

Active Design



Case Study

KIDLINGTON AND GOSFORD ZOO TRAILS, OXFORDSHIRE

Using novel wayfinding approaches to reduce health issues and increase physical activity in primary school children.

Kidlington and Gosford Zoo Trails, Oxfordshire

Name:

Kidlington and Gosford Zoo Trails

Location:

Kidlington and Gosford, Oxfordshire

Key words:

Children and young people, novel wayfinding, health, active travel

The Kidlington and Gosford zoo trails are a great example of creating 'health routes' and testing novel wayfinding approaches to encourage activity for physical and mental wellbeing – with a focus on increasing duration and intensity of a walk.

This case study is a great example of how seeing how Active Design principles work in practice by looking at a specific wayfinding intervention project within Oxfordshire. It shows how community engagement is key to raising awareness and providing a user-led design to enable an increase in physical activity and wellbeing. It also shows how to evidence the impact and outcomes of a small intervention using a social value metric.

KEY ACTIVE DESIGN PRINCIPLES



Activity for all

Comprehensive engagement throughout included co-designing the process and input into the detail from the local community, which led to positive interaction and uptake of the routes.



Walkable communities

The trails were designed to better connect local amenities and recreation facilities to maximise their usage and for greater benefit to the community.



Providing connected active travel routes

The network of routes provides the local community with safe, accessible pathways and careful planning with input from residents led to the theme and clearly marked signage to make it easier to navigate.



Activating spaces

The routes pass through the majority of local green spaces and the canal network, to ensure greater awareness and usage of these spaces with infrastructure added to further activate and encourage activity.



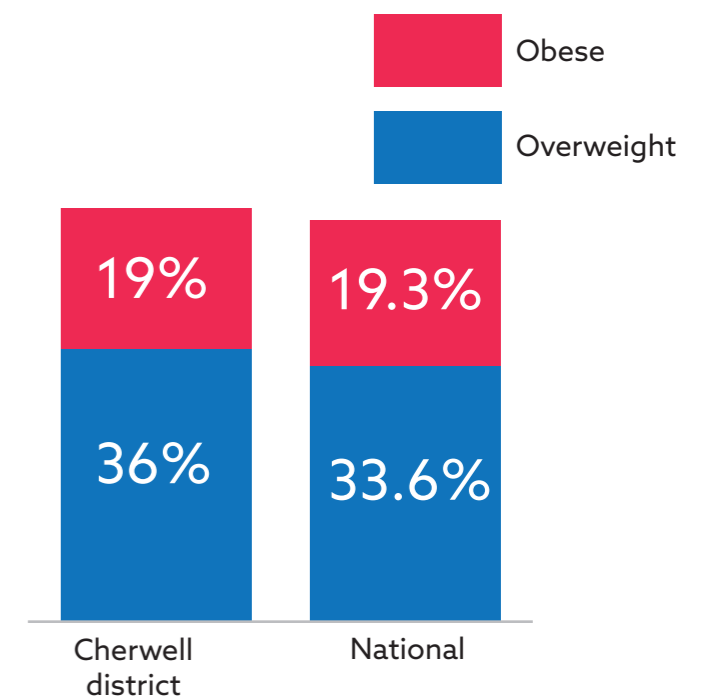
How it happened

In 2019, Cherwell District Council and Sport England piloted a project to evaluate the benefits to health by creating easy-to-follow walking routes around an urban area. The wayfinding project was conceived to improve the health outcomes of primary school-aged children in the Oxfordshire conurbations of Kidlington and Gosford. These are large, connected villages just north of Oxford with a population of around 20,000. There are pockets of lower-income communities, and the health data shows that c.19% of children aged 12 in Cherwell are obese and c.36% of children have excess weight, a figure above the Oxfordshire average of 34%, and this number has increased from 29% since 2007/08.

