, especially those designated for women, is common and hence a mirror should also be included within the accessible cubicle. A mirror placed above the hand wash basin should be set no higher than 600mm from the floor, so that people in wheelchairs can also use it.



Full length mirrors should also be provided. This mirror is considered too small. (Bichard 2006) VivaCity 2020



## Bins

As a result of our audit, with respect to the provision of bins in accessible toilets we found that:

- 45% did not provide a sanitary bin or a general waste bin,
- 78% did not provide a bin suitable for incontinence pads, stoma bags, catheter bags and tubes and urine containers.

Where bins were provided, some cubicles had three separate containers that often impeded access to and use of the toilet cubicle.

In the classification of human waste, as directed by the Health Services Advisory Committee (1999), items used to dispose of urine, faeces and other bodily secretions and excretions including incontinence pads, stoma bags, catheter bags and tubes and urine containers come under category E in categories of clinical waste. Sanitary wastes (otherwise known as human hygiene wastes) from households (e.g. sanitary towels, tampons and nappies) are not considered to be infectious or clinical waste, as it is assumed that the source population is generally healthy. Human hygiene wastes generated in other public places, such as shopping centres, schools and nurseries, offices and factories are considered in the same way.

The current recommendation in respect of the bagging of waste is that a yellow bag with black stripes is suitable for category E waste **and** sanitary waste. Therefore only one bin is needed within the accessible cubicle for incontinence pads, stoma bags, catheter bags and tubes and urine containers (category E waste) and sanitary wastes. Currently, no bin appears to exist on the market that is of a suitable size to receive human hygiene and category E clinical wastes.



Bins must not be kept in the transfer space.  
Careful consideration should be made of multiple bins and space use. (Bichard 2006) VivaCity 2020

Paper towels and general rubbish require their own separate bin, as this may need to be emptied more often than a bin containing human wastes. Bins for the disposal of paper towels should be accessible to all users of the accessible cubicle. The Good Loo Design Guide recommends swing top bins for paper towels, as they require the least amount of pressure to open. Such bins should be accessible without the need to bend over.

Both bins should be kept out of the wheelchair transfer space. Most current sanitary bins have been designed to fit between the WC pan and the closest wall, and this could be considered an appropriate space for a bin that could receive all human wastes.



This integral bin is an excellent idea but in this instance the bin has been placed below a sensor hand dryer which is set off when the bin is used. (Bichard 2005) VivaCity 2020

Current design guidelines for an accessible toilet cubicle do not make provision for an appropriate 'category E' bin, a general waste bin, and a sanitary waste bin.

*"A disabled woman who suffered discrimination on a disability awareness course run by Liverpool City Council has won £2,000 for injury to feelings on the day her case was due to go to court. Rosemary Walker, a mother of two who lives in Lancashire, was supported in her legal case by the Disability Rights Commission (DRC).*

*In 2003, Ms Walker - who was a youth worker for Merseyside Youth Association - attended a two day training course run by Liverpool City Council. On the first day of the course, Rosemary, who uses a colostomy bag, was forced to tell fellow delegates about her condition when she discovered she couldn't change her colostomy bag in a nearby toilet because there was no sanitary disposal box. She was then obliged to search the building for a sanitary disposal unit, but none was found. Eventually, a course delegate who worked for a local charity organised a disposal box to be brought to the building.*

*Ms Walker felt she was subjected to humiliating treatment because of her disability and asked the Council to acknowledge they'd treated her unfairly. The case – taken under Part 3 of the Disability Discrimination Act – was due for a three day hearing in Liverpool County Court today.*

*On the morning of the court case however, the Council agreed to an out of court settlement. Liverpool City Council consented to a judgement to pay Ms Walker £2,000 damages for injury to feelings."*

*Disability Rights Commission news release April 2005*

Yet as a 2005 court ruling found, the lack of provision of appropriate bins can be considered discriminatory.

## Coat Hooks

Coat hooks are often not found within the accessible facilities, or if included they have been fixed at a height that is out of reach for a person seated in a wheelchair. Design guidelines recommend that two coat hooks be fixed at heights that are suitable for standing and seated users respectively. The recommended height for a seated user is 1200mm.

Many people reported that the inclusion of coat hooks would greatly improve their experience of using an accessible toilet. People who may need to partially or fully remove clothing, for example to change a colostomy bag and clean their stoma, require the provision of a coat hook for coats and jackets and possibly other items of clothing, especially during wet and cold weather.



Coat hooks should be provided at heights suitable for people who use wheelchairs. Ideally coat hooks will be at two contrasting heights suitable for users who are seated as well as users who stand. These coathooks are not set at the recommended height. (Bichard 2006) VivaCity 2020

## Vending

It can be suggested that under the requirements of the Disability Discrimination Act Part 3, Access to premises goods and services, wherever sanitary and condom vending is offered within a standard cubicle, it should also be made available in the accessible cubicle. However, such vending machines have to be located at a height suitable for a seated user, as well as to be accessible to those whose disability may include limited hand dexterity (using the change slot and retrieving goods) and users who are visually impaired (instructions, labelling of goods).



Vending machines need to be accessible to all those who may use the accessible facility. (Bichard 2006) VivaCity 2020

## Alarm Systems

Emergency assistance alarms are an important feature of the accessible toilet cubicle. Many people with disabilities may never need to use the alarm, but may be reassured to see that it is available should it ever be needed. The alarm is normally activated by a red pull cord that should extend to a maximum of 100mm from the floor. The recommended placing of the emergency pull cord is next to the WC pan, as it is from here that the alarm can be raised if a person experiences difficulty whilst seated on the WC pan or falls from the WC pan.

Placing the alarm cord within the transfer space can be very frustrating for users who need to use this space. Some wheelchair users commented that they 'tied up' the cord if it got in their way when transferring onto the WC pan. Most users could not recall if they then untied the cord after toileting. In 69% of the accessible cubicles we audited, we found that the pull cord did not reach the maximum 100mm from the floor. Many pull cords were either shortened or tied up to the drop down or horizontal grab rail. This effectively made alarm system ineffective, should a user fall to the floor.

Design guidance also recommends that a 'reset button' be clearly marked and placed within reach of the WC pan. The inclusion of a reset button is important for users who may accidentally pull the alarm cord, yet not need

assistance and still be toileting. Professional caregivers of children with disabilities such as autism, report that for some children, the accessible toilet is an '*adventure playground*' with the red pull cord the equivalent of a '*red rag to a bull*'. Hence the provision of the reset button allows caregivers to reset the alarm, should it be pulled by accident.

Users who have pulled the alarm should be reassured that assistance is on the way by either a visual and / or an audible confirmation that the alarm has been triggered. Such confirmation would also help those who may have pulled the alarm accidentally, so that they can turn off the alarm by using the reset button. Outside of the cubicle, the alarm system should have a clear visual and / or audible indicator that the alarm has been raised.



In many toilets we audited we found the alarm cord had been tied up or in some instances cut off, effectively disabling the alarm system. (Bichard 2006) VivaCity 2020

## Lighting and Colour Contrast

### Lighting Levels

Design guidance recommends that toilet facilities are consistently well lit throughout. The level of lighting should be at least 100 lux. However, higher levels are recommended, especially for reading instructions on vending machines.

### Internal Colour Contrast

Internal contrast is often interpreted as having contrasting colours between the floor and the walls. However, in the accessible cubicle it is also important to have contrast between the fixtures and the fittings and the background to which they are fixed. The use of white porcelain and white fixtures such as grab rails and toilet paper dispensers against a white wall will make it unnecessarily difficult for users with visual impairments to use the accessible cubicle.

### Lighting Switches or Cords

If the interior lighting has been designed to be turned on (and off) by the user of the accessible toilet, the light switch should be set at a suitable height and of a

contrasting colour to the wall. In addition, the switch should be able to be operated by a closed fist. If lighting is operated by a pull cord, the cord should not hang too close to the alarm cord, but should be placed close to the door.



Although this cubicle has a colour-contrasted floor, the walls and grab rails are both white. This may make the cubicle difficult for people with visual impairments to use. (Richard 2006) VivaCity 2020

Automatic lighting timer switches should not be used in the accessible cubicle, as many people need to occupy it for a considerable length of time. Some users may take up to 30 minutes to use a toilet facility and have reported being '*plunged into darkness*' when lighting on a timer switch has been installed. If lights on a timer switch go out, the user may not be able to reactivate the light switch as they may be in the middle of toileting and unable to dress themselves and/or transfer back to their wheelchair in darkness. In such circumstances a disabled person may have no option but to pull the alarm cord.

Equally, movement sensor (PIR) activated lighting maybe unsuitable for the accessible cubicle, as users maybe static for long periods of time whilst seated on the WC pan. This may also result in the light fixtures being turned off whilst the cubicle is still in use. When this occurs, people with disabilities may be placed at risk from falling, especially if they have to move about or wave their arms to reactivate sensor lights. For some people, the loss of artificial light in this way may be experienced as extremely distressing.



This cubicle is not well-appointed but it does have good colour contrast. (Bichard 2005) VivaCity 2020

## Blue Lights

Some providers install blue lights in accessible cubicles. Such lighting is not recommended as it makes the accessible cubicle inaccessible to many user groups. Blue lights are usually installed to deter illegal substance use in the toilet cubicle. The lights work on the principle that veins cannot be seen under this light, which makes it difficult to inject substances. However, some people need to inject prescription medicines and the use of blue lights makes such medical intervention impossible to carry out.

Blue lights make it very difficult for people with visual impairments to navigate the accessible cubicle. People who have stomas have reported that the blue light environment makes it difficult to assess if the stoma has been cleaned adequately. Stoma cleansing is an important aspect of health management. It is an area that, if it becomes infected, can lead to serious health implications. Caregivers of children with autism have reported that toilets lit with blue lights scare them, and that some children refuse to use toilets that have such light fittings. People who use walking aids have also reported that blue lights can make it difficult to determine if the floor is wet and may put users at risk of slipping.



Cubicle shown with blue light on (l) and blue light off (r). Blue lights are not recommended as a lighting option for the accessible cubicle as they can act as a barrier to access for many people with disabilities. (Richard 2006) VivaCity 2020

## Current Designs

There are a number of current preferred designs for toilets for public use. These are based on recommendations published in **British Standard BS6465 (2006)** Sanitary installations, **British Standard BS8300 (2001)** Design of buildings and their approaches to meet the needs of disabled people, and **Approved Document M (2004)** Access to and use of buildings. In addition, many access groups, access auditors and consultancies have produced their own design guidelines. Hanson, Greed & Bichard (2004) suggest that where once there was too little guidance on the design of toilet facilities, there is now an abundance, much of which differs in minor respects to that set out in the British Standards and Building Regulations.

Generally speaking, the design guidance that was intended to specify the **minimum** standard for provision is taken to be the *maximum* that is required. With so much information available, it can be argued that designers now face great difficulty in determining the most appropriate solution to the design of an inclusive and accessible toilet. In turn, many users find that the minimum in provision of accessible toilets does not adequately cater for their specific needs. Some users need more space and others less, some users require all the grab rails specified in design guidance whilst others need only one or two. There is no optimum solution that

suits everyone. People's needs have to be met by providing the right mix to suit local demand.

The research has identified three preferred designs for an accessible toilet cubicle that are already widely in circulation. These three are recommended by the British Standards and the ADM. They are:

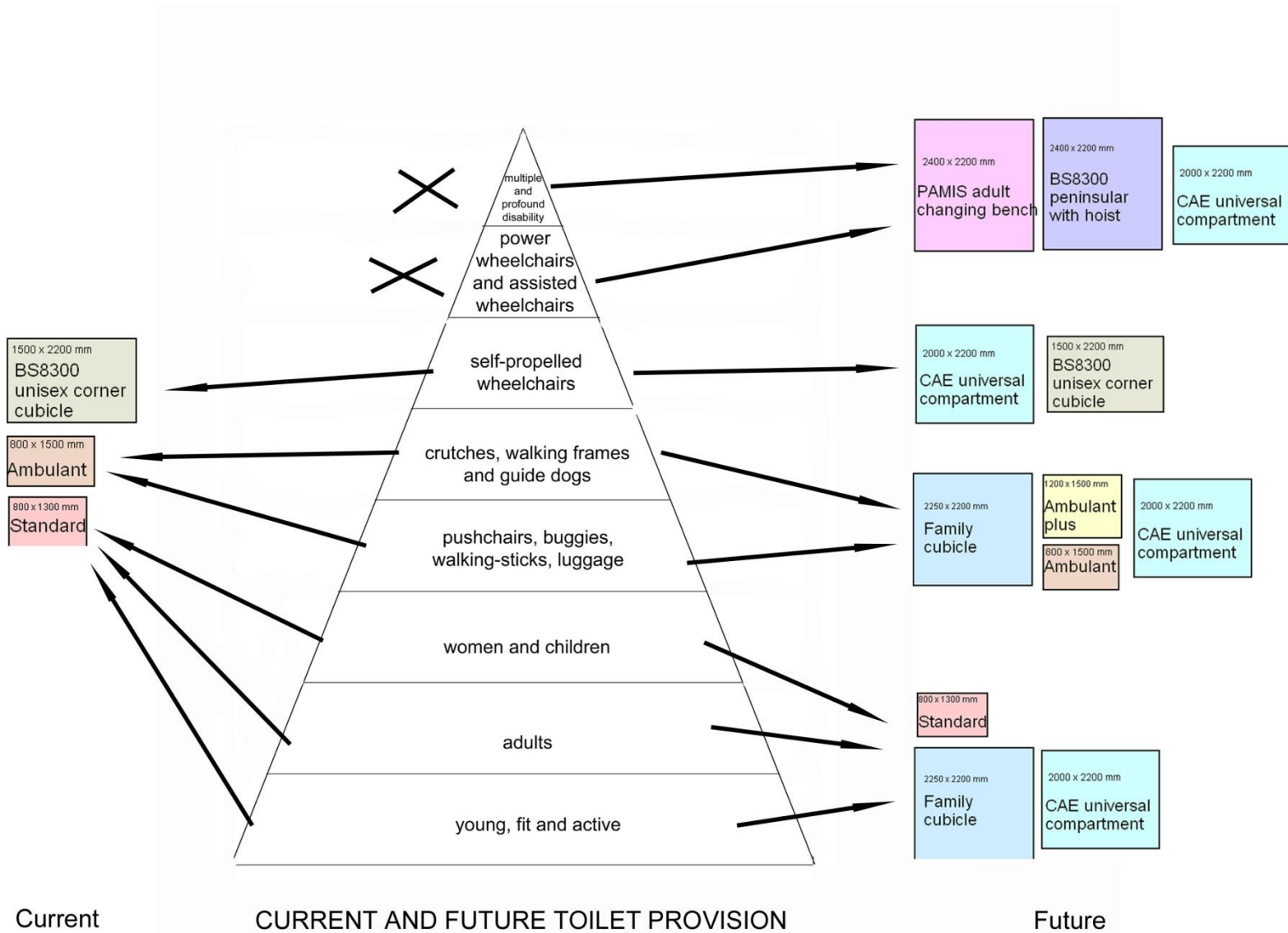
- Ambulant cubicle (ADM)
- Unisex corner accessible cubicle (ADM)
- Peninsular accessible cubicle (ADM)

These are shown, to scale, on the left hand side of the figure, overleaf, that illustrates current and future toilet provision. These have been supplemented by four more designs that build on existing provision by enhanced space standards that would allow access for a wider range of users, including the CAE recommended 'universal cubicle' that meets basic standards of accessible provision in situations where only one toilet compartment can be accommodated, and one recommended by PAMIS, a charity that campaigns for adult changing places for people with profound and multiple learning disabilities who may need the assistance of up to two caregivers. They are:

- Ambulant plus cubicle
- Universal cubicle (CAE)
- Accessible plus cubicle (PAMIS)
- Family cubicle

The templates for these cubicles will be presented and discussed in detail later.





In the figure showing current and future toilet provision, the most widely available cubicle designs have been matched with their intended populations in a population pyramid (after Goldsmith, 2000) where the area covered by each layer in the pyramid conveniently gives an indication of the proportion of the population involved. The pyramid can be split notionally into two, a large 'base' of able-bodied individuals, and a top 'cone' of people with disabilities.

The bottom (widest) layer of the pyramid represents fit and active people who do not experience any architectural barriers. Row two also represents normal adults who can move about freely. Row three represents women, who are considered to be 'architecturally disabled' due to the gender inequality that is inherent in current provision, and that has resulted the need for women to queue. All of these are expected to use standard provision.

Row four represents older people who, although less active generally do not identify themselves as having a disability, as well as families with young children who require pushchairs. Row five represents ambulant disabled people who may feel that, as non-wheelchair users, they also cannot use the accessible toilet. These groups could use an ambulant cubicle in standard provision, if this is provided.

Row six represents independent wheelchair users whose toileting needs have been met by the provision of a unisex accessible WC compartment. Rows seven and eight represent users who need assistance to go to the toilet and scooter users, respectively. At present, their needs are not catered for.

As the diagram illustrates the vast majority of users rely on the smallest standard toilet cubicle design, large numbers of disabled people rely on the accessible cubicle and a very small minority of the population whose needs are more complex require the largest and most specialised cubicle space for toileting.

As we have already seen, in reality many more people regularly use the accessible toilet cubicle than the population that it has been designed to serve. For example, there are many people whose disability may be hidden but who still require certain design features found in the accessible cubicle. In addition, the lack of provision for women results in some women choosing to use the accessible facility even though they do not have a disability. The lack of family-friendly toilets results in mothers taking sons and fathers taking daughters into the accessible provision.

As a consequence, disabled users who must use the accessible cubicle report that they often have difficulty in finding a vacant toilet due to its use by people whom they perceive to be able-bodied. Providing a greater range of

cubicles to cross-cut Goldsmith's population pyramid should help to overcome this problem. We have shown on the right hand side of the diagram, that if a greater range of cubicles were provided in most situations, every group would be able to exercise a choice as to which form of provision they preferred to use. Providers, on the other hand, can match the variety of cubicles they install to their customer base. The cubicles that will be described in more detail below have been arranged in size order, starting with the smallest and ending with the largest.



A typical standard cubicle illustrates the majority and most basic of provisions. (Bichard 2006) VivaCity 2020



Many older standard cubicles are not suitable for users. (Bichard 2006) VivaCity 2020



Ambulant cubicles would be a form of 'standard' provision that would satisfy many users' needs. (Bichard 2006) VivaCity 2020

## Ambulant Cubicle (ADM)

British Standards invariably take the form of a code of practice, which means that the relevant standards on sanitary accommodation are not intended as a complete specification, but rather as guidance for architects, designers and others who provide sanitary appliances in buildings. This means that, in the case of standard non-domestic toilets (public toilets), the dimensional requirements are not specified in the relevant British Standard, **BS6465: 2006**.

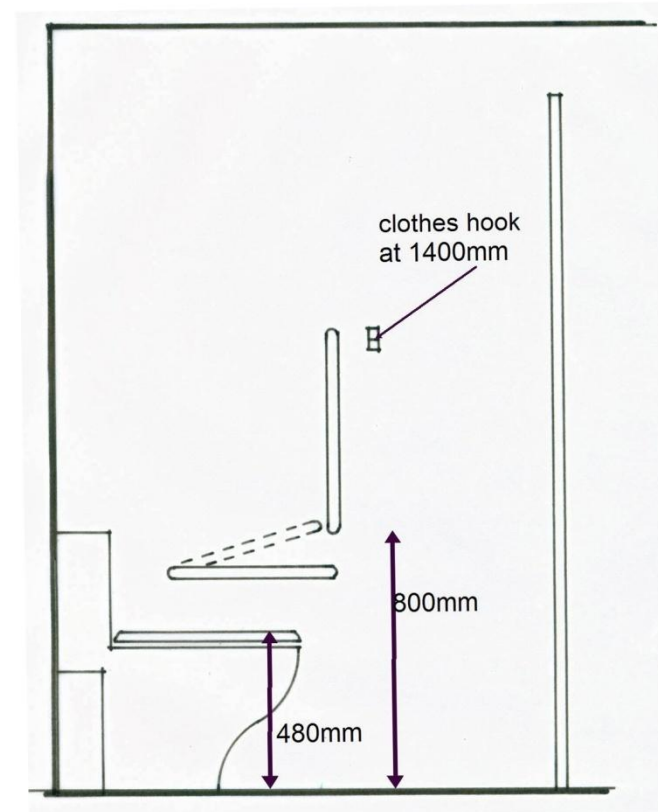
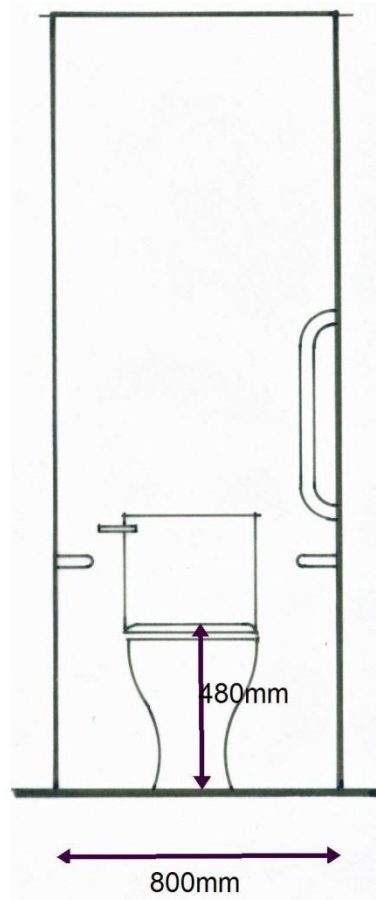
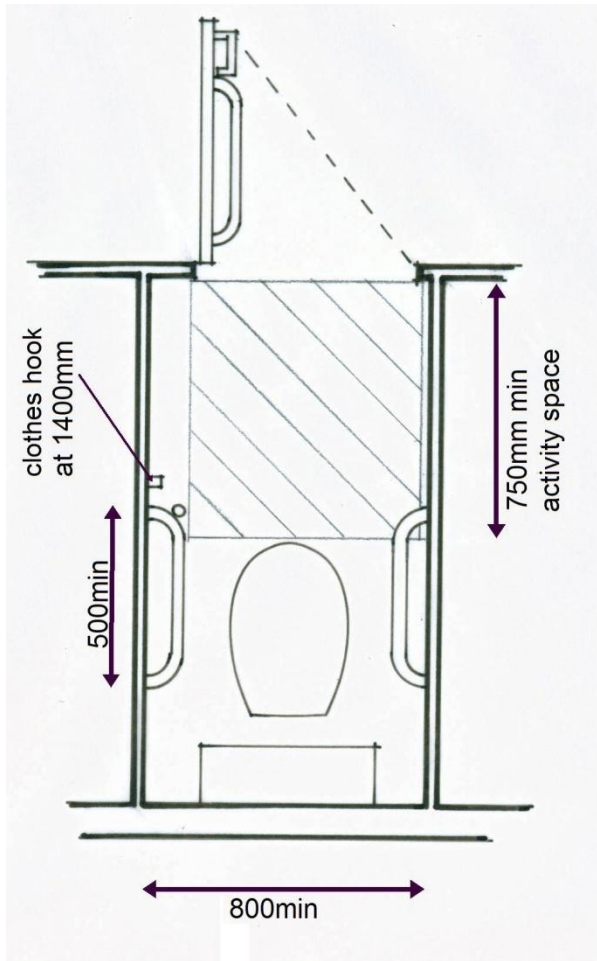
Although no overall dimensions are specified for standard WC cubicles, partly because these will depend on the dimensions of the actual appliances specified, these can be as little as 1300mm deep (front to back) by 800mm wide (side to side). A cubicle with dimensions of the order of 1500mm x 850mm is considered 'normal' (Goldsmith, 2000) but this can still be uncomfortably small for some men and women.

The current British Standard for the design of accessible toilets for disabled people is **BS8300: 2001**, Design of buildings and their approaches to meet the needs of disabled people – a code of practice. The ambulant cubicle shown there is intended to assist people with reduced mobility, strength or grip, who would like to use a standard toilet within normal, gendered provision. The standard therefore specifies the requirements for an

ambulant cubicle suitable for inclusion within standard toilets.

The width of the ambulant cubicle is specified as 800mm. The overall depth of the cubicle is not specified, but there needs to be a 750mm 'activity space' in front of the WC pan to enable people to move about within the cubicle. An activity space is the additional area around the appliance itself that is needed to carry out activities normally associated with the appliance, such as sitting upon the toilet when using it and cleaning and routine maintenance of the WC pan.

In practice, the overall dimensions of an ambulant cubicle is likely to be of the order of 1500mm deep by 800mm wide, in other words no larger than a normal standard cubicle. The difference lies in the fact that the door to the cubicle opens outwards, additional fixtures and fittings have been installed (grab rails, horizontal door closing bar, clothes hook) and in the fact that the height of the WC pan is specified, at 480mm.



Ambulant Cubicle (ADM) – floor plan and elevations

## Ambulant Plus Cubicle

This type of cubicle is also mentioned in BS8300 but it is not illustrated there. It is suitable for inclusion within standard, gendered toilets, to assist people who need extra space, such as adults and babies or older and disabled people. At 1200mm wide, the ambulant plus cubicle is wider than the previous ambulant cubicle, and it contains a wider range of fixtures and fittings.

As before, the door opens outwards and there is a 750mm activity zone in front of the WC pan. The overall depth of the cubicle will again depend on the type of appliances chosen, and whether or not the WC cistern is exposed within the cubicle or concealed within ductwork. The depth is likely to be of the order of 1500mm, which means that it will fit into a standard run of partitioned WC cubicles.

This cubicle meets the requirements of users who require some features of the wheelchair accessible toilet, but not the space. The cubicle is fully enclosed for users' privacy and therefore it includes an alarm system. Many of the fixtures and fittings found in the wheelchair accessible cubicle are also found in this cubicle. These include:

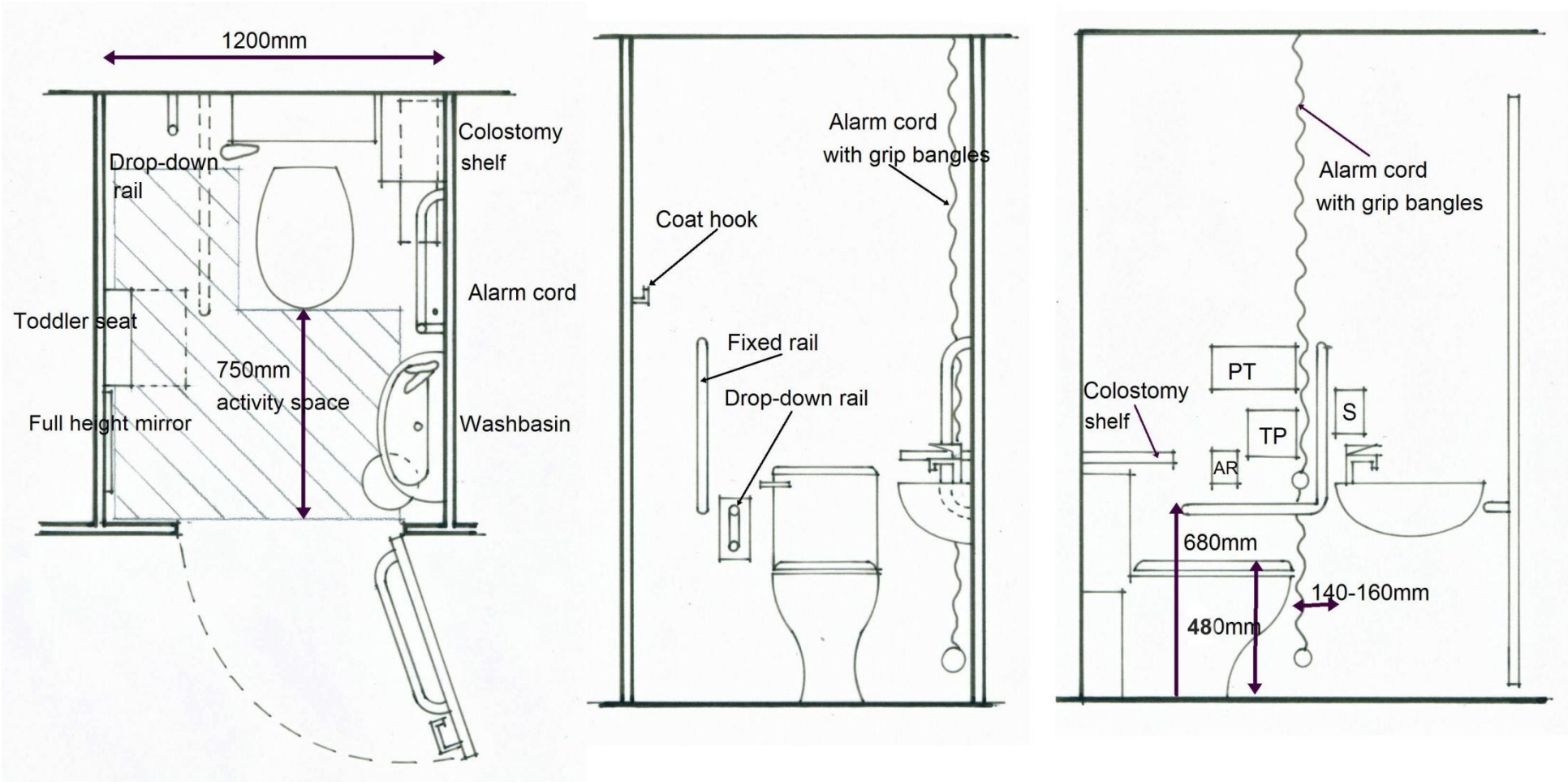
- WC pan at height of 480mm
- Horizontal grab rails on wall closest to WC pan and door.
- Fixed vertical grab rail on wall behind WC pan

- Drop down grab rail on open side of WC pan.
- Hand wash basin at standing height of 850mm
- Hand washing accessories such as soap and paper towel provision
- Waste and general rubbish bins (single bin for category E and sanitary waste).
- Coat hook
- Colostomy shelf

In addition an optional toddler seat could be included within the cubicle for parents to secure young children whilst they toilet. Where space is a major consideration a similar cubicle of a width of 900mm would include all aspects of inclusive fixtures and fittings except the toddler seat. Critical dimensions have been shown.

The cubicle may be located within gendered facilities and has considered the toileting needs of:

- People with stomas, whose physical mobility is not impaired but who need access to hand washing facilities.
- People who require more space for walking aids such as sticks and crutches, higher WC pans, and grab rails for assistance.
- Parents with young children requiring space for pushchair or secure seat for child whilst toileting themselves.
- People of faith communities who observe rituals of cleansing when toileting.
- People whose physical ability is restricted by their weight.



Ambulant Plus Cubicle – floor plan and elevations

## Unisex Corner Accessible Cubicle (ADM)

The term 'unisex' refers to the fact that the cubicle is suitable for both genders and that it may also be used by someone who is assisted by a spouse, partner or caregiver of the opposite gender. 'Corner' refers to the position of the WC pan, which is located close to one side wall in order to provide security and support to a disabled user with poor balance. The corner layout can accommodate a variety of transfer methods from a wheelchair to the WC pan (but not all) and the arrangement of the appliances includes a hand-rinse basin that allows someone to wash and dry their hands whilst seated on the WC before transferring back to the wheelchair, thereby minimising any risk that the user's clothes or the wheelchair itself will be soiled.

To comply with BS8300, the **minimum** room dimensions and the key dimensions relating to sanitary ware and fittings should be as shown in the diagram. These are 2200mm deep by 1500mm wide. These dimensions should be suitable for the majority of wheelchair users, but the users of large power-assisted wheelchairs may be excluded. The compartment illustrated is also suitable for ambulant disabled people. The non-symmetrical layout favours access from one side only, which may cause problems for some users. Where two or more accessible compartments are provided they should be

'handed', so as to be suitable for both left and right hand transfer and the handing should be indicated by a touch legible pictogram.

The dimensions relating the WC pan to the finger-rinse basin and to all the other fixtures and fittings are critical for the successful use of the facility by a wheelchair user. The following points should be taken into consideration:

- the clear useable space within the compartment that is free of any fixtures and fittings needs to be at least 700mm by 1100mm;
- a wall mounted pan is preferable, to permit closer access by wheelchair users;
- where a plinth is used to achieve the correct seat height, this should not obstruct access to and use of the WC by wheelchair users and ambulant disabled people;
- the flush should be operated by a spatula type lever or a chain pull;
- in a corner compartment, the flushing mechanism should be on the open, transfer side of the WC pan;
- where there is a chain pull from a high level cistern, this should also be on the open side of the WC pan, and should terminate with a ring handle of 50mm diameter, positioned between 800 and 1000mm above the floor;
- consideration should be given to the installation of a WC with automatic bidet cleansing and drying



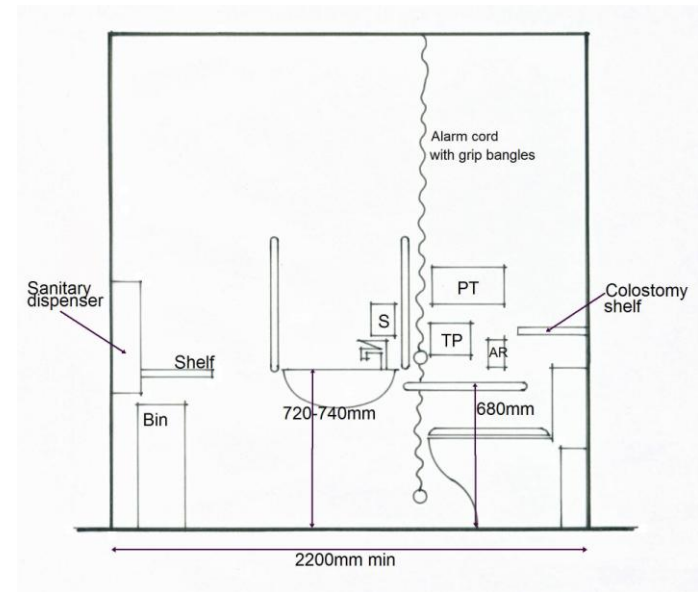
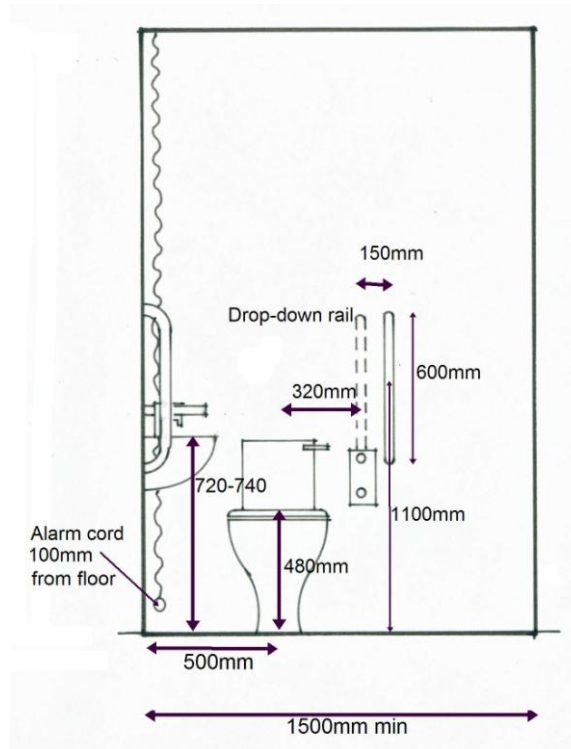
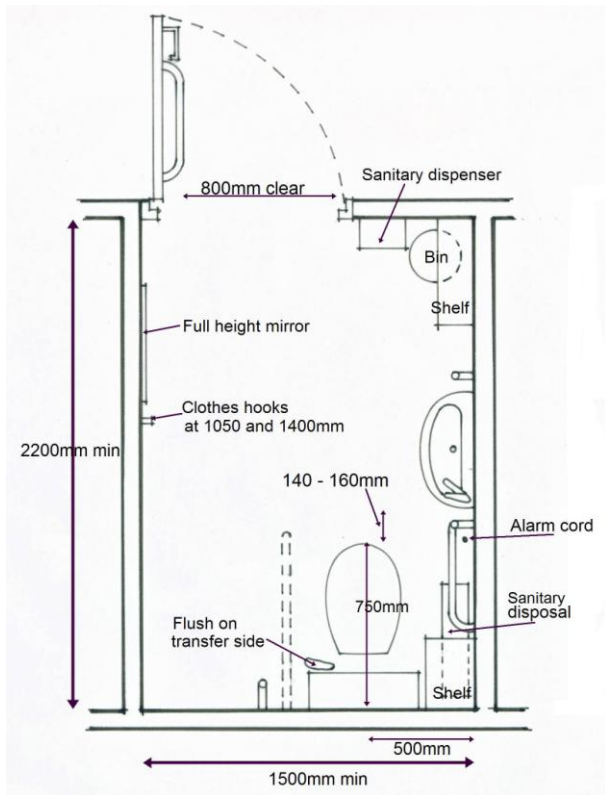
facilities, to avoid the need for wiping when seated on the WC;

- the top surface of the WC seat should be set at 480mm above floor level, which is the same height as the majority of wheelchairs;
- the seat should be designed for heavy duty use and securely fixed with metal (preferably with stainless steel) fittings to the WC. The seat should be able to tilt back beyond the vertical when raised, so that the WC can be used as a urinal. No seat cover is necessary as this impedes transfer when raised. A gap-front seat should not be used;
- where a low level cistern is located in a duct, it is possible to provide a horizontal grab rail with a back rest at the rear of the WC pan to assist transfer. If the low level cistern is external, it is not possible to fit such a rail, but the cistern itself should be selected to support transfer.

The colour and luminance of sanitary fittings and aids should contrast with the background wall and floor finishes to help people with impaired vision to distinguish them. Shiny floor and wall surfaces should also be avoided as they may produce reflections and glare that confuse people with impaired vision. Floors should be non-slip, especially when wet. The boxing in of any pipes or ductwork should not compromise the space in which to manoeuvre.

BS8300 also contains a series of recommendations about the location and positioning of grab rails around the WC, including:

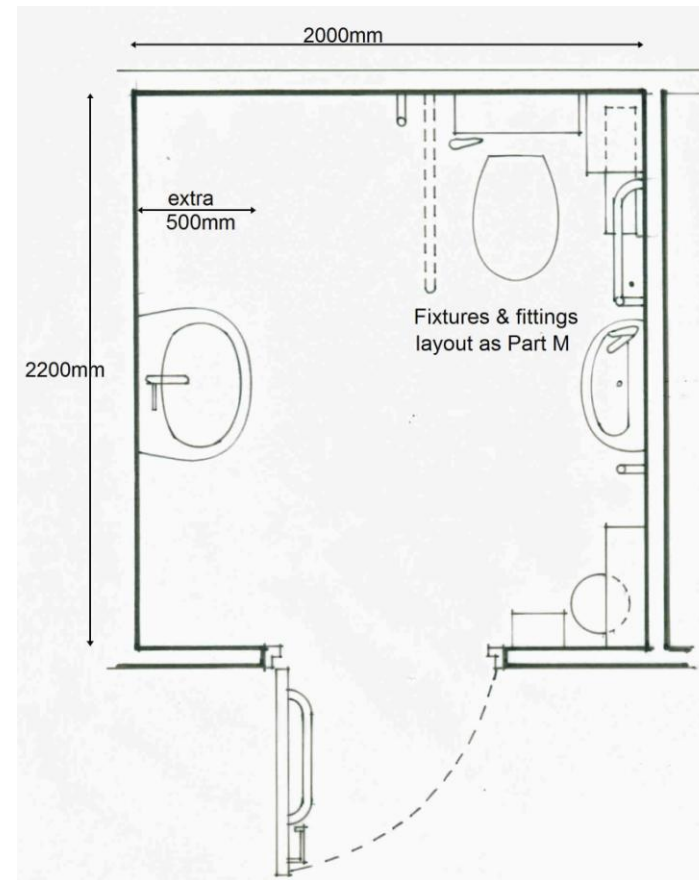
- the height of all horizontal fixed or hinged grab rails should be 600mm above finished floor level;
- the hinged rail on the open side of the WC should be fixed with its centre line 320mm from the centre line of the WC and extending 100-150mm beyond the front line of the WC;
- the fixed rail on the side will should maintain a 50-60mm clearance between the rail and the wall
- a fixed rail should be located behind and centred on the WC pan when the cistern is ducted;
- drop down rails should be capable of being pulled down while the user is seated on the WC. These should incorporate vertical support struts, set back by at least half the rail's projection from the wall so as not to impede wheelchair access;
- vertical grab rails should be at least 600mm long and fixed with their mid point set at 1100mm above the floor;
- the lateral position of vertical grab rails should be set 470mm from the centre line of the WC;
- grab rails should be between 32-35mm in diameter, with a good grip when wet and of high colour contrast and luminance with the surfaces against which they are seen.



