## Active Design



CREATING ACTIVE ENVIRONMENTS THROUGH PLANNING AND DESIGN

Theme 2 - Active, high-quality places and spaces

Supported by







#### THEME 2

## Active, high-quality places and spaces

All places and spaces should encourage physical activity, not just buildings and facilities for sport, activity and leisure, but open spaces, green infrastructure, urban public realm and streets, and the range of places we use in our daily lives.

These places and spaces should also be of high design quality and be designed for longevity, with quality materials and flexibility in their use, to keep the place active into the future.

This group of Active Design principles focuses on the creation of these active, high-quality places and spaces, ensuring opportunities to be active are harnessed wherever possible.

### The Principles



Network of multifunctional open spaces



High-quality streets & spaces



Providing activity infrastructure



Active buildings, inside & out

## How does this increase activity?

- High quality, flexible spaces are those that can be adapted easily and have a clear use when not being programmed for events. They allow opportunities for many different groups to be physically active, and also enable spaces to respond to the changing needs and demands of communities.
- Open space networks can provide a safe and attractive opportunity for active travel between destinations, as well as important spaces to be active (see also Principle 3). A connected network of open spaces can encourage people to travel further and longer, increasing their activity levels. This needs to be combined with good waymarking, signage and knowledge of the connectivity of the networks.
- Providing multifunctional spaces allows for sport and physical activity to be delivered alongside other priorities, such as biodiversity, community space, sustainability or other needs, enabling the function of spaces to be maximised.

#### What other benefits are there?

#### Environment and climate change

• The provision of multifunctional greenspace and green infrastructure often provides opportunities for carbon capture, air quality improvement and biodiversity net gain, amongst a raft of other environmental sustainability benefits. This helps to meet the targets of the Government's 25 Year Plan to Improve the Environment<sup>30</sup> (See Principle 5).



There is a clear link between a higher quality, pleasant environment and increased rates of active travel<sup>31</sup>.
 This increased active travel has a significant positive impact on environmental quality and carbon emissions, by diverting movements from emission-causing transport modes (See Principle 6).

#### Tackling inequalities

• Free-to-use open spaces integrated throughout an urban area are an important basis for creating inclusive environments and tackling health inequalities. If designed and managed well with consideration for all user groups and experiences, they offer the potential to create a common and free space for all, where activities and events can be undertaken, and outdoor physical activity can take place at no cost (See Principle 1).



- Access to nature and amenity space, when well distributed geographically, and taking into account
  population densities, enables easy access and good availability, facilitating associated physical activity and
  health benefits for all<sup>32,33,34</sup>. At present within many areas there is inequality in how different groups within
  local communities can access greenspace, which should be addressed.
- Contact with nature and natural environments is shown to enhance mental health<sup>35</sup>. It improves the experience of being outdoors and physically active and can also provide benefits for nature. Access to greenspace has been shown to result in people experiencing healthier cortisol levels (which controls mood) than those living in areas with limited green space provision<sup>36</sup>.

#### **Economic growth**

- Providing easy access to greenspace is critical. £2.1 billion per year could be saved in health
  costs if everyone in England had good access to greenspace, due to increased physical
  activity in those spaces<sup>37</sup>.
- High Street active travel and public realm improvements can increase retail sales on those streets by 30%, and those who walk to a high street spend 40% more than those who drive. Retail vacancy rates on improved streets can be up to 17% lower<sup>38</sup>.
- Providing opportunities to reduce sedentary working within workplaces can increase employee health, and thus has associated economic benefits. Employees who are physically active take 27% fewer sick days than their colleagues<sup>39</sup>.
- Reduced congestion and increased physical activity encourages greater investment and regeneration and in a way that is beneficial for future generations, as referenced and encouraged in the <u>Transport</u> Decarbonisation Plan<sup>40</sup>.
- Physical activity as part of heritage and leisure trails can be important drivers of tourism with local economic benefits.



# Network of multi-functional open spaces

#### The aim

Accessible and high quality open space should be promoted across cities, towns and villages to provide opportunities for sport and physical activity, as well as active travel connections and natural or civic space for people to congregate and enjoy.

