Crowd-sourced cycling solutions: Helping Campaigners Campaign



Venture Plan - CycleStreets' bid to GeoVation



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Introduction and Executive Summary

Cycling levels in the UK are low by continental standards. Despite recent improvements in places such as London and the Cycling Demonstration Towns, cycling remains the exception not the norm. Fast traffic and little space allocated for cycling puts people off.

Yet, as shown abroad, there is huge potential to turn cycling into the pleasant, easy and safe activity that can help transform cities into efficient and wonderful places to live. Conditions need to be improved around the UK if we are to attract new people to start cycling.

Our proposal is for an extensive suite of tools that will assist cycling campaigners around the UK – people who are already enthused – to be more effective in their work. Despite the large scale of the problem, these groups are sadly often poorly-resourced.

Funded by GeoVation, our proposal will provide a powerful but easy-to-use web-based system to resource existing cycling advocacy groups much more effectively, combining the power of geography and the web. It will build on our existing Photomap of over 28,000 locations, bring in resources such as planning applications, collision statistics, and more. Crucially, it will provide resources and workflows specifically designed and for the needs of the existing cycling advocacy community.

It will help them collect and catalogue these problems, prioritise them, and watch and respond to potential new problems/opportunities (e.g. planning applications). It will make discussion easier, will involve people who cycle through specific areas, and will focus debates to being solution-based, bringing in best-practice examples more easily.

In short, we want to help turn problems into well-argued solutions, and to help groups work productively with Local Authorities to see these solutions implemented.

Our proposal is backed by groups around the country, including the CTC, London Cycling Campaign and groups from Bristol to Edinburgh, Dublin to Cambridge.





Typical British cycling conditions compared to typical Dutch facilities: but how can local cycling groups make this change happen?

The Problem

Getting more people cycling in the UK: the need to improve infrastructure

Although cycling offers many solutions to transport problems (efficient, cheap, healthy, no CO2), rates of cycling are very low: 2% of journeys in the UK – compared to e.g. the Netherlands (c. 30%)

Fundamentally, cycle-unfriendly streets put people off cycling. Traffic needs to be reduced, speeds need to be lowered, and more space needs to be allocated to cycling. Poor infrastructure needs to be removed.

These infrastructure problems are extremely widespread, making improvement hard to manage. Our existing Photomap contains many thousands of examples from all around the UK.

Increasingly-scarce public funds are continually wasted through the provision of inadequate infrastructure that does not meet users' needs.

The pressure to solve these problems comes from cycle campaign groups. But they are over-stretched and could operate more effectively. Relationships with councils are often poor. Problem reports are scattered rather than well-managed, prioritised, researched. Crucially, solutions are often not put forward effectively.



Lack of cycle parking and unusable cycle routes are commonplace.





"The present Government is strongly encouraging local authorities to boost cycle use, for very good health, environmental and other reasons. However many local authorities have little understanding of how to do good cycle-friendly planning and design. Too often, money is spent on facilities which are unnecessary, poorly designed or even downright dangerous, while neglecting locations where improvements are most seriously needed."

- CTC, the national cyclists' organisation, supporting our bid

Who do we need to help to solve these problems?

By facilitating the work of cycle campaign groups – people who are already enthused to solve these problems – and help them work as effectively as possible, the infrastructure deficit around the country can be tackled more quickly. These groups can help Local Authorities improve the situation.

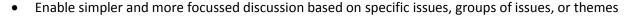
Without effective cycle campaign groups, the political pressure to fix the infrastructure deficit will remain minimal. Public funds will continue to be wasted. The hundreds, if not thousands, of problem spots in every town and city around the UK will continue to put people off from taking up cycling.

Our solution

Good resourcing leads to effective groups

Our proposal for a one-stop cycling advocacy website tool will:

- Enable members of the public and campaigners easily to pinpoint where cycling is difficult
- Help groups prioritise what to work on
- Pull in planning application data automatically, so that potential issues needing attention are readily accessible
- Make geographical data such as collision data and accessibility analysis easily available, to provide context



Involve people who cycle through an area – who therefore have an interest in seeing issues fixed

Enable best practice to be 'pulled-in' to discussions, by providing off-the-shelf examples shared from elsewhere in the UK

- Enable groups to include LA contacts in these discussions
- Enable groups to assemble 'solution' resources so that problems can be resolved on the ground

The system will be organised by the geographical area of each group, using OS boundary and postcode data.

The system will make use of our existing 'Photomap' infrastructure

but turn it into a tool for discussion and resolution, rather than being mostly just a 'sink' for problem reports. People already use the system to highlight problems, but this is only half of the process needed.

Current approaches

Resourcing existing groups in this way will move groups away from the current ad-hoc approaches to solving the infrastructure problems of their towns and cities. Currently, these groups rely on unfocussed e-mail groups and forums, blogs that are not solutions-focussed. Furthermore, issues are often missed.

Although general issue management systems exist, they omit the key element of geography that is so fundamental to cycle campaigning activity. Their workflows do not suit the way that groups operate and are poorly targeted to the ability for people to engage with issues easily and involve new people.