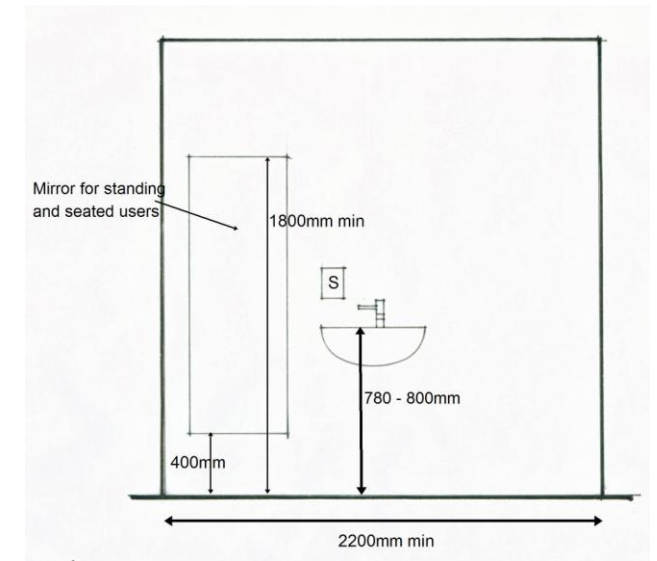
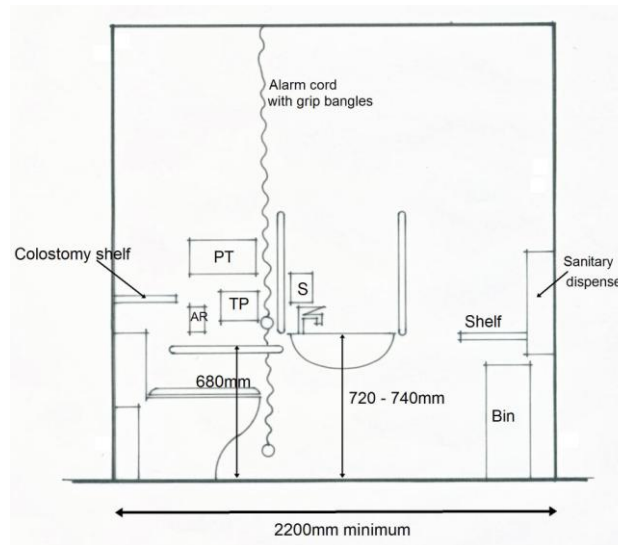
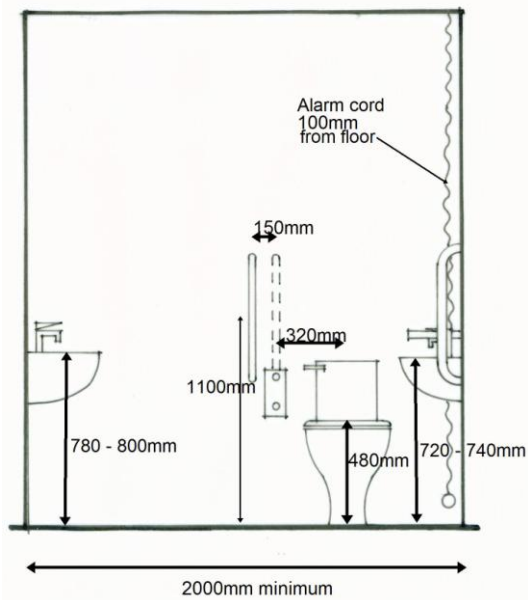
Unisex Corner Accessible Cubicle (ADM) – floor plan and elevations

## Universal Cubicle (CAE)

This cubicle is not shown within BS8300, but where there is space for only one WC in a building, providing this type of cubicle will ensure that it should be accessible to all users, thus ensuring equality of provision. To do so requires that the width of the previous unisex corner accessible cubicle is increased from 1500mm to 2000mm, to accommodate a hand wash basin that can be used standing, as well as the hand-rinse basin associated with the WC.



Universal Cubicle (CAE) – floor plan



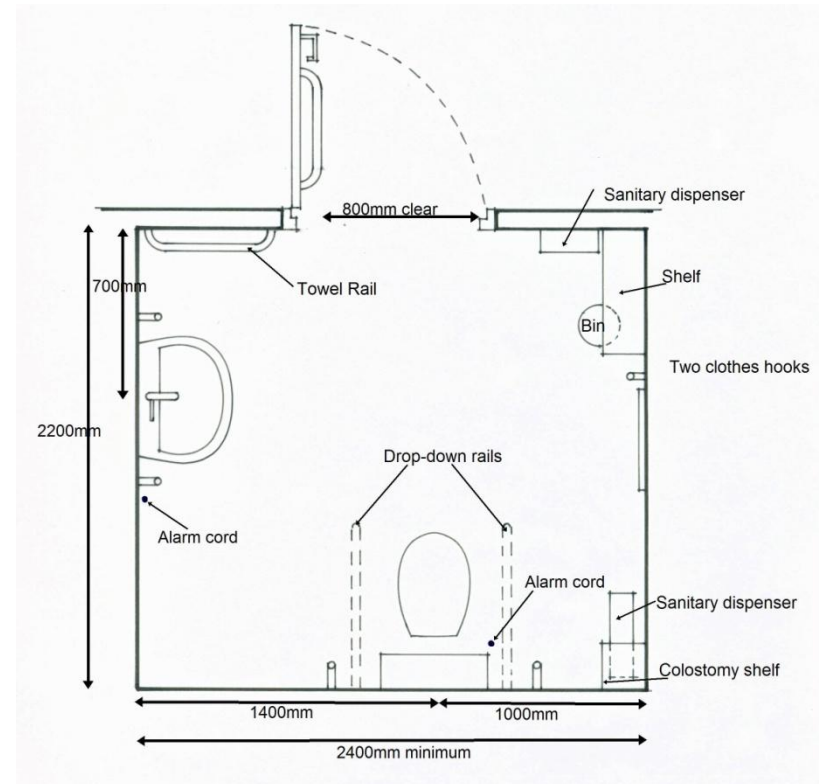
Universal Cubicle (CAE) - elevations

## Peninsular Accessible Cubicle (ADM)

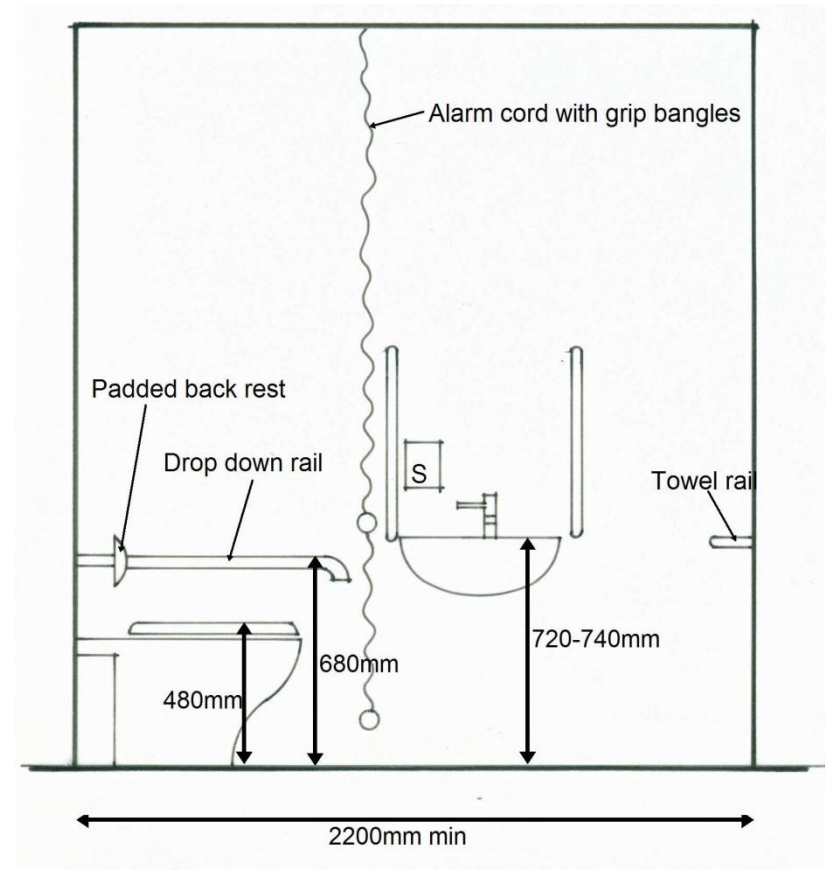
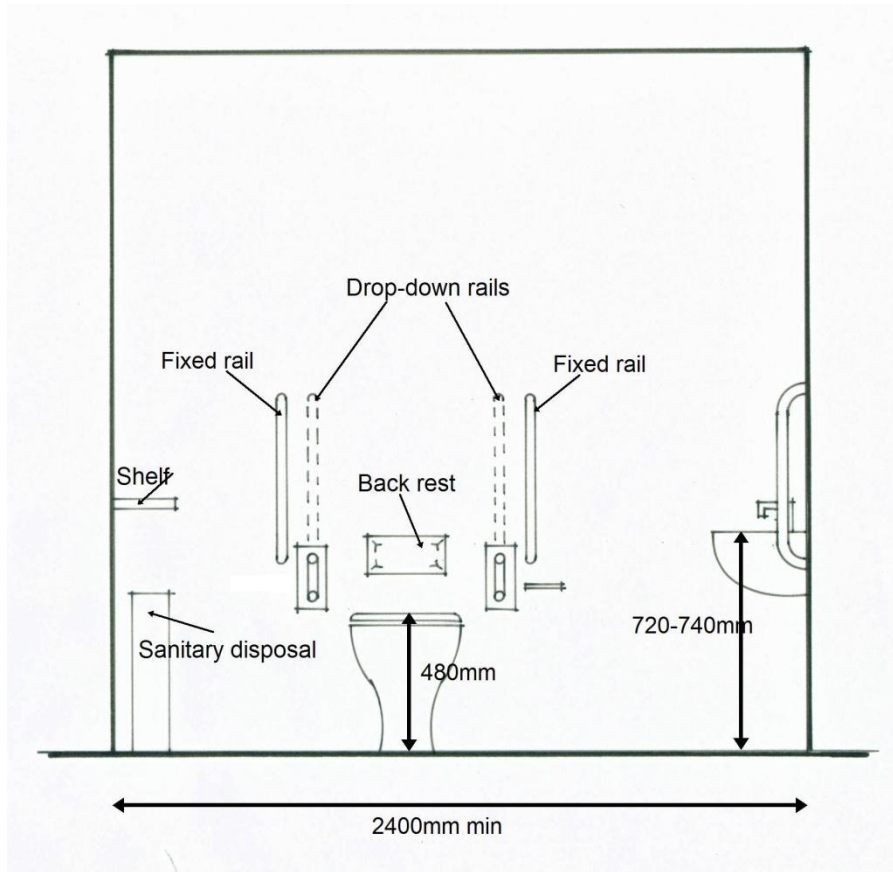
This alternative, a unisex accessible peninsular WC for assisted use, is also shown in BS8300, with the proviso that this is only appropriate where skilled assistance is available because the drop down grab rails do not provide adequate support for someone using the WC alone. The advantage of this layout is that it permits people to transfer from a wheelchair to the WC pan from either side.

The overall dimensions for this cubicle are shown as 2200mm wide by 2400mm deep. Because of the arrangement of the WC pan and its associated fixed and drop down grab rails, it is not possible to reach the wash hand basin in this layout whilst seated on the WC.

Because of the problems that users may experience in accessing the peninsular layout independently, a peninsular WC cubicle should not be provided as a substitute for two separate gender accessible WCs with handed corner layouts, but as an additional facility.



Peninsular Accessible Cubicle (ADM) – floor plan



Peninsular Accessible Cubicle (ADM) - elevations

## **PAMIS Toilet with Adult Changing Facilities**

For many people with disabilities and their caregivers, current designs of accessible toilet facilities do not meet their requirements. The research group consulted with the charity PAMIS and spoke with the parents of adults with profound and multiple disabilities who use large powered wheelchairs. Parents described how they often had no option but to lift their children out of wheelchairs to change them on the floor of the accessible toilet. This was not only degrading for the disabled adults, but also put caregivers at risk of injury from lifting.

Current manual handling legislation restricts lifting for professional caregivers, who are not allowed to lift people from their wheelchair onto a toilet or changing bench without a hoist. The research group received comments from parents detailing how these restrictions resulted in many children being excluded from school trips due to the need to be lifted from wheelchairs for toileting coupled to the restrictions on manual handling placed on professional caregivers.

It is currently estimated by the Changing Places campaign that 40,000 people with profound and multiple learning disabilities require toileting facilities that include more space, a height adjustable changing bench and a track or portable hoist.

In addition, adult changing facilities may be required by people with spinal injuries, muscular dystrophy, multiple sclerosis and acquired brain injury. Currently there are only a handful of PAMIS toilets available in the UK. Therefore, many disabled people's lives and those of their caregivers and other family members are restricted by the lack of access they have to suitable toileting facilities.

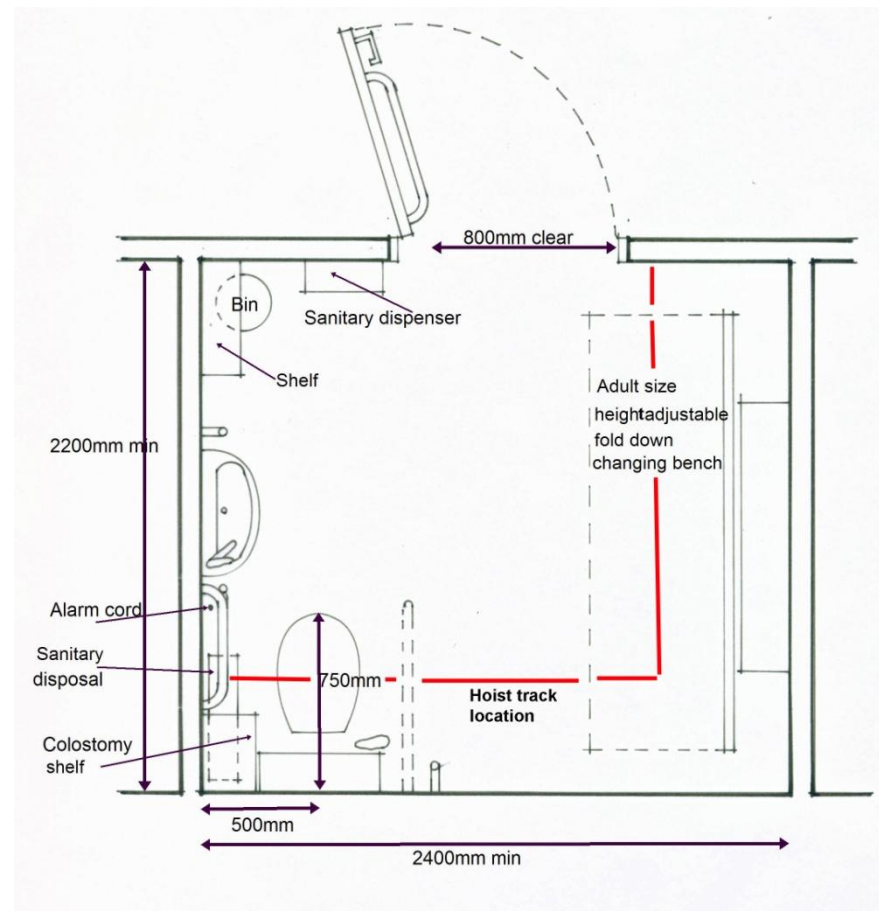
When considering provision of toilet facilities, the research recommends that at least one adult changing facility be installed in large urban centres as well as at major national theatres and events arenas, public buildings such as national art galleries and local authority main buildings and/or town halls. The latter would include provision for adult changing facilities to reflect that of the Welsh Assembly and Scottish Assembly, and be installed in the Greater London Authority building and the Houses of Parliament.

Thinking of the need for adult changing benches the research group has designed a toilet facility that includes this specialised fixture, but that still caters to a wide range of people's disabilities and chronic health conditions. The design includes the provision of an adult changing bench and can accommodate a powered wheelchair or a mobility scooter. However, from an inclusive perspective, the designs does not include a peninsular WC pan, as many people who use wheelchairs but who do not require assistance from a caregiver, prefer to use a WC pan that is close to a wall for reasons of security.

For this design, it is required that the height adjustable changing bench be of the variety that can fold up against the wall when not in use, allowing space to be maximised for other users. This design of accessible toilet would be suitable for people who may either be able to walk a few steps to a changing bench, or for young adults whose parents may be able to lift them with out injury. However, this facility could not be used by professional caregivers unless a portable hoist was installed over the WC and changing bench to aid the caregiver in lifting a person from a wheelchair. The overall dimensions of this cubicle are 2400mm wide by 2200mm deep, making it equivalent in size to a peninsular accessible cubicle.

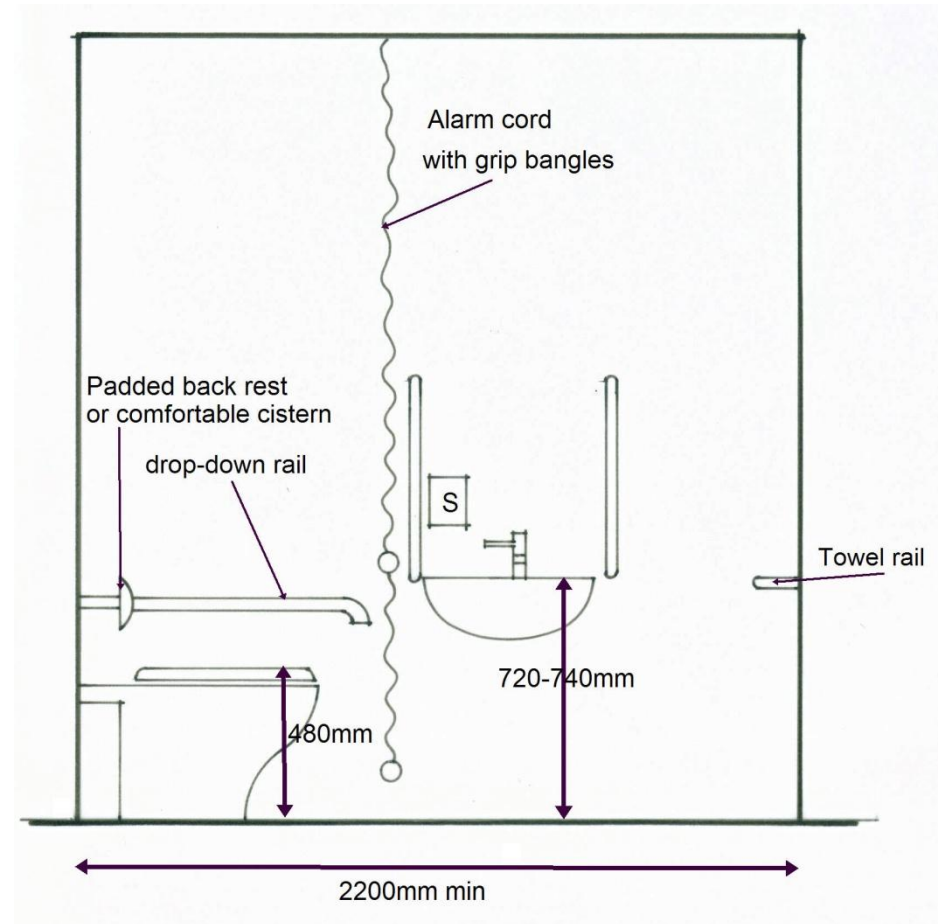
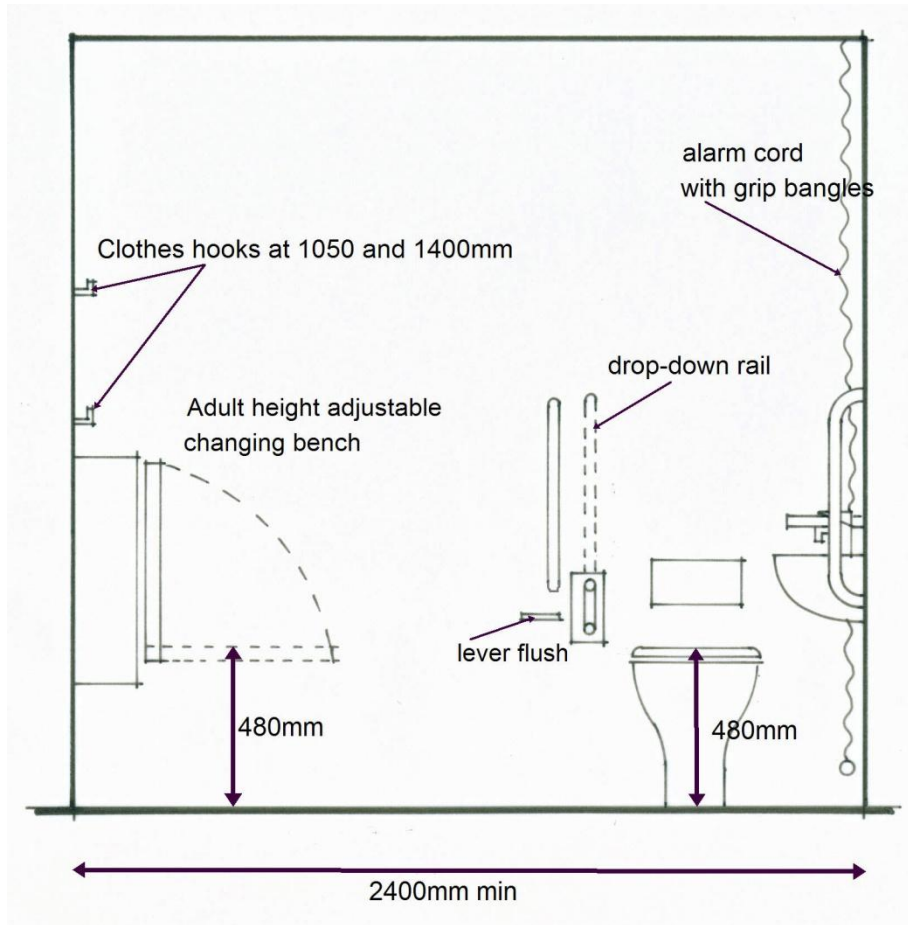


PAMIS toilet, hoist and height/space adjustable basin.  
(Richard 2004) VivaCity 2020



PAMIS toilet with adult changing facilities – floor plan



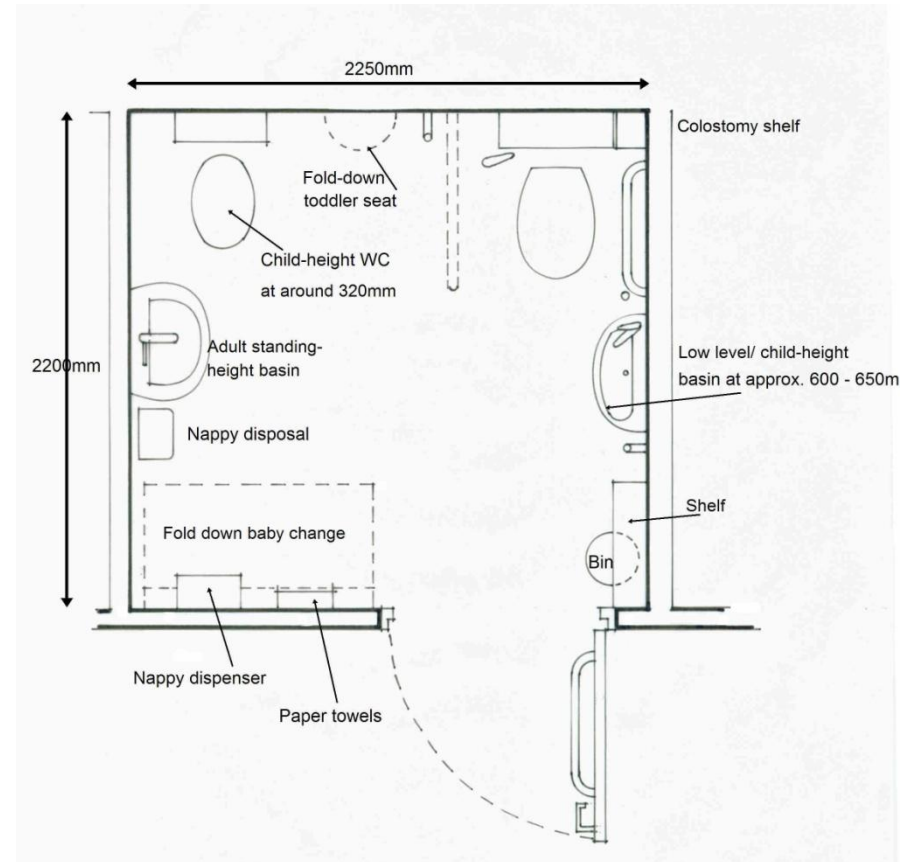


PAMIS toilet with adult changing facilities - elevations

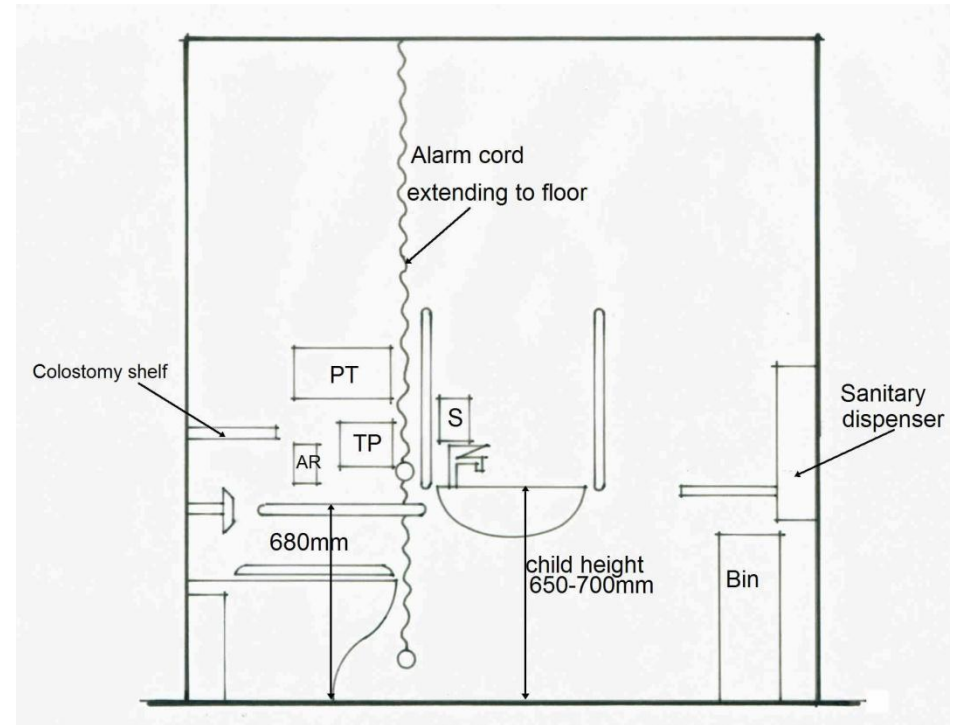
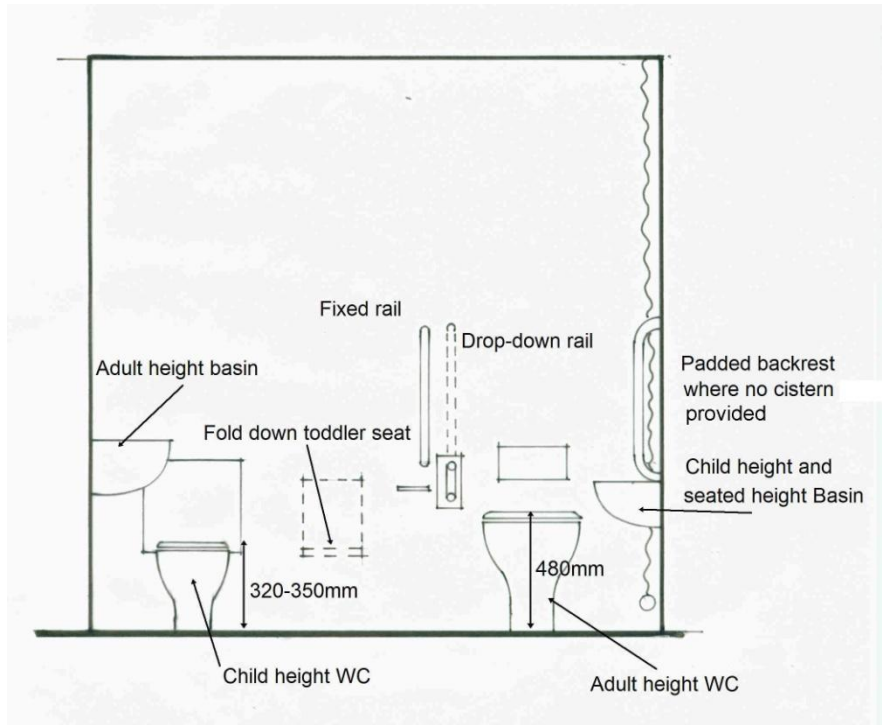
## Family Toilets

In areas such as public parks or businesses that cater specifically for (or with high regard for the needs of) families with young children, family toilets can be seen as an inclusive form of provision. Mothers and fathers consulted for this research commented that they often felt they had 'no choice' but to use the wheelchair accessible facilities, as standard toilet accommodation did not feel appropriate when a father was with his daughter of an age where she could not toilet alone. Similarly, mothers frequently experienced issues with younger sons being 'too old' to use the women's toilets, but feeling nervous of going into the men's toilets on their own.

Unisex family toilets are an option to bridge this gap in provision. Baby changing facilities may also be included, as well as lower WC pans and hand wash basins for children. Currently, no recommended designs appear to be available in the UK for this form of provision, so we have sketched out one way to accommodate the needs of families in inclusively designed provision. The overall dimensions of the cubicle shown are 2250 mm wide by 2200 mm deep. Consideration should also be made to make the adult facilities accessible, for example the inclusion of grab rails, for parents and grand parents who may want to accompany children into the accessible facilities.



Family toilet – floor plan



Family toilet - elevations

## Gendered or Unisex Inclusive Provision

Since its introduction in the mid 1970s, the unisex corner accessible toilet has become one of the central symbols for access. It is considered essential for people who need assistance from a caregiver of the opposite gender. However, many people with disabilities who do not require assistance would prefer to use an accessible facility within gendered provision. Ideally, the unisex accessible facility should be provided in addition to accessible cubicles in the men's and women's toilets. In addition, some disabled people with religious affiliations or members of faith communities may prefer to use gender segregated but accessible cubicles.

In one of our surveys, 90 people who identified themselves as 'disabled' were asked to record their preference in respect of toilet provision between gendered toilets and unisex toilets: 63% of those questioned preferred toilets to be segregated by gender. One respondent noted *'they don't make able bodied men and women share the same toilet'*.

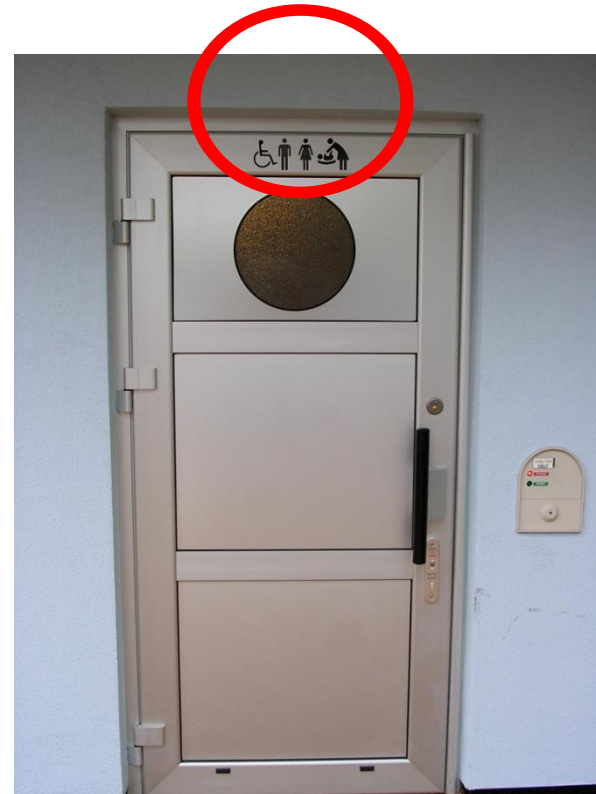
Interestingly, during interviews and focus groups, queues for toilets were cited by both disabled men and women as a reason for their preferences. However, some disabled men said they would prefer to use gendered accessible cubicles so they did not have to queue for the unisex accessible toilet, whilst some disabled women expressed a preference for unisex accessible facilities to avoid the queue for the 'ladies'.

Many people are currently using the wheelchair accessible cubicle as it is the only form of provision that suits their needs yet:

- People with ambulant disabilities, especially those associated with toileting such as colostomy and urostomy users, have reported that they do not need to use the accessible cubicle, but do require access within the cubicle to a hand wash basin and paper towels, mirrors and coat hooks.
- People with back, hip and knee conditions such as arthritis report that they do not need to use the wheelchair accessible cubicle, but do require a cubicle with a higher toilet pan and access to grab rails.
- People with religious affiliations that observe rituals of cleansing before and after toilet use, reported that they do not need to use the wheelchair accessible cubicle, but do require a cubicle with access to water.

Such requirements in toilet provision have increased the populations using the wheelchair accessible toilets to the extent that some users with disabilities have reported that they consider the use of the accessible toilet by people who give the appearance of being able-bodied to be a form of misuse of 'their' facilities.

Design guidance such as the Good Loo Design Guide recommends that an ambulant disabled cubicle be provided wherever a range of WC compartments is provided within gender-segregated provision. However, the current design of the ambulant cubicle does not include access to hand washing facilities. For this, the ambulant plus design shown earlier is necessary.



Many newer facilities are attempting to cater to all possible users, yet their internal design may not be suitable for all possible user needs. (Bichard 2006) VivaCity 2020

## To lock or not to lock

### RADAR

Since 1979, the Royal Association for Disability and Rehabilitation has operated a 'National Key Scheme' (known as NKS or RADAR). The scheme involves locking accessible toilets that are deemed to be at risk from vandalism and misuse, thus ensuring that the accessible cubicle should be in good working order when it is needed. Keys for toilets participating in the scheme can be purchased for a small charge from local authorities that are part of the scheme, as well as from the RADAR organisation. However, the 'key scheme' has been controversial from the start, as it could not guarantee that everyone who needed the accessible toilet would also have access to the key.

Some people with disabilities may be unable to use keys. People with tremors and / or impaired co-ordination have reported difficulty in placing keys in locks. People with visual impairments may also have difficulty locating the lock. On many accessible toilets, the lock and handle is set at a height that is suitable for a person in a wheelchair, yet this height maybe unsuitable for ambulant disabled people who may find the lock is too low when inserting the key and opening the toilet door. People with cognitive disabilities have reported frustration because they forget to take the key for the toilet with them when they go out.



Although on the RADAR Key Scheme this provider has also installed their own lock that requires an attendant to open it. (Bichard 2005) VivaCity 2020

For users who may need the accessible facilities but do not have the appropriate key, there are usually signs directing people to whom or where the key can be collected. This may be from an individual or at a customer services desk. This 'solution' imposes several barriers to accessing toilets.

Some users may find it embarrassing and discriminatory to have to ask for a key to use the toilet, especially if standard facilities are not locked and able-bodied users therefore do not need to ask for a key. Other users may not be able to read the sign or understand the directions given to the place to ask for a key, due to the sign not being legible to those with visual impairments or easy to understand by a person with cognitive disabilities. Users have reported that on requesting keys to open accessible toilets, the key or the person who has the key cannot be found.

Despite such access concerns, the locking of accessible toilets remains a popular choice amongst disabled people's groups. However, whilst keeping the facilities locked is generally believed to be the only way to ensure they are in good working order when needed, some users have commented that the lock itself should be modernised to make it more accessible.



Being obliged to request access to use a toilet is not inclusive. (Richard 2005) VivaCity 2020

## **Coded Systems**

Some providers have installed coded door locks that are operated by keying in a 'code' on a key pad, which then unlocks the door to the toilet facilities. Many of these door locks are installed on outer doors that lead to separate men's, women's and accessible facilities. The code is issued to the user on a receipt that is supplied with a purchase. Such locked toilet systems ensure that toilets are for customer use only. They are frequently installed in railway stations.

Many aspects of this system can be considered to be inaccessible. The code issued to the potential user is printed on a receipt that is often in a small font size, which cannot be read by people with visual impairments and may also be hard to read for people with poor eyesight. The coded lock is often also inaccessible to those with visual impairment as the keys and associated numbers on the key pad are too small. People with limited dexterity and/or co-ordination may also be excluded, as the keys themselves are small and some systems have circular door knobs that require a secure grip to open. The locks are often placed at a height that can be seen by a person standing to operate the key pad, but which is not suitable for a person who uses a wheelchair or is of short stature.

## Smartcards

Research respondents based in London were very keen to suggest that the locking system on the accessible toilet door be upgraded in some form. Suggestions included a lock and key based on the Oyster Card system, in use by London Transport. Such a system may be more accessible to users with visual impairments and impaired co-ordination. In addition, such a card operated lock maybe less cumbersome to carry around, as cards could be kept with travel cards or in wallets and purses with credit and store cards.



Signs asking users to go to another area in order to use the toilet. Having to ask for toilets to be opened can be demeaning for many people with disabilities, as well as inconvenient if using the toilet is a matter of urgency (Bichard 2005) VivaCity 2020



## Evening Provision

Street fouling, either by urination or defecation, has become a severe problem for many urban areas. Often it is associated with evening drinking, but some people with disabilities admitted having to toilet openly in public because of the lack of accessible provision. The British Toilet Association (BTA) has found that less than 30% of public toilets are open longer than 12 hours a day. In addition, a recent survey carried out by the BTA found that 95% of those questioned admitted to urinating, vomiting or defecating in the street. The problem becomes particularly acute in major urban centres that also offer evening leisure options such as pubs, bars and nightclubs. Customers from these leisure activities may require access to an away from home toilet long after daytime facilities, either public or those operated by businesses, have closed.

For those businesses that remain open, customer toilets may be monitored carefully for customer use only. Interviewees commented on being refused access to businesses just to use the toilet facilities, or paying entrance fees of up to £5 just to use toilets.

The lack of evening provision is as acute in the early part of the evening as it is in the early hours of the morning. In the early evening hours, younger people under the age of 18 are not catered for at all. The closure of shops, department stores and cafes results in many people relying on pubs and bars for

toilet provision (with or without purchases). However, for those under 18 who cannot enter premises that serve alcohol, there is no provision, and for many no option but to engage in street fouling.



Businesses open 24 hours may have carefully monitored toilets and may not be accessible to all, like this 24 hour juice bar. (Richard 2003) VivaCity 2020

In the 'Good Practice Guide for Street Urination', Thomson et al (2004), suggest that street urination can contribute to a 'general sense of degradation' of an area. Following the 'broken windows' argument, the guide notes that unchecked street urination can signify to the criminally inclined, a lack of attention by local authorities to an area. This can subsequently lead to increased criminal behaviour in the belief that it too will not gain attention.



Portable urinals are usually placed at identified 'wet-spots' around the city centre. These portable models can be removed during daylight hours and their contents measured to assess how frequently they are used. (Photo courtesy of Edja Trigueiro 2004) VivaCity 2020

Thomson identifies two main reasons why street urination takes place. The first is being 'caught out', which can be the result of factors including:

- lack of public toilets, or facilities in disrepair,
- inaccessible public toilets, subterranean facilities with stepped entrances,
- waiting times for facilities, numbers of facilities may be less than customer numbers, resulting in long queues for toilets,
- notoriety of facilities, resulting in fear of attack, also a sense of revulsion towards what may go on or what a user may find in public toilets.

The second major cause of street fouling is intoxication by alcohol or narcotics, resulting in diminished awareness, judgement, physical abilities or inhibitions that may act as a 'catalyst' and increase an individual's propensity towards public urination. Additionally the individual may have also been 'caught out'. However, extreme levels of intoxication may result in the individual being unaware that street urination is anti-social.

## Urinals

To address the particular problem of street urination, some local authorities have opted to provide evening urinals. In some areas such as Westminster in London (see Case Study), these facilities are either fixed and 'hidden', or portable, so that they remain out of sight during daylight. They are only suitable for able-bodied men, although they could be used by some men with a slight

ambulant disability. They would not normally be considered suitable for women to use, although in some areas that are providing portable urinals 'privacy doors' have been incorporated, to make these more suitable for female use.

Other forms of urinal that have been permanently installed within urban areas include the 'Butterfly', a urinal that can be closed during the day, and the Uri-lift which has proved to be very popular. Activated by remote control the Uri-lift rises from the ground and offers three urinal sections within its stainless steel tower. During daylight hours the Uri-lift descends back into the ground.

These forms of provision have been adopted to tackle the effects of street urination within the evening. They only cater to one form of excretion, and one section of the population and so they cannot be considered inclusive or accessible.



Provision with evening attendants may dispel notoriety and personal safety concerns users may have with evening provision. Here, an attendant rushes into the toilet. (Bichard 2003) VivaCity 2020

## Automatic Public Conveniences

Automatic Public Conveniences (APCs) or 'Superloos' are another form of provision that is considered to be suitable for the evening economy. APCs are unisex and fully automated, incorporating sensor 'no touch' technology for hand washing.