A key focus of the project was engagement and interaction with various groups throughout the co-design process; involving community and disability user groups, the parish councils, schools, local authorities at all levels and the police, which was key to the success of the project. The outcome of the consultative design process saw the installation of five zoo-themed activity trails inspired by the zoo located in the village in the 1930s. The trails range from 1.5km to 5km in length, taking in almost every part of the community, passing each school, visiting the majority of green spaces available, joining the canal and linking community amenities and shops.

The project was also supported by an evaluation study designed around the WELLBY scale and social return on investment. This provided some great statistics and metrics to help show the social value of project of this kind, which can often be difficult to evaluate.

CHILDREN AGED 12



“ Local resident
This is great, my kids love playing 'balancing' and jumping across to 'islands' on the pavement.

Mapping and engagement

The Healthy Place Shaping Team at Cherwell Council completed initial engagement with Kidlington and Gosford residents to understand their wellbeing priorities and the barriers and enablers to them leading healthier, more active lives.

Initial discussions indicated that there was considerable potential for improvement to the built environment, which together with community activation would help to support increased activity levels for the local community.

Local resident

Loving these already! Our boys are so excited that we followed our first trail in the pouring rain yesterday!

The first part of the project was to understand the relevant community assets across the parishes of Kidlington and Gosford, and Water Eaton. GIS Mapping and socio-economic and health outcome data was used to build up a picture of the urban area. As the routes were to be aimed at children and families of primary school age, it was key to ensure that the route or routes drew together schools as well as targeting the lower socio-economic areas identified to have poorer health outcomes. The mapping also consisted of identifying the parks and green spaces, paths away from main roads, community hubs and playgroups, shops, play parks and other green and blue spaces, as well as public rights of way. ArcGIS mapping software was then used to identify key features and to subsequently mark out routes and locations for the routes.

Involvement from parish council officers and appointed health routes champions from the council were vital for the project's overall success, and as ideas started to develop and potential routes were identified, the wider community were invited to become involved.

Initial phases of engagement were about explaining the purpose and concepts of the health routes, then consulting on where the route(s) were to go. Later in the process, the objective was to build anticipation, enthusiasm, and sense of ownership into the programme as a community piece of work.

The zoo theme was identified and the animal characters were developed with local school children through the consultation phase, creating familiarisation and ownership by them from the outset. This helped with the activation and use by the community, with the zoo animals coming to life to make appearances at events and on social media. There was an ask from the community to name each character, and they ended up becoming so popular they were invited to turn on the local Christmas lights.



“ My daughter is usually extremely lazy, to the extent that she would want to catch the bus a couple stops down the road instead of walking but already she wants to walk, scoot and cycle everywhere. She has even told me “We are doing the lion trail this weekend. Even if it's raining!” Which is great news! Its extra brilliant linking in the history of Kidlington Zoo and making them fun with the characters and also including the Kilometre points it will help them understand distance more. Well done to your team for the idea and hard work. It's a MASSIVE thumbs up from us! **”**



Social benefit evaluation

State of Life were appointed to evaluate the impact of the new zoo trails and to explore their social value in Kidlington and beyond. Part of the project was to recruit, train and work with a team of community evaluators. They were appointed from the community to facilitate the engagement of the local population and to ensure their input throughout the project, into both its inception and evaluation stages. The main objectives of the evaluation were to:

1. Describe the type of people who are using the zoo trails
2. Estimate the impact of using the zoo trails on wellbeing
3. Estimate the monetary value of the zoo trails, following HMT Green Book guidance
4. Provide a cost benefit analysis.

The project was evaluated in two ways: an assessment of the routes' social value by surveying key demographic users (young families) before and after the installation and infrared pedestrian counters located on the trails prior to and post installation.

The summary of these studies shows an increase of 0.275 in life satisfaction from trail users, using the [WELLBY scale](#) (endorsed by the UK Government HM Treasury Green Book); this corresponds to a monetary benefit of £3,575 per monthly trail user per year. Using the extrapolated trail user data, this yields a social return on investment of £18.23 for every £1 invested.

