

## **Another first for Birmingham!**

"OpenStreetMap is a free editable map of the whole world. It is made by people like you."

Today Birmingham takes another huge step to becoming a digital City. The metropolitan area of Birmingham and its environs within the motorway ring have been completely digitally remapped by its own citizens in a format which is freely editable and available at <a href="https://www.openstreetmap.org">www.openstreetmap.org</a>.

It is the first English city to be completely remapped in this way. It joins the likes of Paris, Berlin, Canberra and Vienna

Birmingham now has a digital map that is more up-to-date and accurate than all other online or satnav maps. Only Ordnance Survey can claim to be more accurate - and they have huge technical and financial resources at their disposal.

## (Click here for a detailed view of Birmingham)

The OpenStreetMap of Birmingham has been created by local people, with local knowledge, who take pride in how their neighbourhoods are represented. They can match, and even surpass, the efforts of commercial mappers who spend millions creating this kind of rich data. A dedicated band of 100 volunteers has been collecting GPS data whilst cycling, walking, and riding the buses and trains. One of our team has even mapped by canal boat!

The raw positional data is supplemented by additional visual observations on the ground and then edited into a format that can be rendered as a map readable by humans. All the software used in the project has been developed as open source software and is free to download and use. All participants have to do is invest their time and pay attention to detail. All data once submitted is editable in a wiki-style process.

"It's very satisfying to see a complete city mapped in OpenStreetMap. Four years ago when this project was created we were looking at a blank screen and most commentators thought we were crazy." said Andy Robinson, secretary of the OpenStreetMap Foundation and a prolific mapper in the West Midlands.

The Birmingham effort is part of a worldwide movement to digitally remap the entire planet which started in 2004. The project was originated in the UK and now involves some 85,000 enthusiasts globally, who have so far mapped almost 14 million miles of road globally. We have mapped some 15,000 residential roads, 6,000 footpaths and

9,000 other roads in Birmingham (and over 700 bus stops, 300 pubs, 200 traffic lights and 300 postboxes)

## Why re-map the world?

We need a free dataset for programmers, social activists, cartographers, and communities and the like to use geodata and create maps suited to their purposes without being limited by proprietary restrictions designed to protect large corporate investments in geodata. Under-developed countries are particularly helped by a project of this sort, because it is just not economic for commercial mappers to map their areas in detail.

How can it be accurate? The essence of a wiki-style process is that all users have a stake in having accurate data. If one person puts in inaccurate data, maliciously or accidentally, the other 99.9% of people can check it, fix it, or get rid of it.

Just think how amazing it was a few years back when you saw Google Maps for the first time. Suddenly mapping was cool, and access via an API\* lead to a wave of innovation. Satnav was nowhere 3 years ago. Look at it now! But you still can't access the incredible amount of data locked behind the API and you can't add or improve it, so your applications are limited. Just think of the explosion of innovation, much of it in unexpected areas, that's possible when the data is available!

All the software used in the project has been developed as opensource software and is free to download and use. The data and maps are licensed by Creative Commons which defines the spectrum of possibilities between full copyright — *all rights reserved* — and the public domain — *no rights reserved*. What this means to users (and this isn't legal advice) is basically you can do what you like with the data, so long as you mention the original creator and the licence and anyone else can do the same with anything you produce.

A flagship example of the power of opening up access to geodata is OpenCycleMap.

It's a customised online map for cyclists, based on OpenStreetMap data. It shows things that are interesting to cyclists including signed cycle routes, offroad cycle paths, bike shops and bike parking - and of course hills - whilst diminishing other things like motorways that are of little interest. It's built on top of OpenStreetMap, and was recently commended by the British Cartographic Society.

## So we've got a map, what's next?

1. There's most of the Black Country to map for a start!

- 2. Local businesses and organisations can start using OSM maps and data, rather than proprietary sources, freeing themselves from the technical, financial and accuracy restrictions of commercial mapping providers.
- 3. Now that we have a complete set of local data, Midlands software developers can start using it to create novel applications (e.g road traffic simulations, tourist trails, restaurant guides).

Why would a business consider using OpenStreetMap data when anyone can use maps from Google, Mapquest or Yahoo for free? Put succinctly: they have control. OSM data and map users have significantly more control over their maps than someone who uses a free API. With OSM you can modify, supplement and select the data to create a highly customised map.

4. It might take a 100 people to produce a map like this but we need a 1,000 to keep it up to date. We need communities and individuals to improve and verify the map via a simple tool available at <a href="http://openstreetbugs.appspot.com/">http://openstreetbugs.appspot.com/</a> (or on our local West Midlands site <a href="http://www.mappa-mercia.org/openstreetbugs.shtml">http://www.mappa-mercia.org/openstreetbugs.shtml</a> ) All they need is local knowledge and access to the internet.

For more information, individuals and community organisations can contact Brian Prangle 0121 604 1141 and <a href="mailto:community@mappa-mercia.org">community@mappa-mercia.org</a>

Press contact Andy Robinson Tel No 07775537872 and press@mappa-mercia.org

More information for editors can be found at: <a href="https://www.openstreetfoundation.org">www.openstreetfoundation.org</a>

http://wiki.openstreetmap.org/wiki/Main Page

www.openstreetmap.org.

www.opencyclemap.org/

Images of one year of edits for the whole planet:

http://www.flickr.com/photos/peterito/3054501076/in/pool-itomedia

Animation of all the edits we have for Birmingham showing progress from initiation to today:

http://blip.tv/file/1625650

We have gathered all the resources together in a specific West Midlands website:

www.mappa-mercia.org

\*note for non-technical news editors: API Application Programming Interface – a method by which commercial software developers "open" their software via a gateway to third parties whilst at the same time protecting their commercial intellectual property i.e you can "hook" into the software but you can't see the internal workings.