When toileting is completed and the user leaves the facility, the toilets automatically clean themselves. Some users comment on how strange it feels to leave a toilet without flushing as the flush cycle is incorporated into the cleaning cycle. During cleaning, which depending on the model of APC can be from a couple of minutes to nearly 10 minutes, the facility cannot be used. There is a charge for using an APC, usually ten or twenty pence. However, many APCs are part of the National Key Scheme and are free for those who have a RADAR key.

Despite the fact that in many city centres APCs are replacing normal provision, they are not a popular option for toileting, as 67% of those surveyed during this research reported that they would not use one. During interviews, participants with disabilities commented that they would travel further to use facilities offered by a business or go home to use the toilet rather than use an APC.

There was a general mistrust of the technological aspects of the design, which commonly manifested itself in a fear that the door might open whilst someone was using the facility. In addition 'stories' or eye-witness accounts of people being

stuck in the toilets and getting 'washed', also put people off using APCs. Some users reported that they had no objection to APCs, they just didn't know how they worked and felt embarrassed to stand outside reading a set of instructions on how to 'go to the toilet'.



The top APC looks quite civilized but the bottom one is unattractive and uninviting. (Richard 2005) VivaCity 2020

From a design perspective many aspects of the APC do not conform with the requirements of the accessible toilet. There are few grab rails, and no raised WC pan or toilet seat, which can be uncomfortable for users who may be seated for a considerable time whilst toileting. Many of the facilities have a timer control which does not raise the confidence of users, especially those who may take extra time to use toilets due to their need to undress before transferring onto and off the WC pan. Door locking is also an automatic system, which users say they feel insecure about, as they are unable to tell that the door really is locked. The wash basins in APCs are usually set at a standing height, so that they are inaccessible to those who are seated in wheelchairs. People who use walking aids commented that the thought of a wet floor after the cleaning cycle would put them off using such provision.

Some users commented the locations selected for many APCs were too exposed and so they felt uncomfortable coming directly out of a toilet cubicle onto a busy street 'where everyone knows why you've been in there'. Other users, especially women, felt vulnerable coming out of an APC either because they were located in quieter areas or because they could not see if someone might be 'hanging around'. Some male respondents admitted that if they needed to use an APC but it was engaged either by a user or in the wash cycle, they would 'probably' go and find somewhere else to urinate, resulting in street fouling.

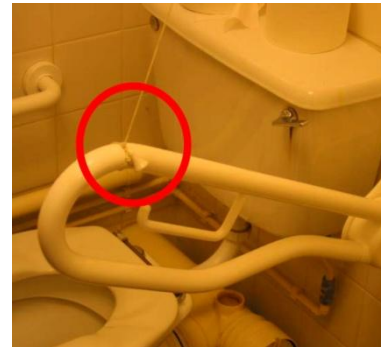
## Management

During our audits of 101 accessible toilets, 7% of the cubicles we looked at were being used for storage. These toilets could not be considered accessible, as they could not be used by anyone who needed them. Sometimes the toilet lobby area or the corridor leading to the accessible toilet was blocked by items being stored. This is just one of several management issues that may prevent disabled people from using away-from-home toilets. Resolving these problems is a matter of raising awareness through staff training.

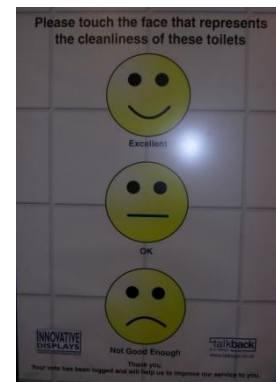
During our surveys, 34% of respondents reported that the condition of their local public toilets was 'bad'. Many people commented on how clean or dirty their local facilities were. As Mary Schramm, of the British Institute of Cleaning Science has observed, 'You can have the best designed loo in the world, but it won't be used if it's not clean'. Comments that were made by members of the public about cleaning rotas suggest that these give users some confidence that the facility is being looked after. Yet, within accessible toilets there appear to be certain fixtures and fittings that are not normally incorporated into a cleaning system, including the grab rails. In some facilities we observed that the grab rails were dusty or dirty, whilst the rest of the facility appeared very clean.

In nearly 70% of the accessible toilets we included in our study, we found the alarm cord did not reach the floor. Often this was because it was tied up. Although some users did

admit to tying up alarm cords that were installed on the transfer side of the WC pan, it has often been assumed that alarm cords are 'put out of the way' by cleaning staff. If the alarm cord is tied up, it cannot be reached in an emergency situation to summon assistance. Providers should therefore ensure that cleaning staff are aware of the importance and need for access to the alarm cord so that it is not placed out of reach.



This alarm cord has been installed in the transfer space, and could be in the way for some users. In addition it is not the recommended red in colour and has been tied to the drop down rail, preventing the rail from extending fully. (Richard 2005) VivaCity 2020



Customer assessment of cleanliness is a good management practice. (Richard 2006) VivaCity 2020

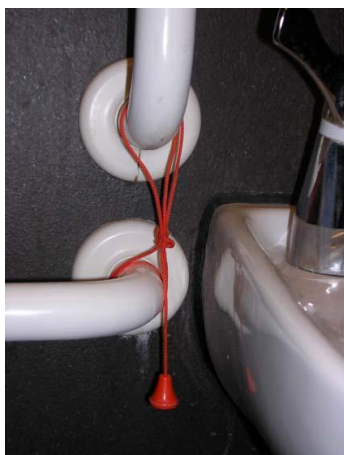
In 70% of the accessible toilets observed during the research, the open transfer space at the side of the WC pan was not accessible due to the storage of bins or furniture within this space. Participants in focus groups and interviews who regularly used a wheelchair, described how they would attempt to move the bin themselves or request that the bin be moved for them. This usually required them to leave the toilet to search for a member of staff to help them.

Some users found that having to ask for such items to be removed was 'embarrassing' and so rather than seek help they would look for another toilet to use. Others who needed to use the toilet urgently, commented that they may have no choice but to make the best of the situation and attempt to transfer within the space available.

Providers should therefore ensure that waste bins or chairs are not kept in the transfer space.



A chair has been placed in the transfer space of this accessible toilet, preventing a person who needs to side transfer onto the WC pan from accessing the space. (Bichard 2005) VivaCity 2020



This alarm cord has been installed on the recommended side of the WC pan, but has been tied up to keep it 'out of the way'. (Bichard 2005) VivaCity 2020



A bin placed in the transfer space of this accessible toilet. (Bichard 2005) VivaCity 2020

## Sustainable Away from Home Toilets

Good public toilet provision is essential to urban sustainability because it makes cities accessible to a wide range of users, including women, children, disabled and older people. Accessible toilet provision caters for pedestrians and public transport users as well as the motorist, a key factor in relation to government policy. Finally, well-designed and located public toilets improve the visual and sensory urban realm and reduce environmental degradation.

However, to be sustainable, provision needs to fit into the way the city is used, and in ways that support environmental balance, in terms of the efficient disposal of sewerage, minimisation of pollution and maximising water conservation, and by eliminating the nuisance of street urination that erodes buildings and requires the use of chemicals and large amounts of water to remove.

High quality away from home toilets will enhance the economic vitality of the town centre, by making cities more attractive to visitors. Finally they contribute to social equity, through ensuring that access is provided for all who require it.

When designing or conducting major refurbishments of toilet facilities, consideration should be given to incorporating sustainable technologies. Grey water technologies should be considered for toilet flushing, whilst solar panels should be

considered as an energy source for lighting, heating and fan ventilation.

In Kyoto, Japan such technologies have been incorporated into public toilet design, including solar panels for lights, and water recycling systems for toilet flushing.



Public toilets with solar panel roof. Kyoto, Japan. (Bichard 2005) VivaCity 2020

## Part Two – Tools and Resources

This section of the Resource is intended to support individuals and groups to campaign for better designed, located and above all **accessible** 'away from home toilets' and to help architects and facilities managers to implement the principles that have been set out in Part One. It contains information about how to conduct surveys, construct personas to represent the views of various stakeholders, and how to conduct focus groups, interviews and questionnaires.

The toilet audit tool that we have developed to audit local away from home toilet facilities is also included in this section of the Resource, as well as a series of case studies that have been selected to illustrate different issues that may be of particular concern, such as how the lack of public toilets can affect an urban area, twenty-four hour provision and the night time economy, toilets at civic buildings and transport interchanges.

We show an example of what can be achieved from a community toilet campaign and by mounting an individual campaign for better toilets. Case studies of a successful community toilet

scheme, an enlightened public provider and a model metropolitan level scheme in a large regional shopping centre authority are presented as demonstration projects.

Alongside these resources, which are primarily shown to stimulate debate, we have included the tools themselves and the findings we obtained by using them.



Local artists in Clerkenwell cast concrete WC pans for the area's Architectural Biennale in 2006 to highlight the lack of public toilet facilities in the area. (Bichard 2006) VivaCity 2020



## Surveys

Surveys are a useful way to find out what people think about current public toilet provision. They may also indicate how strongly people feel about how provision meets, or fails to meet, the local community's needs. Surveys can also help to identify if there is adequate support for a local campaign concerning the provision of away from home toilets.

Surveys can be done face-to-face, over the telephone or through the post. In general, face-to-face and telephone surveys have a higher response than postal surveys.

When conducting surveys it is important to include as many different groups of people as possible. When enquiring about public toilets, given the nature of gendered provision equal numbers and groups of males and females should be included wherever possible.

If an area has a number of different ethnic communities, it is advised that the survey be translated so that people who do not speak English as their first language are not left out.

Survey questions can be open or closed. Open questions may take longer to analyse but can be a good way of identifying themes to explore in focus group discussions.

An example of a closed question would be:

**Do you think there is adequate toilet provision in this area? Yes      No**

An example of an open question would be:

**What would make toilet facilities more comfortable for you to use?**

How a survey is designed will determine how the survey can be analysed. Ideally a survey should be tested (piloted) before it is used to gather information, to ensure that the questions can be readily understood and the results easily analysed.

Quick surveys of no more than 20 questions should ensure that a greater number of people will be included in a shorter amount of time. The longer the survey takes to administer, the greater the amount of time that will be required to analyse the results. Often, such a 'quick and dirty' survey is sufficient to establish that the issue of public toilet provision is a major concern within a local community and to identify the main concerns voiced by local people.

Some additional tips on designing a survey include:

When asking people to fill out the survey themselves, include an introduction explaining why the survey is being conducted and how it may benefit individual respondents.

Explain that the survey is confidential and do not ask for names and addresses.

Questions about age and gender are important for surveys about toilets, as they are one of the last public spaces that continue to be segregated by gender.

However, such personal details should be asked at the end of the survey, so as to avoid causing offence at the outset.

Answers should be pre-coded for ease of analysis.

Keep questions short and clear to avoid ambiguity.

Avoid asking the same question twice.

Avoid wording questions in a way that suggests a preferred answer.



Public toilets segregated by gender.  
(Richard 2005) VivaCity 2020

## A Typical Attitude Survey

In our research, we asked 10 closed questions and one open question about each area's provision. These questions were as follows:

**1. Do you know where the nearest public toilet is?**

**Yes No**

This question helped the research identify if people knew where public toilets were in relation to the area where the survey was being conducted.

**2. Do you ever use it? Yes No**

This question identified if the respondent used the local public toilet.

**3. What kind of condition is it in?**

For this question the research gave four possible responses. These were:

**Good Adequate Bad Don't know**

**4. Do you prefer to use private provision (café, pub etc)**

**Yes No**

This question helped to identify the type of provision people preferred.

**5. Do you come to this area in the evening Yes No**

This question established the proportion of respondents to the survey who might require provision outside normal working hours.

**6. Do you think there is adequate toilet provision in the evening? Yes No**

This question then established the actual need.

**7. Do you think this area has a problem with street urination? Yes No**

This question assessed whether inadequate toilet provision at night resulted in street fouling.

**8. Would you use an automatic public convenience (superloo)? Yes No**

As many of the areas we looked at only offered automatic public conveniences (APCs) this question established respondents' attitudes to these facilities.

**9. Do you think there should be more on street public toilets? Yes No**

This question gauged people's views about the adequacy of current provision.

**10. Would you be willing to pay for well maintained facilities? Yes No**

Finally we asked about people's attitudes to paying to use a public toilet. A supplementary question could be included about how much people would pay. To capture any information people may have wanted to express that was not covered in the survey we added a final open question.

**11. Is there anything you would like to add?**

## Street Survey Results

During the course of the research, street surveys were conducted in the case study areas of Clerkenwell and Westminster in London, and in Manchester and Sheffield city centres. 211 people (87 men and 124 women) who did not identify themselves as having mobility concerns agreed to be surveyed. Their ages ranged from 16 to over 65.

When asked 'Do you know where the nearest public toilet is?' 59% of respondents answered 'yes'. However, 75% of respondents in Westminster knew where their local toilets were, compared with only 32% of respondents in Clerkenwell. This may reflect the level of provision in each location, as Westminster is widely regarded as having exemplary provision whilst Clerkenwell is noted for its lack of public toilets.

Having identified that respondents knew where the nearest toilets were, we asked 'Do you ever use them?' Only 33% of those we asked answered 'Yes'. Again, the highest response was in Westminster, with 51% admitting to using their local public toilets. Only 39% of those asked in Manchester said they would use their local toilets. In Sheffield and Clerkenwell less than a quarter (23% and 22% respectively) would use public facilities. Of all respondents 63% of men and 69% of women reported that they do not use public toilets.

When asked to report on the condition of their local toilets, 48% replied they did not know this as they avoided the facilities altogether. About a quarter of all respondents (24%) described the condition of their local toilets as 'Bad', 16% as 'Adequate' and only 13% as 'Good'. The lowest score for respondents' not knowing the condition of their local toilets was in Westminster, where just 23% answered 'Don't know'. Yet Westminster was also the area where the most respondents (49%, or nearly half of all those asked) considered the toilets to be 'Bad'. This rather surprising result seems to be related to the fact that more of the people we spoke to in Westminster knew about and used public facilities and so they felt better informed and more confident when making a judgement, albeit negative, about their condition.

Given the lack of and notoriety of public toilet provision we asked people 'Do you prefer to use 'private' provision?' such as toilets in cafes, supermarkets etc. In all, 82% reported 'Yes'. There was no major gender difference in this preference, with 79% of men and 83% of women preferring to use toilets operated by businesses. The area with the highest preference for private toilet provision was Sheffield with 92%. Westminster scored the lowest, with only 8% reporting that they preferred to use toilets offered by local businesses.

When asked if they came to the area in the evening, this resulted in a clear difference between those age groups who used the city centre at night and those who did not. 70% of those under 44 reported that they came to the city centre in

the evening. However, 74% of those aged over 45 said they did not come to the city centre in the evening.

When people were asked if they felt there was adequate toilet provision in the evening 77% of respondents reported 'No'. Over 70% of men and women of all age groups and in all city centres involved in the study felt that current evening toilet provision was inadequate.

The issue of street urination was explored, with 52% of respondents considering it to be a problem. In many city centres, the Automatic Public Convenience (APC) has become a familiar sight and our survey asked respondents if they ever used them. Overall, 60% reported that they did not use APCs. However, it appeared that people's attitudes towards this form of provision differed between areas. In Manchester, where APCs form the bulk of public toilet provision, 71% reported that they did use these facilities. By contrast, only 14% of respondents in Westminster use APCs. In total, 64% of women reported they would not use APCs, whilst 53% of men also answered 'No'. Less than a quarter (22%) of those over 65 said they used APCs, and in Clerkenwell no women over 65 would use this provision.

The issue of the numbers of toilets available was addressed by asking people whether there should be more public toilets. Over 80% (90% of men and 80% of women) answered 'Yes'. Over 75% of respondents of all ages in all areas involved in the case studies also thought there should be more public provision.

When asked if they would be willing to pay for well-maintained facilities, 63% of respondents reported 'Yes'. However, more women (70%) were willing to pay than men (53%). Over 60% of all age groups were positive about paying for well-maintained toilets. The area with the highest positive response to paying for facilities was Manchester, where 86% of the 90% who felt there should be more public toilets were willing to pay for them if they were well-maintained.



The city centre during office hours provides a rich sample of people of all ages to include in street surveys. (Richard 2006) VivaCity 2020

## Personas

Personas are a tool that the research group has developed to communicate users' needs to the professionals involved in the design and management of away from home toilets. Each persona is an 'archetypal user' that has been created in collaboration with user groups involved in the research. The personas have been edited from narratives of actual user experiences. Each persona therefore provides a snapshot of their combined experiences, an amalgamation of all those involved in its development.

We have tried to avoid creating stereotypes to convey the information by explaining users' aspirations and motives, rather than concentrating on their disability. Each persona is named, and incorporates what the user likes to do in the city centre as well as explaining how inadequate toilet design acts as a barrier to access in the built environment. The persona's anonymity is able to communicate what might otherwise be considered 'embarrassing' details concerning the toileting needs of specific individuals. In addition to describing what the user / persona likes to do when away from home, and the difficulties experienced when using public toilets, the persona also includes a 'wish list' of the design features each persona would like included within the toilet facility.

Each item on the list has been identified as an aspect of:

- **Planning**, because implementation would require changes to policy or legislation
- **Design**, where implementation would relate to the layout and furnishing of the accessible WC cubicle itself, and/or
- **Management**, where implementation is a matter for how the facilities are looked after on a day-to-day basis.

Personas can be created and used by:

- **User groups**, to highlight the issues faced when using away from home toilets for the particular group.
- **Toilet providers**, to assess if current provision meets the needs of particular user groups.
- **Architects and designers**, when drawing up designs of toilet facilities.
- **Planners and policy makers**, to develop a local strategy for public toilet provision.

Personas can be created from users' input through a number of different methods. These are:

- **Focus Groups**
- **Interviews**
- **Questionnaires**

As each methodology has advantages and disadvantages, each will now be explained.

## Focus Groups

Focus groups are commonly used in research (both academic and marketing) to find out what people think about a particular issue. Focus groups can also be seen as group discussions that enable people to say what they think about issues concerning public toilet provision and for those participating to share their experiences. Focussed group discussions are facilitated to encourage people to keep to the issue under consideration.

It is helpful to keep focus groups to a maximum of six to eight people. If a larger number of people is interested in taking part, it might be useful to hold an **open discussion** to identify the issues that may be explored in more depth during a focus group. More than one focus group may be necessary when creating personas, as one group / persona may not represent the concerns of many. For example, given that toilet provision in the UK is usually gendered, it may be necessary to convene separate male and female groups so that people can speak openly about the issues of provision, access and gender without embarrassment.

To arrange and hold a focus group you will need:

- **A meeting place** – during the course of this research we held focus groups in community centres, hospital rooms and participants' living rooms.

- **A tape recorder** – taping the focus group will allow for those involved to identify all of the issues and experiences addressed during the session, and will provide a permanent record that can be referred to when creating the persona.
- **Writing material** – for those who wish to make notes during the session.
- **Flip chart** – this is not essential but may be useful for rounding up the session and identifying the main points to be carried forward to create the persona.

In addition, if the purpose of the group is to discuss local provision, it may be useful to have photographs and local maps to identify the areas and the facilities that people may want to discuss.

Depending on the circumstances, it may be necessary to comply with the Data Protection Act in respect of keeping a confidential record of participants' names and addresses and to obtain 'informed consent' from the participants that they agree to take part in the focus group and that they are happy that the event is tape recorded. It is usual to obtain informed consent to participate in research in respect of children, older people and adults with disabilities. This will require a form produced for the purpose. Even if these formal procedures are not followed, it may be useful to produce an Information Sheet that explains the purpose of the focus group session to the participants, so that they can decide beforehand whether or not they wish to take part.

Focus groups normally last between 60 and 90 minutes. It is important that someone agrees to facilitate the debate. Concentrating on one subject for an extended period can be quite tiring, so it is important that the facilitator does keep the group 'focused' on the topic under consideration, so as to maximise the usefulness of the meeting. In addition, it may be important to finish on time if the group has hired a venue in which to conduct the session.

Questions are focused on the issue to be discussed, and may look at:

- levels of local provision
- problems with toilets
- how problems with toilets affects people's lives
- what people would like to see provided in toilets
- how provision could be improved

Trying to get eight people to the same place at the same time may not be easy. Some people who are very keen to participate may have work, childcare or family commitments, and there may be mobility considerations that prevent some potential participants from accessing a public venue. Therefore, it can be helpful to supplement the information gathered at a focus group with an interview.



Focus groups provide a stimulating environment in which to discuss issues. (Photo courtesy of Julia Cassim 2006) RCA Helen Hamlyn Centre



## Sample Information Sheet

### 1) Project title

[Give your project title here]

### 2) Invitation

Principle. Participants should not feel that they are under any undue pressure to take part in any research study.

Example wording: "You are being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with family and friends if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this."

### 3) What is the purpose of this project?

[Give details of the purpose of the research and its possible results and benefits]

### 4) Why have I been chosen?

[Explain why the respondent has been selected, e.g. because they are a member of a disabled persons' self-help or support group, or someone who cares for /assists someone with a disability. What effect their participation may have on the research.]

### 5) Do I have to take part?

Principle. Participants should not be made to feel obliged to take part in anything they are not happy with and must always feel free to withdraw from the research.

Example wording: "It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form indicating your willingness to be involved. If you decide to take part you are still free to withdraw at any time without giving a reason."

### 6) What will happen to me if I take part?

[Explain what will be required of the respondent, e.g. they will be invited to share their experiences of the subject and observations in a one-to one recorded interview or focus group.]

### 7) What are the possible benefits of taking part?

[How will the research benefit the participants and society generally?]

### 8) Will I be paid?

[State here any fees/expenses that will be given to respondents in return for their participation.]

### 9) Will my taking part in this project be kept confidential?

Principle. Make clear to the respondent what will happen to the information they provide.

Example wording. "All information that is collected from you during this research will be kept strictly confidential."

## 10) What happens when the research project stops?

[Explain what will happen to the data collected after the project finishes and how it will support further research or development of the project's aims.]

## 11) Will I be debriefed at the end of the research?

Principle. Participants should be informed of the results of the research.

Example wording: "If you agree to our keeping your name and address on file for this purpose, we will send you a regular Newsletter every few months to keep you in touch with the project. The final newsletter will contain a summary of the research findings. If you would like to discuss these with us, you are most welcome to contact us. Contact details are given below. "

## 12) What will happen to the results of the research project?

Principle. Participants should be told who else will see the results. Example wording: "The research findings will be communicated to designers, town planners, local authorities and all who are charged with making the built environment inclusive and accessible to all."

## 13) Who is organising and funding the research?

[Detail here the project partners and funding bodies.]

## 14) Contact for further information

[Detail here the contact point for your project.]

### INFORMED CONSENT FORM

To be completed independently by the participant at the start of the Interview or Focus Group

Title of Project: \_\_\_\_\_

Name of Researchers: \_\_\_\_\_

*Please tick all the boxes that apply*

1. I confirm that I have read and understand the information sheet for the above project.
2. I confirm that the project has been explained to me orally and I have had the opportunity to ask questions.
3. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.
4. I agree to take part in the above project.
5. I agree that a tape-recording can be made of the interview / focus group, for research purposes only.
6. I agree to my name and address being kept on file for the purposes of communication (Newsletters, etc.).
7. I am willing / not willing (delete one) to be contacted further with respect to further questions or surveys for the research, should this prove necessary.


\_\_\_\_\_  
Name Date Signature

\_\_\_\_\_  
Researcher Date Signature

#### Comment or Concerns During the Study

If you have any comments or concerns you should discuss these with the Principal Investigator, [ \_\_\_\_\_ ].  
If you wish to go further and complain about any aspect of the way you have been approached or treated during the course of the study, you should email [ \_\_\_\_\_ ]  
or send a letter to: [ \_\_\_\_\_ ]  
who will take the complaint forward as necessary.

## Interviews and Questionnaires

Interviews will normally take less time than a focus group (between 45 and 60 minutes) and can be held with one or two people present. An interview may also be held over the telephone, at a pre-arranged time. The interviewer would probably use the same questions that would be used at a focus discussion group to guide the interview.

To arrange and hold an interview you will need:

- **A meeting place** – ensure that the venue is accessible.
- **A tape recorder** – taping the interview will provide a record of points to be referred to when creating the persona.
- **Writing material** – for note taking during the interview.

The same ethical considerations in respect of a focus group also apply to interviews. It is important that secure protection of interviewees' personal data is guaranteed and that, where necessary, informed consent is obtained from potential interviewees.

Some people may not wish to either attend a focus group or an interview, but would like their experience to be taken into account. The questions asked at interviews and focus groups can also be asked in a **questionnaire** format that can be given out and returned in person to a mutually convenient

collection point, by dropping the questionnaire at the respondent's home and collecting it later, or by post using a stamped and pre-addressed envelope, within a specific period of time. This should normally be no longer than about a week's time, so that the topic remains fresh in the respondent's mind.



Interviews of 1 or 2 people may be more suitable to situations where more in depth personal issues are discussed. (Photo courtesy of Julia Cassim 2006) RCA Helen Hamlyn Centre

## Creating a Persona

When all the information from the focus groups (and any interviews and questionnaires) are collected, it is time to create the persona representing the participants' experiences of toilet provision.

Firstly, details from the focus groups, and any other modes of data collection, need to be noted. These notes will include:

- **What the participants like to do in the local area.** For example, go shopping, go to the theatre, spend time in the park etc.
- **How the provision fails to meet the participants needs.** For example it may be closed permanently, or at 6pm when shops are still open, or inaccessible to users with disabilities or chronic health conditions.
- **How provision can be improved.** For example, extended opening times, improving access through upgrading fixtures and fittings, better management of facilities.

These notes will then be turned into a narrative that tells a story of the users' issues, but under the name of the fictional **persona**. The story will describe the issues and suggest how these issues can be addressed. In addition the persona may include a wish list of the most important points that were

raised. The persona should be returned to all those who participated in its development for verification. This gives credibility to the persona, which can then be used to communicate issues to providers of toilet facilities. It may be necessary to create several personas to narrate all aspects of a disability or impairment.



(Bichard 2006) VivaCity 2020

## What our personas told us

### Design

Design items were by far and away the most numerous, with a total of 315 mentions by the 42 personas, which is an average of 7.5 items per persona. Altogether, the personas raised 77 separate issues that they would like to see included or improved in respect of toilet design. The top twelve most mentioned items were as follows:

1. Non-slip flooring (17 mentions)
2. Larger standard cubicles (15)
3. Good, bright lighting (13)
4. A paddle flush on the transfer side of the toilet (13)
5. Provision of a shelf in the cubicle (12)
6. Provision of a coat hook (11)
7. The hand wash basin and other fixtures set at the correct distance and height in relation to the WC pan (11)
8. Good quality door locks (10)
9. Larger cubicle that includes hand wash provision (9)
10. Larger cubicle that includes a hose or tap for ablution (9)
11. Locks that are easy to open (e.g., lever type) (9)
12. Lever action mixer taps (9)

Eight personas would like better ventilation, good secure seats on the WC pan, a mirror to check clothing after toileting and a light outward opening door.

Seven personas mentioned the need for a suitable bin for the disposal of changing pads etc., cubicles that are of a standard design, a level entrance, a preference for a fully enclosed cubicle, a plentiful supply of paper towels and a soap dispenser that can be operated with one hand.

Six personas required all the recommended grab rails to be installed and to be placed at the correct height, good quality urinals that offer a choice of heights including ones that are suitable for small boys, and a WC pan that is at least 480mm high.

Five personas required a height adjustable changing bench, and the same number would like to see grab rails installed in standard cubicles.

Four personas expressed a specific preference for unisex facilities, a good sized basin suitable for washing items like colostomy bags, the RADAR key scheme and privacy screens to be erected around urinals.

Three personas mentioned that they required a hoist, and the same number expressed a need for a freestanding, height adjustable changing bench, family toilets, a plentiful supply of hot water, a WC pan at a height that is suitable for children, taps and basins so designed that they do not splash onto the floor, and a single sheet toilet paper dispenser.

Two personas specifically wanted a peninsular layout, and two also mentioned a timer control that would let people know how long the cubicle would be occupied, wide tear off paper, grab rails around the urinals, accessible cubicles in the gendered toilets, water that is temperature controlled (especially in winter), a combined WC pan and bidet, a choice of left or right hand transfer, routes to the WC that are at least 800mm wide, and colour contrast between the fixtures and fittings and the walls.

Many design features were requested by just one persona, though several items would undoubtedly be of assistance to several. These included: adjustable height grab rails, more facilities for women, a height adjustable WC pan, a cubicle with curtains so that a caregiver can use the toilet in private whilst assisting a disabled person, an alarm system, a drop down rail in front of the toilet, a fixture near the WC pan to hold a walking stick and stock level indicators on paper towel, soap and toilet paper dispensers,

Some suggestions were related to the sensory environment of the toilet, including: a low stimulation environment, instinctive fixtures and fittings that are obvious to use without instructions, glare-free fixtures and fittings and background music to mask the sounds of toileting.

Several items were raised in relation to children. These included: safe storage for pushchairs, child seats to be

available in the male and female toilets, baby changing facilities in the men's toilets and a larger changing table that is suitable for toddlers.

The persona that made the most suggestions was Victoria, who had polio as a child and now uses a power wheelchair and has limited upper body strength. She asked for separate 17 items relating to design to be installed in the accessible WC. Kyla and William each had 14 design requirements, Gail and Lou had 13, Eric, Paul and Tracey each had 12, Louise and Vincent had 11 and Garry had 10.

The personas who needed the fewest adjustments were Mark and Melissa who needed 2 special items, Bill, David, Hashim, Rachel, Richard and Yvonne, who each had 3 requirements, and Pauline who had 4. It is interesting to note that the male and female personas representing the same impairment rarely had identical 'wish lists'.

## **Management**

A total of 182 items were mentioned in respect of management, 4.3 per persona, in relation to 21 different management related issues. The top management issues included:

- regular cleaning (34)
- well stocked soap dispensers (27)
- well stocked toilet paper dispensers (26)
- well stocked paper towel dispensers (17)

- the provision of bins for disposable pads, gloves, towels, and suchlike (11)
- locks (RADAR or smart card) that are well-maintained and kept in good working order (10)

Six personas mentioned the need for late evening opening toilets and five personas wanted disposable wipes to be provided, and for these to be well stocked. The same number wanted strong, secure toilet seats. Four personas mentioned the need for a good supply of warm water, good lighting and air hand dryers that are kept in good working order.

Three personas wanted wide tear-off paper to be provided, dry floors and bins to be kept out of the transfer space. Two would like dispensers that show the level of stock remaining and one persona mentioned the need for good ventilation whilst another required temperature control. It will be noticed that some management issues overlap with the design issues previously discussed and so need to be addressed by both architects at the design stage and facilities managers when the facilities are in use.

The most management issues (9) were raised by Victoria. Aileen, the mother of a disabled adult, and Alex, her son, raised 8 management-related issues as did Louise, a scooter rider with arthritis. The other personas raised fewer management issues.

## Planning

Though the planning authorities do not have a statutory duty to provide public toilets, several planning items were mentioned by our personas, though these were less numerous than either design or management, with just 74 items raised altogether, representing an average of 1.8 items per persona. These related to 12 distinct planning issues. Each persona raised only 1,2 or 3 issues. The most important, with 15 mentions, was the need for increased provision. Fifteen personas also raised issues at the interface between planning and design, such as ensuring that there is more choice in the range of toilet cubicles provided.

The next most important planning issue, with 9 mentions, related to the need for more evening provision, whilst 7 personas raised the issue of gender parity in toilet provision. Six personas mentioned the need to plan for good, unobstructed access to toilet facilities, and 5 asked that provision should be made in every town centre for a toilet with an adult changing bench and/or hoist. The same number wanted family toilets to be provided in all town centres. Four personas mentioned the need to provide adequate signage to the toilet facilities, 3 wanted the toilets to be provided in safe, well-used locations and the same number felt that toilets should be provided as standard at all transport facilities. The issues of unisex facilities and free public toilets were each mentioned by just one persona.

## A Typical Persona

### Ileostomy / Colostomy

### Persona - Terry



Terry is 55 and has taken early retirement on grounds of ill health. He likes to visit the city centre for shopping and special events at galleries. Yet he has difficulty being away from home for any length of time due to the lack of toilet facilities that cater to his need

Terry has short bowel syndrome caused by the removal of his small intestine during surgery, and now he has to wear a ileostomy pouch. His ileostomy pouch can fill up very rapidly which means he sometimes requires toilet facilities urgently.

To empty his ileostomy pouch Terry has to kneel on one knee in front of the WC pan. He also needs access to a wash basin in order to wet some tissue that he uses to clean the opening of his ileostomy pouch after emptying it. Being able to access tissue for cleaning and drying his pouch is extremely important to him, as is having a clean dry floor to kneel on.

When out in the city centre, Terry relies on the toilets located in department stores, as there are no longer any local authority operated public toilets open. Although he finds the department store toilets to be immaculate, he also tires of having to rely on them and sometimes feels 'chained' to one area of the city.

Terry feels there is quite a variety of standards in design and management of away from home toilets, which he finds frustrating. His local shopping centre has toilets that are located on an upper floor and are difficult to reach in a hurry.

In addition, the toilets at the local bus station often have wet floors and poor standards of hygiene. A clean toileting area is extremely important for Terry as if his stoma is not cleaned adequately he can develop health problems.

Terry sometimes limits the amount of time he is away from home, to avoid having to empty or change his pouch in public facilities, especially as he often finds even the 'disabled' toilet does not adequately cater for his specific needs. Terry requires a clean shelf to set out his ostomy supplies, as well as access to hot water. All too often he finds that only cold water is available. Terry also requires the appropriate bin to dispose of his pouches. He often finds that such a bin is not provided in toilets and then he has no resort but to leave his soiled pouch in a disposal bag on the floor. Terry also requires a full length mirror so that he can check that his clothing is appropriately adjusted after changing or emptying his pouch.

Terry has a RADAR key but often finds even locked toilets are poorly maintained. Terry has also experienced problems if baby change facilities are included in the accessible toilet, as he has been challenged by mothers for using the facility. This is because Terry's disability is invisible and hidden under his clothing. Terry has found these situations extremely distressing and now tries to avoid accessible toilets that include baby changing fixtures.



## Ileostomy / Colostomy

## Persona - Terry

VivaCity2020

### Design Wish List

A clean shelf to lay out ostomy supplies.

Appropriate bin for ileostomy pouch disposal.

Full length mirror to check clothing after changing pouch.

Separate facilities for baby changing.

Coat hook.

### Planning Wish List

More accessible local authority public toilets.

Separate facilities for baby changing.

### Management Wish List

Toilets kept clean, with dry floors, a good supply of toilet paper that can be easily reached, and a supply of hot water.

Toilets located in accessible areas that can be reached quickly in an emergency.

A clean shelf to lay out ostomy supplies.

Appropriate bin for ileostomy pouch disposal.

Air hand dryers in good working order.

Terry was created in co-operation with members of:  
The British Colostomy Association and  
The Nottingham CIU Group



## List of personas produced during the research

On average, 7 people's experiences contributed to the building of each persona. A list of personas and their corresponding user groups is given below. These personas are available to use for design reference or user needs and can be found in the Appendix to this Resource - see CD inside rear cover.

Persona	Users	User Group Consulted
<b>Aileen</b>	Caregiver of person with profound and multiple disabilities	PAMIS
<b>Alan</b>	Caregiver of person with profound and multiple disabilities	PAMIS
<b>Alex</b>	Person with profound and multiple disabilities	PAMIS
<b>Beatrice</b>	Continence	The Continence Promotion Service
<b>Bill</b>	Continence	Croft Consultants & Accessibuilt
<b>Carol</b>	Professional Caregiver	Charlie Chaplin Adventure Playground
<b>Charlie</b>	Professional Caregiver	Charlie Chaplin Adventure Playground
<b>Daphne</b>	Older Person	Enfield Over 50s Forum

Persona	Users	User Group Consulted
<b>David</b>	Older Person	Enfield Over 50s Forum
<b>Elaine</b>	Irritable bowel syndrome	The IBS Network
<b>Eric</b>	Irritable bowel syndrome	The IBS Network
<b>Frances</b>	Spinal Injury	The Spinal Injury Association & the Disabled Drivers Association
<b>Frank</b>	Spinal Injury	The Spinal Injury Association & The Disabled Drivers Association
<b>Gail</b>	Mother	The National Childbirth Trust & Education for the Future
<b>Gary</b>	Father	The National Childbirth Trust & Education for the Future
<b>Gemma &amp; Gavin</b>	New parents - twins	The National Childbirth Trust & Education for the Future
<b>Habiba</b>	Muslim woman	The Asian Elders Women's Group & Age Concern
<b>Hashim</b>	Muslim man	The Islamic Society of Britain
<b>Ian</b>	Small manual wheelchair user	The International Paralympic Committee

Persona	Users	User Group Consulted
<b>Isabel</b>	Small manual wheelchair user & carer	ITAAL
<b>Jack</b>	Urostomy/Hidden disability	The Manchester Urostomy Association
<b>Janet</b>	Urostomy/Hidden disability	The Manchester Urostomy Association
<b>Ken</b>	Wheelchair user/limited dexterity	The Disabled Drivers Association
<b>Kyla</b>	Wheelchair user/limited dexterity	Ataxia UK
<b>Lou</b>	Arthritis (Lower)	Arthritis Care
<b>Louise</b>	Arthritis (Lower)	Arthritis Care
<b>Mark &amp; Melissa</b>	Learning Disability	Manchester People First
<b>Nora</b>	Artificial limb/ walking aid	Arthritis Care
<b>Paul</b>	Visual impairment	The RCA Helen Hamlyn Centre Expert Users Panel
<b>Pauline</b>	Visual impairment	The RCA Helen Hamlyn Centre Expert Users Panel
<b>Rachael</b>	Paruresis/shy bladder	The UK Paruresis Association
<b>Richard</b>	Paruresis	The UK Paruresis Association
<b>Sarah</b>	Teenager	St Charles Catholic Sixth Form College
<b>Steve</b>	Teenager	St Charles Catholic Sixth Form College

Persona	Users	User Group Consulted
Terry	Colostomy / Ileostomy	The British Colostomy Association & The Nottingham CIU Group
Tracey	Colostomy / Ileostomy	The British Colostomy Association & The Nottingham CIU Group
Victoria	Limited Upper Body Strength	The British Polio Fellowship
Vincent	Limited Upper Body Strength	The British Polio Fellowship
Wendy	Short stature/visitor	Access=Design
William	Carer / left/right hand provision	The Disabled Drivers Association
Yvonne	Heavy build	Arthritis Care & The Disabled Drivers Association

## Toilet Audits

The toilet audit tool described below was developed by and for the research, in collaboration with Vin Goodwin a National Registered Access Auditor, to collect data on the accessible provision that was currently available. The tool is based on the design of the unisex corner accessible cubicle described in Approved Document M (ADM) of the Building Regulations 2004.

This unisex corner accessible cubicle represents current 'best practice'. It is based on research conducted with disabled people's representatives (Feeney, 2003). If its recommendations are followed, the resulting cubicle should be accessible to wheelchair users and convenient for people with reduced mobility or other impairments. All the recommended dimensions for the cubicle are critical and have to be followed if the toilet is to be accessible.

For example, if the height of the WC pan is not as recommended in the guidance, a wheelchair user may not be able to transfer from the chair to the toilet seat. If the distance between the toilet pan and the hand wash basin is too great, it may not be possible for someone seated on the toilet to clean themselves after using the toilet. If a fixture like the colostomy shelf is not provided, it will be difficult for anyone with a colostomy to clean their stoma and change their colostomy bag.

The tool can be used by:

- **User groups**, to identify critical design details such as the size of the cubicle as well as the inclusion and placement of fixtures and fittings.
- **Accessible toilet providers**, to assess the provision and pinpoint any areas that may need attention.
- **Architects and designers**, as a checklist of key dimensions, and fixtures and fittings that should be included when considering accessible provision and their placement.
- **Building facilities managers** to assess if facilities meet minimum access standards.

To use the audit tool you will need:

- **A tape measure**
- **A copy of the audit sheet** (available on the CD)
- **A pen or pencil**
- **A camera to record the layout of facilities** (not essential but may be useful as an aide memoire)

All the recommended **minimum** dimensions and measurements are given on the audit sheet. These should be checked in situ and any discrepancies between reality and that recommended should be noted. There is also a diagram of the basic layout of the accessible cubicle that can be used as a guide or to amend to show where the real layout differs from that recommended in the guidance.

During this research into away from home toilet provision, we allowed for up to a 10mm discrepancy between the ideal and the real layout, when considering if the toilet met the guidelines or not. For example, some facilities had horizontal grab rails fitted at 670mm or 690mm (see section 4, grab rail heights, of the audit tool). This was 10mm under or over the recommended measurement but was considered sufficiently close to the 680mm recommendation and therefore to have followed guidance.