You can read further detail on these findings in the evaluation report undertaken by Cherwell District Council.



Table 1. Estimating the social value of monthly use of the Zoo Trails

Estimated impact on Life Satisfaction of using the trails (at least once a month)	0.275
WELLBY value of 1 increase in Life Satisfaction	£13,000
Estimated monetary value of trails, per person who uses monthly	£3,575
Average estimated no. of people who trails at least monthly	579
Estimated monetary value of trails	£2,068,790

Table 2. Estimating the net social value of monthly use of the Zoo Trails

Estimate monetary value of trails	£2,068,790
Cost (Project Management, Community Engagement and Physical Infrastructure)	£113,500
Net Value	£1,955,290
Benefit-Cost Ratio	18.23



Delivering against other priority agendas

A key message of the 2023 Active Design principles was that by delivering environments that promote health and physical activity, you can also achieve better outcomes towards other key policy priorities, including increasing biodiversity, reduction in costs to healthcare, route to net zero, reduction in social inequality and more economically productive communities.

HEALTH AND WELLBEING

Kidlington and Gosford Zoo Trails have addressed a number of different agendas, with a heavy focus on health and wellbeing, looking to improve people's health and evidencing the impact using the WELLBY social value metric. Extra funding was sourced to enhance the routes by installing trail-themed benches, picnic tables and low rope course activity equipment. The activities that were added along the routes were to encourage

further movement and increase the intensity and duration of participation.

Increases to health and wellbeing helps to promote greater active travel by changing people's habits to be less reliant on cars and to walk or cycle within their local community more. If this can be achieved, the trails will also help towards addressing issues with climate change and overall route to net zero emissions for the local area.

BIODIVERSITY

Another key priority was increasing and promoting biodiversity enhancements along the trails. Initiatives include getting the community involved in building bug hotels to raise awareness, supported by a local social enterprise that supports disadvantaged groups, with the aim they are adopted by the community.



Active Design principles in practice

This is a great project which creates an active environment and uses a number of the Active Design principles in practice.



Comprehensive engagement throughout included co-designing the process and input into the detail from the local community, which led to positive interaction and uptake of the routes.

1. ACTIVITY FOR ALL

The foundational principle of Active Design, which underpins all other principles throughout the guide, is 'activity for all'. This principle states that all environments should support physical activity equitably across all ages, ethnicities, genders, and abilities, enabling everyone to be active and build long-term active habits and behaviours. One of the key ways to achieve environments that provide opportunities for everyone to be physically active is through an engagement process to properly understand the needs of the community members. By listening and learning, planning professionals can consider the issues and requests and provide a design that best meets the needs of the community.

Cherwell District Council successfully engaged the local community from the very start, understanding their needs and co-developing solutions to address this. The aim was to target children and families and in doing so they have provided infrastructure that is suitable for all ages, abilities, and cultures. The routes provide attractive walking and cycling infrastructure, which have been enhanced with fun games, and things to do and see along the way. This will encourage users to keep coming back and continue to use them in their daily lives.



The trails were designed to better connect local amenities and recreation facilities to maximise their usage and for greater benefit to the community.

2. WALKABLE COMMUNITIES

This principle looks at facilities for daily essentials and recreation that should be within easy reach of each other by active travel means, making it more likely that people will make the journey by using other active travel modes.

Good active travel connections should be provided to extend the range of services that are accessible to people while remaining physically active.

When identifying the routes, the Zoo Trails were mapped to enable every school to be on a route, both primary and secondary. They were carefully designed to also include many community centres, playgrounds and play areas, shops, and all the main community recreation grounds as well as many 'hidden' green spaces including the Oxford Canal. This is important to encourage and provide safe, accessible walking routes to all major community services to give residents a suitable and attractive option to walk and cycle. The routes passed through or near to almost every part of the community, from the historic part of the village to the areas with less favourable social and health outcomes.