#### How to do it

A network of multifunctional open space should be created across all communities to support a range of activities including sport, recreation and play and other landscape uses including woodland, wildlife habitat and productive landscapes (allotments, orchards).

Facilities for sport, recreation and play should be of an appropriate

Facilities for sport, recreation and play should be of an appropriate scale and positioned in prominent locations, to increase awareness and visibility of activity, as well as being appropriately sited and designed to respect residential amenity.

## 5.1 Create a variety of open spaces

- Open space is not just grass and playing fields (green space), it also includes civic space with hard landscaping (grey space), play areas, informal/amenity, natural/semi-natural places where nature dominates, allotments, formal gardens and incidental 'pocket' parks. Often these uses will be suitable in a range of contexts and could be more complementary in certain locations than other comparable uses. This creates variety in an area, with multiple activity opportunities.
- Accessibility should be considered. Spaces
  with just grass can be less accessible to some,
  especially during the winter when they can be
  muddy. A variety of surfacing materials can be
  employed to ensure spaces can be used by all.
- Small and large spaces are needed for different activities, functions and uses. Networks should contain spaces of different scales and character.

- Spaces should include active travel networks, leisure cycling networks, natural habitats and other facilities as well as amenity space and sports infrastructure
- Open spaces should be multi-functional, with the
  potential to incorporate within them sustainable
  drainage systems (SuDS) such as swales,
  wetlands and open basins. Careful consideration
  should be made with respect to location and
  function of SuDS with other uses.
- Where single large spaces are being created their design should be carefully considered so that they can potentially incorporate smaller, more easily occupiable spaces so that different groups can co-exist and occupy spaces, and a variety of activities can be enjoyed. This should be balanced against the functional requirements of sports facilities such as the need for playing pitches and their run-offs to be free from obstacles (see Principle 4).

## 5.2 Link open spaces together within and beyond a site

- Find opportunities to connect to wider networks
   of open spaces, looking beyond the site boundary.
   Wherever possible, all open spaces should be
   integrated with nearby active travel networks to
   form part of direct routes or leisure routes. These
   connections should respond to local green and
   blue infrastructure action plans or strategies,
   where available, and other strategic priorities in
   an area, such as Walking and Cycling Investment
   Plans (see Principle 3).
- Utilise clear and distinctive wayfinding in open spaces, together with promotion and awareness raising activities to enhance local knowledge of the networks. This is vital to help people find their way around and use them effectively.
- Include and promote use of nearby 'blue' infrastructure such as rivers, canals and lakes for water recreation activities, as part of the network.

## 5.3 Plan and design for a wide range of activities

- Formal and informal sport can be integrated throughout the public realm, utilising and creating physical activity opportunities. These spaces should be co-designed with the local community, focusing on identified needs and enabling all people to be active (see Principle 1). Opportunities should include creating age appropriate play space for both younger and older children, including teenagers. This should result in a range of provision which responds to local needs and the co-design process e.g. swings, off road bike tracks, trampolines, skate parks, games areas, table tennis tables, marked running/walking routes and outdoor gyms.
- Research on the usage of different types of facilities by different groups can help identify if there are imbalances in provision in an area. This evidence can support interventions to address such imbalances and offer physical activity opportunities to certain groups who may be underrepresented.
- Formal sports pitches should be integrated within the networks of open space to provide variety, vitality and focal points (see Principle 4).
- Other diverse sources of activity for different groups include food production (e.g. community gardens and allotments), hiking trails, dog walking, horse riding, organised outdoor classes and augmented reality gaming.
- Ancillary infrastructure (e.g. cafés, resting places, public toilets and changing places) can support and increase the range of physical activity opportunities a space can provide. This can create greater diversity of use within spaces, attracting more people to use and spend more time at them and make them more welcoming to all (see Principle 7).