Researchers photographing a toilet on completion of the audit. (Bichard 2005) VivaCity 2020



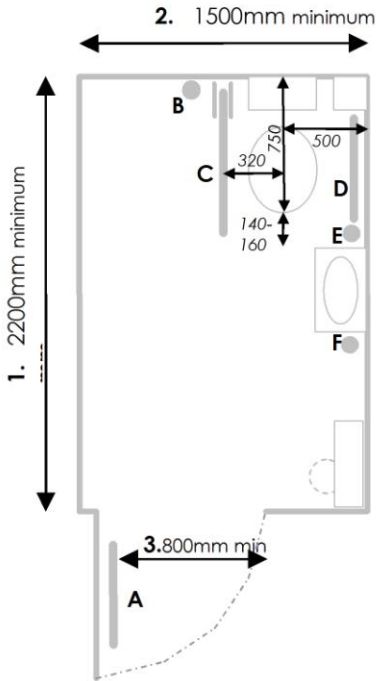
A clip board is also recommended for carrying out toilet audits as some facilities may not have flat surfaces to write on. (Goodwin 2005) VivaCity 2020

Toilet audit tool

**Place:**  
\_\_\_\_\_

**Date:**  
\_\_\_\_\_

**Auditor name:**  
\_\_\_\_\_



**Dimensions:**

- 1. **Depth** 2200mm min y/n? \_\_\_\_\_
- 2. **Width** 1500mm min y/n? \_\_\_\_\_
- 3. **Door** 800mm min y/n? \_\_\_\_\_
- 4. **Grab rail heights:**
  - A (horiz. Door) 680mm y/n? \_\_\_\_\_
  - B (vertical) 800mm y/n? \_\_\_\_\_
  - C (drop down) 680mm y/n? \_\_\_\_\_
  - D (horizontal) 680mm y/n? \_\_\_\_\_
  - E (vertical) 800mm y/n? \_\_\_\_\_
  - F (vertical) 800mm y/n? \_\_\_\_\_

- 5. **Grab rail lengths:**
  - A,B,D,E & F 600mm long y/n? \_\_\_\_\_

- 6. **WC pan height** (top of seat) 480mm y/n? \_\_\_\_\_

- 7. **Basin height:** 720 –740mm y/n? \_\_\_\_\_

- 8. **WC pan from side wall?** 500mm y/n? \_\_\_\_\_

- 9. **WC pan from back wall?** 750mm y/n? \_\_\_\_\_

- 10. **Drop down to WC pan?** 320mm y/n? \_\_\_\_\_

- 11. **WC pan - basin** 140-160mm y/n? \_\_\_\_\_

- 12. **Height of basin mirror** 1600mm min (to top) y/n? \_\_\_\_\_

- 13. **Height of wall mirror** 600mm – 1600mm y/n? \_\_\_\_\_

**Observations:**

- 14. Suitable access route to WC? Y/N
- 15. Suitable signage to WC? Y/N
- 16. Is WC near to male and female WCs? Y/N
- 17. Doors on route easy to open? Y/N
- 18. WC door easy to open? Y/N
- 19. Outward opening door? Y/N
- 20. Lever type door lock? Y/N
- 21. Is there a colostomy shelf? Y/N
- 22. Is there a General use shelf? Y/N
- 23. Backrest/cistern to lean on? Y/N
- 24. Toilet paper single sheet dispenser? Y/N
- 25. Lever tap to basin? Y/N Automatic tap Y/N
- 26. Soap facilities within reach? Y/N
- 27. Paper towels within reach? Y/N
- 28. Grab rails appear grippable & sturdy? Y/N
- 29. Drop-down rail easy to use and sturdy Y/N
- 30. Alarm system? Y/N
  - Cord to floor? Y/N
  - Reset button within reach of WC? Y/N

31. Flush lever on the transfer side? Y/N

32. Is the transfer space clear of  
obstructions? Y/N

33. Left or right hand transfer?  
L /R /neither

34. Is there a waste bin? Y/N

35. Is there a sanitary disposal bin? Y/N

36. Is there an incontinence pad  
disposal bin or nappy bin? Y/N

37. Is there a coat hook at suitable  
height? Y/N

38. If there is a sanitary dispenser, easy  
to use and at good height? Y/N

39. If there is a hot air dryer, is it at good  
height and useable? Y/N

40. Is there a standing height basin to  
supplement hand-rinse basin? Y/N

41. Have Baby changing facilities been  
included in the WC? Y/N

42. Lighting good? Y/N

43. Good contrast in internal  
decoration? Y/N

44. In your opinion, is this an  
accessible toilet? Y/N

**45. Further comments:**

## Using the tool – measuring

This allows the auditor to make an objective assessment of 13 critical measurements that govern the accessibility of the cubicle, according to current best practice. The measurements specify the overall dimensions of the cubicle, the size and positioning of the grab rails, the positioning of the WC pan and the positioning of the hand wash basin and mirrors. The most important of these is the overall size and dimensions of the accessible cubicle.

### Cubicle Size

The **minimum** recommended size of the accessible cubicle is 2200mm depth x 1500mm width. Previous research (Feeney 2003) has determined that this should create sufficient space for most independent wheelchair users to turn in, as well as provide enough space for one caregiver if needed.

Since Feeney's research, wheelchair design has improved for more robust power chairs that are more manoeuvrable. We have spoken with many wheelchair users who use separate chairs for indoor and outdoor activities. Generally wheelchairs used in the home tend to be lighter and smaller than chairs used out of the home. In addition, the wide range of wheelchairs in current use reflects the wide range of disabilities that people have. As such, whilst some wheelchair

users may find the space of the current accessible toilet adequate, other users may not.

Many wheelchair users who contributed to the research found the accessible toilet too small, and asked for more space to be set aside within the accessible cubicle. However, this request for more space may also reflect the fact that most current installations fail to follow the guidance with regards to the size of the cubicle.

Our audit of accessible toilet cubicles found that 68% were less than the minimum depth of 2200mm, and 30% were less than the minimum width of 1500mm. Of these, 22% did not meet the minimum depth or width. In not meeting the minimum requirements in respect of the size of cubicle provided, the accessible toilet could be experienced as inaccessible by many potential users who require extra space for a wheelchair and / or assistance from a caregiver.

Mobility scooters have become very popular in recent years, especially amongst older people. Many people who use mobility scooters are able to walk a few steps to the lavatory, but require the cubicle to be of such a size that the scooter can fit into it to prevent it from being stolen.



## Overall dimensions

- The **depth** of the toilet is the length taken back to front of the cubicle, following the way the WC pan is facing. Sometimes more than one depth measurement may be required if the cubicle is not square.
- The **width** of the cubicle is taken between the partitions of the cubicle, and may also be measured more than once if there is a difference in width at different points in the cubicle, due to internal ducting or an irregular cubicle shape. (See picture below)
- The **clear opening width** of the door should be measured.



This cubicle would need to be measured twice, due to the wall protruding within the cubicle, which may be an obstacle to some users

## Grab rails

- The **horizontal (A, D) and drop down grab rails (C)** are measured to the top of the rail, where users place their hands for support.
- The **vertical grab rails (B, E, F)** are measured from the floor to the base of the rail.
- The **grab rail length** is the overall measurement taken between each end of the outward part of the rail.
- The **drop down rail (C)** adjacent to the WC is measured from the floor to the top of the rail and from the top of the drop down rail to the middle of the WC pan.



## WC Pan

- The **WC pan height** is the measurement from the finished floor level to the top of the WC pan seat. (See picture below)
- The **WC pan from side wall** is the measurement from the wall to the middle of the WC pan and the **WC pan from back wall** is the measurement from the back wall to the centre of the front of the WC pan. (See top picture opposite)
- The **WC to basin spacing** is the measurement from the edge of the WC pan to the edge of the basin. (See bottom picture opposite)



### Other measurements in the audit tool

- The **basin height** is the measurement from the floor to the top of the basin rim.
- The **height of the basin and wall mirrors** is the measurement from the floor to the top of the mirror in each case.
- The **grab rail measurement** is the length of the grab rail.



## Using the tool – subjective appraisal

The remainder of the audit tool involves subjective appraisal, based on a 'yes/no' answer to a series of questions. There are 30 of these in all. The issues that are covered in this section of the tool have been divided below by topic, into the following sections that deal with the approach and access to the facility (4), access to the accessible WC cubicle itself (6), internal fixtures and fittings (6), grab rails (2), emergency alarm (3), fittings that are also provided in standard cubicles (7), fittings that are specific to a Universal cubicle (1) and finally an overall summative judgement on the accessibility of the cubicle (1).

### Approach and access

- Is there a **suitable access route**? A suitable route incorporates a wide enough corridor that allows people who use a variety of different-sized wheelchairs to reach the facility, as well as a route without any steps or level changes that would block access altogether for a wheelchair user or anyone with restricted mobility.
- **Suitable signage**? This would give a clear indication of how to find the toilet facility and then to identify it as an accessible one.

- **Is the accessible cubicle near male and female WCs?** This would assess if the accessible cubicle was close to other toilets or further away. It is desirable for the accessible toilet to be located close to the standard toilets, so that those who are part of a mixed group of able-bodied and disabled people will not have to go to the toilet separately, thus drawing attention to themselves. It should also be noted here if the accessible cubicle is shared with ladies' toilets.
- **Doors on route easy to open?** This assesses if any door on the way to the accessible cubicle has been fitted with some thought as to how someone with reduced strength or manual dexterity will open the door. The door should not be heavy to open and it should have handles that are easy to operate.

### Access to the accessible cubicle itself

- **WC door easy to open?** This assesses if the door to the accessible cubicle is easy to open for people with limited mobility, strength and/or manual dexterity.
- **Outward opening door?** This records if the door opens outwards. An outward opening door is necessary so that if someone falls inside the cubicle, blocking the space that an inward opening door would need to swing through, it is still possible to

open the door outwards and enter the cubicle to provide assistance.

- **Lever type door lock?** This records if the cubicle door lock that can be used by someone with limited grip. If the door lock is unsuitable, it may not be possible to ensure privacy, or alternatively someone who cannot unlock the door may become trapped inside the cubicle.
- **Is the transfer space clear of obstructions?** Once inside the cubicle, it is important to ensure that the transfer space is clear for ease of transfer by wheelchair users. If not, it may not be possible to turn and close the door to ensure privacy, or even to use the toilet at all.
- **Flush lever on transfer side?** This records if the flush lever is on the correct (open) side of the cistern so that a wheelchair user is able flush the toilet after use.
- **Left or right hand transfer?** Records if the WC pan is positioned for a left or right hand transfer. The position of the WC pan in the diagram on the audit tool can be used to guide this assessment. The audit tool depicts the WC pan on the right side, therefore the transfer space is on the left and the cubicle is a left hand transfer cubicle. Where more than one accessible cubicle is provided, it is

desirable to provide one of each transfer mode, so that anyone with reduced strength on just one side of their body can choose an accessible cubicle that meets their needs, regardless of which side of the body is affected.

## Internal fixtures and fittings

- **Is there a colostomy and/or a general shelf?** This records if there has been a shelf fitted within the cubicle. The position of the shelf is important in respect of how it is used to hold equipment. It is important that the shelf is clean.
- **Backrest / cistern to lean on?** This records if either is present. One or the other should be provided.
- **Toilet paper single sheet dispenser?** This is the recommended dispenser within the accessible cubicle, so that it can be used by someone with limited grip or by using just one hand.
- **Lever tap to basin / Automatic tap?** This records the type of tap used in the facility. Taps should either be easy to operate with a fist or elbow, or to operate automatically.
- **Soap facilities within reach?** This can be tested by sitting on the WC pan.

- **Paper towels within reach?** This can be tested by sitting on the WC pan.

### Grab rails

- **Grab rails grippable and sturdy?** This can be tested by applying pressure on the grab rails. Insecure grab rails are probably worse than useless.
- **Drop down rail easy to use and sturdy?** This can be tested by the ease of which the drop down rail comes down, if it wobbles, and if it can be replaced with a limited amount of strength. A well-fitted rail needs to be both easy to operate and secure in use.

### Emergency alarm

- **Alarm system** allows the tool to record if an alarm system is installed
- **Cord to floor** records if the cord is the recommended length and reaches the floor.
- **Reset button within reach of the WC** records if an alarm reset button can be reached whilst sitting on the WC pan.

### Fittings that are also provided in standard cubicles

- **Is there a waste bin, sanitary bin and / or incontinence pad or nappy bin?** This records if any, or all, bins have been included within the accessible cubicle.
- **Is there a coat hook at a suitable height?** Records if any coat hook installed can be reached by a person using a wheelchair.
- **If there is a sanitary dispenser, easy to use and at good height?** This records that if a sanitary dispenser has been installed in the female accessible WC cubicle. If so, it should be reachable for women using a wheelchair. It should be possible for a wheelchair user to read the product information, insert the necessary coins and retrieve the product once it has been dispensed.
- **Is there a hot air dryer, set at a good height and useable?** This records if the hot air dryer can be used by somebody seated in a wheelchair.
- **Have baby-changing facilities been included in the WC?** This records if a baby-changing bench has been installed.

- **Lighting good?** Records if the lighting is at a reasonable level to see clearly.
- **Good contrast in internal decoration?** This records if the floor is a contrasting colour to the walls and should also consider the colour of grab rails to the walls. Good colour contrast is essential to people with impaired vision.



Example with good colour contrast. (Bichard 2005) VivaCity 2020

## Fittings specific to a Universal cubicle

A Universal cubicle should be of accessible design in all other respects, and is mostly found where there is only one toilet available for all users.

- **Is there a standing height basin to supplement hand-rinse facilities?** This records if a standing height basin has been installed, as it should be, in a universal cubicle.

## Summative judgement

At the end of the checklist a summative question records whether, in the view of the auditor, any defects in the design of the cubicle are minor and would not affect its practical use by a disabled person, or alternatively are so great as to make it inaccessible.

- **In your opinion, is this an accessible toilet?** Records if the person or people carrying out the audit feel the accessible cubicle reaches a minimum standard of access.

## Key Statistics from Accessible Toilet Audits of 101 Facilities in England

The following aspects of the accessible toilet did conform to Part M of the Building Regulations.

Note: the research allowed for a 10mm flexibility either way in **all** measurements: For example if a grab rail measured 670mm or 690mm it was considered to have meet the guidance.

- 98% of cubicles had a lever or automatic tap.
- 95% of cubicles had grab rails that were considered adequately fixed to the wall (sturdy).
- 93% of cubicles we visited were not being used for storage.
- 92% of cubicles had either left or right hand WC transfer.
- 90% of cubicles had a door clearance dimension of 800mm.
- 83% of accessible toilets had an adequate access route, or the access route was not blocked.
- 83% of cubicle doors opened outwards.
- 83% of cubicles had a WC door that was considered an adequate weight to be used by a person in a wheelchair or with limited strength.
- 83% of routes to the accessible toilet that did or did not have one or more doors, were considered accessible due to appropriate door weight and clearance / dimensions.
- 81% of cubicles had an alarm system.
- 78% of cubicles had the recommended grab rail length of 600mm.
- 73% of cubicles did not include baby change fixtures.
- 70% of cubicles did have a dimensional width of 1500mm.
- 70% of cubicles did have the recommended lever lock.
- 70% of accessible toilets were near their gendered equivalent (ladies & gents).
- 68% of cubicles had adequate lighting.
- 66% of cubicles had drop down rails that were considered appropriately fixed to the wall (sturdy).
- 65% of cubicles did have adequate signage indicating they were accessible toilets.
- 61% of cubicles did have a backrest or cistern to lean against.
- 61% of cubicles did have the hand wash basin set at a height of 720-740mm
- 58% of cubicles did have the flush handle set on the transfer side of the WC pan.
- 56% of cubicles had a hot air hand dryer.
- 55% of cubicles had a sanitary bin.
- 53% of cubicles did have a general waste bin.
- 50% of cubicles did have internal contrast between the walls and the fixtures and fittings.

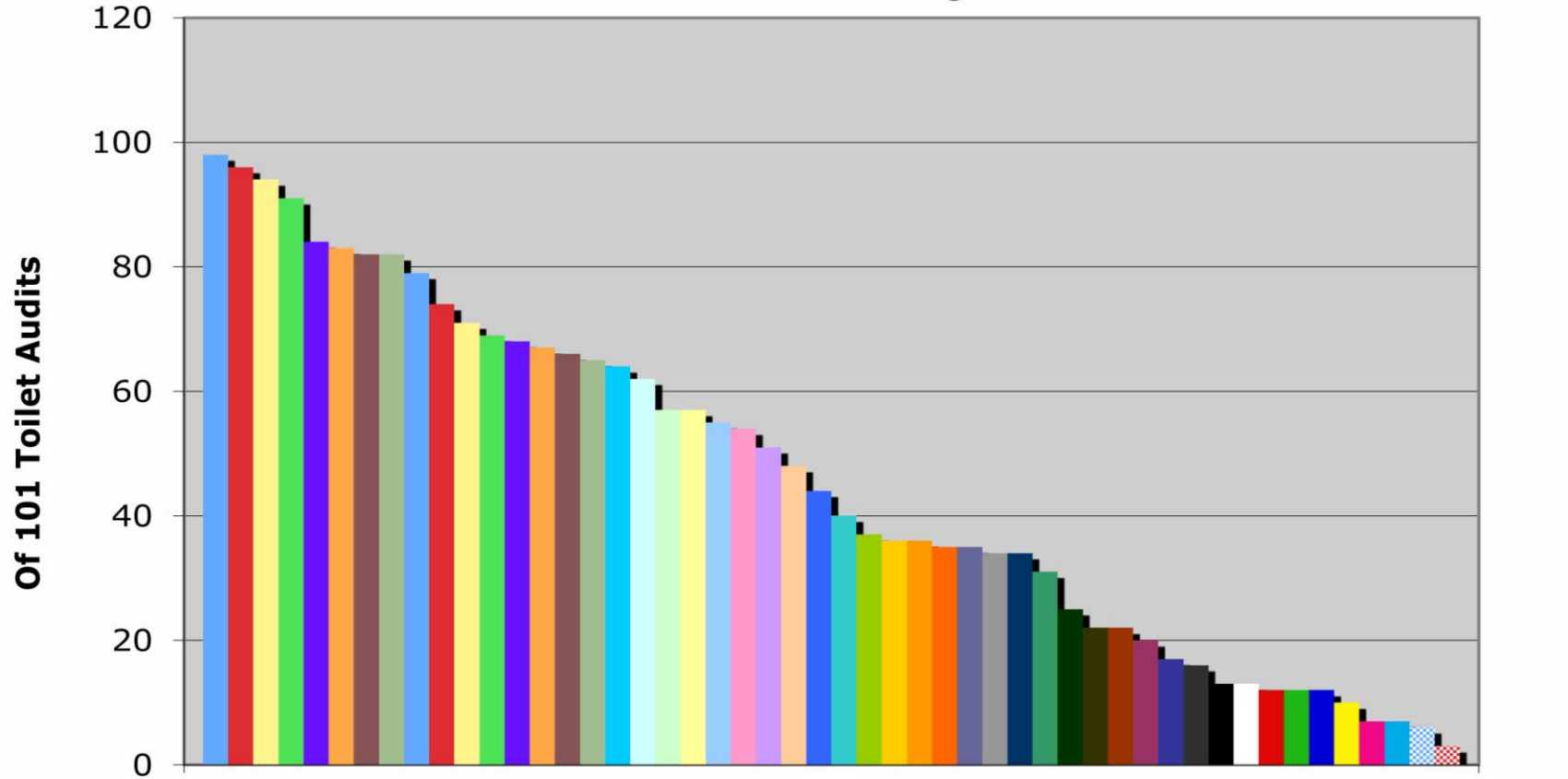


- 48% of cubicles did have the WC pan set at a distance of 500mm from the side wall.
- 40% of cubicles had the vertical grab rail by the basin (closest to the WC pan) at a height of 800mm (grab rail E).
- 37% of cubicles had the vertical grab rail by the drop down rail at a height of 800mm (grab rail B).
- 36% of cubicles had an overall cubicle depth of 2200mm.
- 36% of cubicles had the WC pan set from the back wall at 750mm.
- 35% of cubicles had the drop down rail set at a height of 320mm (grab rail C).
- 35% of cubicles had the drop down rail affixed at the recommended height of 680mm.
- 34% of cubicles had the recommended WC pan height of 480mm.
- 34% of cubicles had soap dispensers that were considered accessible to a range of people with disabilities.
- 31% of cubicles had a clear transfer space.
- 30% of cubicles had the alarm cord reaching the floor.
- 22% of cubicles had placed a mirror at the correct height above the hand wash basin.
- 22% of cubicles had a bin suitable for adult pads.
- 20% of cubicles had the recommended single sheet toilet paper dispenser.
- 17% of cubicles had the correct distance of 140-160mm between the WC pan and wash basin.

- 16% of cubicles had the horizontal grab rail next to the WC pan set at a correct height of 680mm (grab rail D).
- 13% of cubicles had coat hooks set at a height that was accessible to wheelchair users.
- 13% of cubicles had the vertical rail on the furthest side away from the WC pan next to the basin set at the correct height of 800mm (grab rail F).
- 12% of cubicles had paper towels.
- 12% of cubicles had a wall mirror set at the correct height.
- 14% of cubicles had the alarm reset button in the correct position next to the WC pan.
- 10% of cubicles had a general shelf.
- 7% of cubicles had a sanitary dispenser.
- 6% of the cubicles had the horizontal grab rail set at the correct height of 680mm (grab rail A).
- 6% had the correct configuration of all grab rails.
- 3% of cubicles had a colostomy shelf.

The chart on the next page presents this information in the form of a graph. Separate charts have been produced for each of the following areas of the design of the accessible cubicle: finding an accessible toilet, the overall cubicle measurements, the fixing and positioning of the WC pan and hand wash basin, the positioning and fixing of the grab rails, hand washing, aspects of safety security and comfort and sundry other fixtures, décor and fittings.

### All Fixtures & Fittings

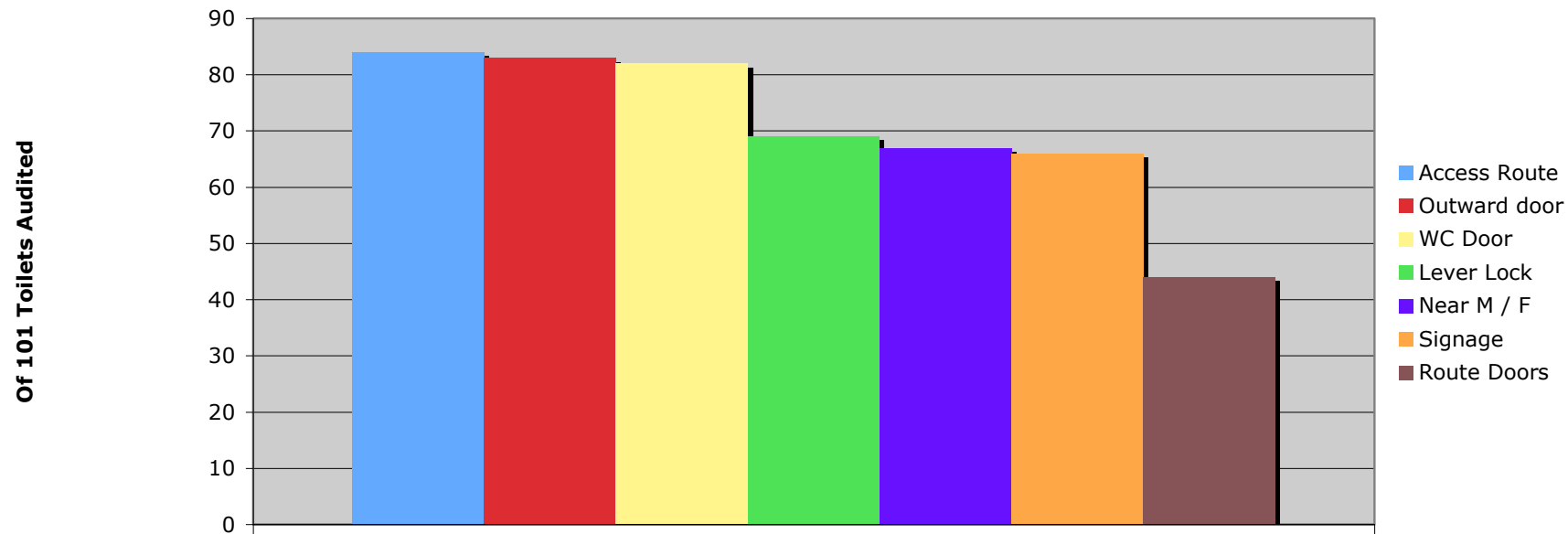


### Conform to Part M

- Lever/Auto tap
- GR Sturdy
- Storage Use -No
- Door 800mm
- Access Route
- Outward door
- WC Door
- Alarm System
- GR Lengths 600mm
- Baby Change-No
- Width 1500mm
- Lever Lock
- Near M / F
- Signage
- Drop down sturdy
- Backrest/cistern
- Transfer Flush
- Hot air dryer
- Sanitary Bin
- Waste Bin
- WC Pan side wall 500mm
- Route Doors
- GR E 800mm
- GR B 800mm
- WC Pan back wall 750mm
- Drop down WC 320mm
- GR C 680mm
- WC Pan Height 480mm
- Clear trans space
- Alarm Cord to floor
- Hgt Basin Mirror
- Pad / Nappy Bin
- WC - Basin 140-160mm
- GR D 680mm
- Coat Hook
- GR F 800mm
- Paper Towels
- Alarm Reset button WC
- General Shelf
- Sanitary Dispenser
- Sanitary Dispenser
- GR A 680mm
- Colostomy Shelf

Reading from left to right

### Finding an Accessible Toilet

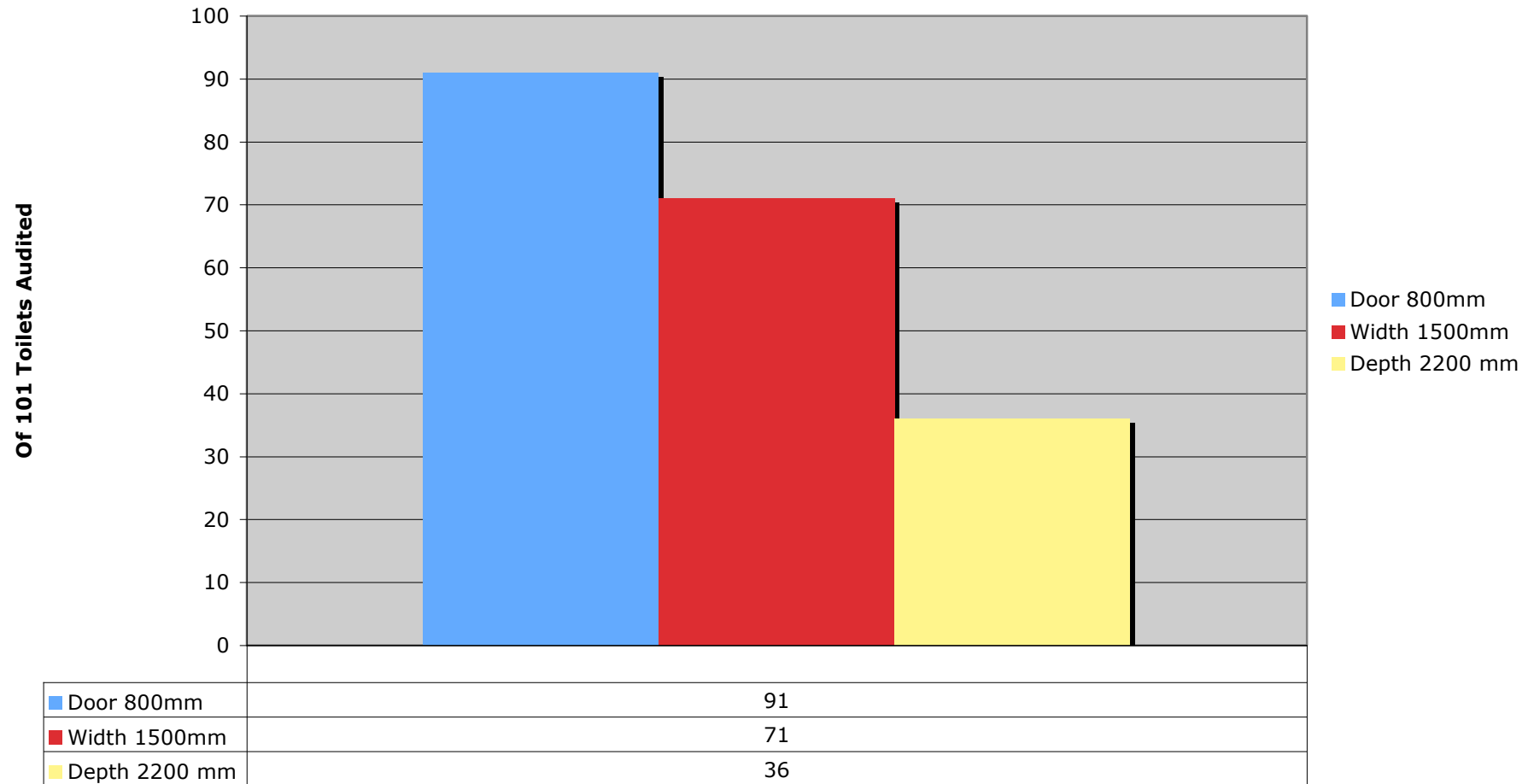


Access Route	84
Outward door	83
WC Door	82
Lever Lock	69
Near M / F	67
Signage	66
Route Doors	44

**Conforms to Part M**

Note: figures refer to number of applicable accessible toilets audited not percentage

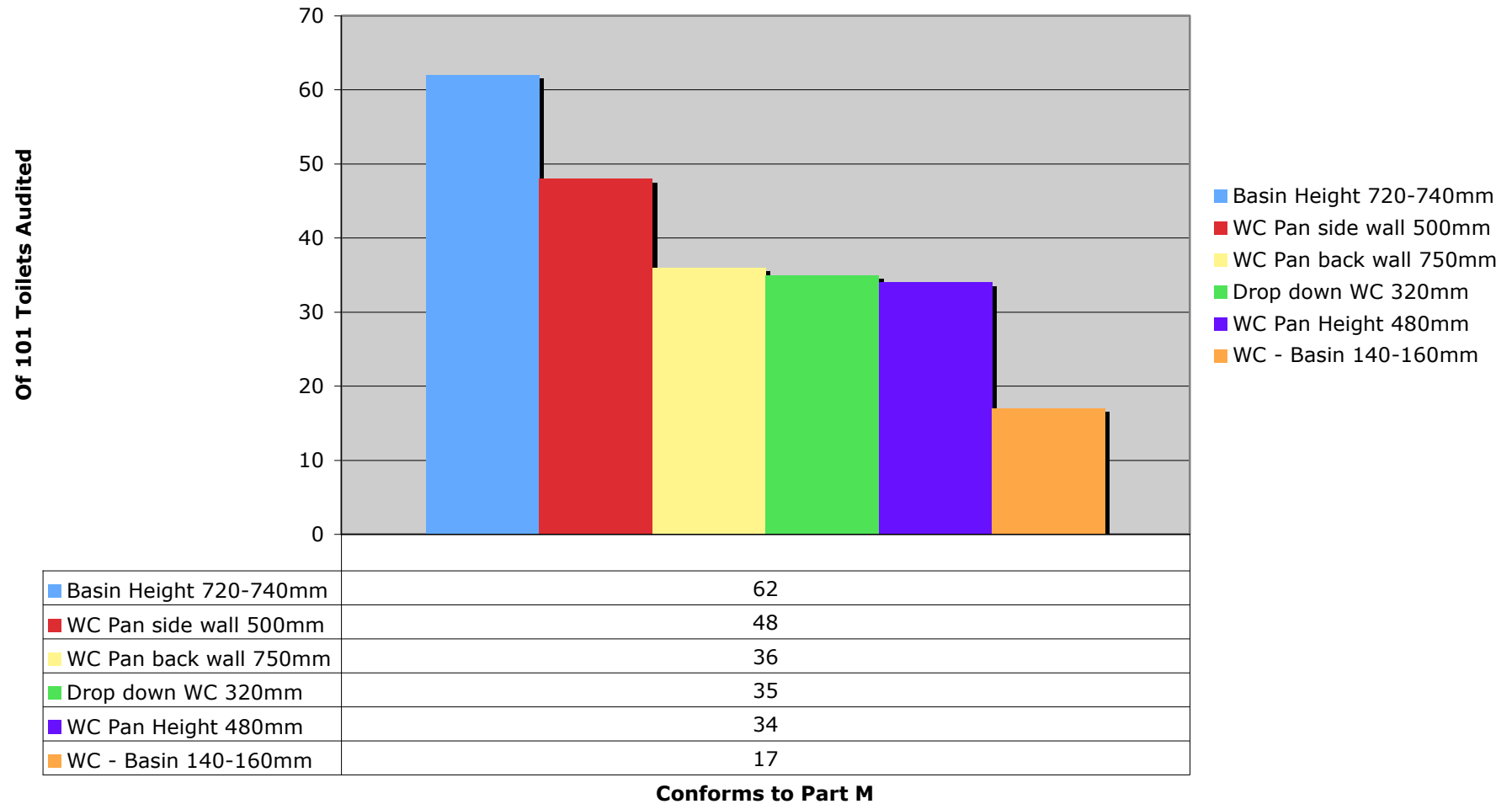
### Cubicle Measurements



**Conforms to Part M**

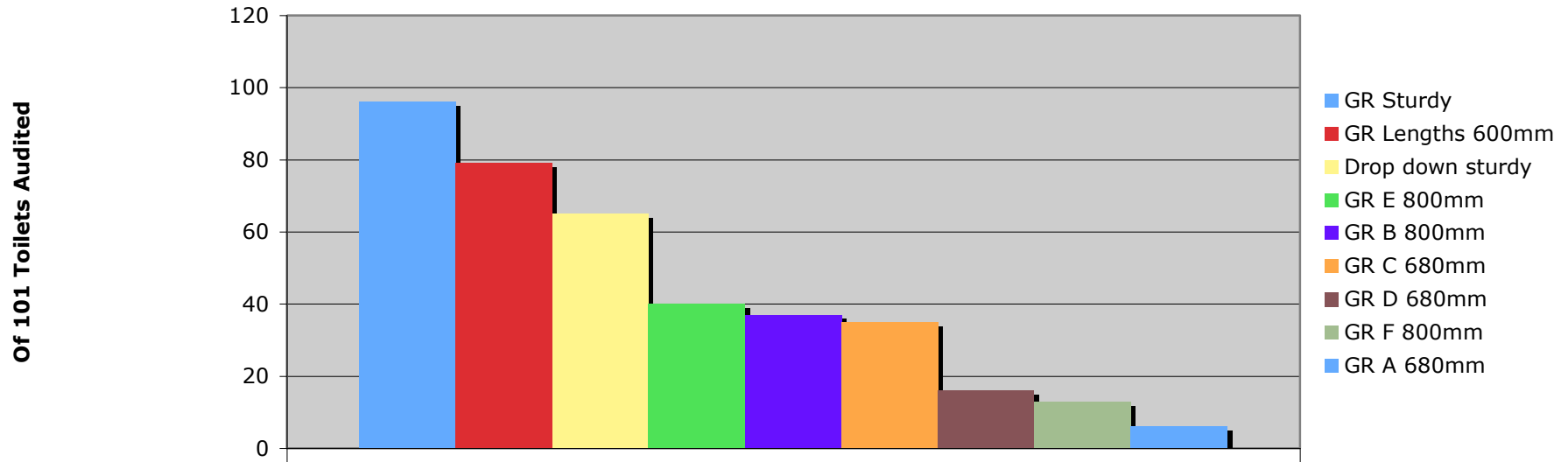
Note: figures refer to number of applicable accessible toilets audited not percentage

### Fixtures & Fittings - WC Pan & Basin



Note: figures refer to number of applicable accessible toilets audited not percentage

### Grab Rails

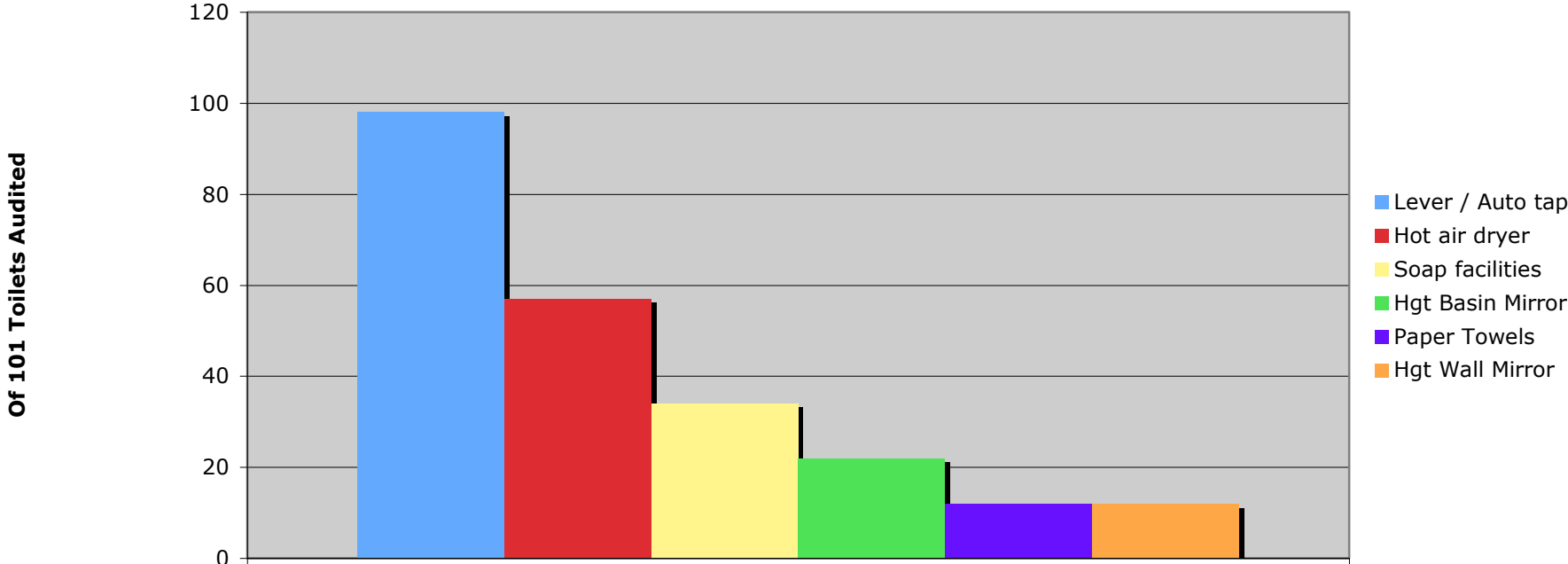


GR Sturdy	96
GR Lengths 600mm	79
Drop down sturdy	65
GR E 800mm	40
GR B 800mm	37
GR C 680mm	35
GR D 680mm	16
GR F 800mm	13
GR A 680mm	6

#### Conforms to Part M

Note: figures refer to number of applicable accessible toilets audited not percentage

### Hand Washing etc

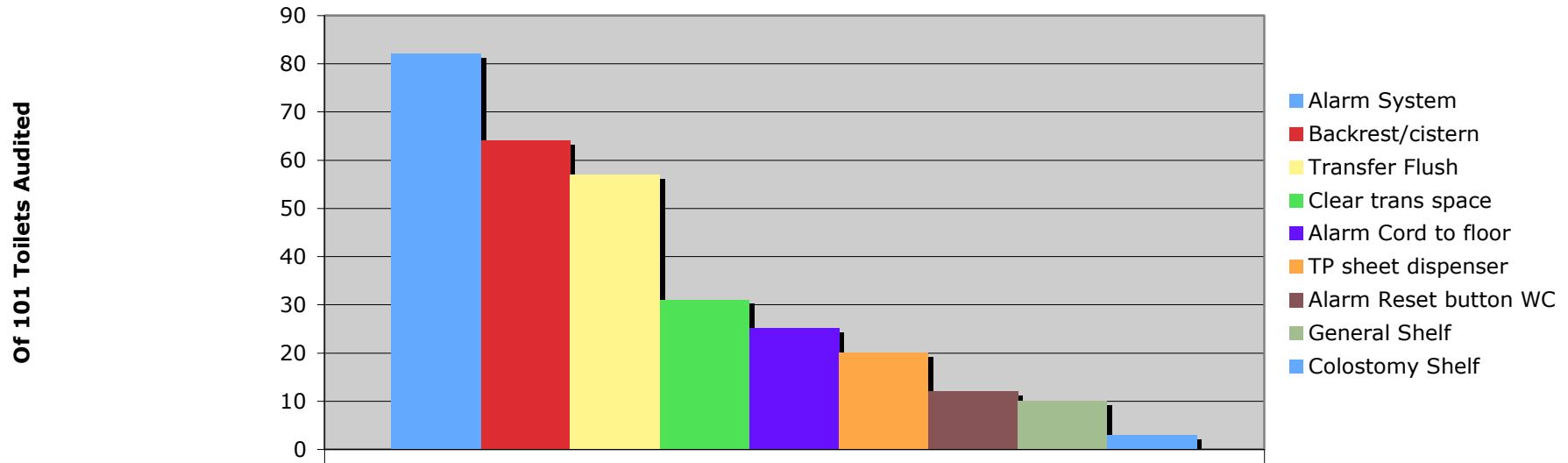


Lever / Auto tap	98
Hot air dryer	57
Soap facilities	34
Hgt Basin Mirror	22
Paper Towels	12
Hgt Wall Mirror	12

**Conforms to Part M**

Note: figures refer to number of applicable accessible toilets audited not percentage

### Safety, Security & Comfort



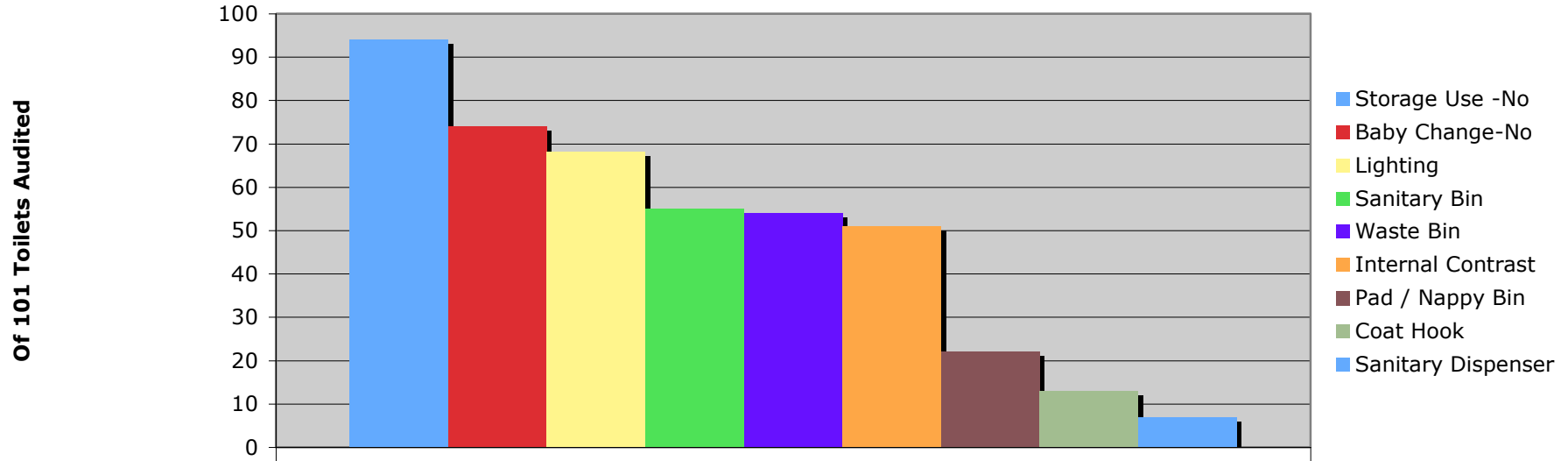
Alarm System	82
Backrest/cistern	64
Transfer Flush	57
Clear trans space	31
Alarm Cord to floor	25
TP sheet dispenser	20
Alarm Reset button WC	12
General Shelf	10
Colostomy Shelf	3

#### Conforms to Part M

Note: figures refer to number of applicable accessible toilets audited not percentage



### Sundry Fixtures, Decor & Management



Storage Use -No	94
Baby Change-No	74
Lighting	68
Sanitary Bin	55
Waste Bin	54
Internal Contrast	51
Pad / Nappy Bin	22
Coat Hook	13
Sanitary Dispenser	7

**Conforms to Part M**

Note: figures refer to number of applicable accessible toilets audited not percentage

## Case Study – Clerkenwell

### Theme – the absence of ‘public’ toilets in the 24 hour city.

In 2004, a report by the London Assembly’s Green Party identified the London Borough of Islington as having one of the ‘worst’ provisions for public toilets in London. After two decades of toilet closures in this area of London, current provision was estimated to be 1 facility per 58,600 people. Clerkenwell is an area located in the south of the borough. It is centrally located, well served by public transport and is home to numerous museums, galleries, specialist libraries and historic walks. In addition, it hosts a literary festival and the London Architectural Biennale. Consequently, the area attracts a large number of visitors both as tourists and for work, as well as having a large residential population.