Support from the cycling community

Our bid has clear support from the community. The two national organisations (Cyclenation, the national federation of cycle campaign groups, and CTC, the national cyclists' organisation) support our bid, plus the largest group, London Cycling Campaign. Local groups in Bristol, Nottingham, Richmond, Dublin, Cambridge, Edinburgh, East Kent, Loughborough, Sheffield and Birmingham have all written to us in support of our bid.

"a hugely important step forward for all cycle campaigning groups" – Andy Allan, creator of OpenCycleMap

"The proposals tick all the boxes for us" - Bristol CC

"This will be a valuable tool, helping local campaigners focus on barriers to cycling and ultimately generating extra cycling trips." – Cyclenation



Local Issues

Execution

Budget

£30k is required for a full-scale, featureful and polished implementation. This is broken down as:

- £18k: 2 server-side developers working against a clear specification on a concentrated basis for 10 weeks each; they will implement the workflow logic, expanded API, and integration with geographical data sources. This forms the project core on which other parts will build.
- £4k: Interface designer; Information Architecture will be absolutely key
- £3k: Javascript developer, 4 weeks; will result in as simplified an interface as possible.
- £4k: Designer, to create the visual appearance of the site.
- £1k: hosting, 3 years, to help ensure the sustainability of the site.

Although a workable project could be implemented at a figure of £20k, this would require significant compromises. These would be a reduction in the feature set and reduced usability. A polished and full-featured product will ensure the best possible reputation and level of adoption from the start.

A highly deliverable and low-risk project

The two identified key risks would be lack of adoption by the cycling community and problems with implementation. However, mitigations for these two risks are strong:

The project is tightly-focussed on a specific community whose problems are well understood, as evidenced in the many quotes our bid has already supported: it has users already waiting. Also, the bid was submitted with a feature list from the start, which has continued to mature following community interest. Turning these needs into an implementable specification will be straightforward.

CycleStreets Ltd has a track record of delivery. We run the leading UK cycle journey planner, achieved at the fraction of the cost of the relatively little-used government equivalent. Many technical challenges have already been successfully overcome, and new innovations are continually added. Over £127,000 of contracts have recently been obtained for journey planner work.

The new site adds to an existing codebase. Submission of issues would use an existing and proven API, and mobile apps already exist for this. Some 28,000+ locations have already been submitted into the platform.

The fundamental nature of the site is a community site solving a specific workflow problem. It does not involve financial transactions. Business risks (profit, loss and cashflow issues) simply do not apply.

Outcome measurement

The ultimate aim of the system is to see implementation by Local Authorities of specific improvements to on-street cycling conditions identified by cycling advocacy groups. Naturally, this involves the willingness of Local Authorities to make such investments. However, it is the project's aim to improve the relationship between these groups and the LAs; this is not likely to happen in the short term (months) but over a period of perhaps 2-3 years.

Key indicators will become measurable within the first year: Successful improvements to infrastructure on the ground ('campaign successes'), the number of groups using the system, levels of user registration, numbers of submitted and prioritised issues and levels of discussion on each issue.

Time and money

Timescale

The product will be delivered within a 4.5-month timescale.

This assumes an initial six-week period (max.) for the finalisation of a specification and hiring of suitable developers (both done by existing CycleStreets personnel as part of their existing project management activities). Ten weeks of concentrated work for the two developers to implement and evolve the specification will then follow, with a beta appearing roughly two-thirds of the way through. Additionally, two weeks' flexibility is added for unforeseen delays.

After the rollout and creation of the project after this concentrated initial period, the project will shift to the model of an open-source project (see below) for the longer term, namely availability of the source code and the assembly of a project team. The continued presence of employed CycleStreets personnel (working on a variety of CycleStreets products) will mean ongoing oversight as the years progress.

Sustainability and longer-term development

We believe the project is highly sustainable and scalable. It requires a single one-hit injection of funding and will then be essentially self-sustaining.

The project is fundamentally the setting-up of a website containing a significant set of features from the start. The feature-set has already been scoped in response to community consultation. Once set up, addition of new functionality in response to users is likely not to require significant resources.

The project will be run on the basis of a standard open source project model. It is believed that the community of interest being served, namely cycling groups, contains sufficient people with the relevant skills and interests to add new features such a site as new ideas emerge. Should additional development of major new functionality require extensive funding (considered unlikely), a successful and well-implemented project attracting users will find it easier to obtain funding.

The openness of the project, combined with the cycling community's natural inclination to air issues in public, will ensure that continued development does not take place in a vacuum.

Three years' worth of hosting costs are included in the budget. Beyond this, it is likely that campaign groups will self-finance these very minimal costs.

Conclusion

This is a highly deliverable, low-risk project attracting clear support from the cycling community, solving a recognised and common problem, and clearly targeted towards this community's specific nuances.

The project also provides an excellent return on what is ultimately public funding. The avoidance of even a single poorly-considered Local Authority transport scheme in favour of a well-argued and cyclist-supported scheme will save public funds likely to be in excess of £30k.

We are ready to implement it and help solve the cycling community's needs if GeoVation can provide the funding.