Top: Big Data Institute, Oxford, offers a mix of formal and informal pocket spaces (Old Road Campus, Oxford)

Middle: A play area integrated within the public realm (East Village, Olympic Park, London)

**Bottom:** Activity can be integrated in areas with shops and cafés to attract people to use the spaces (Market Place, Stevenage)









**Above:** Blending natural environments with public spaces is beneficial for mental health and for enhancing biodiversity (Nottingham Science Park)



**Above:** Play should be integrated within attractive open space (Wolverton, Milton Keynes)

## 5.4 Integrate a diversity of natural habitats to make environments where people want be outdoors and active

- A variety of habitats should be incorporated into an area, not a single consistent environment.
  There can be benefits for nature and physical activity when habitats are linked together continuously as wildlife corridors and when they connect to wider habitats and networks e.g. as part of developing walkable communities (see Principle 2).
- 5.5 Make space for children's play
- Children need space to be active in the public realm and open space and their presence often activates spaces, creates destinations for families, builds community connection and encourages adults to be outdoors.
- When children have safe space and permission to play outside near their home, they are naturally active. Outdoor play is also a way that children develop physical literacy and skills such as cycling. This shouldn't just include playgrounds, as children like to play outside near home—including in streets and other shared public space—where they feel safe and welcome to do so.
- Where formal play spaces are provided they should be accessible and convenient to those they are providing for, and ideally integrated as part of destinations and local centres. Create a strategy (or contribute to an existing strategy) for a variety of children's play spaces, creating both formal and informal opportunities.

- Consider the accessibility of space when creating habitats, as some areas for nature without humans using the space can be beneficial in ecological terms. This space may be able to contribute to a wider, pleasant environment without direct access.
- Seasonal variations should be embraced, providing native variety and creating a changing experience for users of the space.
- Play spaces should be designed to be accessible
  for all children, including disabled children, in
  terms of equipment such as high-back swings and
  wheelchair roundabouts, and ensuring accessible
  entrances and exits to the play space. Equipment
  provided should be high quality and durable.
- Different groups of children should also be considered, as they have different needs including children with Special Educational Needs and Disabilities (SEND). Co-design of spaces can play an important part in the design of effective areas.
- Informal play spaces such as trim trails can be inventive and low-cost: smaller children will climb and explore most things given the opportunity.
- Create safe places for children to play on their doorsteps by closing streets for an afternoon.
   The Play Street Initiative<sup>41</sup> is a way for residents to regularly create safe space for children to play out on their doorstep, which can lead to more permanent changes.

## Sowerby Park & Sports Village, North Yorkshire

Sowerby Park is a 7.5 hectare green space at the centre of a growing community in North Yorkshire. The project, built over a former landfill site, includes a 1km fitness trail, a sustainable drainage system, space for three high quality sports pitches, cycle trails, a BMX park, a new school, and allotments. The project will deliver significant ecological improvements including the retention of existing hedgerows, 300 new trees, and large swathes of wildflower meadow.

The emphasis was on creating a park that became a common place for the community, supported health and wellbeing whilst establishing a matrix of new and improved ecological habitats.

The design process involved significant consultation with local clubs, to ensure the facility met their needs, and local residents to ensure features such as pitch lighting were sensitively integrated.



### Luna Park, Swindon

Luna Park is a traditional play space in Haydon Wick, Swindon, which has been refurbished to make it accessible into a space that all children can enjoy and use. The redesign was driven by Becky Maddern, a local resident who had found that her local park was increasingly not meeting her son's needs. Through engagement with the parish council, Becky helped to raise awareness and supported the design process. The play area was made more accessible by ensuring the surface was suitable for wheelchair users and those with limited mobility. More inclusive equipment was incorporated into the design, which included a wheelchair accessible roundabout, high back swing, several different sensory panels, a low-level spinning bowl and a seesaw with a back and footrest. The redesign of the Luna Park was achieved in a similar cost budget as for a traditional park.

Through the redesign of Luna Park, Swindon Borough Council considered how other parks could achieve the same inclusive design. Other considerations around inclusive design include surface painting which offers

opportunities for play and integrated equipment to ensure that children are not segregated. Further information on inclusive design can be found through Plan Inclusive Play Areas (PIPA Play<sup>42</sup>).



#### Useful resources

Play England publish guidance on Design for Play, a guide to creating successful play spaces<sup>43</sup>.

Guidance on open space, including formal play space is published by Fields in Trust, <u>Guidance for Outdoor Sport and Play</u><sup>44</sup>.