In 1981 Clerkenwell had two underground public toilet facilities for men and women. These were supplemented by one toilet facility that was for men only, and one urinal. None of these public conveniences included accessible provision. By 1991, all the public conveniences in the Clerkenwell area had closed. This has resulted in the onus of toilet provision falling to the businesses that operate in this area. Due to the lack of ‘public facilities, many businesses in the area display signs informing members of the public that toilets are ‘for customers only’.

Clerkenwell is also home to Smithfield’s meat market, and has a long association with early morning activity. Public convenience provision once reflected the work hours of the area, with some facilities available throughout the 24 hour period. The area has retained its reputation for late night and early morning activity as it is now home to many fashionable nightclubs and popular drinking and eating establishments. However, it’s lack of toilet facilities can be felt (and smelt) when these businesses close, as doorways to shops and residences become saturated by the residue of street fouling.



Sign on pub door, Clerkenwell. The sign reads ‘Toilets for customers use only refusal often offends’. (Bichard 2005) VivaCity 2020

Street surveys conducted by the research with members of the public revealed that 74% felt there was inadequate provision of toilet facilities in the evening, and 78% acknowledged that the area had a problem with street urination. 84% of respondents said there should be more public toilets, although only 50% of those questioned would be willing to use an automatic public convenience (APC).



Most of Clerkenwell's Victorian subterranean provision has been closed. Clerkenwell Green Toilets. (Bichard 2003) VivaCity 2020

As an area that offers a number of visitor attractions as well as places of employment, ideally the provision of accessible toilets for people with disabilities should match that of standard provision. In the summer 2005, the research visited 86 premises within the Clerkenwell area all of which provided 'standard' toilet facilities. However, only 34 premises offered accessible toilets as well.

When audits were carried out on half of the accessible premises using the purpose-designed audit tool, we found that 30% of the accessible toilets could not be accessed as they were being used for storage.



The owner of this establishment commented that they frequently had to replace the decorative shrubs as they were often used for street urination. (Bichard 2003) VivaCity 2020

Less than 20% of the toilets on which we collected data were of both the recommended minimum depth and width, and 35% of facilities were neither the recommended minimum depth nor width and so could be considered too small to admit a wheelchair user or someone needing a caregiver to assist them. None of the accessible toilets had all the recommended grab rails at the recommended heights and only 18% had WC pans at the recommended height of 480mm.

Yet, on speaking with providers we found that most were proud of their accessible toilets, many of which had been recently installed as a result of the recent introduction of part III of the Disability Discrimination Act. There appeared to be a lack of understanding amongst providers concerning how people with disabilities actually use an accessible toilet.

Many accessible toilets within businesses in the Clerkenwell area, whilst complying with the spirit of DDA legislation, fail to follow recognised standards that meet disabled people's needs and so they are failing to meet either the aspirations of service providers or the requirements of disabled people.



Many providers were proud of their newly installed accessible toilet facilities. Whilst aesthetically pleasing this toilet cubicle did not provide enough space for transfer and had installed the toilet roll dispenser out of reach. (Goodwin 2003) VivaCity 2020

## Case Study – Westminster

### Theme – Evening Provision

Westminster in the heart of London has won multiple awards from the British Toilet Association (BTA) for its provision and management of public conveniences. It is estimated that London receives 28 million visitors a year – many of whom will visit Westminster for its major landmarks and tourist attractions. Westminster therefore offers a unique perspective on public toilet provision as, although the borough has a small percentage of residents, its ‘population’ increases dramatically when considering those who work in or visit the area. During 2003, the council estimated that its public conveniences received over 10.5 million users. The Council currently operates 26 facilities around the borough, all of which are attended. Per user, Westminster’s provision costs on average between 2p – 48p per ‘flush’.

Westminster is also the major centre for London’s nightlife and, accordingly, the Council has provided public toilet provision to support the evening economy. Much of the borough’s central provision is open until midnight, whilst 2 public conveniences, located at Leicester Square and Covent Garden, are open 24 hours. Figures for usage of the Leicester Square facilities during 2003 show that over 1.5 million people used the provision, with over 90% of footfall taking place in the evening. Additional 24 hour toilet facilities are supplied by

Automatic Public Conveniences (APCs), which in 2003 received over 9,500 users a month.

In 2001, following complaints by local residents and businesses regarding the problem of street urination, Westminster sought to increase its evening provision by installing urinals in key areas of the city. Currently, the council provides 4 purpose built permanent urinal facilities, supplemented at weekends by 12 temporary urinals.

The permanent urinals were first installed in 2001, and were co-designed by Westminster Council and Danfo. Known as the ‘Butterfly’ urinal, this permanent structure opens out to provide 2 purpose built urinal areas. In 2002, this provision was supplemented by Uri-lifts, purpose built urinals that are kept underground during the daytime, to be raised in the evenings by remote control. Both the butterfly urinals and the Uri-lifts are open from dusk to sunrise. It is estimated that each urinal cost £10,000 to install.

The installation of urinals at key sites where known street urination was taking place has resulted in a reduced need for street cleansing of the area. It is estimated that on average 50,000 men use the urinals annually, whilst the users of temporary facilities are estimated to be between 5-6000 each weekend. Whilst observing night time facilities during the course of this research, we found that the urinals were extremely popular with male users. In some instances we observed men queuing to use the facilities. Yet, equally, we

observed men deciding not to queue who ventured off to find another area to urinate in.



Butterfly Urinal co- designed by Westminster Council and Danfo. (Greed 2002) Vivacity 2020

During our street surveys of city centres, Westminster scored the lowest for those respondents who thought there was a problem with street urination in the area. 45% thought there was, compared to 55% in Manchester and 59% in Sheffield.

Westminster's provision, especially its permanent urinal facilities, have become a benchmark for evening toilet provision. The urinals are often demonstrated to council representatives from around the UK, as well as international parties.

Westminster concedes that this form of single gender provision is far from perfect. Yet, the success in terms of numbers of users, illustrates how important the introduction of urinals has been to the night life of the borough. It is interesting to reflect on the fact that the popular Uri-lift, a hi-tech solution to street urination, echoes the first public toilets that were installed in the nineteenth century that were also for male only users. Indeed, it can be argued that such provision not only excludes women, but also excludes men who may not wish to use urinals because they are too shy to urinate so openly, or because they have pollution concerns due to their faith. In addition, these urinals do not adequately serve the needs of men with disabilities who cannot stand to urinate.

Whilst the cost/benefit ratio in offering such facilities can be seen to be in favour of urinal provision, a question still remains about whether providing facilities of this kind to tackle the effects of street urination is not really addressing the cause.



The Uri-lift urinal for evening provision, designed to combat street urination. (Richard 2003) VivaCity 2020

## Case Study – Manchester

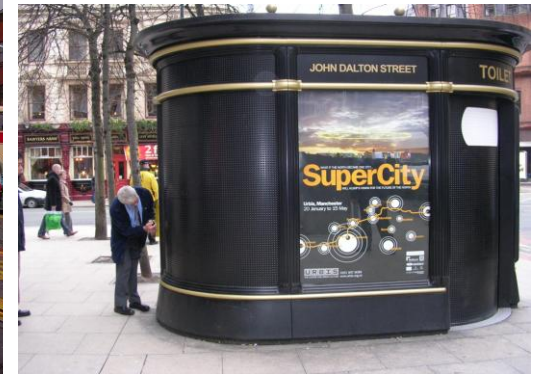
### Theme – Civic buildings and Transport Interchange

Manchester City Centre is one of the main economic centres of the North West Region. It has over 6,000 businesses which employ around 120,000 people and it is the region's main retail and entertainment destination. Since the early 1990's, Manchester has seen massive investment and rapid change and renewal. The city's outlying areas house one of the largest university campuses in Europe, which accommodates approximately 65,000 students who also access the city centre's entertainment and retail outlets.

In addition, Manchester has increasingly become a major tourist destination. In 2004 it was estimated that 770,000 overseas visitors went to Manchester making it the third most popular city destination in the UK, after London and Edinburgh (Marketing Manchester 2004).

Manchester has a thriving cultural centre comprising of some of the most highly acclaimed museums in the country, including; The Museum of Science and Industry Manchester, The Lowry, The Manchester Art Gallery, the Imperial War Museum North, Urbis and the Manchester Museum. Together these museums attracted 1.7 million visitors in 2004 (Marketing Manchester 2004).

Opened in 1992, the Manchester Metrolink Light Rail Tram system is considered one of the most successful tram networks in the UK and has become an iconic image for the city. It transported over 18 million people in 2004.



Automatic Public Conveniences (APCs) make up the majority of Manchester's city centre provision, yet these may be considered inaccessible to many people with disabilities. (Bichard 2005) VivaCity 2020



Manchester city centre has one purpose built public toilet facility located near the Town Hall. The rest of the city centre's toilet provision is supplied by six Automatic Public Conveniences (APCs). The public's acceptance and use of APCs in Manchester was notable in our street surveys, as over 70% of respondents answered that they 'would use' an APC. This acceptance rate was over double Sheffield's 'would use' rate (31%) and over five times the 'would use' rate in Westminster (14%). Yet, although seemingly more accepting of APCs, nearly 90% of respondents also felt there should be more conventional public toilet facilities in Manchester.



Internal fixtures and fittings of the APC do not match recommended guidelines. (Richard 2005) VivaCity 2020

Access audits carried out on Manchester's APCs found that the facilities did not conform to Manchester's own current access guidance (Design for Access II) or to the British Standard BS8300. Problematic areas of design of the APC included:

- the WC pan, which was not set at the recommended height of 480mm,
- the configuration of grab rails, which were not in line with current guidance,
- poor lighting, and
- operating instructions all signed in upper case.

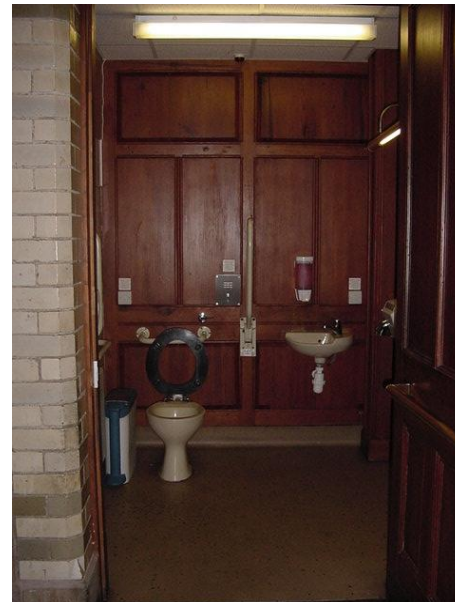
Therefore, for many people with disabilities, APCs may not be an option when needing to use toilet facilities in the city centre.

Another option for those requiring toilets are the facilities available at central transport hubs, such as railway stations and the new Manchester Transport Interchange. The accessible facility at Piccadilly Station did not conform to guidelines in respect of its cubicle size or grab rail configuration. By contrast, the newer accessible facilities at Manchester Transport Interchange have gone beyond the minimum requirement in respect of cubicle size, which measures 2600 mm in depth by 1650 mm in width. The cubicle contained all of the recommended grab rails in a contrasting colour from the walls, although three were found to be fixed at incorrect heights and distances from the WC pan.

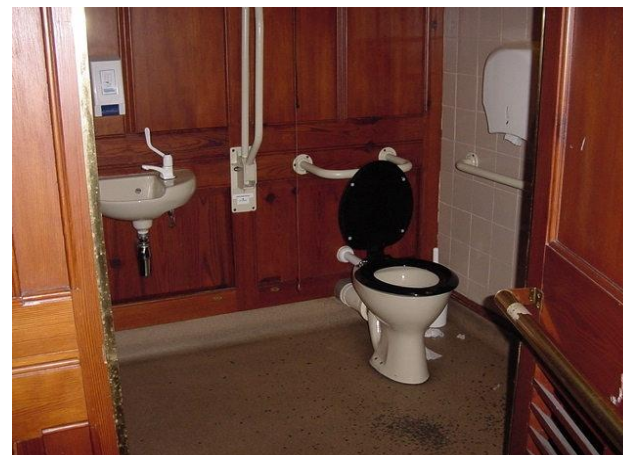
As a popular destination for visitors to Manchester, the research focused its audits on the most important civic

buildings. We visited 10 civic buildings located in and around Manchester's city centre (museums, Central Library and a cinema / arts complex). The larger museums will often have more than one accessible toilet facility, and it was surprising to find how much discrepancy there would be between 2 or 3 toilets within the same premises. In one of the City's newer museums, we found three accessible facilities, all with different cubicle dimensions. One of these did not meet the minimum recommended dimensional guidelines. None of the cubicles had the full configuration of grab rails set at the recommended heights or distances, or the recommended height of 480mm for the WC pan. Given the differing cubicle size dimensions, each accessible cubicle was also laid out and fitted in different a way. Such design variability in the accessible toilets provided within one building can be seen to illustrate one of the major issues that respondents to surveys and interviewees spoke about, namely the lack of standardisation in the design of the accessible cubicle. Where disabled people find that no two cubicles are alike, they have to negotiate access in a different way for every toilet they use.

In the 10 Civic buildings we visited, we audited 14 accessible cubicles and found that only 5 were of the minimum recommended dimensions in respect of the cubicle size. One feature that did stand out in the accessible facilities was the inclusion of sanitary dispensers in three of the cubicles and a condom dispenser (although broken) in one cubicle. However, although included in cubicles they were fitted too high, as the coin slot would be beyond the reach of women who may not be able to stand or who are of short stature.



Provision at some civic buildings did not meet design guidelines in respect of cubicle size or configuration of the fixtures and fittings. (Bichard 2006) VivaCity 2020



## Case Study – Sheffield

### Theme – Public and Private Provision

The metropolitan area of Sheffield in South Yorkshire has an estimated population of 512,000 people, of which 10.8% identify themselves as belonging to minority ethnic communities (Audit Commission, 2004). In addition, the area has a large student population. Over the last decade Sheffield city centre has undergone several large-scale urban regeneration projects, culminating in the building of the Millennium and Peace gardens. These areas provide a mix of indoor and outdoor spaces, sympathetic street furniture, public art, and a water feature that has proved extremely popular with children on warm sunny days.



The Peace Gardens, located next to Sheffield Town Hall, provide ample seating and respite from the bustle of the city centre. (Bichard 2005) VivaCity 2020

Within the city centre, Sheffield City Council provides two purpose-built public toilet facilities located by the Town Hall and in the Moor shopping precinct. The Town Hall facilities charge 20p for use, whilst the provision located at the Moor is free. Both facilities are attended, and are open between 8.30am and 5.45pm. Three Automatic Public Conveniences, accommodating 24-hour provision, supplement the purpose-built city centre facilities.



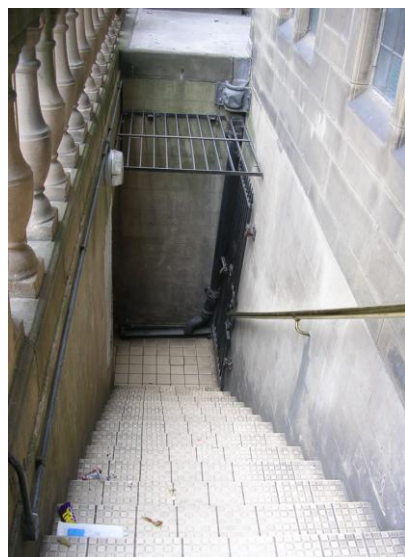
The water feature at the Peace Gardens is particularly popular with children on warm sunny days. (Bichard 2005) Vivacity 2020

The Town Hall toilets are a prime example of Victorian civic planning. The ladies' and gentlemen's facilities are located in a prime position on either side of the Town Hall building. However, they are poorly signed. This was illustrated on one of our visits to the ladies' facility, when a young man

mistakenly entered the toilets. Both facilities are subterranean and therefore provide no access for people with disabilities and they are difficult to access by parents with pushchairs. However, both the ladies' and gent's toilets do provide baby changing and shower facilities, which are used frequently by either homeless people or builders from the many construction sites around the city centre. As the closest facilities to the Peace Gardens, the toilets are often used by children to change into dry clothes, after they have been playing in the garden's popular water feature.



The entrances to the Town Hall's 'ladies' and 'men's' toilets. (Bichard 2005) VivaCity 2020



In our street surveys of Sheffield city centre provision, members of the public also identified toilets located at the Council Offices at Howden House, and facilities at a small city centre shopping area called Orchard Square as 'public'. Surprisingly, few respondents identified the toilets at the Millennium Gardens as 'public' facilities. This may be due to the poor signage around and within the gardens, which makes it difficult to identify and locate these toilets.



This city centre sign outside the Town Hall does not include directions to the Town Hall's toilet facilities. (Bichard 2005) VivaCity 2020

Whilst 74% of survey respondents knew where the nearest 'public' toilets were, only 23% said they would use these facilities. In total 92% of the respondents questioned preferred

to use the toilets provided by department stores, cafes and pubs.

A public consultation meeting carried out in 2002 by Sheffield City Council's Streetforce Department, found that the majority of respondents did not perceive Automatic Public Conveniences (APCs) as 'public toilets'. Surveys carried out by this research found that nearly 70% of respondents in Sheffield would not use an APC.

One particular area of Sheffield city centre was identified as lacking in suitable provision. This area, known as the Devonshire Quarter, has developed into a bar, café and independent retail centre that primarily attracts younger people, students and young families. In addition, the area has a large green space which includes a skateboard park. The area hosts a yearly music festival that attracts large crowds.



The skateboard area on Devonshire Green is popular with younger people. (Bichard 2005) VivaCity 2020

Interviews with local business owners identified the stress placed on businesses and the area itself, due to the lack of public toilet facilities. One retail business owner commented on the increased street urination resulting from the success of the area's bars and nightlife. This made the area quite unpleasant for shoppers during the day.

A café bar owner commented that the absence of any accessible toilets in the local area placed huge pressures on his facilities. The research team was offered an opportunity to monitor toilet usage at this business, and found that on a Saturday afternoon in July between 12.30-1.30pm, 40 people entered this business solely to use the toilet facilities. Between 1.30-1.45 pm, 19 people used the toilets. Whilst some did stay after using the facilities, the majority entered the premises solely to use the toilets.

A major gap in provision was identified in the Devonshire Quarter in relation to its predominant visitor demographic. Many of those who come to the area to shop, use the skate park or just 'hang-out' are under 18. During the daytime, those we spoke too commented that they would use café toilets, sometimes making a purchase to do so. However, the real issue came in the early evenings when cafes and shops were closed, as under 18's could not legally access the many pubs and bars in the area to use their toilets. One restaurant owner commented that she would sometimes let girls who were under 18 come into the restaurant to use the toilets, but would not allow boys under 18 as the owner had experienced 'drug

taking' in the men's toilets which she believed was by younger male users.

The lack of provision for younger people may lead directly to an increase in street urination. The research's street survey found that 90% of respondents felt there was a problem with street urination in the city centre, and 82% thought there was inadequate provision of toilets in the evening.

Whilst the majority of those we surveyed may prefer 'private' provision, many of the private options may not be suitable for all members of the public. Of 28 'private' toilets audited in Sheffield's city centre, only 16 had accessible toilet facilities for people with disabilities. Of these, only four offered the correct cubicle size dimensions of 2200mm depth and 1500mm width. None of the facilities we audited had the correct height and configuration of grab rails. Only four toilets provided a WC pan at the recommended height of 480mm, whilst, only 2 facilities had correctly positioned the WC pan 750mm from the back wall.

The choice between 'public' and 'private' provision may also impact on nearly 11% of Sheffield's population that identify themselves as belonging to minority ethnic communities. An important aspect of these communities may be faith affiliations, which can determine which form of 'private' provision are accessible. For example, provision located in pubs or bars may not be suitable for people who do not include alcohol consumption as part of their faith. Consequently, such reliance on this form of provision, especially in the evening,

may further exclude members of the population from visiting the city centre.



Devonshire Green, Sheffield City Centre's major green space. (Bichard 2005) VivaCity 2020

## Case Study – Nottingham

### Theme – Community Toilet Campaign

In winter 2004, we reported in our regular newsletter ‘The Toilet Paper’, that Nottingham Council’s Social Services Department had recently run extensive user trials of a fully accessible toilet cubicle that included an adult changing bench and a hoist. By Spring 2005, the research team was contacted by Mrs Pat Tomlinson of the Nottingham Pensioners Action Group (NPAG), who enquired about our report and informed us about NPAG’s campaign to save the toilet facilities in the Nottingham area.

NPAG’s campaign had begun in early 2005, on learning that toilets in the central area of Nottingham City Centre were to close as part of a multi-million pound redevelopment of Nottingham’s central square. NPAG began to raise awareness about the issue by contacting the local media, and by writing letters to the Council, the Government Office for the East Midlands and the Prime Minister, Tony Blair. One action that did result from the campaign was that Mr & Mrs Tomlinson were invited to be the last users of the existing facilities before they closed!

Information provided by Nottingham Council regarding the redevelopment of the Old Market Square made no mention of including new toilet facilities within the development. With no knowledge of any plans for new facilities to replace those that

had closed, NPAG members stepped up their campaign, holding protests outside the city’s Council House. These actions drew more press coverage, including that of local radio and television.

An essential element of NPAG’s campaign was for the toilets to be fully accessible to people with disabilities including the provision of adult changing facilities.

By Christmas 2005, NPAG had learnt that their campaign had been successful and that fully accessible toilet facilities including adult changing facilities were to be built on a street just off of the central square area. The toilet opened in May 2006<sup>1</sup> with a ceremony attended by Mr & Mrs Tomlinson and other NPAG members. Mr Tomlinson reported in the Nottingham Evening Post<sup>2</sup> that the new facilities were ‘beautiful’ and that the Council had ‘done a good job’.

As the first Local Authority maintained fully accessible public conveniences to offer adult changing provision within England, the new facilities in Nottingham also became the benchmark for provision in a campaign called Changing Places <http://www.changing-places.org/> to encourage more providers to install adult changing facilities.

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<sup>1</sup> Unfortunately, due to prior commitments members of the research team were unable to attend the opening or include an audit of the toilets within the research.

<sup>2</sup> Nottingham Evening Post, May 2006

The facilities provided by Nottingham Council were recognised for their excellence and awarded a Community Care Award in January 2007.

The Nottingham Pensioners Action Group (NPAG) continue their campaign against poor access and closures of toilets in the Nottingham area.



## Case Study – Liverpool

### Theme – Individual Toilet Campaign

In late 2004 the research team was contacted by Mr Len Cole, through one of the user support networks we had been working with. Mr Cole described how he had enquired about accessible toilet facilities at a central railway station in Liverpool and had been directed to the nearest fast food outlet. The station's existing facilities were of a standard design and were not suitable for Mr Cole's toileting needs.

Angered by the lack of accessible toilets, Mr Cole complained to the railway station's operators Merseyrail, who took Mr Cole's complaint on board and began a renovation scheme on the station's existing toilet facilities, to include accessible and baby-changing provision, as well as re-building the existing standard toilet provision.

During the campaign, Mr Cole contacted a local radio station to draw attention to the lack of toilets for people with disabilities and received widespread support. Throughout the campaign, mostly conducted through telephone calls, Mr Cole regularly contacted the research team to discuss the progress of the campaign and the renovation work.

The toilets were opened in June 2006, with a ceremony attended by Merseyrail's Managing Director, local councillors and Mr Cole, in which a plaque in honour of Mr Cole's

campaign was unveiled. The ceremony was covered in the local press and radio. A spokesman from Merseyrail commented that Mr Cole's involvement was a 'catalyst' for the company to get funding to build the facilities, adding that his 'involvement' and valuable input was 'instrumental in getting the toilets built'.<sup>3</sup>



Mr Len Cole at the opening of the toilets he campaigned to have built. (Bichard 2006) Vivacity 2020

<sup>3</sup> Reported in the Liverpool Daily Post June 2006

The research team was given the opportunity to include the toilet facilities within its study. An audit of the facilities revealed that Merseyrail had installed two accessible toilets, one incorporating left hand transfer and the other for users who preferred to transfer onto the WC pan from the right hand side. The left hand transfer cubicle had included 30 of the 50 recommended design features, whilst the right hand transfer cubicle had incorporated 27 features. Both toilets ranked in the top 15 of 101 facilities we audited around England.



The accessible toilet cubicle. (Bichard 2006)  
VivaCity 2020

Specific features that complied with design guidance included the provision of a colostomy shelf, an alarm reset button in reach of the WC pan, the correct height WC pan and colour contrast grab rails. Features that had not been incorporated within the toilets included the provision of coat hooks or mirrors both over the basin and full length. Both toilets were 120mm short of the recommended width of 1500mm, yet both cubicles had an extended depth of 2550mm (right hand cubicle) and 2610mm (left hand cubicle). An interesting anomaly within the fitting of the cubicles was that the right hand side transfer cubicle had the flush handle fitted on the correct transfer side of the cistern, whilst the left hand side cubicle had it fitted on the 'wrong' side, closest to the wall.

Mr Cole described the toilets in the local press coverage as 'absolutely wonderful', adding that although some people felt the toilets would never be built, he felt it was worth 'the fight' as eventually people would get not only what they want, but what they need.

Mr Cole continues to campaign on his own for better toilet provision. His other successes include the moving of an accessible cubicle at a motorway service station. In this case the accessible cubicle was too close to the ladies' facilities and had resulted in men with disabilities being accused of entering the ladies' toilets. Mr Cole complained directly to the management and subsequently the accessible toilets were moved to a more suitable position. Currently Mr Cole is in correspondence with a national supermarket chain regarding

the provision of essential stock within its provision of accessible toilets.

Whilst Mr Cole does have a disability, he feels that addressing the failures of current accessible provision is primarily not about his own personal needs but those of all people with disabilities. His example shows that, by going about things the right way, even one individual working alone can make an impact.



The plaque commemorating the opening of the toilet facilities by Mr Cole. (Bichard 2006) Vivacity 2020

## Case Study – Richmond upon Thames

### Theme – Community Toilet Scheme

The London Borough of Richmond upon Thames launched a Community Toilet Scheme in June 2005, and has since attracted 65 businesses to become members. In July 2006 at a British Toilet Association seminar, Phil Woolas, Minister for Local Government, backed the initiative when setting out a national strategy for public toilets.



Richmond upon Thames council have incorporated details of their community toilet scheme within general direction signs. (Bichard 2006) VivaCity 2020

Richmond upon Thames community toilet scheme works in partnership with businesses like pubs, restaurants and shops to provide clean, safe and accessible toilets available to members of the public in addition to their own paying customers. The toilet facilities are available during the hours that participating members' businesses are open. Businesses

who are members promote this service through stickers displayed on their doors and windows. Further information about the scheme, including a map and leaflets, is distributed through council offices, libraries, hospitals, GP surgeries and tourist information centres. In addition, the council have placed street signs in prominent areas directing people to toilets. Richmond upon Thames pays an annual contribution towards the toilets' maintenance and cleaning costs. Currently, the local authority has 65 members involved in the scheme, of which 35% offer accessible toilets, and 25% offer provision for baby changing.



Local businesses display stickers informing members of the public that they are part of the scheme, and that a purchase does not have to take place to use the toilet. Bichard (2006) VivaCity 2020

In addition to running the community toilet scheme, Richmond upon Thames maintains five Automatic Public Conveniences (APCs) and five purpose built public toilets. The APCs cost 20p to use, whilst the purpose built facilities are free.



Additional signage is placed in areas where the scheme is operational. (Bichard 2006) VivaCity 2020

The research team visited Richmond in August 2006 to include the scheme within the research, and audited 19 of the then available accessible toilets. Of the 50 design features available within the audit, one of the facilities in the scheme had incorporated 32 design features, the highest number of the 101 accessible toilets we audited. Another facility incorporated 29 of the design features and shared joint third position out of the 101 audits. In all, three of Richmond's facilities involved in the community toilet scheme were in the top 10 of our toilet audits. Twelve of the toilets involved in the scheme had incorporated a minimum of 20 design features, and were in the upper 65 of 101 facilities. The facilities that incorporated the fewest design features (less than 20) were those operated by the local authority itself.

All of the toilets we visited that are involved in the scheme were immaculately clean and well stocked. Most were small businesses that had clearly made an effort with the decoration to provide a pleasant environment. Some had included baby change facilities within their accessible toilets, and provided wipes and spare nappies. Whilst not recommended within guidance, such universal provision seemed appropriate due to these businesses' predominant customer base of families with young children.



All of the toilets were clean and well stocked. (Bichard 2006) VivaCity 2020

Overall, Richmond's scheme can be seen to be a success and other local authorities around the country have adopted or are considering adopting a similar scheme. However, there are some wider ranging concerns that need to be considered.

Due to business opening times, the provision of toilet facilities may be reduced dramatically in the evenings. In addition, those businesses that do offer facilities such as pubs, may not be accessible to those who are under the legal drinking age, people who do not include alcohol consumption within their social network or who do not wish to enter a pub on their own. Because of this, community toilet schemes may not be suitable as the only form of provision for areas with a thriving evening economy.

As the proprietors of the business, owners and manager have the right to refuse admission to their toilets, this does not guarantee that access is available to all, especially to those who maybe considered undesirable such as people who are homeless.

Finally, businesses that offer standard toilet provision, but that do not offer toilet facilities that are accessible to people with disabilities, could be considered to be contravening the provisions of Part 3 of the Disability Discrimination Act.



The interior design and layout of some toilets suggests that providers may be confused about what people require and what the guidance states. This toilet is of a peninsular design, yet it has the grab rail configuration of a standard accessible toilet. (Bichard 2006) VivaCity 2020,

## Case Study – Cambridge

### Theme – Design Against Crime

Since the late 1990s, Crime and Disorder Partnerships have been set up throughout England. This initiative aims to bring together local people, the police, local authorities and other public agencies to reduce crime and address its causes. Cambridge Community Safety Partnership formed in 1998 and produced its second three-year strategy in 2002, with a central priority of tackling Anti-social Behaviour.

Council surveys in 2000 revealed that public toilets were considered the service with the highest level of public dissatisfaction. In addition, a survey undertaken by the British Toilet Association in 2002 revealed that 75% of the current council-maintained toilet stock was in need of improvement.

Additional public surveys and agency-wide consultation revealed that one of the key areas identified for Anti-social Behaviour was the city's public toilet facilities. The most common cause for concern was substance misuse and its associated litter, predominately discarded hypodermic needles. In addition, criminal damage, including graffiti and 'rough sleeping' particularly in the accessible toilets, was identified as an issue that needed to be tackled.

Through consultation, the issue of the toilet buildings was discussed. Some of the [then] current toilet stock was considered to be badly placed, hidden or secluded. Council

documents record that 'there is little doubt a significant impact on discouraging anti-social behaviour in public toilets can be achieved through design' (Cambridge Anti-social Behaviour Task Group, 2002).

A number of recommendations were made as a result of consultations including; assessment of the need for specific facilities, assessment of the most appropriate location for facilities, consideration of new vandal-proof facilities in suitable locations, a review of opening times, the value of attendants as a deterrent and lastly, the abuse of the RADAR key system and accessible toilets by illegal substance users and 'rough sleepers'.



Standard toilet cubicle in the Midsummer Common facilities (Bichard 2003) VivaCity 2020

In conjunction with these consultations, Cambridge City Council initiated a four-year capital building programme to improve or replace major public convenience blocks. Improvements or replacements were set to achieve safe, clean facilities, by reducing anti-social behaviour through good design. Sites were identified for refurbishment and reconstruction. However, at some sites it was decided to replace the existing toilet blocks with new facilities, and invitations were sent to local architectural practices to take part in a competition to design new toilet facilities at Gonville Place.



Rear of the 'armadillo', Midsummer Common. (Bichard 2003) VivaCity 2020

The design brief specifically aimed to 'design out crime' and called for the use of materials and finishes that would

minimise vandalism and graffiti, stainless steel sanitary fittings and individual door access that is visible to the public. Design features such as flat roofs or recesses and planting were to be avoided.

Whilst the council set no cost limit on the design, the brief intimated that the total cost should not exceed £200,000.



The 'armadillo', Midsummer Common. (Bichard 2003) VivaCity 2020

Two sites were identified for the replacement of existing toilet blocks. These were Gonville Place and Midsummer Common/Victoria Avenue. Architects Freeland Rees Roberts won the design competition for Gonville Place and were



subsequently commissioned to design facilities for the Midsummer Common/Victoria Avenue site. The facilities at Gonville Place were completed in March 2003, whilst those on Midsummer Common were completed during the following year.

The public conveniences at Midsummer Common/Victoria Avenue were highly commended in the John Smith Award for craftsmanship, and in 2006 they won the Royal Institute of British Architects (RIBA) East Client Award. The notable feature of the award-winning toilets was their elongated, domed copper roof, considered a reflection of the surrounding canopy of the chestnut trees. The nearby river also influenced the building's design.

In addition to a 'design out crime' priority, which resulted in a building constructed from easy-to-clean materials, with no hidden corners and benefiting from the strategic use of lighting, the Midsummer Common facilities also include environmentally friendly and sustainable design features such as rainwater harvesting for use in the toilet flush system. The distinctive copper roof has led to the facilities being fondly re-named the 'armadil-loo' by the local population.

Residents whose houses face the toilet facilities were not keen on overlooking the doors of the WC cubicles. Consequently, these were designed to face away from the open space of the common and surrounding residences, and to face towards the nearby well-used road. This orientation was also considered preferable in respect of the issue of

security, as the busy road could provide 'natural observation'. The side of the facilities that faces onto the common includes a 'pindar's room'. This room stores hay for animals grazing on the common, which Cambridge City Council is obliged to provide by ancient statutes.



Combined accessible/baby changing facility. (Richard 2003) VivaCity 2020

The facilities contain five unisex cubicles including a combined accessible / baby changing facility. In late 2003, close to completion of the Midsummer Common/Victoria Avenue public conveniences, the research team visited the facilities to assess if the high priority given to the 'design out

crime' brief compromised or improved access considerations for people with disabilities<sup>4</sup>.

Signage comprised a mixture of upper and lower case text. However signage informing users of the cost of using the toilet and indicating if the toilet was vacant or in use, was quite small and all in upper case text. The accessible cubicle included a baby change table that was not in itself accessible to parents who use wheelchairs. Fixtures for hand washing involved automated 'stages' that may be considered confusing for people with cognitive impairments. People with visual impairments may find the operating illustrations difficult to read, due to the high glare of the stainless steel surface. The alarm system comprised a button located on the wall beside the toilet pan at approximately 500mm above floor level. This may be difficult to reach if someone falls to the floor and cannot raise their arm.

One of the most controversial aspects of Cambridge's refurbishment and rebuilding of toilets was the inclusion of 'sharps bins' within the facilities. A long-standing campaign by the British Toilet Association has pressed for sharps provision to be excluded from toilet fixtures and fittings, to discourage substance injection within toilets. For Cambridge City Council, the issue of substance misuse within its public toilets was one of the central aspects of its refurbishment and rebuilding programme. By including sharps bins, the council has reduced

the risk of stick injuries to its employees and to members of the public from discarded hypodermics. A sharps bin has been included within the accessible toilet, but it could be considered out of reach for someone who uses a wheelchair and who may have to inject themselves for medical purposes.



Coin slot and 'sharps' bin. (Bichard 2003) VivaCity 2020

<sup>4</sup> The research had yet to develop its audit tool so undertook assessment by noting aspects of current design guidance. No measurements were taken of this facility.

## Case Study Milton Keynes

### Case Study – thecentre:mk, Milton Keynes

#### Theme – Regional Metropolitan Provision

Following a £16m refurbishment of the shopping centre in Milton Keynes, in 1999 thecentre:mk was awarded two national *Loo of the Year Awards* for its provision of accessible toilets and baby-changing facilities. During the refurbishment, the centre's customer toilet facilities had been dramatically upgraded to include unisex accessible toilets that offered left and right hand transfer options, and a parent and child / baby changing including a screened nursing area, bottle warmers and toddler seats in the changing areas. Additional thought in provision included a television and magazines in the nursing area and mounted toys on changing benches to keep toddlers occupied.



Each baby change unit has room for 2 babies to be changed on either side. A screen separates each unit, and each side has its own sink unit attached. (Bichard 2006) VivaCity 2020

However, the major development in toilet provision for customers in the centre was the inclusion of an adult changing / toileting room fitted with a height adjustable changing bench, a hoist, and WC facilities. It is believed that thecentre:mk's provision of a changing room for older children and adults who require the assistance of one or more carers to toilet, or require a changing bed, was the first of its kind in the UK within a public space. It has gone on to become the benchmark for fully inclusive accessible toilet provision.



The height adjustable adult changing bench (l) at thecentre:mk provides carers of older children and adults with disabilities suitable facilities to use for toileting and changing. The provision of a hoist (r) is essential for parents who may not be able to lift their children, as well as carers who are restricted when lifting those within their care by the rules contained in manual handling legislation. (Bichard 2006) VivaCity2020

The research group visited thecentre:mk in August 2006 to include the accessible toilets within the project. We found that provision in the accessible facilities exceeded recommended guidelines in many respects, most notably in the provision of automatic door opening mechanisms on some of the cubicles, and the provision of disposable urine bottles.