In addition to the mapping, parts of the routes required removal of physical barriers, ranging from overgrown and intrusive vegetation, resurfacing pathways, and removal of obstructive pathway barriers. This was to ensure all users were able to access the trails. This work was done in conjunction with Oxfordshire Highways Department.





The network of routes provides the local community with safe, accessible pathways and careful planning with input from residents led to the theme and clearly marked signage to make it easier to navigate.

3. PROVIDING CONNECTED ACTIVE TRAVEL ROUTES

This principle encourages active travel for all ages and abilities by creating a continuous network of routes connecting places safely and directly. These networks should be easy to use, supported by signage and landmarks to help people find their way.

The project team, when developing the final route marking designs, had to decide on how these were to be identified and considered different shapes, colours, continuous lines and footprints of various types. The zoo theme idea was identified (linked to Kidlington's heritage) and was a perfect solution as the feedback from the consultation was for a fun and attractive focus.

The design and colouring for marks and the signs on the routes were selected in conjunction with Oxfordshire Association of the Blind to create as much contrast as possible for visually impaired users. Careful consideration was also given to ensure each trail was identified by differing shapes and colours to accommodate different visual capabilities.

To complement the signage and infrastructure, child friendly maps were developed and the routes have been digitised and are available to [download](#) on Go Jauntly.

The trail markings and signs are of a material specification designed to last at least 10 years and are likely to be in place much longer. The parish council monitor the overall resource and the local authority cleaning teams ensure that ground markings are cleaned as part of the road sweeping regime. This means that the resource will remain available for many young families in the community.





The routes pass through the majority of local green spaces and the canal network, to ensure greater awareness and usage of these spaces with infrastructure added to further activate and encourage activity.

4. ACTIVATING SPACES

The provision of spaces and facilities can help to improve physical activity and should be supported by a commitment to activate them. This in turn will encourage people to be more physically active and increase the awareness of activity opportunities within a community.

The Zoo Trails project carefully considered the activation of the trails during the design, engagement, and installation phases. The engagement with the community early in the design phase helped to create ownership from the very start. It was clear from this engagement that the community, in particular families with young children, wanted the trails to be fun, engaging, and easy to use. This led to the zoo theme, which has subsequently helped with the ongoing engagement and activation. The routes have been clearly marked out using highway specification paint, to make it clear to all users where to go. This also included ground-painted games along the paths, to add elements of fun and keep the children entertained. The signage was installed to aid route finding and give assurance of 'you are welcome here'.

Once the installation was complete, there was an official launch to open the route. The use of social media (specifically Facebook and Nextdoor) helped to promote this, and they have since used different engagements on social media to promote, encourage and bring awareness to the trails. An example of this includes a Royal Jubilee treasure hunt, which was used to encourage activity as well as a way to collect post-installation survey data. This was aided by a free prize draw (prizes donated by local businesses) to entice survey completion.

The trails are regularly referenced in local life and have even become part of one of the primary schools' curriculum. The social media interaction was also a way for the council to give progress updates during the design, engagement, and installation phases, which helped to further promote and raise awareness. It was very useful to alert and dispel myths around pavement chalk marks, which some residents were concerned about as potential crime targets. The community police, in this instance, were quickly able to pick up on incorrect rumours and bring comfort to the community.

Since the rollout of the routes, they have been digitised and are available to download on Go Jauntly, which make them openly available to more people including those who are not necessarily local residents.



Small Steps Day Nursery

We are a day nursery in the centre of Kidington with children aged 9 months to 4 years old. All our children have taken part in the trails and have all enjoyed exploring the routes around the nursery. We have been out following the trails 4-5 times with each of our age groups since they have been installed. The younger children have enjoyed being outside and exploring from their pushchairs but have also walked along some of the animals. They loved making the noises of the animals and saying their names.

The older children have completed a couple of the routes and are always keen to spot the footprints. They have also enjoyed the games in the alleyways, and we have been able to talk about numbers and shapes as they play. The children have responded well to using the trails and are learning lots about their local community.