Natural England have published a Green Infrastructure Standards/
Design Guide which sets out the principles for successful green infrastructure in open space and other environments<sup>45</sup>.

The London Borough of Hackney adopted a <u>'Child Friendly</u>
Spaces' Supplementary Planning

<u>Document</u> which establishes child friendly design principles, ensuring child-friendly design can be embedded beyond play space provision<sup>46</sup>.

SCOPE's campaign <u>'Lets Play</u>
<u>Fair'</u> seeks to improve levels of accessibility across England's play areas<sup>47</sup>.



# High-quality streets and spaces

#### The aim

Streets and outdoor public spaces should be Active Environments in their own right. They should be safe, attractive, functional, prioritise people and able to host a mix of uses, with durable, high quality materials, street furniture in the right places and easy-to-use signage. High quality streets and spaces encourage activity, whereas poor quality streets and spaces are much less likely to be used to the same degree.

#### How to do it

Streets and public spaces of all types should be designed to be attractive places, using durable materials to reduce maintenance costs and improve longevity. Streets are places and not simply movement corridors, and their role in a network and the surrounding place should be clearly defined. Placemaking should be supported through reducing the speed and dominance of motor traffic, the creation of informal spaces and flexible uses along streets, including children's play, resting places and meeting spots. Street furniture and signage can also contribute to the variety and quality of the street scene, when used in a considerate way.

## **6.1** Design streets as places, not movement corridors

- Streets are about more than just vehicular throughroutes or highways dominated by vehicular traffic.
   The role of streets as 'places' should be prioritised above their role as movement corridors, with consideration given to the attractiveness of a street and how this may affect its use.
- Separation of active travel activity from vehicular use, for example through the use of planting, can be an effective way to improve the quality of a street, especially where the anticipated volume of traffic is such that pedestrians and cyclists may otherwise feel vulnerable.
- Footways and any segregated cycleways should be uninterrupted and direct, with utility cabinets, car charging points, bins and other street furniture off to the side. Space should be set aside in a street so that such essential items can be accommodated in the future without blocking active travel routes and infrastructure.
- Residential and minor streets are an important part of an active travel network as they are used less by vehicles. Surfacing and carriageway widths should make clear to drivers that these streets are for people, and vehicles should proceed with caution.

- Appropriate ground-floor uses with attractive frontages animate a street helping to make it a place. How they connect to the public realm should be considered. At a minimum, front doors should face the street and be clearly visible with blank frontages avoided.
- Car parking should not be prioritised over other uses and users, and appropriate ways of accommodating cars should not have impacts on active travel and quality of place. For example, on-street parking should be effectively accommodated without impacting on footways or cycle lanes.



**Above:** Streets should offer an attractive environment, and not be orientated around vehicles (Trumpington Meadows, Cambridge)

## 6.2 Design streets and spaces of high quality, utilising appropriate and durable materials

- All streets and spaces should be fit for purpose to encourage movement by active travel, and utilise high quality and durable materials which can provide grip in all weathers.
- Surface materials should be used to define space clearly, for example by clearly delineating active travel and vehicle space. Changes in carriageway materials from tarmac to paving, and changes in levels through use of raised tables and continuous footways accompanied by give way markings can help slow vehicles at junctions by making it clear that this part of the street is prioritised for people. (see Principle 2).
- Ensuring a space is safe, and feels safe, is an essential part of securing design quality (see Principle 1).
- The choice of materials and design of key spaces should make reference and take inspiration from the surrounding landscape and historic context, to make a place feel distinctive and rooted in its local environment. This creates opportunities to draw users in and encourages associated activity within these areas.
- In existing places, opportunities to retro-fit and improve existing infrastructure should be taken, responding to changing needs (See Principle 9).
- Maintenance should be considered in design, and active travel infrastructure should not be an afterthought in terms of clearance of snow, fallen leaves or overgrown planting.