The provision of disposable urine bottles exceeds current recommendations and guidance. (Bichard 2006) VivaCity2020

Most of the recommended fixtures and fittings had been included within the cubicles, although not all at the recommended heights were the same as those published in current design guidance. This may be a discrepancy between the age of the cubicles and more recent guidance. For example, the cubicle length measured 2160mm, 40mm short of current guidance. However, the width of cubicles exceeded the recommendation of 1500mm in the design guidance by 20mm. The WC pan measured 420mm in height as opposed to the recommended 480mm, but again this may be due to the age of the facilities. It is estimated that the fixtures and fittings at thecentre:mk have a ten year design life.

The accessible cubicles at thecentre:mk are heavily used. Provision in respect of bins includes those suitable for continence pads. Surprisingly, the bins were placed in the transfer space, yet on questioning the management of the facilities, it emerged that no-one had complained about the positioning of the bins in this space.



The unisex accessible cubicle. (Bichard 2006) Vivacity2020

The adult changing facility measured approximately 2770mm deep by 2470 mm wide, with a toileting area of 1500mm width by 2140mm depth. Currently no standards or guidelines exist for this form of toilet provision besides those issued by groups such as PAMIS.

The maintenance of the accessible toilets is a significant issue for thecentre:mk. Weekly checks are made to ensure the hoist

in the adult changing room is in good working order. In addition, alarms in the accessible cubicles are also tested on a weekly basis. Over a period of five years thecentre:mk report that there have been no accidents within the toilet facilities.

Due to the popularity and heavy footfall of thecentre:mk toilets there are cleaned continuously. However certain aspects of the toilets are difficult to keep up to a high standard of cleaning, such as the slip resistant flooring which, due to its resistant nature, is difficult to keep clean. Walls are tiled and thecentre:mk have found this to be the best form of wipeable surface to keep clean. In addition, to ensure good cleaning practice all staff at thecentre:mk facilities hold grade 1 certification from the British Institute of Cleaning Science.



Bottle warming facilities and nappy vending machines are also available. (Bichard 2006) Vivacity2020



Toilets for parents and children complete the family style provision at thecentre:mk. (Bichard 2006) Vivacity2020



Toddler seats are provided within the baby change. (Bichard 2006) Vivacity2020



A separate screened nursing room provides calm respite and privacy for nursing mothers. (Bichard 2006) Vivacity2020

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### Parents of Disabled Adults

Aileen is mother to 16 year old Alex and cares for him full time. She enjoys shopping with her son and sometimes gasps at the money he will pay for his preferred designer label clothes. Aileen and Alan (Alex's dad), and younger sister Alice, often take weekend trips to interesting local sites and activity centres. Twice a year, the family take a driving holiday in various parts of the UK. Aileen and Alan would like to forsake driving one year and take the children abroad. However, the current lack of provision for accessible toilets on aeroplanes makes such a holiday unlikely at present, as Alex, who has profound multiple disabilities and uses a wheelchair, requires Aileen and Alan to change him every few hours. For this Alex and his parents need a suitable adult changing space.

Aileen feels she has become 'obsessive about loos', and always has to check a previously unvisited toilet to see if it may accommodate her needs and those of her son. More often than not Aileen is disappointed and somewhat angry as the toilet is not really 'accessible'. Aileen feels frustrated when she reflects on how many accessible toilet designs could accommodate a height adjustable adult changing bench. She finds this lack of thought and consideration for Alex's needs restricts not only his life, but also her own, and the lives of the rest of her family.

The lack of provision has often meant that Aileen has no option but to change Alex on the toilet floor. She thinks this is a terrible situation to be in, as the floor is invariably dirty and unhygienic.

### Persona - Aileen



Also to get Alex onto the floor Aileen has to lift him out of his chair, carefully lower him onto the floor and move the chair out of the toilet, as there is never enough room for Alex, Aileen and the wheelchair. She will then lay Alex out into an adequate position for changing and change him. Once the change is complete Aileen then has to bring the chair back into the toilet and lift Alex into it. Aileen feels that changing Alex on the floor is not only unsanitary but undignified for her son. Furthermore, lifting a 16 year old in and out of his wheelchair, puts a lot of strain on Aileen's back, which she worries may affect her own health in the future.

To prevent Aileen damaging her back through lifting Alex, an accessible toilet would have a height adjustable changing bench and a hoist. Aileen thinks this would not only benefit her, but also many paid carers who have to adhere to legislation preventing them from lifting those under their care.

Changing Alex takes approximately half an hour, and sometimes longer. Knowing other people may be waiting to use the toilet often puts pressure on Aileen to change her son as quickly as possible. Sometimes Alex will pick up on his mum's stress and become agitated. This inevitably leads to changing becoming harder and taking up more time, in what is usually the only accessible toilet facility.

Aileen continues over



## Adult Changing Bench

## Persona - Aileen



Aileen is also conscious of the time it takes to change Alex when Alice is with them. As most of the unisex accessible facilities have their entrance directly from the main public area, Aileen thinks it would be unsuitable to leave Alice outside, hence she has no option but to take Alice into the toilet with her and Alex. Not only does this make the space even more cramped but Aileen senses that as her children get older, not only is Alex becoming embarrassed about being changed in front of his sister, but his sister is also becoming embarrassed about seeing him changed. Also Alice has begun to get impatient when having to wait inside the toilet for Aileen and Alex, which end up making everybody irritable.

Some accessible toilets are not separate unisex facilities, but located in the ladies' or gents' toilets. When having to take Alex into the ladies', Aileen has been asked by other users if she *has* to bring her son in there. Not only has this frustrated Aileen, but Alex has become upset at having to use a ladies' toilet. If the only accessible provision is in the men's toilets, Aileen will wait until the toilets are empty and take Alex in there, all the time letting other users know that she is in there by speaking loudly to her son. Aileen once found a suitable changing bench in a baby changing area,

but she felt very self-conscious changing Alex in front of the other parents, so decided not to use this facility again. Aileen feels that she shouldn't have to share these facilities with parents with babies and younger children, as everyone feels uncomfortable. Also Aileen thinks that at Alex's age he deserves some privacy and dignity when using the toilet.

To address these problems, the family have converted a van into a mobile changing facility. This has enabled Alex and the family to travel and get out of the house and local area more. However the van is far from perfect and using it to change Alex continues to put a lot of stress on Aileen's back. Also taking Alex back to the van inevitably means taking Alice as well. Aileen senses her daughter is beginning to resent having to stop whatever they are doing and go back to the van to change Alex.

The van also adds to extra planning time for journeys as Aileen and Alan have to make sure they can park. Given current restrictions for parking in many city centres, and the lack of suitable toilet facilities, Aileen finds her family's access to the city is becoming more and more restricted.

## Adult Changing Bench

## Persona - Aileen

VivaCity2020

### Design Wish List

Unisex facilities with peninsular layout.

Height adjustable changing bench or free standing changing bench.

Hoist to meet requirements of manual handling policies.

Timer control to notify other users how long toilet will be engaged.

Wide tear-off paper to cover bench.

Disposable wipes.

Suitable bin for disposable pads.

### Planning Wish List

Adult changing rooms in all urban centres and major tourist attractions.

### Management Wish List

Wide tear-off paper to cover bench.

Disposable wipes.

Suitable bin for disposable pads.

Facilities regularly cleaned and well stocked with toilet paper, bench paper, wipes and soap.

Aileen was created in co-operation with Pamis



Alan is father to 16 year old Alex and helps his wife Aileen care for their son. When travelling either to the city centre or for sightseeing and holidays, Alan will drive a van that has been specially adapted and doubles as a changing facility for Alex. Alex needs these adaptations as he has profound multiple disabilities and uses a wheelchair, and currently there are practically no suitable toilet facilities that cater for Alex's toileting needs.

Due to the nature of Alex's disabilities he needs to be changed every few hours. For this Alex needs to be lying down. Ideally a toilet that would be accessible to Alex would include a height adjustable changing bench and a hoist. The hoist would allow ease of transfer from Alex's wheelchair to the bench and would diminish the strain on Alan's back and that of his wife. The height adjustable changing bench would allow Alan and Aileen to change Alex in comfort and allow their son some dignity, which is denied him in the majority of toilet provision.

When travelling, Alan will have carefully planned a route to include available accessible toilets. However he often gets frustrated when, having phoned ahead and checked for suitable toilet provision, on arrival they find the toilet is inaccessible. Alan feels the lack of suitable toilet facilities for his son, restricts the life of the whole family.

Alan would like to help Aileen more when Alex does need changing. Sometimes however the only accessible facilities are situated in the ladies' toilets, whilst at other times unisex facilities will not have enough space for Alex, his wheelchair, Aileen and Alan as well. If the facilities are unisex, but don't have enough room for all of them, Aileen and Alan will take turns to change Alex. Alan is concerned that as Alex get older he will become heavier, whilst he and Aileen will become weaker due to age, and so they may possibly injure themselves when trying to change Alex without each other's help.

Currently Alex participates in a wide variety of activities and often has days out with his mum and dad. Nevertheless, as Alex gets older, he may at some point need professional care. Alan worries that paid carers would not be able to accommodate Alex in the activities he enjoys. Due to legislative guidelines on lifting people, carers would not be allowed to lift Alex to change him. Alan feels this would further restrict his son's life, and he is frustrated because this situation could be resolved if certain central public toilets included a larger 'peninsular'[1] design and incorporated an adult height adjustable changing bench, and a hoist.

[1] The peninsular layout places the toilet at the centre, so that access to the toilet pan can be reached from either side.

Parents of disabled adults

Persona - Alan

VivaCity2020

**Design Wish List**

An adjustable height changing bench and hoist in at least one city toilet facility.

Unisex facilities.

Where facilities cannot be provided with changing bench, all accessible toilets to a standard design, especially size of cubicle.

Good lighting.

**Planning Wish List**

An adjustable height changing bench and hoist in at least one city toilet facility.

**Management Wish List**

Facilities regularly cleaned and well stocked.

Alan was created in co-operation with PAMIS



## Disabled Adult with Parent Carers

## Persona - Alex

Alex is sixteen years old and, like many teenagers, he enjoys a wide variety of activities. He likes to go shopping and is especially keen on designer label clothes. In the evenings Alex likes to go to the cinema or ten-pin bowling with his family and friends, and once a week he visits the local stables for horse riding lessons. However, when Alex participates in any of these activities his parents have to keep a watchful eye on him all the time, as Alex has profound multiple disabilities and his toileting needs require him to be changed every few hours. The nature of Alex's disabilities necessitates that he has his parents to help him in all aspects of his life.

Finding a suitable accessible toilet in which to change Alex is extremely problematic for him and his parents. The toilet needs to be big enough for Alex, his wheelchair and his mum or dad (and sometimes both), and to include a height adjustable adult changing bench. However to Alex's parents' knowledge there are only a handful of suitable facilities throughout the UK. As nearly all accessible toilets do not have the adjustable changing bed facility suitable for adults, Alex often has to be changed on the toilet floor. As these floors can be very dirty and consequently unhygienic, this situation is very unpleasant for Alex and also for his parents.

On one occasion Alex's mum found a fixed adult sized changing bench in the baby changing area of a

department store, and took him in to be changed.

Although the bench was not adjustable, Alex could be lifted onto it and changed with relative ease. However this area was communal and some younger children, accompanying their parents, began to ask why a 'big person' would need to be changed. Alex's mum found this embarrassing, and felt that Alex did too. She also sensed that other parents, on seeing Alex being changed, also felt embarrassed. Consequently Alex's mum has not used this facility again.

The lack of suitable toilet provision for Alex to be changed in means that he, and his parents, can only go out for a couple of hours at a time. This is a situation Alex and his family feel greatly restricts their lives. As a substitute to overcome many of the problems concerning inaccessible toilet facilities, the family have a van they use as a mobile changing room. Whilst this affords Alex privacy and dignity when being changed, it means that whenever the family are away from home shopping, or engaging in the many activities Alex enjoys, there is an interruption whenever he needs to go back to the van to be changed. Also, current restrictions for parking in many city centres, together with the lack of suitable toilet facilities, further restricts Alex's and his family's access to the amenities the city has to offer.

**Design Wish List**

Unisex facilities with peninsular layout.

Height adjustable changing bench or free standing changing bench.

Hoist to meet requirements of manual handling policies.

Timer control to notify other users how long toilet will be engaged.

Wide tear-off paper to cover bench.

Disposable wipes.

Suitable bin for disposable pads.

**Planning Wish List**

An adjustable height changing bench and hoist in at least one city toilet facility, especially at venues that cater to families.

**Management Wish List**

Wide tear-off paper to cover bench.

Disposable wipes.

Suitable bin for disposable pads.

Facilities regularly cleaned and well stocked with toilet paper, bench paper, wipes and soap.

Alex was created in co-operation with PAMIS



## Contenance

## Persona - Beatrice



Beatrice lives in the city and likes to spend time meeting friends at the city's art centres. She is a keen supporter of her local theatre and often goes there in the evenings. However recently Beatrice has found her evening trips to the theatre have become more difficult, as for the journey home, she relied on the public toilet located by her local train station. Beatrice was recently surprised to find this facility had been shut and finds herself asking "what to do when there's no loo?". Consequently Beatrice thinks twice about going out in the evenings.

Beatrice requires a good sized toilet as she has continence concerns and has to wear pads. For Beatrice, using standard toilet facilities can prove difficult as often the cubicles are too small for her to comfortably move around in when changing pads. When changing, Beatrice needs to access her bag to retrieve a clean pad and often has to balance her bag on the sanitary bin or loo seat. After changing, Beatrice usually has to carry her used pad around with her as the sanitary bin provided in toilets is too small to dispose of the pads. In some toilets she has noticed a bin outside the cubicle labelled 'for nappies and continence pads'. Although Beatrice welcomes the provision of a large enough bin she sometimes notices people looking at her when she disposes of her pads and hence finds the bins embarrassing to use. Beatrice does not like using toilets that are poorly lit, as she can not see clearly to check she has cleaned herself. She also needs a good hot water supply and soap to wash her hands after changing her pads.

Beatrice has a RADAR key and also uses the accessible toilet facilities. Often they are big enough for Beatrice to

change in, and they tend to have a good standard of lighting and a supply of soap. Recently Beatrice has noticed that some facilities have changed their locks and cannot be opened by her key. Beatrice finds it annoying that she will have to ask for the key, but it can also be unpleasant as "when you're bursting it's difficult to arrange everything and then find someone to open the door".

When in the city, Beatrice keeps a mental note of where the toilets are and will not explore areas where she's unsure about adequate toilet provision. She finds this greatly restrains her use of the amenities the city has to offer. Even in areas Beatrice regularly visits, sometimes a familiar toilet will be shut, so she keeps in mind another nearby facility that may be available.

When travelling, Beatrice will often check the route to make sure there are toilet facilities on the way, and on many occasions she has decided not to visit somewhere due to a lack of provision.

If Beatrice does want to make the journey, she will avoid drinking in the morning and for the journey itself, dehydrating herself so as not to need to use the toilet.

During the day Beatrice knows she will be able to use a number of different facilities and she often uses her local library, shops and cafes. As all these facilities close in the evening, Beatrice feels she has a limited choice of places she can visit as there will be no facilities on the way. In some areas where facilities are provided in the evening, Beatrice is extremely reluctant to use them. She often finds the toilets are sited in badly lit areas and so she does not feel safe going in.

## Continance

## Persona - Beatrice

VivaCity2020

### Design Wish List

Suitably sized toilet cubicle.

Shelf to access bag for changing pads and/or change of clothes.

Suitable bin for disposable pads within cubicle.

Good sized basin for washing.

Good lighting for personal safety.

### Planning Wish List

Good placing of toilet facilities especially evening provision.

More suitable facilities available in the evening.

Adequate signage informing if toilets are locked.

### Management Wish List

Good supply of hot water and soap.

Good lighting for personal safety.

More suitable facilities available in the evening.

Adequate signage informing if toilets are locked.

Beatrice was created in co-operation with:  
The Continance Promotion Service (Wandsworth)





## Contenance

Bill is 80 years old and is active within his local community. He often represents pensioners at local and national meetings and travels to the city for these meetings. When attending meetings, Bill likes to undertake research at libraries and uses these times to visit shops. During these times in the city centre, Bill has to make frequent visits to the toilet as he has a bladder continence condition. In addition, due to his age Bill walks slowly with the aid of a walking stick.

Bill developed his bladder incontinence after an industrial accident 40 years ago, and remembers that there were more public toilet facilities available then. Consequently, he managed his disability quite well. However, he has found that fewer facilities now exist, and coupled with his aging he is finding it harder to continue to lead an active life.

Unfortunately, one of the public toilets Bill relies on when out in the city centre is located at the bus station. Due to its position, the walkway leading to the facility is often crowded with people getting on and off a bus. This has put Bill in a frightening situation where he has had to stand still to let people rush past, and this has caused him great embarrassment as it has delayed his access to the toilet and caused an accident.

Bill manages his continence by wearing a pad and a leg bag. However, he finds that often when he needs to change pads there are no bins available within the men's toilets. The lack of bins forces Bill to carry his pad and find a rubbish bin to dispose of it. This concerns him, as he feels it may not be hygienic to be disposing of his pad in general rubbish bins.

## Persona - Bill

VivaCity2020

To empty his leg bag, Bill lifts his leg onto the WC pan. However, as he ages he is finding this more and more difficult and so he wishes there were a drainage unit at a lower height that he could use.

Sometimes Bill has a leakage and will have to change his clothes. Due to his mobility difficulties, Bill requires help from his companion and uses the unisex accessible toilet. Within this facility Bill can sit down and hold onto the grab rails whilst he and his companion clean and change him. He nearly always finds adequate bins within the accessible toilet, but occasionally they are not the appropriate bins and Bill finds it distressing to leave his soiled pads on view in an 'ordinary' bin.

Bill feels very strongly about using facilities that are clean and well maintained and in the past he has searched out other facilities when the nearest toilet has not been cleaned adequately. However, as he ages, Bill feels this is not an option he now has, and so he worries that dirty toilets may be unhygienic and possibly dangerous to his health.

Bill requires a toilet with a non-slip floor and plenty of paper towels for cleaning and drying himself. Good lighting is essential so that he can see clearly where he is going and what he is doing.

Bill has a RADAR key but he has discovered that older locks can be unlocked from the outside. This has led to embarrassing situations where someone has unlocked the toilet he is using, as well as he himself having unlocked a facility that was in use.

## Contenance

## Persona - Bill

VivaCity2020

### Design Wish List

Non-slip floors.  
Good lighting.  
Low level (300mm) urinal.

### Planning Wish List

More public toilets.  
Unobstructed access to toilets with adequate pedestrian space in busy areas.  
Low level (300mm) urinal.

### Management Wish List

Toilet cleaned regularly and well stocked with paper towels.  
Good lighting.  
Replacement of older RADAR locks.  
Appropriate bins in accessible and men's toilets for disposal of soiled pads.

Bill was created in co-operation with Croft Consultants & Accessibuilt



## Autism / Paid Carer

## Persona - Carol

VivaCity2020

Carol is 24 years old and works as a carer at a day centre for children with disabilities. She often organises days out for the children to zoos and amusement parks, and always phones ahead to check if they provide accessible toilets. Carol finds she is often told that accessible toilets are available, yet on arrival she will find the design of the toilet makes it difficult for her to assist the children, or for the children themselves to use the toilet unaided.

One of the main problems at sites that specifically cater for children, is the number of accessible toilets available, especially for groups of children with disabilities. Often Carol will have to queue with the children for the single accessible toilet. Having to queue can result in 'accidents', as some of the children will not have planned for when they might 'need' the toilet.

The space in the accessible toilet is often not big enough for Carol, the child and their wheelchair, and a colleague to help. Due to legislation covering manual handling, Carol is restricted in lifting the children on her own. Yet there are times when this is unavoidable, due to the lack of space inside the cubicle. Carol also finds the children use a variety of manual and powered wheelchairs, and that many of the toilet cubicles are too small for the current models of powered chairs.

Carol has often found that there are no unisex facilities available, and she has to take the children to the facilities in the ladies' toilet. However when the child Carol is toileting is a boy, it can often be embarrassing for the child to have to use the ladies' toilet, whilst if the child is a girl and her colleague is male, Carol will have to attend to the child on her own. Unlike a carer who is a member of the family, Carol risks breaching the health and safety

legislation for care workers when she lifts a child on her own.

Some of the children Carol cares for wear pads and she often has to change the children on the floor. Carol considers this very unhygienic for the child, whilst it also puts her at risk from having to bend over to change the child and negotiate around the toilet's fixtures and fittings. She would like to see height adjustable changing benches suitable for older children and adults installed, especially at facilities that 'welcome' children with disabilities. In addition Carol requires a bin of a suitable size for used continence pads and nappies.

The accessible toilets Carol helps the children to use have been designed for adults, and consequently many of the fixtures and fittings may be unsuitable for children. Fixed grab rails can be obstructive, blocking Carol from supporting the child. Additionally, adjustable bars may be too far away for the child to reach and support themselves. The toilet paper dispenser may also be out of the child's reach, requiring the child having to ask to be handed toilet paper. In some facilities a raised toilet pan may prove too high for younger users, and make them feel unsafe. The raised toilet pan may also require Carol to lift the child onto it, which can be difficult and dangerous when a colleague can not also fit into the cubicle.

Carol thinks having good accessible toilets, especially for children with disabilities, is important for their dignity and that the lack of such facilities can have adverse psychological effects. Children often find the issue of toileting embarrassing and can develop issues and behaviours to avoid using the toilet.

**Autism / Paid Carer**

**Persona - Carol**

**VivaCity2020**

**Design Wish List**

**Adequate space within toilet facilities.**

**All toilets to a standard design with rails and WC pan at suitable placing and height for children.**

**Height adjustable changing bench.**

**Unisex facilities.**

**Planning Wish List**

**More accessible toilets at sites that specifically cater for children.**

**Unisex facilities.**

**Management Wish List**

**Suitable bin for disposable pads and nappies.**

**Disposable wipes.**

**Facilities regularly cleaned and well stocked with toilet paper and soap.**

Carol was created in co-operation with the staff of:  
Charlie Chaplin Adventure Playground



## Autism / Paid Carer

## Persona - Charlie

VivaCity2020

Charlie is 24 years old and works as a carer at a day centre for children with a range of visible and hidden disabilities. He often accompanies Carol on the days out that the centre organises. Occasionally the places visited by children from the day centre will have accessible toilets that are locked, and Charlie has sometimes been asked to 'prove' the children are disabled in order to use the accessible facilities. This has occurred especially for the children with autism, whose disability is invisible.

Charlie often has to accompany a child into the toilet to ensure they undress and re-dress correctly and concentrate on their toileting. Some of the children Charlie works with are able to use the toilet on their own, although they still require some supervision. In these instances Charlie will take the boys to the men's toilets. However, Charlie often feels uncomfortable waiting outside the cubicle for the child, especially when the standard toilet area is small and he has to wait close to the urinals. This could be resolved if Charlie and the child used the accessible toilet, however he feels it's important for a child who is able to use the toilet on his own, to do so.

Charlie finds that for autistic children the accessible toilet can be an exciting and stimulating place, where it can be difficult for him to focus the child on toileting. Some children with autism may have a fascination with water; consequently lever taps are very easy for the children to turn on. In addition, the force of water flow from the tap, coupled with a shallow basin, leads to "everyone getting wet". This also leaves the floor wet and a potential danger to other users.

Electric hand dryers can also be a source of fascination for autistic children and Charlie often has to distract the child from continuously pressing the button on the hand dryer. Similarly, push button soap dispensers are a temptation for children to 'press'. Charlie also finds that placing red emergency cords next to the light pull cords often entices the child to pull the one that stands out.

Many of the children in Charlie's care have rituals for using the toilet, with the action of flushing the 'reward' for successful toileting. In toilets with sensors or automatic flushes, the physical action of flushing is denied to the child. This unfamiliarity may make an autistic child anxious and cause them distress. Similarly Automatic Public Conveniences and toilets installed with blue lights may feel alien to a child who requires familiarity, especially for toileting. In addition, some of the children will not use a toilet facility that is dirty, and will often deny that they need the toilet in order to avoid a facility that they are not comfortable in.

Charlie thinks that good ventilation is important, especially when there are queues of children and adults waiting to use the single accessible toilet. In addition, the toilet should also be heated, as many children will spend a good deal of time partially undressed whilst using the facilities.

For Charlie, an ideal toilet would be one that was large enough for him to accompany the child with autism, but that was simple and uncluttered. A larger standard cubicle, heated and well ventilated, without the many fixtures and fittings associated with the accessible toilet would be ideal.

**Autism / Paid Carer**

**Persona - Charlie**

**VivaCity2020**

**Design Wish List**

**Larger standard cubicle.**

**Standard accessible flush handles, tap handles etc.**

**Low stimulation environment.**

**Good lighting (no blue lights).**

**Good ventilation.**

**Temperature control (especially in winter).**

**Planning Wish List**

**More facilities incorporating adult changing fixtures, especially at major children's attractions.**

**Management Wish List**

**Paper hand towels.**

**Good lighting (no blue lights).**

**Good ventilation.**

**Temperature control (especially in winter).**

Charlie was created in co-operation with staff of:  
Charlie Chaplin Adventure Playground



## Older Women

## Persona - Daphne

VivaCity2020

Daphne is 68, widowed and lives outside of the city centre. She is active in her local community and spends a lot of time in her local area for her shopping needs. Daphne also has family and friends locally. Recently, Daphne has noticed that the amount of time she is able to be out and about in her local area is decreasing, as she needs to use the toilet more often. However, with fewer and fewer public toilets available for her to use, Daphne often interrupts journeys and shopping trips to go home to use the toilet.

Since many of her local public toilets have closed, Daphne has to time her shopping trips so that she won't have to use toilets whilst out. Daphne resents this as she thinks it would be nice to sometimes meet friends and spend longer periods of time socialising, window shopping and just being out of the house.

When shopping locally, Daphne will avoid drinking fluids so that she will not have to use a toilet. When Daphne does need to use the toilet, she will try to find a shop and use their facilities. Yet, as Daphne gets older, she has noticed the time between wanting to use the toilet and needing to use a toilet is getting shorter. This can be difficult when trying to find a toilet to use.

Although there are often toilet facilities in pubs, Daphne will not use these as she feels intimidated going into a pub on her own. Daphne also feels very uncomfortable trying to sneak into a café or restaurant to use their facilities.

Daphne regularly visits and tends her husband's resting place. However, she is unable to spend as much time there as she would like as the toilet facilities at the cemetery are in a terrible state. This causes her great distress, as her time spent there is dictated by the lack of decent toilet facilities.

Daphne finds that, when she does use toilets, the cubicles can be very cramped, especially if she has shopping with her. In addition, as she ages she finds it harder to lower herself onto and lift herself off the WC pan. Sometimes she has to grab hold of the toilet roll holder for support, and worries that she might pull it off the wall. Daphne also finds that many cubicles do not have a coat hook. This can make toileting in a small cubicle during cold weather, when she feels the need to 'go' more often, very constrictive as there is nowhere to hang her coat. The facilities themselves need to be clean and well stocked with essentials such as toilet paper and soap.

Although Daphne has a Freedom Pass for public transport, she does not use it as much as she would like. The lack of local toilet facilities at major bus stops and train stations means that she will often put off a journey or travel by car instead. Daphne would like to see public toilets in her local area so that she could spend more time out of the house.

## Older Women

## Persona - Daphne

VivaCity2020

### Design Wish List

Good quality locks on the door that are easy to open.

Coat hook for coat and bags.

Non-slip floor surfaces.

Facilities with level entrances (no steps up or down).

More facilities for women to reduce the need to queue.

Good lighting in and around the facility, especially in the evening and winter months.

Larger standard cubicles with grab rails for support.

### Planning Wish List

More public toilets in local area including shopping centres and public buildings such as the library.

Public toilets at bus station and local train station.

More facilities for women to reduce the need to queue.

### Management Wish List

Facilities regularly cleaned and well stocked with toilet paper and soap.

Daphne was created in co-operation with members of :  
Enfield Over 50's Forum





## Older Men

## Persona - David

VivaCity2020

David is 75 and has lived in the same town for most of his life. He likes to visit the town centre to meet friends, and to attend functions organised by local community groups. David likes to keep active within his community, but he 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 cannot go so far 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 increasingly difficult to do, due to a lack of facilities en 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.

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 he finds that he cannot simply because travelling even for short distances is difficult without public toilet provision.

## Older Men

## Persona - David

VivaCity2020

### Design Wish List

Good quality urinals that do not flood.

Coat hook for coats.

Cubicle with grab rails.

### Planning Wish List

More public toilets in local area including shopping centres and public buildings such as the library.

Public toilets at bus station and local train station.

### Management Wish List

Public toilets available in evenings.

Facilities regularly cleaned and well stocked with toilet paper and soap.

Air hand dryers in good working order.

David was created in co-operation with members of:  
Enfield Over 50's Forum



## Irritable Bowel Syndrome (IBS)

## Persona - Elaine

VivaCity2020

Elaine is 30 and is currently building a career for herself in the city. She travels to work everyday before the rush hour has started. This is a tactic she has developed to manage her irritable bowel syndrome (IBS). Having IBS means Elaine sometimes has to access toilets in a hurry, as well as ensuring that toilets are available for her on the journey to work. She travels out of the rush hour so that she will have better access to the toilets on trains, although she does sometimes find these out of order. Elaine finds many of the toilets within the transport system are either out of use or too dirty to use, consequently she finds traveling quite difficult and has the available toilets on her route to work carefully mapped, with alternative facilities included in case one particular toilet is closed or out of order.

Elaine likes to go out early in the mornings and finds that the provision of toilets at this time can be limited, as business provision that she could use is often not yet open.

When visiting a new area, Elaine immediately finds out where toilet facilities are. She often has to ask as she finds signage is either absent or unreliable, and doesn't indicate the distance to the facility. This can be very frustrating when she needs to use the toilet urgently.

When shopping in the city Elaine notes where all the toilets are. As she has to use the toilet often, Elaine has strong feelings regarding paying for toilets, so she tries to use facilities that are free.

Due to the effect of tea and coffee on her IBS, Elaine cannot make a beverage purchase just to use the toilet, and consequently sometimes has to 'sneak in' to a café to use the facilities.

Elaine will sometimes use the accessible toilet, especially if she needs 'to go' urgently and there is a queue for the ladies'. She also prefers this type of facility as it is usually well ventilated and has direct access to washing facilities. Elaine also finds the accessible toilet more comfortable to use as it is fully enclosed. Sometimes, she finds the sounds and odours her body makes during an IBS attack can be embarrassing when in a standard cubicle with partitions.

Elaine is finding more and more public toilets are made of stainless steel with inappropriate seats. These are very uncomfortable for her to use as she may be sitting on the WC pan for some time during an IBS attack. In addition, the lack of a seat often means that she will be 'splashed' whilst toileting. Elaine finds this style of provision 'appalling' especially in winter when the cubicle and WC pan will be very cold, and she will be forced to 'hover' over the WC pan, leading to an incomplete bowel movement.

Elaine requires a good standard of lighting within the facility so that she can ensure she has adequately cleaned herself and the toilet, as well as good hand washing facilities with warm water and adequate soap and hand drying fixtures.

**Design Wish List**

Public toilets that are free to use with a larger cubicle that includes hand washing provision.

Cubicle fully enclosed for privacy.

Good ventilation.

Good secure seating on WC pan.

Coat hook for coats.

Secure door locks that are fixed or replaced when broken.

Good hand washing facilities with air hand dryers in good working order.

**Planning Wish List**

Public toilets that are free to use with a larger cubicle that includes hand washing provision.

**Management Wish List**

Facilities regularly cleaned and well stocked with absorbent toilet paper and soap.

Secure door locks that are fixed or replaced when broken.

Good hand washing facilities with air hand dryers in good working order.

Elaine was created in co-operation with members of:  
The IBS Network



## Irritable Bowel Syndrome (IBS)

## Persona - Eric



Eric is 38 and lives and works outside of the city centre. He likes to travel in to attend the theatre, go for a meal or meet friends for an evening out. When Eric travels into the centre of the city he uses the over ground train as currently, there is a lack of toilets available on the underground system. Eric feels more confident if he is close to a toilet and knows where they are as he has Irritable Bowel Syndrome (IBS), and often has an urgent need to use a lavatory.

Eric finds his IBS and the lack of suitable toilets doesn't allow him a lot of spontaneity and consequently he does not go to the city centre as much as he would like.

Eric's IBS sometimes means he has to go to the toilet urgently. This can be quite problematic when away from home, as often there are no public facilities in many areas. The toilet facilities in other areas of the city, such as those offered in shops and department stores, may be on the top floor and quite a distance to reach when in urgent need of the toilet.

Eric prefers to use the accessible cubicle as it offers more space and privacy for his toileting needs. Due to the nature of IBS, Eric is concerned with sound and ventilation, and finds that a fully enclosed, well ventilated cubicle will allow him to toilet without embarrassment.

Sometimes Eric will not make the toilet in time and has an 'accident'. During these moments he also prefers to use the accessible cubicle as it has adequate space for him to clean himself, and change his clothes.

Because Eric's condition is hidden, he has experienced being challenged using the accessible facilities.

However, due to his long term condition he needs the extra space and privacy the accessible toilet provides. Eric requires a good sized toilet cubicle that would be large enough for him to comfortably change his clothes in. He also requires the cubicle to have a good sized wash basin with warm water, soap and drying facilities. As Eric may sometimes get his hands dirty when cleaning himself, he would prefer lever handled mixer taps with a good flow of water.

Eric also requires that there is adequate toilet paper, soap and paper towels within the cubicle, as well as suitable bins for paper towels and incontinence pads.

Ideally, Eric feels a good toilet door lock is essential for issues of personal security and vulnerability. Eric has seen a combined toilet with a bidet attachment and thinks this would be the most suitable provision for him. He also requires a coat hook and a shelf for accessing the clean clothes that he carries with him.

Eric sometimes has difficulty locating toilets due to inadequate signage, and would like to see signage to public toilets include the distance, so that he can assess if that facility will be close enough for him, or if he should find alternative toilet to use.

Eric finds the lack of public toilets in the evening particularly restricting and sometimes will not go out because of the difficulty he may encounter with finding and accessing toilets during an IBS attack.

**Design Wish List**

**A good sized, fully enclosed toilet cubicle.**

**Good ventilation.**

**Good door lock in working order.**

**Hand wash basin within cubicle including good supply of hot water, lever mixer tap, soap and hand drying provision.**

**Coat hook and shelf for changing clothes.**

**Adequate bin for paper towels, incontinence pads.**

**Combined WC Pan / Bidet.**

**Planning Wish List**

**More public toilets, especially at transport interchanges and open for evening provision.**

**Management Wish List**

**Good door lock in working order.**

**Adequate supply of toilet paper, soap and paper towels.**

**Adequate bin for paper towels, incontinence pads.**

Eric was created in co-operation with members of:  
The IBS Network



## Spinal Injury

## Persona - Frances

VivaCity2020

Frances has lived in the city centre for most of her life. She enjoys all the amenities the city has to offer especially the nightlife. Frances attends many concerts not only in her home city but also driving around the country to a variety of venues. However, Frances can only attend concerts at venues that have good accessible toilet facilities as Frances has a spinal injury, uses a small manual wheelchair and needs an accessible toilet facility. Frances is finding she has more difficulty using toilets as she gets older, and finds herself becoming quite nervous about going to places where she is not familiar with the toilet. This is because Frances often finds many of the 'disabled' toilets unsuitable for her needs. Frances says "my life revolves around one loo to the next" and "they think because you're in a wheelchair you don't go out at night".

Frances has often had to leave a concert early when the toilet facilities do not meet her needs. This situation is further complicated if the area the concert venue is in does not have any accessible public toilets. Frances has often had to find a pub or petrol station and hope that their facilities will be satisfactory, and that management will let her use the toilet.

On some occasions if out in her local area, Frances has had to go home due to the lack of suitable toilets. She finds this quite upsetting when she thinks about living in the middle of the city and there not being adequate toilet facilities she can use.

On other occasions Frances has found suitable public toilets, but in unsuitable locations that are badly lit and feel isolated.

Frances will not use these facilities especially when out in the evening. In smaller venues, Frances does not mind if there is only one accessible toilet for all to use. However in larger buildings Frances would prefer an accessible cubicle in the ladies' toilets as "able bodied men and women aren't expected to share loos".

Frances often finds the horizontal handrail next to the toilet facility is too far away for her to reach. Whilst this may not stop Frances from getting onto the toilet, it does restrict her leverage when she wants to transfer back to her wheelchair and, as Frances gets older, she is finding this more and more difficult.

Frances thinks it is important for the toilet to have a strong and secure toilet seat as she often 'drags' the toilet seat with her when transferring onto and off the toilet.

In addition Frances often has to hold onto the toilet seat when transferring from her wheelchair, consequently the cleanliness and hygiene of the facilities are very important to her, especially if Frances has any cuts or pressure sores. Sometimes Frances has come across dirty toilets that she would prefer not to use, but due to the lack of facilities for her, she has had no choice.

Frances would like to see all toilets built to a standard so that, no matter where she went, she would know the toilet is going to be accessible, and will have been designed properly.

## Spinal Injury

### Design Wish List

**In public buildings accessible cubicles in ladies' toilets.**

**Level access to the toilet.**

**All toilets to a standard design.**

**Horizontal grab rail close to the toilet pan.**

**Strong and secure toilet seat.**

**Good lighting to see when transferring and also to check for cuts, grazes and bruises.**

**Flush handle on transfer side of toilet.**

**Good signage and signage indicating if toilet is left or right hand transfer**

## Persona - Frances

### Planning Wish List

**In public buildings accessible cubicles in the ladies' toilets.**

**Access to toilets in the evening.**

VivaCity2020

### Management Wish List

**Facilities regularly cleaned and well stocked with toilet paper and soap.**

**Access to toilets in the evening.**

Francis was created in co-operation with members of:  
The Spinal Injury Association and the Disabled Drivers Association





## Spinal Injury

## Persona - Frank

VivaCity2020

Frank likes to visit the city centre in the evening to meet friends for a drink or go out for a meal. Frank enjoys a variety of cuisines, and wishes he could go to more restaurants. However, he can only visit those that provide accessible toilet facilities as Frank has a spinal injury and uses a wheelchair.

Due to a lack of accessible toilets in many pubs and restaurants, Frank often finds he is going to the same places and feels his movement and choice is restricted.

If Frank is travelling out of his local area he often spends time researching toilet provision. Sometimes, he finds that the 'disabled' toilet is too small and incorrectly fitted, and extremely difficult to use. Such experiences make him nervous of going out of the area he is familiar with.

When Frank was younger he was able to walk short distances with crutches, so he could sometimes use the cubicle in the men's toilets, but as he has become older Frank needs an accessible cubicle, as he now transfers from his wheelchair. Frank prefers accessible facilities to be unisex as he knows that one day he will probably need his wife to help him use the toilet.

Frank has a RADAR key, but he is finding that many businesses are not using RADAR locks. Frank finds it a 'major hassle' to have to ask for the key, especially if in a pub at a busy time. Sometimes Frank has to use the toilet urgently and the thought of having the queue at the bar to ask for the key to the toilet often stops him from staying out as late as he would like to.

At times when Frank has waited to ask for the key, he has then found that the key has been misplaced. Frank finds this extremely frustrating.

Frank requires an accessible toilet as he needs space to transfer from his wheelchair. It is important that the transfer space is free from obstructions, but often Frank finds bins have been left in the transfer area. Frank has to catheterise himself so he needs the toilet to be clean. Also, due to a lack of sensation in his lower body the facility needs to be free of any item that may cause a cut or a graze as Frank will be unaware that he may have injured himself.

One of Frank's biggest problems is finding the accessible toilet being used as storage space. He has often had some very uncomfortable moments whilst waiting for toilets to be cleared so that he can use them.

Frank thinks 'you can never have enough grab rails' in toilets as they give him something to hold onto in case he slips. Frank often finds the basin too small to wash his hands in and would like to see better bins beside the toilet (not in the transfer space) so that he can dispose of his catheter and surgical gloves. He feels a shelf close to the toilet would be 'fantastic' as he would be able to put his personal equipment bag on it and not have to balance it in his lap whilst trying to use the toilet.

## Spinal Injury

### Design Wish List

**RADAR key as standard lock.**

**All recommended grab rails installed.**

**Slip resistant floors.**

**A height adjustable WC pan, as Frank finds some too high, but knows other people find his preferred height too low.**

**Shelf close to WC pan for his personal equipment.**

**Strong secure toilet seat for transfer.**

**Back rest not preventing toilet seat from being lifted up.**

**Larger basin for hand washing.**

## Persona - Frank

### Planning Wish List

**More accessible toilets in pubs and restaurants.**

VivaCity2020

### Management Wish List

**RADAR key as standard lock.**

**Strong secure toilet seat for transfer.**

**Back rest not preventing toilet seat from being lifted up.**

**Waste bin for gloves / catheter disposal closer to toilet.**

Frank was created in co-operation with members of:  
The Spinal Injury Association and  
the Disabled Drivers Association



## Family Provision / City Centre

## Persona - Gail



Gail is 31 and is married to Gary. They have two children, Gareth who is seven years old and Gaby who is three years of age. Gail is a full-time mum who often visits the city-centre for shopping and to visit museums with her daughter. At the weekend, the family will attend events and family days being held in the city centre, often staying out all day.

