

Digital Toilets: For your convenience

### 1) MAP

Hi I'm Gail. The Great British Public Toilet Map is a project aiming to create open data about all the toilets in the UK available to the public.

Starting in 2011 with next to no data, It now has 10000 toilets, the largest database of toilets in the UK.

I'll be talking about 1) how we found the money, resources and data to build up the map

2) how anti-social behaviour towards toilets was replicated in the digital space through online vandalism

and, 3) as we work towards a 'complete' public toilet dataset, what this could reveal about our cities that could help decision-makers to improve public toilets and other public services.

How did we make this toilet map?

### 2) HHCD

The toilet map began as the output to a piece of research by The Helen Hamlyn Centre for Design at the Royal College of Art, . Here we do people-centred design research, where we use different methods to understand people's needs and the problems they face. These insights into the everyday lives of others are used as inspiration for the design and development of ideas that are more inclusive of all ages and abilities.

A piece of academic research, funded by UK research councils, looked into the problems people face when they need the toilet away from home.

### 3) different types of loo

From this we found such a range of needs, abilities and preferences, sometimes contradictory, that makes it difficult to design a one-size-fits-all solution to the public toilet, not to mention unlikely as local authority providers, who we also spoke to, cannot afford to improve the service.

There are many different types of toilet out there (superloos, public block, toilet scheme, transport) and many different types of provider (council, national rail, shopping centre, John Lewis, royal parks, cityloos..) - I found it was very difficult for people to find information about the toilets available to them. So whilst we all complain of a lack of public toilets and we can see facilities closing or not being maintained in the face of government cuts, the problem is accentuated by a lack of information.

#### 4) Neontribe

There have been 3 different versions of the toilet map, for each we have continued to work with the developers Neontribe.

#### 5) Diagram

It was first launched in 2011 as a pilot-version for London, using money from the research grant set aside for project outputs. As almost no open data existed, this was as much a campaign site to highlight the lack of information.

We then redesigned the site to be more of a toilet finder, in part because we had a dataset from National Rail Enquiries that gave toilets in train stations all over the country, so everywhere could now be represented, if with very limited content.

I then applied for a grant from Nominet Trust for £20000 which allowed us to spend 6 months on the project, to take it from a 'prototype' or proof of concept to a functioning, useful toilet finding website.

click

It may be worth pointing out at this point the difference between how long the map has existed and how much of that time it has been funded. It's not a volunteer project. For the periods where we have funding, we and the developers do it as a job, although it certainly is a labour of love, It needs to be to keep it going for the long periods when it isn't funded.

It's also been fundamental to work with developers who like the project as much as we do. In the last stage of funding Neontribe estimated they had willingly done 50% more work than we were paying them for.

We did this by now getting data from 3 different sources. There are 3 ways to make a toilet map...

#### 6)7)

...so we combined crowd-sourcing, open data from councils and openstreetmap, and data we collected ourselves from websites and FOI requests, or other providers like national rail enquiries, tfl, royal parks, supermarkets. It's important to us to include these other providers. If you want the toilet on your way home tonight, you don't really care if it's provided by Camden Council, Westminster Council, National Rail, TfL, or the Royal Parks - and you don't want to visit each of their websites to find one.

Our aim is to include all toilets that the public can access without being customers. This effort has resulted in the largest database of publicly accessible toilets for the UK, now at over 10000 loos.

-----

## 8) BLUE TOILET?

what's been of interest to me since the project began and especially since this latest version was launched attracting more attention, is that the way people mistreat toilets continues even when those are digital toilets on a website.

Toilets always interested me as a designer because they are designed to meet a basic human need yet suffer disproportionately from such a lack of design consideration, because of the taboo around the subject - people don't want to talk about them, designers don't want to think about them, investors don't want to spend money on them, and yet the need doesn't go away.

This was reflected first in our digital adventures. A toilet map is such an obvious idea, yet it's very difficult to realise firstly, because first you have to create the data. I say we've got 10000 toilets on our map but is that a lot? Is that nearly all? Barely a start? I don't know, because we don't actually know as a country how many toilets no database of toilets. The audit commission use stopped collecting the information 14 years ago.

Similarly, when I looked for open data on toilets provided by councils, I'd find councils providing location data about a range of things - libraries, car parks, recycling bins, leisure centres, lampposts - but 9/10 no public toilet locations, though most were more than happy to provide it once I'd requested it, as if they either hadn't thought of it, or didn't want to think about it, or didn't think anyone would want to know.

Toilets are not just forgotten or denied - as a service they suffer from anti-social behaviour, sexual activity and vandalism. Weirdly, this is also mirrored in the online toilets. I've also found toilets that have been added by people recommending them for cottaging, and the website sources for a small amount of our traffic reflects this.

The major incident was when someone hacked the map. After Christmas I found just over a thousand toilets had been added, which, on closer inspection, were all in the English channel. Several hundred other genuine entries had been deleted. The user had used a purile username that makes me think this was childish vandalism, funny because toilets involve wee and poo. Their prank caused many hours to be spent restoring the data to pre-vandalism state. It meant we had to restrict how

other people could use the site. This replicates the access v. fortress argument used in real toilets.

9)

This is when, to protect public property from crime, providers put up barriers to create a fortress, without fully considering the barriers this also places on legitimate users who also get designed out. So instead of risking people damage vandalising toilets and damaging toilet seats, we make them out of cold hard stainless steel, that no one enjoys using. Instead of people injecting drugs in toilets, we use UV light so they can't see their veins. Instead of having toilets open to all, we charge 20p thinking people will respect something they've paid for, but keeping out those that don't have the money.

10)

And instead of risking people mistreat the toilet map, we ask people to login, creating another barrier to use and excluding anyone without a certain online account. However after the hack, we had to stop it immediately happening again. We'd already made this page before we launched, but quickly got rid of it when we realised the irony of us introducing a barrier when we'd been critical of some design out crime approaches towards toilets. However without current resources, reintroducing this page for which we already had code was the only practical thing we could do.

11)12) LGA MAP

Despite these headaches the future looks bright. Following a request I made to data.gov.uk about toilet data, the open data user group led by the LGA chose public toilets as one of 3 datasets that they would pay councils to produce if they did so using a new standard. There are now over 80 councils producing public toilet open data, a huge achievement.

13) Comments

We've also had lots of positive comments from people who have found the map and like the idea, including those with similar continence concerns to our original research participants.

14) FUTURE (zoomed out map?)

We'll continue to work towards this idea of a complete dataset, and want to add functionality through an app for photos. A complete dataset, that includes all publicly accessible toilets not just council ones, and more detail like accessibility and opening hours, will tell both us so much more about where resources should be concentrated. It would also allow local providers to see how similar areas in terms

of say - ageing population, tourism, commerce - are providing facilities, in which case why aren't you? And as well as the difference across the country, we're interested in the difference throughout the day, and how early morning or night time provision might be insufficient and link to street urination or limited activity.

and having created this database. we're interested to see how the approach could be applied to other types of provision - libraries, childcare, recycling. to create more detailed, more complicated but richer datasets for our public services that are defined by what they provide, not who provides them.