Top: A change in surface material can help to define a cycleway from the vehicle space (Castlegate, Sheffield)

Bottom: Cycleways can be accommodated as part of the street network (Manor Kingsway, Derby)

## 6.3 Create and support safe, flexible spaces which can support multiple forms of activity

- Public spaces should be designed to be multifunctional, allowing for numerous activities and events to be able to take place within a single space, and enabling flexibility for evolving trends, technologies and activities. This should be supported by activity infrastructure (see Principle 7), and opportunities for whole families to be physically active (adults, young people and older people).
- Within public spaces such as parks and civic spaces, subdividing the space into a variety of different environments can provide an opportunity for people to meet, talk, exercise, move through and take part in activities.
- Informal uses of streets (such as children playing in the streets) should also be supported and promoted where appropriate. This informal play has been encouraged through the UK-wide play streets movement, supported by Playing Out.
- The flexible use of spaces and streets should be tested through temporary installations that encourage physical activity and getting people out into the public realm (See Principle

- 7). These could include the addition of new seating, play spaces, cycle parking, cycle lanes or even temporary retail uses such as café space. 'Parklets', green spaces located in parking spaces, can bring life and nature to streets. Such flexibility can enable opportunities to engage with communities to consider what is sought within localities<sup>48</sup>.
- Spaces and streets should include seating at appropriate locations. Studies<sup>49,50</sup> have shown that seating is often most well-used when located at edges in public spaces (which may be the physical edge, or defined by landscaping and other space subdivision), and can be delivered through standalone benches, steps, or integrated into landscaping proposals and raised planting beds. A mix of social seating (e.g. benches facing towards one another) and solitary seating (e.g. moveable chairs or single seat benches) can provide a place for a mix of people to feel comfortable in a space. Attention should be given to the amount, siting and design of seating to provide sufficient capacity for potential users and to support personal safety.





## 6.4 Create resilient spaces that can be active in all seasons

- Streets and spaces should be designed for use in all seasons, with particular consideration given to the hotter summer months and the colder, darker, winter months.
- The use of tree planting, colonnades, shelters, sustainable drainage systems and rain gardens improves the street scene and plays a role in extending the outdoor season through improving
- drainage, offering cover and regulating air temperature.
- Street trees can play a large role in offering shade and natural cooling throughout summer for users across towns and cities, reducing ambient temperatures. They should be located appropriately so as not to hinder existing or block proposed active travel routes and infrastructure.

## **Broad Meadow, Oxford**

Broad Street in Oxford is a wide, centrally located street that connects the shopping heart of the city centre to the historic university area. In the past it was underused, with some car parking, and mainly used as a transit space. In the summer of 2021, to aid the economic recovery of the city after the pandemic, Oxford City Council set up a temporary 'meadow' in the space using shipping cases that transported the Covid 19 vaccine as planters to create a wildflower meadow environment, integrating seating, a performance area and space for street food. The experiment was a huge success, creating a destination and lots of outdoor activity in a previously unused space and bringing a more natural environment into the city centre. Based on this Oxford City Council, together with Oxfordshire County Council, have taken the decision to make it a permanent space, creating a long-term asset and flexible space for a variety of events and activities.

The Oxford City Council website holds further detail on this project<sup>51</sup>.



### Useful resources

Manual for Streets and Manual for Streets 2<sup>52</sup> provide comprehensive guidance on successful street design. Work is underway at present to update and bring them together into a single Manual for Streets.

The Global Designing Cities Initiative publishes several handbooks for successful street design, using international case studies, including **Designing Streets for Kids** and the comprehensive **Global Street Design Guide**.

Originally developed by Transport for London, and now endorsed by the Department for Transport, the Healthy Streets toolkit sets out measurable criteria for healthy streets as places in urban areas, with a selection of tools

and approaches to make change happen<sup>53</sup>.

Historic England have produced guidance called <u>Streets for All:</u>
Advice for Highway and Public
Realm Works in Historic Places
which provides detailed advice on what you can do to help make our streets more attractive, distinctive and user-friendly for everyone<sup>54</sup>.



## Providing activity infrastructure

#### The aim

Infrastructure to enable sport, recreation and physical activity to take place should be provided across all contexts including workplaces, sports facilities and public space, to facilitate activity for all.

#### How to do it

Infrastructure to support physical activity should be provided and be easily accessible and safe. There are a range of opportunities to achieve this, for example providing water fountains, public toilets and clear wayfinding networks. Offices and workspaces should provide changing facilities and cycle parking to encourage employees to commute via active travel. Sports and community facilities should look beyond their primary function, to encourage wider activity, including the provision of infrastructure which non-facility users can access, such as toilets, refreshments, social spaces and water refilling stations.