When planning a day out, Gail finds herself having to think about toilet provision for herself and the children, as she often finds it a “nightmare” when they all need to go to the toilet.

When in the city centre for shopping, Gail will head for a department store to use the toilets. However, she finds it difficult to access the toilets, especially if the children need to go urgently, as the toilets in department stores are often located at the back of the store or on the top floor. In addition, she finds the signage within the store can be quite confusing.

Mostly Gail will use the ladies’ toilets. However, if there is a queue and Gaby is ‘desperate’ she will use the ‘disabled’ toilets as she can also get Gaby’s pushchair in there.

Gareth is now at an age where he will not use the ladies’ toilets with his mum, preferring to use the men’s toilets on his own. Gail worries about Gareth when he does, as sometimes the doors can be very heavy for him. He has difficulty reaching the door handles, as well as the hand washing facilities. Also there are times when all the doors look the same and Gareth has become confused and upset because he has not been able to find the exit door. Gail thinks that when Gareth uses the men’s toilets he does not wash his hands afterwards and she

is concerned he may be neglecting aspects of toilet training. In addition, Gail worries about any graffiti that Gareth might see, especially now that he is reading more.

When Gail uses the ladies’, she will often try to use the end cubicle, as she cannot get Gaby, the pushchair and herself into the cubicle. Gail will use the toilet with the door open and the buggy in front of her. She finds this somewhat embarrassing, especially if there are lot of other women using the toilets or if there are mirrors directly opposite the cubicles that reflect her whilst toileting.

If Gaby needs to use the toilet, Gail will take her out of her pushchair and sit her on the WC pan. Because the WC pan is too high for Gaby she has to hold onto the toilet seat. After toileting, Gaby may sometimes dart under the toilet cubicle partition and door, or start playing with the sanitary bin.

As Gabby may have had her hands ‘everywhere’ when using the toilet, Gail thinks it is important to wash her daughter’s hands after toileting. However, this is quite difficult for Gail as she often has to lift Gabby up to use the hand wash basin, and at the same time operate the soap dispenser and taps. Often, Gail finds the separate taps have extremely hot water that Gabby can’t use. Gail always dries her daughter’s hands with paper towels as Gabby is terrified of the noise the automatic hand dryers make.

When out in the city centre there are only two toilets that Gail feels the family can use fairly comfortably, and consequently she finds she takes the children back to the same places, thus not expanding their horizons.

**Design Wish List**

Family toilets including urinals at lower heights for young boys and lower WC pans for girls.

*or*

Larger cubicles that can accommodate a pushchair with lower partitions to prevent child crawling under.

*or*

Safe storage space for pushchairs and child seats in men's and women's cubicles so that toddlers can be settled whilst parent uses toilet.

Hand washing fixtures at a height children can reach.

**Design Wish List (c'td)**

Clearly identified hot & cold mixer taps for warm water.

Soap dispensers that can be operated by small hands.

Paper towels that can be reached for hand drying.

No warm air dryers

Easy operated flush handles

Sanitary bins enclosed to prevent children playing with them.

**Planning Wish List**

Family toilets including urinals at lower heights for young boys and lower WC pans for girls.

*or*

Safe storage space for pushchairs and child seats in men's and women's cubicles so that toddlers can be settled whilst parent uses toilet.

**Management Wish List**

Toilets cleaned and well stocked with toilet paper, soap and warm water.



Gail was created in co-operation with members of:  
The National Childbirth Trust & Education for the  
Future.



Gary is 34 and married to Gail. They have two children, Gareth who is seven years old and Gaby who is three years of age. Gary works full time during the week and likes to keep his weekends free to spend time with his family. Sometimes, Gary will take Gareth and Gaby to the city park on his own, so Gail can have a break.

Whilst in the park, the children will often need to use the toilet. Gary is beginning to dread these times as the park toilets can be quite awkward to use.

Previously, when the children were smaller, Gary would take them to use the men's toilets. However, he always found them to be in a terrible state of cleanliness, with no provision for changing nappies. Consequently, Gary often changed his children's nappies on a bench in the park.

As the children have grown older, new concerns have arisen for Gary in regards to toilet provision. He feels that Gaby can no longer be taken into the men's toilets. Gary once took her into the ladies' toilets but he was told off by one of the women in there. After this, Gary decided that he would take Gaby into the bushes if she needed to go to the toilet. Recently, the park built a unisex accessible toilet so Gary had begun to take his daughter in there, especially as

the cubicle is also big enough to take the pushchair, and Gareth in as well. However, the last time Gary and the children visited the park, he found the accessible toilet was locked and he had no choice but to take Gaby back into the bushes to toilet.

Gary has noticed that Gareth has also started going to the toilet in the bushes instead of asking his dad to take him to the facilities, and Gary and Gail are beginning to be concerned about the signals that the lack of suitable toilets are sending to their children. Gareth has told his parents he doesn't like the park toilets because they are dark and "smelly".

Both Gary and Gail are concerned that the lack of suitable toilets also results in no facilities for the children to wash their hands after toileting.

When Gary needs to use the toilet, he makes sure that Gareth will look after his sister whilst he rushes in and out of the men's facilities. Gary also neglects to wash his hands in the rush to get back to the children.

Gary has seen 'family changing areas' at his local swimming pool and thinks this would be a good idea to have for toilets in city parks, especially in parks that have dedicated children's playgrounds.

## Family Provision / City Park

## Persona - Gary

VivaCity2020

### Design Wish List

**Family toilets including urinals at lower heights for young boys and lower WC pans for girls, especially in dedicated children's play areas in parks.**

**Hand washing fixtures at a height children can reach.**

**Clearly identified hot & cold mixer taps for warm water.**

**Soap dispensers that can be operated by small hands.**

**Paper towels that can be reached for hand drying.**

**No warm air dryers**

**Easy operated flush handles**

**Good ventilation and lighting.**

### Planning Wish List

**Family toilets including urinals at lower heights for young boys and lower WC pans for girls, especially in dedicated children's play areas in parks.**

### Management Wish List

**Toilets kept clean and adequately supplied with toilet paper, soap and paper towels.**

Gary was created in co-operation with members of:  
The National Childbirth Trust & Education for the Future.



## Family Provision

## Persona – Gavin & Gemma

VivaCity2020

Gavin & Gemma are in their late twenties. They are the proud parents of 6 month old twin boys named Graham and Gage. They are both teachers, although Gemma is currently on maternity leave.

Gemma finds that she cannot go out unless she has another adult with her as she has difficulty accessing many places with the twins' pushchair. This difficulty is especially acute if she needs to use the toilet.

Gemma finds that in many buildings there are usually one or two heavy doors to go through before she reaches the toilet facilities, and she finds many of these doors quite difficult to open with the pushchair.

Often the toilet facilities will be too small for Gemma to get into with the pushchair, so she prefers to use the accessible toilet, as she can keep the twins with her.

Gemma finds the space of the accessible toilet very useful, especially if the facility also includes a baby changing table, as she can use the toilet herself and also change the twins. Changing the boys often takes quite a bit of time, and Gemma worries that she may be using a toilet that a person with a disability might urgently need. Although good for space, Gemma still finds the toilet awkward to use as there are never any flat surfaces to put her bag of changing supplies.

Gemma started using the accessible toilets before she had the twins as she had a frightening experience in the standard cubicle. During the later stages of her pregnancy, she needed to use the toilet a lot, and one time got stuck in the ladies' cubicle as the gap between the cubicle door and the WC pan wasn't big enough for her to get out. She eventually did get out, but had to squeeze her 'bump' quite considerably and she worried that this may have hurt her babies.

Sometimes, Gemma will come across an accessible toilet that has the baby-changing sign on but is locked. Gemma will then have to try to find someone to ask for the key or to unlock it for her. She finds it annoying that she should have to 'ask to use the toilet'.

When Gemma is out with Gavin they will each share baby-changing duties. However, Gavin often ends up using the accessible toilet as there is rarely any baby-changing provision in the men's facilities.

Gavin & Gemma would like to spend more time visiting places in the early evening. Yet they find this difficult as many of the toilet facilities they rely on, such as those in department stores, are closed in the evening.

## Family Provision

## Persona - Gavin & Gemma

VivaCity2020

### Design Wish List

Family toilets that can be used for baby-changing and child / adult toileting by both parents.

Wash basin facilities within cubicle.

Larger cubicles in the men's and women's toilets to accommodate double pushchairs.

Baby-changing fixtures in men's toilets.

Lighting that does not shine directly into babies' eyes.

Family toilets available after 6pm.

### Design Wish List (c'td)

Flat surface near changing table to place items needed for baby-changing.

Larger baby-changing table for toddlers.

### Planning Wish List

Family toilets that can be used for baby-changing and child / adult toileting by both parents.

Family toilets available after 6pm.

### Management Wish List

Toilets kept clean and well stocked with adequate supplies including emergency nappies and fragrant free wet wipes.

Bins emptied regularly.

Gavin & Gemma were created in co-operation with members of:  
The National Childbirth Trust & Education for the Future.





## Faith Community / Family

## Persona - Habiba

VivaCity2020

Habiba is 30 and married to Aasim who is 35. They have two children, Yasmin who is 18 months and Sabir who is 5 and has just started school. Habiba works part time in an office in the city centre. When in the city, Habiba relies on the toilet facilities in her workplace, which she knows to be clean. However, when out in the city, shopping with her family, Habiba often has trouble using toilet facilities. She finds that many cubicles are too small for her and the children to get into, especially with the two child buggy they sometimes use. It concerns her that sometimes she has to leave the children outside the toilet if she needs to use it. When the children need to use the toilet she also finds it difficult to access because of its small size. Also, Sabir does not want to use the ladies' toilet anymore, but Habiba is too concerned about safety to let him use the men's toilets on his own.

Aasim often takes the children to the park to play, but finds the toilets there particularly awful for them to use, as they are often very dirty. When out in the city without his wife, Aasim has to make sure that Yasmin has been changed recently as there are rarely any changing facilities for babies in the men's toilets.

Often Habiba and Aasim will look for a 'disabled' toilet to use. They prefer this form of provision as they are able to get the children and the buggy into the cubicle. In addition, the fully enclosed cubicle also ensures they can perform ablutions for themselves and their children. However they both feel uncomfortable using the 'disabled' toilet as they worry that a disabled person may need it urgently.

Habiba likes to use Mother and Baby rooms in some department stores, which she finds can accommodate her and the children and cater to their faith needs. However, there is rarely the same provision for Aasim in the men's toilets.

Since starting school Sabir has complained to his mother about the lack of water facilities for ablution after toileting in the school toilets. Habiba and Aasim are concerned that Sabir may begin not using the toilet at all, as she has heard from other mothers that some children avoid using the toilets all day and in some cases soil themselves because the school toilets are 'scary'.

Habiba carries a bottle of water with her for ablution, but sometimes finds it may run out before she has finished. She then has to go out the cubicle and refill the bottle. If there is a queue this can be very embarrassing. Habiba uses the toilet for longer and used to rush when there was a queue. However she would inevitably, in her rush, spill water on the floor and then be in the cubicle for longer to clean it up.

Habiba would like a larger cubicle for her and the children, with a hose attachment or tap, for ablution. She would like the hand washing basin included as well as a shelf to put her bag. She is very concerned with hygiene and would like to see seat sanitisers or automatic seat covers on the WC pans. Habiba thinks family toilets would be ideal, as then both she and her husband could take the children to them.

**Faith Community / Family**

**Persona - Habiba**

**VivaCity2020**

**Design Wish List**

**Larger cubicles that include a hose or tap for ablution.**

*Or*

**Cubicles that include basins for access to water.**

**Larger cubicles in the ladies' toilets.**

**Mirror to check dress after toileting.**

**Non-slip floors that dry easily.**

**Planning Wish List**

**Family toilets, especially in parks.**

**Management Wish List**

**Good supply of soap or anti-bacterial hand wash, toilet paper and paper towels.**

**Facilities regularly cleaned.**

**Odour free nappy bins that are emptied regularly.**

**Toilet seat covers or seat sanitisers.**

Habiba was created in co-operation with members of The Asian Elders Women's Group and Age Concern, Rochdale



Hashim is 55 and drives a taxi during the evenings throughout the city centre. He has noticed that since the city's regeneration programme, the centre is busy at night, particularly at the weekend. Hashim enjoys his work as a taxi driver, but finds great difficulty accessing public conveniences during his night time shifts. When driving around he often sees people urinating in doorways or alleys because of the lack of toilet available in the evenings.

When Hashim needs to use the toilet whilst working, he will drive out of the city centre to the nearest 24 hour supermarket, which he feels guilty about because he is not a customer.

In some area of the city the local authority have installed automatic public conveniences. However, Hashim dislikes these as he thinks they are too complicated to use and he feels that he would be vulnerable standing outside in the evening trying to read instructions on how to use the toilet.

Hashim is Muslim and does not have contact with alcohol as part of his faith, consequently he does not use toilets in pubs or bars, which he often sees as the only provision available in the late evenings.

During the daytime Hashim will use toilets in shops. He is uncomfortable using urinals as they can sometimes be poorly positioned and cause urine to 'splash back' onto his clothes. From his faith perspective, such soiling can make his prayer and attendance at the mosque invalid. He has heard that some cities are providing outdoor evening urinals. However, because of his faith, this form of provision would be unsuitable for him.

Hashim carries his own bottle of water with him to perform ablution after toileting, but sometimes finds the toilet cubicle too small to comfortably do ablution. Hashim sometimes worries about poor signage to toilets, in that he may mis-read the signs and accidentally walk into the ladies'. He is especially concerned about this as he ages and his sight deteriorates.

At the Mosque he attends, there are both Western and 'squat' toilets provided. Hashim avoids the squat toilets as he has back problems. His wife tells him that in the ladies' there is often a queue for the British standard toilet as no one will use the 'squat' provision. Hashim and his friends often discuss the lack of standard WC pans at the Mosque, which they consider strange given that all their homes have 'normal' toilets.

Sometimes, Hashim will use the 'disabled' toilet as it is far more comfortable to use. Its size and access to a 'private' wash basin means that Hashim can comfortably toilet and perform ablution. However, Hashim has noticed that many of these facilities are locked both in the day and evening.

Hashim would like to see toilets with water provision close to the cubicle. He would also like to see public toilets open later in the evening. This would not only cater to his and his colleagues' needs whilst driving taxis around the city, but would also prevent some of the anti-social behaviour he comes across, such as street urination in the evening hours.

**Design Wish List**

Water facility, either a tap or bidet within the cubicle for ablution.

*Or*

Larger cubicles in men's toilets, including tap for ablution.

*Or*

Cubicle in men's toilets that includes a basin for access to water.

Non-slip floors.

**Planning Wish List**

Public toilets available throughout the evening into the early hours of the morning.

**Management Wish List**

Public toilets available through out the evening into the early hours.

Good supply of soap, toilet paper, paper towels and working hot air hand dryer.

Facilities regularly cleaned.

Hashim was created in co-operation with members of the Islamic Society of Britain, Manchester Region



## Small Manual Wheelchair

Ian is in his late 40s and travels all over the world on business. When 'away from home' he enjoys eating out, both for business and leisure. Although Ian often works from home he regularly travels to the city centre for meetings and business lunches. If meeting in a restaurant, Ian likes to ensure there are public toilet facilities close by as often restaurants will not have adequate toilets for his needs, as Ian uses a small manual wheelchair and requires an accessible toilet cubicle.

Ian relies on public facilities so that he can access a wider variety of places to eat. He is quite active, as he was previously a Paralympic sportsman, so he doesn't find a single step too difficult to negotiate in his wheelchair.

However, Ian has great difficulty using many accessible toilets as he has great difficulty using the WC pan with a raised height of 480mm. Ian finds these higher WC pans difficult to transfer onto as the seat of his wheelchair is much lower. In addition, when using the WC pan, Ian requires an inflatable toilet seat to prevent pressure sores. This increases the height of the WC pan and makes it extremely difficult for him to transfer onto.

## Persona - Ian

VivaCity2020

Sometimes Ian will find an accessible cubicle with a standard height WC pan that he can use. However, often the fittings and fixtures of this cubicle may be placed at height ratio in line with guidance for the higher WC pan. Ian therefore finds that he cannot comfortably use the grab rails as they have been placed too high in relation to the WC pan.

Ian would like to see more choice in toilet facilities for people with disabilities. He is particularly concerned that current provision, with a higher WC pan causes him to attempt an 'unnatural transfer' as he has to do this by hoisting or lifting himself upwards. Ian worries that this may cause injuries to ligaments and tendons.

In addition, Ian would like to see more public accessible toilet facilities as he feels this would allow him greater access to areas of the city that he currently cannot visit. He feels that although many businesses provide accessible toilets, many can not afford the space to provide a choice in accessible toilets. However, a range of varying designs of accessible facilities would give Ian the assurance to know there would be a toilet near by that he could use with ease.

## Small Manual Wheelchair

## Persona - Ian

VivaCity2020

### Design Wish List

A standard height WC pan of a minimum 440mm.

Grab rails in ratio to standard height of WC pan.

Basin and other fixtures in ratio to standard height of WC pan.

An open out door that is not heavy.

RADAR key scheme replaced by a 'smart-card' technology.

Adjustable height grab rails.

### Planning Wish List

More fully accessible public toilet facilities.

More choice in the design of accessible toilet facilities reflecting the wide degree of people's needs.

### Management Wish List

Toilet facilities kept at a good level of cleanliness.

Transfer space kept clear of obstacles such as bins.

Turning space kept clear of obstacles such as bins.

Adequate supply of toilet paper, hand towels and soap.

Ian was created in co-operation with members of:  
The International Paralympic Committee



## Small Manual Wheelchair User & Carer

## Persona - Isabel

VivaCity2020

Isabel is seventeen years old and likes to visit the city centre to go shopping. She lives with her parents in a small town outside of the city and also likes to visit this area to meet with friends. However, Isabel relies on her parents to drive her when she wants to go out as she has cerebral palsy and uses a small manual wheelchair. Isabel also relies on her mum and dad or friends to help push her in her wheelchair.

When away from home Isabel relies on toilet facilities operated by supermarkets as there are no public toilets in her local town centre. Unlike the city centre, there are no department stores in the town either so Isabel and her mum always stop off at the supermarket on their way to and from the town.

Sometimes Isabel's mum needs some help as there can be very heavy doors for them to open. Isabel and her mum often have to ask a few people to help before someone does.

Isabel usually wears a continence pad when away from home, and sometimes needs to have it changed.

When being changed Isabel prefers to be in a toilet she is familiar with, as once both she and her mum were trapped in a toilet because the door was too stiff and got stuck. Isabel's mum had to shout for ages before someone came to help, as there wasn't an alarm installed.

Isabel and her mum find that some toilets they use just aren't big enough for both of them so they tend always to go back to the same ones.

If they are in a part of the city they are not familiar with, they try to find a hotel. Isabel's mum will then buy a coffee and ask if it is possible to borrow a room for a few minutes to change Isabel in. Isabel and her mum don't really like to do this - but find that so many toilets are unsuitable for both of them.

Isabel would like to see larger toilets that include a changing bench, but also some privacy curtains so that both she and her mum can have some privacy when using the toilet, as her mum often has to take Isabel in with her when she wants 'to go', or leave Isabel outside on her own.

**Small Manual Wheelchair  
User & Carer**

**Persona - Isabel**

**VivaCity2020**

**Design Wish List**

**Accessible toilets that are large enough for a small manual wheelchair and a carer.**

**Or**

**Accessible toilets with adult changing bench**

**WC pans with privacy curtains so that carer can also toilet in privacy.**

**Adequate bins for continence pads.**

**Alarm system.**

**Lightweight door that opens outwards with ease.**

**Level access.**

**Planning Wish List**

**More accessible public toilet facilities in smaller town centres.**

**Good quality public toilets in city centres, with adult changing facilities.**

**Management Wish List**

**Toilets kept to a high standard of cleanliness.**

**Toilets adequately stocked with toilet paper, soap, paper towels and sanitising wipes.**

Isabel was created in co-operation with members of:  
ITAAL (Is There An Accessible Loo)





## Urostomy / Hidden Disability

## Persona - Jack

Jack is 65 and enjoying his retirement. He likes to take camping holidays, often visiting sites in the UK and abroad. In the evenings Jack likes to meet friends to enjoy a range of social activities. However Jack finds it difficult to visit the city centre in the evening due to the lack of toilet provision, as Jack wears a urostomy bag which means that he sometimes requires toilet facilities urgently. If Jack can't find a toilet in time, his urostomy bag will separate from his body and leak. This is a situation that Jack describes as 'grim'.

To regularly empty his urostomy bag, knowing where toilets are is an essential part of Jack's life. Through his travels abroad Jack has encountered many different types of toilets and he feels embarrassed about the level of provision and cleanliness in UK toilets when compared to the other countries he has visited.

Jack often avoids the city centre, not only due to the lack of toilets, but also because signs directing him to a facility are often poorly placed or completely absent. For Jack, being able to find a toilet quickly is important and very often he abandons his search and uses the toilets in a nearby pub. However Jack feels obliged to order a drink to do this, a situation which takes him back to the initial problem of finding a toilet. This is especially problematic for Jack in the evening when the majority of on-street toilets and facilities in shops and stores are shut. Jack feels many public toilets are very unhygienic. A toilet's cleanliness is the number one priority for Jack,

as he needs to keep his stoma clean. Consequently Jack keeps a mental note of all the toilets he can comfortably use. Sometimes Jack finds a known toilet closed due to vandalism. Damage to soap dispensers and light fittings make it impossible for Jack to see to clean himself, to maintain a standard of hygiene essential for his health.

Sometimes cubicles will be unusable, forcing Jack to empty his urostomy bag at the urinal. Although not embarrassed to do so, Jack finds other people can be uncomfortable, so he prefers to use a cubicle, especially if younger people are around. Jack also finds the cubicle space useful for accessing supplies for his urostomy. However, Jack often has to use the lid of the toilet seat which he thinks can be very problematic in terms of hygiene. Jack does not regard himself as disabled so wouldn't think to use accessible toilets, even though they are generally cleaner and better equipped to suit his needs.

Jack feels a number of improvements would make toilets easier to use. He would like to see a shelf for his supplies and also a mirror to help him see when cleaning his stoma. However Jack's most important concerns are the number of facilities available and the signage directing him to them. It is important for Jack's health that a basic standard of hygiene is maintained, as for Jack a dirty toilet is almost as bad as no toilet at all.

[1] A urostomy is an operation to re-route the passage of urine. An opening or stoma is created in the abdomen for the urine to drain. The stoma has no muscles, and therefore there is no control when passing urine. People with urostomies wear stoma bags to collect their urine. These have to be emptied at regular intervals

**Urostomy / Hidden Disability**

**Persona - Jack**

**VivaCity2020**

**Design Wish List**

**Good lighting.**

**Larger standard cubicle.**

**Shelf to place urostomy items.**

**Mirror to check placing of urostomy bag.**

**Hand washing facilities within cubicle.**

**Planning Wish List**

**More evening provision.**

**Good signage within city centre indicating where toilets are.**

**Management Wish List**

**Good standard of cleanliness.**

**Toilet well stocked with paper towels and soap.**

Jack was created in co-operation with members of :  
The Manchester Urostomy Association



## Urostomy / Hidden disability

## Persona - Janet

VivaCity2020

Janet is 60 and enjoying her retirement. She is lively and outgoing, often taking day trips around her local area to visit sights and see family and friends. Janet also enjoys travelling to Europe and beyond. In recent years she has visited the USA and Eastern Asia. In the evenings Janet likes to go to the theatre but finds that she usually misses that last few minutes of the play in order to avoid queuing for the toilet. Having to wait for toilets can be very problematic for Janet as she wears a urostomy[1] bag. The urostomy requires her to regularly drink fluids and, as a consequence, her bag constantly fills and needs emptying. If she doesn't find a toilet in time her bag will leak which Janet finds embarrassing and uncomfortable.

To regularly empty her urostomy bag, knowing where toilets are is an essential part of Janet's life. Through her travels abroad Janet has encountered many different types of toilet and is disappointed with the level of toilet provision in the UK when compared to the countries she has visited.

Although Janet lives close to city centre, she only occasionally goes there due to the lack of public toilets. When she does go to the city, Janet tends to use the same department store toilet as she knows it will have a good level of cleanliness essential for urostomy care. Janet does not visit the city in the evenings due to department store toilets being shut. Janet feels on-street provision (if open) is too dirty, and also a possible risk to personal safety.

Janet may become ill if her urostomy becomes infected, so hygiene is one of the most important factors when changing her urostomy bag. However changing the bag and ensuring it is secure requires a good level of lighting, and Janet sometimes has concerns regarding the timed lighting in some accessible toilets, as she has occasionally found herself plunged into darkness due to the extra time she needs to use the facilities.

When emptying her urostomy bag, Janet has to stand up. She has sometimes found the wide gap under doors allows people to see that she's 'not going the normal way'. Janet has heard comments from other women regarding how she uses the toilet and tries to laugh it off, but would prefer that toilets were fully enclosed for more privacy.

Janet has a Radar key and prefers to use accessible toilets where she knows certain standards of hygiene will be maintained and privacy assured. There may also be a shelf for Janet to place her supplies (instead of on the toilet lid in standard toilets). However Janet's disability is 'invisible' and she has often received comments when leaving accessible toilets, and on occasion when she has forgotten her key she has been denied access to the toilet facilities because she doesn't 'look disabled'. Janet has been put in situations where she has had to explain her need and in certain circumstances she has found this embarrassing and frustrating.

[1] A urostomy is an operation to re-route the passage of urine. An opening or stoma is created in the abdomen for the urine to drain. The stoma has no muscles, and therefore there is no control when passing urine. People with urostomies wear stoma bags to collect their urine. These have to be emptied at regular intervals

## Urostomy / Hidden Disability

## Persona - Janet

VivaCity2020

### Design Wish List

Fully enclosed doors and walls for privacy.

Good ventilation.

Good lighting.

Larger standard cubicle.

Shelf to place urostomy items.

Mirror to check placing of urostomy bag.

Hand washing facilities within cubicle.

### Planning Wish List

More public toilets available with fully enclosed cubicles.

### Management Wish List

Good standard of cleanliness.

Janet was created in co-operation with members of the Manchester Urostomy Association



## Wheelchair User / Ltd Dexterity

## Persona - Ken

VivaCity2020

Ken often travels to the city centre to attend meetings. After meetings he often stays to go shopping and sometimes will stay into the evening, visiting the cinema and going for a meal. Ken would like to visit the city centre more, especially in the evenings, but finds that toilet provision can not be guaranteed to suit his needs. Ken uses a wheelchair and has limited dexterity in his hands. Although he does sometimes use crutches to walk, he has to be careful not to tire himself as he also has breathing difficulties.

Due to the lack of accessible toilets, Ken often limits the time he is away from home to two hours. He also self-dehydrates to avoid using the toilet.

The toilets Ken relies on mostly are the facilities offered by department stores, although he sometimes has difficulty finding them within the store due to the lack of signage. Ken finds it frustrating that he is so reliant on this 'private' provision, especially as he cannot use it in the evenings when the stores are closed.

Ken prefers an adapted cubicle in the men's toilets, as he often finds he has to queue for the unisex accessible facility. He prefers to stand when urinating and feels a urinal with grab rails would adequately suit his needs. Sometimes, within the accessible toilet he finds the toilet seat won't stay up due to the prominence of the padded back rest.

Within his local area, the only provision is that of Automatic Public Conveniences. Ken avoids these as he does not like the idea of such a technological aspect to

toileting, and he feels a sense of a loss of control, especially with regards to whether or not the door is locked.

Ken has experienced being locked in toilets quite often. This is mostly due to locks that he can close but then, because of his limited strength and dexterity, cannot open. When he has been stuck in the toilet Ken has pulled the alarm cord, but has found that in many instances no-one has responded.

When visiting an area he's never been to before, Ken often finds there's a lack of accurate signage directing him to toilets. Often he has followed signs and found that it is either the wrong way or there will be a barrier preventing access, such as steps en route. He also finds that sometimes the accessible toilets are not near the standard ladies' and gents' and consequently he has a further distance to travel.

Ken requires a cubicle with plenty of turning space. He often finds this is not adequate and has to resort to reversing into the toilet. He also finds the rails are sometimes not fitted to specification and are either too high or low for him to use. In addition the toilet flush is often not on the transfer side of the toilet and can't be reached. Ken finds this particularly annoying as he dislikes leaving the toilet 'in a mess'.

Ken requires a dry non-slip floor surface as he stands to use the toilet, but also to ensure his wheelchair does not slip as he uses it for support, especially when the grab rails are inadequate.

## Wheelchair User / Ltd Dexterity

## Persona - Ken

VivaCity2020

### Design Wish List

**Door lock that can be closed and opened with fist and minimum pressure.**

**Non-slip floors.**

**Grab rails around bowl urinals.**

**Grab rails at recommended heights, drop down grab rail on counter balance.**

**Paddle flush on transfer side.**

**Hand wash basin at correct height and depth so not blocking reach to soap dispenser and hand dryer.**

**Soap dispenser that can be used with one hand.**

### Planning Wish List

**More accessible public toilets available in the evening, including adapted cubicles in men's and women's toilets.**

### Management Wish List

**Facilities regularly cleaned ensuring floors are dry.**

Ken was created in co-operation with members of:  
The Disabled Drivers Association



## Wheelchair User /Ltd Co-ordination

## Persona - Kyla



Kyla is 25 and spends a lot of her spare time going to concerts in the evening. She will travel by train all over the country to see the bands she likes and to meet up with friends. When going to see a band, Kyla will make an evening of it and also go out for something to eat. Yet Kyla has to choose the restaurants she goes to carefully, as if they don't have accessible toilets, she may not be able to use the toilet whilst out.

Kyla uses a medium power wheelchair and so needs an accessible toilet that is big enough for her wheelchair to turn in. She finds that although there are many accessible toilets now provided by businesses, they are often a variety of shapes and sizes, many of which she can not use because they are too small.

Kyla has a condition called Freidrich's Ataxia, which affects her nervous system. She has limited control of her movements, poor balance and restricted hand co-ordination, which makes grabbing onto things difficult.

When using the toilet, Kyla may often have to ask someone to help her to open the door, as it is too heavy. She may also need help in closing the door as sometimes it will not be fitted with a grab rail.

If the toilet floor is wet, Kyla will not use the facility as she transfers to the WC pan by pivoting on her feet from her wheelchair. It is important that the floor is dry as a wet floor can cause her to slip and fall. A wet toilet floor is a very serious concern for Kyla when she goes to concerts as it seems the accessible toilet is used a lot more. Often there are big queues for the standard toilets, so people use the accessible toilets instead.

Kyla feels the wet floor is caused by the splashing from the tap into the basin when the increased numbers of users wash their hands. Sometimes Kyla finds the basin in the accessible toilet is too big and gets in the way of her transferring from her wheelchair.

Kyla sometimes finds the horizontal grab rail on the wall is too far from the WC pan. This can be dangerous for Kyla as her lack of balance can cause her to fall down between the wall and WC pan. She does not use the drop down rail as she finds it too stiff to use, and it gets in the way of her wheelchair. Kyla would like a form of drop down rail in the front of the WC pan to help her balance and prevent her tipping forwards. It is also important that the toilet paper dispenser is not too far back, as Kyla may lose her balance and fall by having to reach behind her.

Kyla prefers Radar locked toilets as they are often cleaner with dry floors. However, she has difficulty using Radar keys due to her limited co-ordination in her hands, so would like a smart card system that would make the door would be easier to open.

Kyla thinks a full length mirror would be good so that she could check her dress before she leaves the toilet. She also wishes there were a shelf for her to put her bag on as she often ends up having to put it in a wet basin.

**Design Wish List**

Toilets of a standard size, big enough for her power wheelchair to turn in.

Non-slip floor.

Lightweight doors.

Lever door locks.

Smartcard system to keep toilets locked.

Grab rails fixed to standard, especially the horizontal door and wall rails.

A drop down rail at the front of the toilet.

Taps and basins that do not splash onto floor.

**Design Wish List (c'td)**

Basin in a place and of a size that does not obstruct transfer from wheelchair.

Temperature control, especially when cold.

Paddle flush on transfer side at a height that can be reached by her elbow.

Full length mirror.

Shelf.

**Management Wish List**

Smartcard system to keep toilets locked.

Taps and basins that do not splash onto floor.

Secure toilet seat.

Facilities cleaned and maintained, especially keeping floors dry.

**Planning Wish List**

Toilets of a standard size, big enough for her power wheelchair to turn in.

Kyla was created with the help from members of:  
Ataxia UK





## Arthritis - Walking Aid

## Persona - Lou

VivaCity2020

Lou is 50 years old and lives in the city. He likes to go out in the evening with friends for dinner. However he finds he is becoming more and more reliant on large chain restaurants as they have suitable access. Lou requires level access to restaurants and for the toilet to be on the ground floor as he uses walking sticks to walk due to his arthritis.

Lou finds that many of the accessible toilets he comes across are locked and he does not have the key. He resents having to ask for a key to open the door as it reminds him of being a child having to ask to use the toilet. Friends have recommended he purchase a key, but Lou has difficulty holding and turning keys due to his arthritis in his hands, and in addition he often finds the lock on the toilet door too far down to reach.

Lou does not require the space of a full accessible toilet, but often finds the toilets in the gents' are inaccessible either through steps to reach them or a lack of accessible features such as an accessible urinal or lever locks on the cubicle door.

However, Lou often finds the accessible cubicle does not suit his needs either, as after using the toilet he has difficulty using the hand washing facilities as they are too low.

Sometimes, Lou finds it more comfortable to sit down when urinating. Yet, he often finds the WC pan is too low for him and he has difficulty getting up.

When using the toilet facility Lou often has to put his walking sticks across the basin, and often worries about them falling onto the floor as he would be unable to bend down to reach them.

Lou finds some toilets can have very dim lighting. This causes him concern as he may not be able to see if the floor is wet and may risk falling. He has particular concerns about using automatic toilet facilities as he finds them too dark to use and has concerns that the self cleaning mechanism may leave the floor wet. Consequently, Lou avoids this form of provision, preferring to walk, even with difficulty, a little further to a conventional accessible cubicle.

Lou finds that he can tire easily from walking so he takes rests in cafés. However, he is often obliged to purchase a drink which eventually means he will have to use the toilet. Sometimes Lou finds the problems he will encounter when away from home, from the lack of public seating to the difficulties accessing toilets, too much to cope with so that he will decide not to go out with his friends on that occasion.

Lou has difficulty using certain fixtures and fittings within the toilet, especially those that are operated by push buttons, such as taps, flushes and soap dispensers. In addition he often cannot use the hot air hand dryers as they are placed too high up for him to lift his hands under.

In addition it is important for Lou that there is warm water for hand washing and that the toilet is a comfortable temperature, as cold temperatures can be painful for him. Consequently, he cannot use any facilities with stainless steel grab rails or WC pans.

## Arthritis - Walking Aid

## Persona - Lou

VivaCity2020

### Design Wish List

Level access to toilet facilities.

Adapted cubicle within the men's toilets.

Higher WC pan.

Basin at standard height.

Non-slip floors.

Doors that are easy to open.

Urinals in men's toilets at a choice of heights.

Support rails and privacy screens around urinals.

Lever door locks

### Design Wish List (c'td)

Paddle flush handle.

Lever handle mixer taps with good supply of warm water.

Good ventilation.

### Management Wish List

Facilities regularly cleaned including grab rails and door locks with floors sufficiently dried.

### Planning Wish List

Level access to toilet facilities.

Adapted cubicle with in men's toilets.

Lou was created in co-operation with members of:  
Arthritis Care



## Arthritis - Scooter user

## Persona - Louise



Louise is 50 and lives in the city centre. She tries to do her shopping every few days, and likes to spend time in the city parks. Louise often finds it difficult to access shops as she uses a scooter to get around. Louise has arthritis in her hips and knees and can only walk with the aid of crutches. In addition, her arthritis in her hands also restricts her movements in her upper body.

Before leaving home Louise makes sure she uses the toilet to try to prevent herself from having to search and find a toilet she can access when she is away from home. She says that having to do this feels like being a child again, and she sometimes finds this demoralising. If she does need a toilet when out locally, Louise will often just go home instead.

When Louise is out of her local area, she often has the toilets she can use mapped out in her head. However, she has great difficulty using the facilities as most of them are not big enough or do not have suitable access for her to drive her scooter in. Usually, Louise tries to leave her scooter as close to the toilet door as possible, and then she uses her crutches to help her walk into the toilet. If she sees the toilet floor is wet, she will instantly change her mind and look for another facility, as she will not risk falling on a wet and slippery floor.

Louise often has problems opening the door to the toilet as they can be too heavy for her to pull. In addition, if the handle is not suitable, she cannot grip it to pull it. Similarly if the door does not have a suitable grab bar on the inside, she cannot close it behind her.

Equally, Louise sometimes has difficulty locking the toilet if the lock is too small, and she cannot grip it.

Once in the toilet, Louise may then face great difficulty using the WC pan as often it is not the recommended height. If it is too low, Louise may drop down on it, and not be able to get up. In the past Louise has experienced dropping down heavily on the toilet seat, and has caused it to break which has nearly caused her to fall.

To get off the toilet Louise uses the horizontal and drop down grab rail, and has a preference for a counter weighted drop down rail as she finds the ones that you have to pull up to pull down too difficult to use with her restricted arm movements.

Louise often finds she cannot reach the toilet paper dispenser, or it is a large roll holder, in which case she cannot use her hands to grip the end of the roll.

Equally, Louise has difficulty flushing the toilet after her if the flush is not of the paddle design and on the transfer side of the toilet.

Louise has great difficulty with push buttons, so she cannot use push button operated flushes, soap dispensers and taps. In addition Louise requires warm water to wash her hands, as cold water, especially in winter, will aggravate her arthritis. She often has difficulty accessing paper towels as they can be too tightly packed or placed too high up for her to reach up her arms to pull them out.

## Arthritis - Scooter user

### Design Wish List

Level access to the toilet cubicle, big enough for scooter.

Toilet cubicle big enough to driver a scooter into.

Doors that can be opened with a minimum of strength.

Accessible door handles on front and back of toilet door.

Lever type door locks.

Counter weighted drop down rail that can be brought down and raised with a minimum of effort.

480mm WC pan.

Strong and secure toilet seat.

Single sheet toilet paper dispenser within reach.

Lever mixer taps with hot water.

## Persona - Louise

### Design Wish List (c'td)

Paddle handle flush on transfer side of cistern.

Lever operated soap dispenser.

Paper towel dispenser at reasonable height.

Non-slip floors.

### Planning Wish List

Level access to the toilet cubicle big enough for scooter.

Toilet cubicle big enough to driver a scooter into.

VivaCity2020

### Management Wish List

Strong and secure toilet seat.

Single sheet toilet paper dispenser within reach.

Lever mixer taps with hot water.

Dispensers not packed too tight, so that items cannot be pulled out.

Non-slip floors.

Ensure floors are dry.

Toilets cleaned regularly and well stocked.

Louise was created in co-operation with members of:  
Arthritis Care



## Learning Disability

## Persona - Mark & Melissa

VivaCity2020

Mark and Melissa are in their mid forties and twenties respectively and work together at a charity. As part of their work, Mark and Melissa carry out access audits for clients, so they are often out of the office and walking around the city centre. On many occasions when they are away from the office they need to use the toilet. However, finding a toilet in areas of the city centre they are not familiar with can sometimes be quite stressful for Mark and Melissa as they both have a learning disability and find it difficult to locate toilets.

Mark and Melissa sometimes find it confusing that there are so many names and symbols for toilets such as "Ladies", Gentlemen's, Gents', Women, Men, Lavatories, Conveniences or Toilets". In addition, the signs around the city centre are not very clear as to where the toilets are or how far away they are. The one sign that causes them the most confusion are arrows indicating straight ahead, but that are pointing straight up, especially if the sign is located near a stair or escalator. Such signs can make finding toilets very confusing and uncomfortable if Melissa and Mark need to use the toilet urgently.

Melissa prefers to use the ladies' toilet as she does not require the extra assistance provided in the accessible or 'disabled' toilets, where she sometimes finds the WC pan too high for her. Mark prefers to use the disabled toilets as he finds it easier to remember the 'disabled' icon.

Occasionally, because he can not locate the toilets in time, Mark has had an 'accident' and has to use the accessible toilets, where he and his carer can help him to clean up and change his clothes.

One of the reasons Melissa prefers to use the ladies' toilets is that she often finds the 'disabled' toilets locked. Both Melissa and Mark used to have Radar keys but found them too big to carry around with them every day. In addition, they would often forget to take the key with them. This can be very difficult, especially for Mark, as if he does not have his key he will often find the accessible toilet to be locked, with a sign indicating where he should go to ask for the key. Yet, Mark has difficulty reading signs with lots of words on so often does not understand the instructions the sign is giving.