The children have also liked going over to the bug hotel in Exeter Park. They have loved adding things to this and we got parents involved by asking them to help supply some of the materials needed. The children have been able to think about where the insects live and what makes a suitable house. This has all aided their understanding of the natural environment and how to look after it.



Key learning from Cherwell District Council

- **Engagement** – in this case with the local community and vitally the parish council, this was key to smooth progress and adoption of the trails. Drawing ideas from the community and working with local stakeholders to co-design the routes overcame obstacles, as well as creating a new enthusiasm toward opportunity and change.
- **Simple Symbols** – marking out the routes with periodic symbols or shapes enables routes to be non-intrusive yet easy to follow; symbols that are always in line of sight require awareness to follow but not full concentration. When this was not possible, signs were used to support wayfinding. This balance alleviated most concerns of the community and allowed for progress with more creative theming and ideas.
- **Theme** – having a theme that the whole community could be enthusiastic about enabled wider ‘identity-building’ activities that prolonged the impact of the project.
- **Wider Improvements** - the creation of the trails enabled a range of wider public realm improvements in areas that had not been focused on for many years; for example, clearing greenery-blocking paths, improving accessibility by removing obstructive barriers, placing benches in areas requested by the community to serve families and the elderly, and opening up access to less used areas, which made them more welcoming for all users and reduced the likelihood of anti-social behaviour.
- **Understand your target group** – it is vital to understand the target user groups to be able to consider where they would like to go for leisure and for practical purposes; for example, schools, green spaces, shops and what they might want and need on route to make it fun, useful, achievable, or relaxing. Building these elements into the route will make it more likely that people will go out of their way to use them. It is also important that users feel safe, so paths with ‘escape routes’

or easy sightlines and that feel welcoming (good signage) are to be used wherever possible.

- **Make it fun** – it is not easy to specify exactly what will make a route successful in increasing activity, but a useful rule is to bring joy to the environment people are in while delivering a purpose to the activity so that being active is both easy and fun.
- **Evaluation** – to gain absolute behaviour change evidence, the pre-intervention and post-intervention surveys should be carried out by the same target group with a control group alongside. In practicality this may, of course, be difficult to achieve. Also allow for the surveys to run for a long period of time to allow for seasonal variation and comparative months.
- **Social Value** – the results of the social return on investment evaluation demonstrate how wayfinding as a fairly simple, low-cost intervention can have

a positive impact on wellbeing; improving physical and mental health will help prevent more intrusive and expensive health interventions later on.

- **Greater evidence** – providing robust evidence for developers and all those involved in designing and planning new developments results in an asset that is valued and well used and can demonstrate how a settlement is seeking to create a healthy community. This helps demonstrate impact for further or additional investment and changes to local plans.





Conclusion

This project has shown how fundamental it is to engage and interact with the local community before, during and post-installation for a community initiative project to be a success. Creating attractive, fun, usable trails, with a specific focus on families and young children, has enabled Cherwell District Council to offer active travel routes for all users as careful planning and thinking

was given to the services and areas that the routes needed to connect. Activation and usage are a priority; however, to be able to evidence the impact and outcomes of the project, it was vital for data to be collected pre and post-installation, in this case via pedestrian counters and community evaluators with surveys. This allowed the council to analyse and use a social impact metric to give the project and

the impact a value - an improvement of 0.275 to life satisfaction (for monthly trail use) and a benefit-cost ratio of £18.23 for every £1 invested. The project has been a success not only for the community of Kidlington and Gosford, but other local authorities are taking inspiration and guidance from this project and further trails are planned across Oxfordshire. In Banbury, North

Oxfordshire, three similar routes have been installed in areas of social deprivation. These 3km and 5km 'Shape Trails' - green star, pink diamond and blue hexagon- have similar activity elements and street furniture; they are also used by local schools, early years and community groups to encourage active lifestyles.

Active Design



Acknowledgements:

Sport England wishes to thank [Cherwell District Council](#) for their contributions to this document.

Prepared by: Sport England

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August 2024

