

WHAT DO WE DO?

Colouring Beirut is a free knowledge exchange platform, designed by

University College Beirut, to collect, collate, visualise, and make accessible, fifty categories of statistical data, for every building in Beirut.

We're looking for volunteers of all ages and abilities, and from all sectors and disciplines, to join our open data project and help create our free statistical database, and beautiful, colour-coded building maps.

If you live in, manage, design, build, study, care for, or just love Beirut's buildings, volunteer your knowledge, via our platform, to help make Beirut more sustainable.

WHAT ARE WE COLLECTING?

Pick any building on the map, choose one of these twelve data categories, fill in some information and see the building colour!

Every building you colour will help improve our database.

VIEWING AND EDITING DATA

You can add and edit information on Beirut's buildings on our site, or just view our beautiful maps as they are coloured in.

Every contribution you make will help improve our understanding of which buildings we should look to keep, upgrade and repair, adapt, copy, or build a new, to make Beirut as efficient, vibrant and sustainable as possible.

WHAT'S NEXT?

We're testing the site now, and gradually adding new features and new data categories.

When we launch officially, you can download our open data. We'll also be adding lots more new features over the next year including our 'Data showcase' section, an advanced search facility and a data analytics page.

MORE ABOUT

WHY IS THE PROJECT NEEDED?

Beirut's building stock makes up most of the city's urban fabric, and is its largest and most valuable socio-economic resource. However data relating to Beirut's buildings are highly fragmented and extremely difficult to access.

Buildings and building construction are responsible for around 40% of global energy use, and 24% of global material extraction from the lithosphere.

Tightening of international energy and waste legislation since the 1990s has led to major shift in Europe from new build to building reuse to reduce energy and waste flows. This has in turn created a rapidly growing, demand for more detailed data on the characteristics of the existing building stock, for measurement, monitoring and analysis purposes.

WHAT KINDS OF QUESTION ARE WE TRYING TO ANSWER?

Our data can be used to explore and address many types of urban issues and problem. We're particularly interested in helping answer the following: What kind of buildings make up Beirut? What are their size, shape, age and use?

Which types are most vulnerable to demolition and which most resilient and why? Is there greenery around them able to reduce pollution, urban heat and flooding? How can we extend their lifespans to reduce energy and waste flows? Which buildings work best in the city, and in what ways? What do we need to do to develop, a more energy efficient, diverse, high quality and sustainable building stock.

WHO'S IT MAINLY DESIGNED FOR?

Colouring Beirut is designed for everyone interested in Beirut and its buildings. We hope our audiences will include residents and schools as well as planners, housing providers and construction industry professionals involved in the design, repair, construction, conservation and management of buildings, academic researchers and those involved in policy development.

CAN ANYONE ADD & USE THE DATA?

Yes, we're looking to engage as many audiences as possible in viewing, downloading data and helping us create our beautiful maps. You don't need a log in to view our maps

If you want to edit data you just need to be over 13 to sign up or, if you're younger have a parent or guardian login so you can help -we'll also developing a special teacher signup for schools. Every entry is valuable to us, however we are looking for data that's as accurate as possible. Our easiest category to

add to is 'Like me?'- Which is not included to collect data for research but instead to simply but to encourage diverse audiences to join in.

For example, you're a resident you can help us by adding information on the physical characteristics of your street - such as the type of buildings in it. If you're a civic society, or interested in historical research we'd love your help with the 'Age' category. If you're a school you could make a huge contribution by adding information on land use or number of. If you're a local authority or professional body you can send us bulk uploads for visualization to support your public engagement work. And If you're involved in the property and construction industry you can help by adding information on past on current developments and encouraging others in the industry to upload theirs.

WHY IS COLOUR SO IMPORTANT?

Colour is a fundamental to Colouring Beirut and is used as an attractor, and in editing as a motivator and a thank you. A long tradition of hand-coloured building maps exists in Beirut. The most spectacular examples include Booth Poverty Maps, The LCC Bomb damage maps, The Goad maps and the post war maps of use and height in the City of Beirut. Coloured maps showing building characteristics for a city are rare but a number were produced in the first half of the 20th century in Germany and Austria.

Since 2013, stunning online colour visualisations of property age have been generated for a growing number of cities, as property tax data is released around the world. Created by independent web developers, including Justin Palmer, Thomas Rhiel, Bert Spaan and Brandon Liu, these have shown a new audience the power of detailed colour-coded data on the building stock.

Colour-coded visualizations of changes to the physical composition of cities over time, such as those produced by Hiroki Tanikawa and Seiji Hashimoto in Japan, are also becoming of increasing importance in Sustainability Science. These are being used to improve understanding of the 'metabolism' of cities in relation to their energy and waste flows.

Using colour also helps to firmly embed role of the arts and humanities in urban problem solving firmly alongside science. The colour palettes draw from the work of painters, and of digital mapping specialists working with colour. Colour also is used stimulate curiosity and to motivate our users to add more to reveal patterns within the city never seen before. It is also used to thank contributors and we hope you have a relaxing and rewarding time colouring our buildings in.

CAN THE PLATFORM BE COPIED BY OTHER CITIES?

Yes and we encourage it. Any city can use our open platform code available on [GitHub](#) as long as they follow the terms of use.

We are developing a platform for Beirut first. This will allow us to provide a proof of concept and to identify problems

are you only collecting information on buildings?

Yes, at present, our focus is the building stock owing to its importance, complexity and scale, and it is a city's (and society's) largest socio-economic resource and the area in which the greatest potential for energy reduction lies. However we will be looking at how to expand our open data collection in the future.

WHAT IF PEOPLE PUT IN INACCURATE DATA?

Following the examples of Wikipedia and Open Street Map, Colouring Beirut is a self-moderating platform with the opportunity for any logged-in user to edit any data entry. A record of all edits is available under 'Edit histories'. If you don't agree with a change that has been made you can always edit the entry. The platform also requires sources and includes a verification button.

To prevent malicious behavior to the system, buildings have to be coloured individually, though bulk uploads can be submitted for moderation and we also have a copy and paste tool.

WHAT IF A BUILDING OUTLINE REPRESENTS MULTIPLE USES AND AGES?

We are using Ordnance Survey MasterMap (OSMM) polygons/building footprints and are limited to these. If polygons are not subdivided (as for example the main UCL building which was built over many different periods), we are only able to record, for 'Age', the year of construction in which most of the building was built. In the case of 'Use', multiple uses can be selected and entered. Number of self contained units within the building can also be recorded.

WHY CAN'T I ADD TEXT?

Colouring Beirut is a statistical database which is needed to increase and support scientific analysis of the building stock. We collect spatial statistics, i.e. statistical information relating to a specific location. For example we collect data on how many hospitals there are in Beirut, what age they are, what are they built of and where are they located. All our categories also use dropdown menus, or [moderated text boxes](#) (for 'sources' for example)- to avoid free text boxes being linked to a building location.

HOW CAN WE BE CONTACTED?

You can join any of our discussion threads [here](#). We're interested in constructive feedback during our test period and beyond. Where we find many individuals and organizations are asking for a similar feature or category we'll look at including it. We'll also try to be as responsive as possible to solving technical issues.

We need to operate Colouring Beirut in a way that's as efficient, sustainable and low cost as possible. The platform is run by a dedicated but small team. As well as adding, editing, checking, viewing and using the data you can really help us by distributing our site link and encouraging family, friends, colleagues to add their knowledge and join us in building a free educational resource, and sustainable development research tool for Beirut.