Melissa also finds that signs with lots of instructions on are confusing, especially on the sanitary vending machines in the ladies' toilets.

Mark and Melissa would like to see signs giving directions made clearer for them to understand or placed in better locations, so as to not cause confusion. In addition they would like to see one name used for signs for toilets.

Mark thinks it would be better to have a card for access to locked accessible toilets, one that could also double for his bus pass, so that it wouldn't have to be another thing he would have to remember.

## Learning Disability

## Persona - Mark & Melissa

VivaCity2020

### Design Wish List

**RADAR key scheme replaced by a 'smart-card' technology that is the same card as a travel card.**

**All fixtures in toilets to require a minimum of instructions on how to use them, e.g., sanitary dispensers and sensor operated taps and flushes.**

### Planning Wish List

**Signs showing directions for toilets carefully placed in the city to avoid confusion.**

**All signs for toilets using the same word to describe the facility.**

### Management Wish List

**Keys for locked toilets available close by, with signs clearly indicating where and who to ask.**

Mark & Melissa were created in co-operation with members of:  
Manchester People First



## Walking Aid

Nora likes to visit city centres to see historic buildings and galleries. She is especially fond of visiting the theatre to see dance performances. Over the last few years Nora has found it increasingly difficult to use the ladies' toilets as it often located in an inaccessible area, for example up stairs. She is beginning to have difficulty climbing stairs as she has an artificial leg, and as she ages she is experiencing additional mobility difficulties due to arthritis.

Nora will use a walking stick for small distances. However, over the last few years she has experienced some 'nasty falls' and is finding she is revisiting places she is familiar with and not exploring further. Nora now prefers to use the 'disabled' toilet as she finds the grab rails helpful, and sometimes the toilet will be higher and therefore more comfortable as well. However she sometimes finds the facility locked and will then have to walk quite a distance to request and return the key. Nora appreciates the accessible toilet being locked as when they are not, because they are located in convenient positions, 'everybody uses them', which often results in queues.

When driving to the city, Nora has toilets she knows mapped in her mind. She will often use ones in supermarkets and department stores. Yet, she finds when returning home, especially in the evenings after a visit to the theatre, these toilets will be locked.

Nora describes her time being away from home as similar to that of 'a little animal that has certain tracks'.

## Persona - Nora

VivaCity2020

She dreads having to use an unfamiliar toilet so she always returns to the ones she knows. Unfortunately this is beginning to restrict her from venturing further afield and this is restricting her husband as well.

Nora thinks the cleanliness and hygiene of the toilet are extremely important. In addition, it is essential the the floors are non-slip, as a wet and slippery floor is a big hazard to her.

Nora doesn't necessarily need a full sized accessible toilet, but she does require the toilet pan to be higher than average and the cubicle needs to include grab rails for support. One feature that does worry her is the effectiveness of the door lock, as she has had situations in the past where someone has walked in on her whilst she is using the toilet.

Nora finds the height of the wash basin in the accessible toilet too low, so would prefer an ambulant disabled cubicle with standard height wash basin facilities.

Good lighting is also important so that Nora can see if there are any wet spots on the floor she should avoid. She would also like a fixture to secure her walking stick, as if it falls to the floor whilst she is toileting, she has great difficulty retrieving it.

Nora feels there are more accessible toilets than previously. However they are mostly only available during the day. As she ages, she feels she may need the toilet more, but the lack of accessible facilities in the evening may begin to restrict her visiting the city centre for evening events.

## Walking Aid

## Persona - Nora

VivaCity2020

### Design Wish List

Ambulant disabled cubicle with grab rails and higher WC pan.

Secure accessible door locks that can be seen to be locked.

Slip resistant floor.

Doors that are easy to open.

Wash basins at standard height.

Fixture by WC pan for securing walking aid.

### Planning Wish List

Ambulant disabled cubicle with grab rails and higher WC pan.

### Management Wish List

Public toilets available in evenings.

Facilities regularly cleaned to ensure that floors are not wet.

Nora was created in co-operation with members of:  
Arthritis Care





## Visual Impairment

## Persona - Paul

Paul is 43 and likes to travel to the city centre to meet up with friends at a pub. From there, Paul and his friends often go on to to a venue to listen to live music. On the weekends, Paul visits the city centre in the daytime to do his weekly shopping. When away from home, during the day or the evening, Paul makes sure he knows where the toilets are, as he has difficulty locating them when he's by himself.

Paul is visually impaired and uses a 'long cane' to detect changes of level where he is walking.

Paul cannot see signage indicating where toilets are so he has to ask, but often he has difficulty identifying if the toilets are the men's or women's, especially if similar symbols are used to identify the facilities.

Paul prefers to use the men's toilets as he finds the space of the accessible toilet too big, and the fixtures and fittings set at a height too low for him to comfortably use.

When Paul uses the toilet he has to feel around to make sure he knows where fixtures and fittings are. Paul often feels that he has no choice but to 'trust' that the toilets and their fixtures and fittings have been adequately cleaned.

Paul prefers to use a cubicle in the men's toilets as often the urinals are badly placed or have no colour contrast between them and the wall. The lack of colour contrast between fixtures and fittings also deters Paul from using the accessible toilet, as when he used these in the past he has bumped into a grab rail or the basin. Recently Paul has noticed some toilet facilities installing all-in-one stainless steel 'hole in the wall' hand washing fixtures. Paul finds he cannot use these, as the stainless steel causes glare and he cannot read the signs indicating how the basins should be used.

Paul has difficulty locating the flush if it is a button on the wall and not a flush handle. In addition, he finds that sensor taps can be confusing as he cannot see the signs indicating them so he has to feel to see what type of taps they are, before using them.

Paul would like to see larger standard cubicles, including hand wash fixtures, designed to a standard. In such a cubicle Paul would know where everything is and would not have to feel around for fixtures and fittings, in an environment he cannot always be sure is clean.

**Visually Impaired**

**Design Wish List**

Larger standard cubicle that include hand washing fixtures and fittings.

Colour contrast between fixtures and fittings.

Standardised placement between fixtures and fittings for easier location and recognition.

Lever handled taps.

Lever handled flush.

Colour contrast between urinals and wall.

Privacy space between urinals.

Good tactile locks that can be felt to show they have closed.

Non-slip floors.

**Persona - Paul**

**Design Wish List c'td**

Good lighting that does not produce glare.

Fixtures and fittings that do not produce glare.

Fixtures such as toilet paper holders in which stock levels can be seen.

**Planning Wish List**

Personal talking sign that only he can hear, identifying if a toilet is close by.

Clear signage identifying facilities.

**Management Wish List**

Toilets kept to a high standard of cleanliness including the cleaning of fixtures, fittings and walls.

Adequate stock of toilet paper, soap and paper towels in containers in which stock level can be seen.

Paul was created in co-operation with members of:  
The RCA Helen Hamlyn Centre Expert Users Panel



## Visual Impairment

## Persona - Pauline

VivaCity2020

Pauline is 26 and likes to travel to the city centre to visit galleries and go shopping. She will often meet up with friends for coffee and sometimes for an evening meal. Pauline always makes sure she goes to the toilet before she leaves home as sometimes she may have difficulty finding toilets in the city centre, especially if she is on her own, and visiting an area of the city she's not familiar with.

Pauline is partially sighted in one eye and uses a 'long cane' to detect changes of level where she is walking.

Pauline cannot see signs that indicate where toilets are so she always has to ask someone for help in locating the facilities. She prefers to ask women for directions as she sometimes feels vulnerable asking for help from men she doesn't know.

Pauline prefers to use the ladies' toilets as she finds the space of the accessible toilet too big. If she does use the accessible facilities she has to feel around for the toilet paper holder, soap dispenser and hand drying facilities, as she finds they are usually white fixtures on white walls and therefore are not colour contrasting. When Pauline needs to use the toilet she asks

for directions to the ladies' as the smaller cubicles tend to be easier to negotiate. However, Pauline has great difficulty if she needs to purchase sanitary goods from vending machines as these often do not cater to women with visual impairments. Pauline often has difficulty locating which product she wants to purchase, and putting the coins in the slot.

If Pauline needs to make a vending machine purchase she will ask either an attendant or another woman for help. Although she knows she shouldn't be embarrassed, nevertheless she still feels uncomfortable doing so.

Sometimes Pauline has difficulty working out how to use the sanitary bin. She often has to feel around the bin to work out how to open it. Pauline worries that the bin may be quite dirty, as are other fixtures and fittings that she has to feel around for before use. Pauline would like many fixtures and fittings fitted to a standard layout so that she would know where they are. In addition, she would like sanitary vending and disposal to be more accessible to her, so that she need not have to ask for help or to touch more of the bin than she needs to.

## Visually Impaired

## Persona - Pauline

VivaCity2020

### Design Wish List

Cubicles with fixtures and fittings fitted to a standard layout.

Colour contrast between fixtures and fittings.

Sanitary vending machines that are accessible to women with visual impairments, with a choice of products and method of payment.

Sanitary bins that are of a standard design, requiring a minimum of touch to dispose of used products.

**Non-slip floors.**

### Planning Wish List

Standard public toilets on level access.

### Management Wish List

Toilets kept to a high standard of cleanliness including cleaning of fixtures, fittings and walls.

Adequate stock of toilet paper, soap and paper towels in containers in which stock level can be seen.

Paul was created in co-operation with members of:  
The RCA Helen Hamlyn Centre Expert Users Panel



## Paruresis / Shy Bladder

## Persona - Rachael

VivaCity2020

Rachael is a retired teacher. She would like to go shopping in the city, but avoids doing so because the toilet provision is inadequate for her needs. Rachael has the specific social phobia Avoidant Paruresis (Shy Bladder Syndrome), which means she finds it difficult to urinate when other people are around. She has devised a range of strategies to cope with her condition which include avoiding shopping trips with friends and family. However, sometimes she is expected to be social and although she outwardly projects that she is enjoying herself, the reality for Rachael is that she is tense, micro-managing her time and trying to find an adequate public toilet facility she can use.

When Rachael needs to urinate, she will make an excuse to leave the group. Her excuses range from needing to find a cash machine to the inability to receive a signal on her mobile phone. Due to the nature of shy bladder syndrome Rachael cannot tell people she is going to the toilet. Away from her family and friends, Rachael will seek out a familiar toilet that is away from crowds. Walking to the toilet Rachael hopes it will be quiet and empty so that she can complete before anyone else comes in. When using the toilet on her own Rachael is comfortable, but if other people are around, she cannot empty her bladder and will leave the toilets with her bladder still full.

Rachael requires a toilet cubicle that provides a good degree of privacy, with a solid floor to ceiling door and solid walls. She also requires a good lock as this gives her a strong sense of security and privacy.

Rachael feels under pressure when there are queues for the ladies' toilets, and makes a mental note of toilets she knows to be less busy. Consequently she will often walk out of her way to use these particular facilities. Rachael would like to see an increase in provision for women that reduces the need to queue. She feels this would also mean a longer stay within the toilet cubicle would be less noticed.

Due to the complex nature of Paruresis, Rachael is also very aware of the noise made when urinating. Her ideal preference would be for background music to eliminate the silence of the toilet facility.

Rachael's Paruresis has had a number of negative effects on her life. Her relationships have suffered as her behaviour is seen by others as being 'odd'. This one seemingly minor condition is affecting her quality of life to a major degree. She lives and manages this condition imagining she is unique, unaware that many women and 7% of men also have Paruresis.

**Paruresis / Shy Bladder**

**Persona - Rachael**

**VivaCity2020**

**Design Wish List**

**Fully enclosed cubicle for privacy.**

**Good standard of accessible door lock.**

**Background music to mask toileting sounds.**

**Planning Wish List**

**Increased provision for women to avoid queuing.**

**Management Wish List**

**Toilets kept well maintained especially door locks for sense of personal security.**

Rachael was constructed by:  
The UK Paruresis Association



## Paruresis / Shy Bladder

## Persona - Richard

Richard is a family man, with a partner and two little girls. As a family they often go shopping on a Saturday in the city centre. Occasionally Richard and his partner will also visit the city to socialise with friends in the evening. Richard finds both the shopping trips and the social events particularly stressful as he has a social phobia called Avoidant Paruresis, which is also known as Shy Bladder Syndrome. For Richard, urinating in public toilets is very difficult, as there are often other men around; this results in his avoidance of situations where he might need to use the toilet. Richard has devised a range of strategies to cope with his condition. If he cannot get out of shopping trips, he will dehydrate himself and not drink during the trip so that he will not have to use the toilet. When socialising he will also try to avoid drinking, but if pressured he will choose a small drink and slowly sip it. In these situations Richard appears outwardly to be enjoying himself, but inwardly he is tense, micro-managing the time as he tries to work out where and when he will be able to use a toilet. If Richard needs to use the toilet, he will make an excuse to leave, such as needing a cash machine or the inability to get a signal on his mobile phone. He will then seek out a known safe toilet, one that is located away from a crowded area. Richard will then hang around until he feels the toilet is quiet, and then enter and try to use the urinal. If the toilet is empty and he can complete before anyone comes in he will be alright, otherwise he can feel frustrated, be unable to urinate and have to leave the toilet with a full bladder.

The urinals Richard finds least difficult to use are bowl urinals, with adequate spacing and privacy screens between them. He would also like to see the layout of the toilet designed so that the urinal area is afforded some privacy. Richard finds urinals with no screens, and worse still open troughs, almost impossible to use, as his delay in urination is visible to others and further aggravates the syndrome.

Although Richard prefers not to use a cubicle as in his mind they are not for urination, sometimes he will have no choice. Richard also finds many cubicles difficult to use as they will have high gaps under the door and between the walls. In these spaces Richard feels exposed, believing that everyone can see his feet pointing the wrong way. Often the construction of the cubicle is flimsy and locks may be missing. This heightens Richards's sense of feeling exposed and severely limits his ability to urinate.

Richard would prefer a cubicle that provides a good deal of privacy with floor to ceiling doors, solid walls and an adequate lock. Ideally he would not have to walk past urinals to reach the cubicle, so making him feel self-conscious.

When out with friends Richard's delayed return is sometimes commented upon and he feels embarrassed at the lies he tells to try to explain it away. He lives with his condition imagining he is unique, although in reality he is one of 7% of the male population who has this condition, and who find using public toilets difficult if not impossible to use.

**Paruresis / Shy Bladder**

**Persona - Richard**

**VivaCity2020**

**Design Wish List**

**Bowl urinals.**

**Privacy screens between bowl urinals.**

**Urinal shielded for more privacy.**

**Fully enclosed cubicle.**

**Good standard accessible toilet door lock.**

**Planning Wish List**

**Management Wish List**

Richard was constructed by:  
The UK Paruresis Association





## Younger Person

## Persona - Sarah

VivaCity2020

Sarah is seventeen years old and currently attends a sixth form college during the week. At the weekend she likes to go to the city centre with friends to shop. In the evening Sarah visits friends' houses to hang out but they will often then go to the cinema.

When either travelling to college or shopping in the city centre, Sarah will avoid using public toilets. She feels she would not be safe in one as some are covered in graffiti and others are not located in an area where there are a lot of people about. Sarah particularly dislikes the toilets that are underground, as she doesn't feel safe going down there by herself.

When visiting the city centre, Sarah prefers to use the toilets in department stores, as she knows that they will be clean. Sometimes, she will use the facilities provided in fast food restaurants, but occasionally finds that these toilets are dirty and often too small to get into, especially if she has bags from her shopping.

Sarah is very concerned with personal safety and considers it an important decision when deciding where to use the toilet. In addition, Sarah is also concerned about the cleanliness of the toilet facilities and will not use a toilet that is dirty. Sometimes, when she comes across a dirty toilet she decides to 'hold on' and wait until she gets home. However, she is beginning to be concerned that doing this may cause health problems for her when she gets older.

Holding on is a particular issue Sarah has in the evening when coming home from the cinema, as there are no

store toilets open at this time and as she is 17, she cannot go into pubs to use their facilities.

Sarah would like to see more public toilets that are clean and look nice. She thinks some of the best toilets she's experienced are those that have attendants. Although Sarah feels you shouldn't have to pay for something that is 'natural', she would be happy to pay 20p if she knew the toilets were in excellent condition and clean.

Sarah would like a decent sized cubicle, so that she didn't have to 'touch everything' to get in there. She would also like it big enough so that she didn't come into contact with the sanitary bin. It is important that the toilet cubicle has a good lock that can be easily opened, as when she was little Sarah got stuck in a toilet when the lock was too stiff for her to open.

Sarah prefers a partitioned cubicle so that if she does get 'stuck' she could get out by climbing over or under the door. However, Sarah does like good ventilation within the toilets.

Sarah thinks that flush handles that she could use with the minimum of touch would be a good idea. Paddle handles would mean she could flush the toilet with her elbow. Similarly, Sarah would like lever taps that she wouldn't have to touch with her hands.

Finally, Sarah thinks it's important that toilets are managed well, with adequate supplies of toilet roll, soap, paper towels and cleaned regularly.

**Younger Person**

**Persona - Sarah**

**VivaCity2020**

**Design Wish List**

**Larger standard partitioned cubicle with good ventilation.**

**Good quality door lock that can be opened easily.**

**Paddle flush handle that can be used easily.**

**Mixer lever taps with adequate hot water supply.**

**Planning Wish List**

**Public toilets in safe and secure areas.**

**Management Wish List**

**Adequate supplies of soap, toilet paper and paper towels.**

**Toilet facilities cleaned regularly.**

**Attended toilets for cleanliness, management and extra security.**

Sarah was created in co-operation with students from:  
St Charles Catholic Sixth Form College



## Younger Person

Steve is 17 years old and goes to college. In the evening he will sometimes meet friends to play football in the park or just hang out. Sometimes Steve finds himself leaving early as he'll need to use the toilet and the toilet in the park is closed. If desperate Steve has no choice but to find a private area and urinate against a wall or tree. He hates having to do this and worries that he might get in trouble, but sometimes he has no choice, especially as he has heard it can cause health complications to 'hold on'.

Steve notices the biggest problems accessing toilets are in the early evenings as most of the cafés and shops are shut and, as he is underage, he can't go into pubs to use the toilets. If Steve is on a high street he will look for a fast food outlet to see if he can use the facilities. Often he is told that he can only do so if he makes a purchase, and Steve often does not want to eat or drink anything. Sometimes when he is with friends he has noticed that the girls will be allowed to use a business's toilets but not the boys, so Steve and his male friends sometimes feel they have no choice but to urinate in public.

## Persona - Steve

VivaCity2020

In some areas of the city Steve sees public conveniences, but he doesn't like using them as sometimes they will be quite dark, and have a lot of graffiti which makes Steve feel unsafe. Steve likes to use toilet facilities that are well lit and cleaned regularly. He would like urinals to be at a good height to avoid any splashing as well as having privacy screens around each urinal. Steve likes toilet cubicles to have a good strong door lock and for the facilities to be well ventilated.

Steve would like a coat hook on the cubicle door, as well as a shelf that he could put his college bag on.

In the hand washing area, Steve would like basins that didn't splash, and automatic taps. Steve has no preference for paper towels or hot air hand dryers but often feels that bad management of facilities results in no toilet paper or soap in the soap dispensers. Steve thinks this happens more in the men's toilets than in the women's. Steve would also like a mirror to check his appearance before leaving the cubicle.

## Younger Person

### Design Wish List

**Good lighting.**

**Urinals at a good height to avoid splashing.**

**Urinal privacy screen.**

**Toilet cubicles with good strong locks.**

**Non-slip floors.**

**Coat hooks in cubicles.**

**Shelf for college bag.**

**Hand wash area with taps and basins that don't splash.**

**Mirrors to check self before leaving.**

## Persona - Steve

### Planning Wish List

**High quality public toilets open longer, especially in the early evening.**

**Toilets in well lit and safe areas.**

**VivaCity2020**

### Management Wish List

**Toilets kept clean and free from graffiti.**

**Toilets regularly cleaned.**

**Toilets managed well with good stocks of toilet paper and soap.**

**High quality public toilets open longer, especially in the early evening.**

Steve was created in co-operation with the students of;  
St Charles 6th Form College



## Ileostomy / Colostomy

## Persona - Terry

VivaCity2020

Terry is 55 and has taken early retirement on grounds of ill health. He likes to visit the city centre for shopping and special events at galleries. Yet he has difficulty being away from home for any length of time due to the lack of toilet facilities that cater to his need

Terry has short bowel syndrome caused by the removal of his small intestine during surgery, and now he has to wear a ileostomy pouch. His ileostomy pouch can fill up very rapidly which means he sometimes requires toilet facilities urgently.

To empty his ileostomy pouch Terry has to kneel on one knee in front of the WC pan. He also needs access to a wash basin in order to wet some tissue that he uses to clean the opening of his ileostomy pouch after emptying it. Being able to access tissue for cleaning and drying his pouch is extremely important to him, as is having a clean dry floor to kneel on.

When out in the city centre, Terry relies on the toilets located in department stores, as there are no longer any local authority operated public toilets open. Although he finds the department store toilets to be immaculate, he also tires of having to rely on them and sometimes feels 'chained' to one area of the city.

Terry feels there is quite a variety of standards in design and management of away from home toilets, which he finds frustrating. His local shopping centre has toilets that are located on an upper floor and are difficult to reach in a hurry.

In addition, the toilets at the local bus station often have wet floors and poor standards of hygiene. A clean toileting area is extremely important for Terry as if his stoma is not cleaned adequately he can develop health problems.

Terry sometimes limits the amount of time he is away from home, to avoid having to empty or change his pouch in public facilities, especially as he often finds even the 'disabled' toilet does not adequately cater for his specific needs. Terry requires a clean shelf to set out his ostomy supplies, as well as access to hot water. All too often he finds that only cold water is available. Terry also requires the appropriate bin to dispose of his pouches. He often finds that such a bin is not provided in toilets and then he has no resort but to leave his soiled pouch in a disposal bag on the floor. Terry also requires a full length mirror so that he can check that his clothing is appropriately adjusted after changing or emptying his pouch.

Terry has a RADAR key but often finds even locked toilets are poorly maintained. Terry has also experienced problems if baby change facilities are included in the accessible toilet, as he has been challenged by mothers for using the facility. This is because Terry's disability is invisible and hidden under his clothing. Terry has found these situations extremely distressing and now tries to avoid accessible toilets that include baby changing fixtures.

## Ileostomy / Colostomy

## Persona - Terry

VivaCity2020

### Design Wish List

A clean shelf to lay out ostomy supplies.

Appropriate bin for ileostomy pouch disposal.

Full length mirror to check clothing after changing pouch.

Separate facilities for baby changing.

Coat hook.

### Planning Wish List

More accessible local authority public toilets.

Separate facilities for baby changing.

### Management Wish List

Toilets kept clean, with dry floors, a good supply of toilet paper that can be easily reached, and a supply of hot water.

Toilets located in accessible areas that can be reached quickly in an emergency.

A clean shelf to lay out ostomy supplies.

Appropriate bin for ileostomy pouch disposal.

Air hand dryers in good working order.

Terry was created in co-operation with members of:  
The British Colostomy Association and  
The Nottingham CIU Group



## Ileostomy / Colostomy

## Persona - Tracey



Tracey is 38 years old and works in the city centre. After work Tracey will often socialise with colleagues by going to the pub or out for a meal. Sometimes, Tracey likes to come back to the city centre at the weekends to shop, as there is more choice than at her local town centre. However, Tracey finds both socialising and shopping in the city centre can be quite stressful, due to her occasional need to urgently use a toilet.

Tracey finds her local public provision is excellent; however, she finds that she often has to rely on the toilets offered by cafes, pubs and department stores when in the city centre. This can sometimes be difficult for Tracey as she feels obliged to make a purchase before using facilities in pubs and cafes, whilst department stores often have their ladies' toilets on the top floor and these may be difficult to find in a hurry.

When socialising with her colleagues, Tracey sometimes finds herself nervous about going to new places as she is unfamiliar with the toilet provision. She feels that the lack of suitable toilets governs not only her life but the lives of her friends as well.

Tracey requires access to toilet facilities frequently and quickly as she has a stoma and wears a colostomy pouch.

Tracey prefers not to use the 'disabled' toilet unless absolutely necessary; for example, if she feels she will not 'make it' to the ladies' toilet in time. Tracey has been put off using the accessible facilities as she finds they are usually locked and she does not have the appropriate key.

In addition, she has concerns that if the nearest accessible facility is locked, she may then have to ask for the key and be questioned about her disability, as she has experienced this in the past.

However, Tracey also finds she has great difficulty using the ladies' toilets as the cubicles are very small, and often only separated by partitions.

Tracey prefers fully enclosed, well ventilated cubicles as they provide more privacy for her to change her pouch. Tracey carries her own wipes for cleaning her stoma with. However, occasionally she has to dampen paper towels and take them into the cubicle with her.

To change her pouch, Tracey will lay out her equipment on the toilet cistern. Sometimes, her equipment will fall off the cistern and onto the floor as the lid is rounded. When changing her pouch Tracey needs to take off her coat or jacket. She often finds there is no provision for a coat hook and she ends up putting her clothes on the floor.

Occasionally Tracey may get her hands dirty whilst changing her colostomy pouch. She often cleans them with toilet paper but is concerned that she may dirty the lock on the toilet door.

Although Tracey prefers not to use the accessible toilet, she has found that when she does they are more suitable to her needs. Yet, she is aware she does not need the same amount of space as a wheelchair user and she feels uncomfortable that she may be using a facility that someone who does need the space also needs to use.

## Ileostomy / Colostomy

### Design Wish List

Larger cubicles in ladies' toilets for provision of additional fixtures and fittings.

Fully enclosed cubicles.

Good ventilation.

Accessible door lock in good working order.

Basin and mixer taps with hot water.

Soap dispenser.

Paper towels.

Shelf for laying out equipment.

Coat hook.

Full length mirror for checking self after changing.

## Persona -Tracey

### Planning Wish List

Larger cubicles in ladies' toilets for provision of additional fixtures and fittings.

VivaCity2020

### Management Wish List

Accessible door lock in good working order.

Good supply of toilet paper, paper towels and soap.

Regular cleaning of facilities.

Tracey was created in co-operation with members of:  
The British Colostomy Association and  
The Nottingham CIU Group.





## Ltd Upper Body Strength

## Persona - Victoria

VivaCity2020

Victoria, who is 61, likes to visit the city centre to shop and meet up with friends. In the evening she likes to go to live music events and will often be out quite late. When she is planning to visit the city, she often has to spend time making lots of enquiries regarding accessible toilet facilities, as she had polio as a child and now uses powered wheelchair. Consequently, Victoria needs a fully accessible toilet.

Victoria spends a lot of time researching if suitable toilets are available, and often finds that due to a lack of accessible toilets she has no choice but to go back to the same places. She feels this restricts her from visiting new places and areas of the city.

Sometimes, she finds toilets are located in quiet areas of the city, and in the winter's early evenings these facilities are intimidating if she has to use them.

When driving, Victoria worries about getting stuck in traffic, especially as most public toilets do not have a parking area close by that she could pull over and use.

As Victoria has aged she has found she is having greater difficulty raising her arms, and has limited strength. This can make some toilets inaccessible to her, especially if they have heavy stiff doors.

Victoria needs a good sized toilet so that she can turn her wheelchair. However, she often finds that the basin gets in the way and can block her transfer to the toilet. In addition, sometimes the taps will not be in the correct position for the basin and water will end up by being

splashed over the floor, which, if not slip resistant makes the facility dangerous for her and others to use. Victoria needs a high WC pan so she can shuffle across from her wheelchair onto the toilet. She has difficulty using grab rails as she does not have enough strength in her arms to support herself and so she requires that the toilet seat is strong and secure to support her when transferring on and off the toilet.

Victoria often finds the toilet paper too far behind her so that she cannot reach it, or it is in a big drum in which she cannot find the end of the roll.

After toileting, Victoria finds flushing can be difficult, especially if the flush has been placed on the wall side of the cistern instead of the transfer side. Sometimes the flush handle on the transfer side will also be difficult to reach as there may be a bin in the transfer space.

It is important for Victoria that the facility has good lighting so that she can see what she is doing, especially when transferring.

Victoria feels a number of fixtures such as a shelf close to the toilet and a coat hook would be helpful. She would especially like to see at least one toilet in the city centre have a bidet attachment, so that if needed she (and other users) could 'clean up' if she has an accident. She would like to see more public toilets available in the city centre and feels she would go out more if there was more accessible provision.

## Ltd Upper Body Strength

### Design Wish List

**Good level access.**

*Or*

**Low gradient ramps.**

**More central turning space.**

**More space between the WC pan and basin.**

**A finger rinse basin inset to the wall, next to the WC pan.**

**Single sheet toilet paper dispenser within reach.**

**Slip resistant floors.**

**Good lighting.**

**High WC pan with strong and secure toilet seat.**

**Taps and basins that do not splash.**

## Persona - Victoria

### Design Wish List (c'td)

**Bidet style toilets in at least one city centre facility.**

**Paddle handle toilet flush on transfer side and not too high.**

**Shelf, mirror and coat hook at adequate height.**

### Planning Wish List

**Good level access as sometimes ramps are too steep and don't feel safe.**

**VivaCity2020**

### Management Wish List

**Good lighting.**

**High WC pan with strong and secure toilet seat.**

**Toilets cleaned regularly and adequately supplied.**

**Bidet style toilets in at least one city centre facility.**

**Designated space for bins.**

Victoria was created in co-operation with members of:  
The British Polio Fellowship



## Ltd Upper Body Strength

## Persona - Vincent

VivaCity2020

Music lover Vincent is 62, and likes to go to the opera, but he enjoys jazz and folk music too. Most of the music events he attends are held in the city centre, and Vincent will often make a 'night of it' by going out for a meal and then moving on to the music event.

Vincent will drive to the city centre in the evening, but on the way he will keep an eye out for supermarkets so that he can use the toilet, as Vincent often finds that toilets, especially in restaurants and smaller music venues are not adequate to his needs. Additionally, there is a noticeable lack of public toilets available in the evenings.

Vincent had polio when he was a young child. Up until a few years ago, he used walking aids to get around, but his arms have now become weak from having used them 'to walk' for many years, so he now uses a powered wheelchair.

Vincent feels there are not enough toilets, especially later in the evenings when he will be on the way home from a night out. He also feels there is inadequate signage to toilets, and finds this frustrating when he is in an area he is not familiar with.

Although he keeps an eye out for supermarket toilets, Vincent feels as if he's 'sneaking in', and he thinks it's wrong that he should have to rely on businesses for toilet provision.

When out in the evening, Vincent often finds there is only one unisex accessible toilet, and so he will have to queue. He feels it would be better, especially at music venues, if there were more accessible toilets with a choice of left and right transfer preferences.

Sometimes Vincent uses a urine bottle, but often he finds that the basin is too small to adequately clean it after use. When transferring onto the toilet, he finds that the toilet seat can be loose, or that the WC pan is too far away from the horizontal wall rail to adequately grab onto for support.

Because Vincent's arms have limited strength he has difficulty raising them. This can be very problematic if the flush handle is too high. In addition, the pressure required to operate the flush handle may be difficult for him. Vincent often finds the drop down rail too stiff and almost impossible for him to pull down. Equally, returning the rail to its original position can also be very difficult and Vincent often has no choice but to leave it down. Washing his hands after using the toilet can also be problematic for Vincent. Soap dispensers can be impossible to reach, and hot air dryers cannot be used as Vincent cannot raise his hands into the stream of air.

Vincent often comes across toilets that are signed as being suitable for disabled users, but do not have adequate turning space for his wheelchair. He can get into the toilet, but cannot turn around to close the door, and so he can not use the facility.

Vincent feels that cleanliness and hygiene are equally as important as access when it comes to using the toilet. He sometimes finds he will not bother going out in the evening, as he has to spend a lot of time finding out about toilet provision. He is frequently told there is accessible provision, but on going to use the toilet finds that it is inadequate for his needs.

## Ltd Upper Body Strength

## Persona - Vincent

VivaCity2020

### Design Wish List

Doors on routes to and of toilets a minimum of 800mm, for large powered wheelchair.

Doors of a weight that can be opened with ease.

Doors fitted with a horizontal grab rail.

Toilets locks with large handle.

Safe and secure grab rails at correct distances from WC pan.

Paddle flush handle at suitable height for to reach, and of a lighter pressure.

Basin large enough to wash urine bottle after use.

Coat hook and shelf for coat, bags, gloves etc.

### Design Wish List (c'td)

Paper towels in dispenser at suitable height and pulled with minimum strength.

Soap dispenser that can be reached and used with one hand.

### Planning Wish List

More accessible public toilets available in the evening.

### Management Wish List

Bins not placed in transfer space.

Adequate supply of toilet paper, paper towels and soap.

Toilets kept clean and with dry floors.

Vincent was constructed in Co-operation with members of:  
The British Polio Fellowship



## Short Stature / Visitor

## Persona - Wendy

Wendy is 35 and from the United States. She often visits the UK for business, and makes sure to take some extra time to see more of the country. She likes to visit 'traditional' British pubs, as well as historical sites. As her business takes her to many cities, she travels around the country by train, but often finds that she has difficulty with her small motorised scooter, as these are not allowed on some train services. Wendy uses a scooter to help her get around as she has dystrophic dysplasia and is 104 cms tall.

Wendy has travelled around the world, but has mostly experienced barriers to her access in the UK. She says, 'I have never felt more disabled then when coming to the UK'. She finds people's attitudes to be the biggest barrier.

When travelling around the country, Wendy relies on away from home toilet facilities. Wendy finds the majority of UK toilets to be better than at home in the US. Yet Wendy often finds she has difficulty accessing toilets because many of them are locked under the national key scheme, and sometimes the key cannot be accessed as quickly as it is needed.

In addition, Wendy feels incredibly self-conscious having to ask for a key to use the toilet, and thinks that more information about the scheme, including the keys themselves, should be made available to overseas visitors.

Wendy is often in the city centre in the late evening and she relies on toilets in pubs or fast food restaurants for her needs. Wendy is wary of using public toilets, especially in the evening, as they are sometimes in quieter areas of the city, which makes her feel vulnerable.

If she can, Wendy will drive her scooter into the toilet so she can use it for extra support. She also has a portable step stool to help her reach fixtures and fittings but sometimes finds this is not enough.

Wendy cannot open heavy doors, so needs a door that is easy to open. As her hands are small she requires a good lever action door lock at a height she can reach.

Wendy will transfer from her scooter to the WC pan and requires that the toilet seat is strong and does not move around. She finds she cannot reach the horizontal rail on the wall so uses her scooter for support, as well as the drop down rail. Although rails may be difficult to reach Wendy finds that they do offer her a sense of security when toileting. Wendy gets additional security from the knowledge that the alarm cord is there. However, she often finds it has been tied up or has been cut to a length that she cannot reach.

The choice and placing of the toilet paper dispenser can also be problematic for Wendy, as she may lose her balance if trying to reach too far to access it. As is the toilet flush, which Wendy often finds is too high or of the wrong design, such as a push button that she does not have the strength or dexterity to operate.

Sometimes Wendy is unable to wash her hands after toileting. Although she may be able to reach the basin from her scooter or stool, she finds she cannot reach the soap dispenser, taps and paper towels.

Wendy uses the accessible toilets as she is able to take her scooter in there for support. However, she feels that a toilet cubicle with a lower WC pan and lower hand washing facilities, such as needed by a young girl, would also suit her needs.

## Short Stature / Visitor

### Design Wish List

Lightweight outward opening toilet doors.

Lever type door locks that can be used with a minimum of effort and grip, and at a suitable height.

Strong and secure toilet seat.

Paddle handle toilet flush at a reasonable height.

Hand wash basin, taps, soap dispenser and paper towels, at an equal standardised height and distance from each other.

## Persona - Wendy

### Planning Wish List

Lower WC pan in standard cubicle, and lower hand wash basin in washing area that would also be suitable for young girls.

VivaCity2020

### Management Wish List

More information on the national key scheme, including loan of a key for overseas visitors.

Strong and secure toilet seat.

Lower WC pan in standard cubicle, and lower hand wash basin in washing area that would also be suitable for young girls.

Wendy was created in co-operation with;  
Access=Design



William is 60 years old and married to Irene. They like to take days out visiting historic houses and gardens. In the evenings they like to go out for dinner and sometimes will go to the theatre. Before they visit places they've never been to before, William will go there first to check to see if the building or restaurant is accessible, and especially to see if it has an accessible toilet.

William does this as often he and Irene have been told a business is accessible, only to arrive there and find it is not.

William and Irene require accessible buildings and toilet facilities as William is the primary carer for Irene who has had a stroke. Irene is paralysed down one side of her body and uses a large powered wheelchair.

William often takes a tape measure with him to quickly measure the toilets, so that he can be sure both he and Irene will be able to get into them. He finds that many facilities have not followed design standards, with some being too small for him to help his wife in. They therefore cannot use these facilities. In addition, Irene and William will also have difficulties if all of the fixtures and fittings are on Irene's paralysed side, as she cannot move her arms on this side.

William has to help Irene out of her wheelchair and onto the WC pan. Sometimes he has great difficulty doing so as the cubicle is too small and fixtures such as the basin get in his way. William also has some frustrating times when the accessible cubicle is in the ladies' toilets. He has previously experienced being chastised by women

users, so now if faced with this will get an attendant or member of staff to notify other users that he and Irene be using the facility. However, both Irene and William would prefer a unisex accessible toilet. In some areas William and Irene have found a choice of left or right hand toilet facilities. This has been of great help as Irene has been able to reach the fixtures and fittings.

In many facilities, William finds that the WC pan is not of the recommended height. This means William has to bend further to help Irene on and off the toilet.

William worries that this may damage his back as he gets older and that he and Irene may become more tied to their home or only able to visit areas they know.

William would like to see more signage to show whether an accessible toilet is a left or a right hand transfer cubicle. It is important that the floors are dry and non-slip as both he and Irene could slip in the facility. Both he and Irene would like a basin that did not get in the way, as well as soap dispensers that can be used with one hand and lever taps. William prefers a cubicle without a hot air dryer as sometimes he finds it can accidentally go off and the loud noise startles and upsets Irene.

William would like to see more information about toilets, especially detailing sizes, as often the toilet will look big enough in a picture but on visiting it will be too small for him and Irene to use.

**Design Wish List**

Level access to toilet facilities.

Corridors and passages to accessible toilets wide enough for a large powered wheelchair.

Toilet cubicles large enough for powered wheelchair user and carer.

Higher WC pan.

Basin that does not impede space for aiding transfer on and off the WC pan.

Non-slip floors.

Doors that are easy to open.

**Design Wish List (c'td)**

Automatic sliding doors.

Choice of left and right hand transfer toilets in major public areas.

Signage indicating if facility is left or right hand transfer

Information on toilets to include size of cubicle.

Built in bins to allow more space as well as not block transfer space

Coat hooks at multiple heights.

Shelf for bags and gloves.

**Management Wish List**

Facilities regularly cleaned including grab rails and door locks, with floors sufficiently dried.

**Planning Wish List**

Level access to toilet facilities.

Corridors and passages to accessible toilets wide enough for a large powered wheelchair.

Toilet cubicles large enough for powered wheelchair user and carer.

William was created in co-operation with members of:  
The Disabled Drivers Association





## Heavy Build

## Persona - Yvonne

VivaCity2020

Yvonne is 45 and likes to go to the city centre to visit the cinema and for shopping. She prefers the shopping areas of the city as she finds there is more choice for her size, as Yvonne is heavily built and weighs just under 20 stone.

When visiting either the shops or cinema, Yvonne has to use the accessible toilet as she finds the standard cubicles in the ladies' toilets are too small for her, especially if she has shopping with her as well. In addition, Yvonne finds the grab rails in the accessible toilet useful to assist her in lowering herself down and then lifting herself off the WC pan.

However, Yvonne does feel guilty about using the 'disabled' toilet as she knows she is not disabled. Sometimes, she has come out of the accessible facility to find people waiting and has felt 'terrible'.

Occasionally when using the accessible toilet,

Yvonne has worried about the toilet seat being too flimsy to take her weight, especially as she once sat down with a bit of a bump and broke the toilet seat.

Yvonne also has great difficulty reaching for the toilet paper if it is in one of the big roll dispensers, as she finds it difficult to bend over and fit her hand inside the section where the paper comes out.

Yvonne would prefer to use a larger standard cubicle in the ladies' toilet as she feels she wouldn't be using a facility that a disabled person may urgently need.

The cubicle would also include a larger height WC pan, grab rails for support and a strong toilet seat.

Yvonne knows she is not alone as many other people are 'heavily built', but feels that she is often ostracised because of her size.

## Heavy Build

### Design Wish List

Larger cubicles in ladies' toilets.

Larger cubicles fitted with grab rails and a higher WC pan.

Toilet paper dispensers that are easy to reach and access toilet paper.

Strong and sturdy WC seat.

Non-slip floors.

Coat hook.

## Persona - Yvonne

VivaCity2020

### Planning Wish List

Larger cubicles in ladies' toilets.

### Management Wish List

Toilets kept clean and adequately stocked.

Attention paid to wet floors from taps and basins.

Yvonne was created in co-operation with members of:  
Arthritis Care and The Disabled Drivers Association.