## 7.1 Provide infrastructure which supports and enables active travel

- Deliver a broad range of infrastructure to encourage activity for the full range of potential users, not just those who are most likely to be active. The provision and maintenance of simple infrastructure such as public toilets, changing spaces, secure cycle parking, seating, signage, lighting and drinking fountains can increase the number and variety users within a locality<sup>55</sup>.
- Provision should be safe, within prominent locations, and ensure it meets the needs of the local population through co-design and consultation (See Principle 1).
- Accessibility of routes and destinations for all groups, especially disabled users, should be provided through appropriately-sized and provisioned infrastructure.
- Provide access to toilets as part of public spaces which are free to use. This is an important consideration that may influence whether some users feel they can visit a space, participate in an activity there and how long they will participate.
- Safe and secure cycle parking should be provided at all locations, with consideration given for larger and adapted cycles and trikes. It needs to be central to design considerations and carefully planned into the development from the outset in a way that makes it attractive and convenient to the user.

 Appropriate cycling, buggy and children's scooter parking should also be provided at schools, community facilities and play spaces in prominent and convenient locations, as well as additional provision for parents, guardians and carers who may accompany their children by cycling.





Top: Bike maintenance and water fountain facilities are placed to support active travel (Ladybower Lake, Derbyshire)

Bottom: Cycle parking located in a prominent location and designed to be part of the public realm (Croydon, London)

## Provide infrastructure which supports physical activity

- High quality, well-placed and well-maintained outdoor gym equipment and informal sporting equipment, such as goalposts, swings, trampolines, a basketball hoop or BMX pumptracks can play multiple roles in generating activity, whether utilised as part of a fitness routine or as part of a more formal group exercise (eg. fitness camps). However, not all equipment will be appropriate or attractive to all groups, so consideration should be given to the different needs of people in the local area to help ensure overall equity of provision (see Principle 1).
- Include appropriately designed and sited storage facilities and electrical power points for equipment that might be used for public events such as parkruns, street parties, markets, festivals, etc.
- Provide connections or expand Public Rights of Way networks to encourage linkages between places and enable activity. Bridleways and connected off-road routes, linked to quiet lanes can also provide safe and attractive routes for horse riding. The use of equestian crossings at important intersections can improve safety and complete links.





**Top:** A dedicated active travel bridge (University of Northampton) **Bottom:** Trim trail equipment placed along pedestrian route to school (Houlton, Rugby)

## 7.3 Provide supporting infrastructure which enables people to utilise spaces flexibly

- Frequent opportunities for people to stop and sit should be provided across public spaces, streets and active travel routes. Accessible, well-placed seating encourages people to remain within an area, whilst supporting users to undertake active journeys<sup>56</sup>.
- Cafés, street tables, well-designed outdoor space and other local services can be used to support and enable activity, by encouraging a wider range of users and people to stop and linger. This increases the vitality and attractiveness of a space.
- Dog waste bins, drinking water for dogs and, where required, dedicated space for dogs to be let off the lead should be provided to prevent conflict with other open space users. Spending areas should also be provided for assistance dogs.



**Top:** Cafés offer space to stop and linger, and increase the vibrancy of a place (The Tuning Fork Café, Houlton, Rugby)

## 7.4 Integrate and utilise innovative digital technology in spaces and places

- Consider how micro-mobility systems such as e-bikes may be accommodated, aiming to avoid conflict with other users both whilst in use, and when parked. The public realm should be clearly delineated so that it is clear where to park different types of micro-mobility modes.
- Wayfinding apps, or those which seek to encourage physical activity though augmented reality or gaming, can be effective in getting those who are less active to become active<sup>57</sup>.
- Providing opportunities for free Wi-Fi internet connection can encourage people to utilise a space and provides the infrastructure to enable other digital interventions.
- When creating digital technology, consider how wider groups might be able to access the information. Any online platforms or applications must be created with accessibility and inclusion standards in mind and alternative ways to access information should be considered.



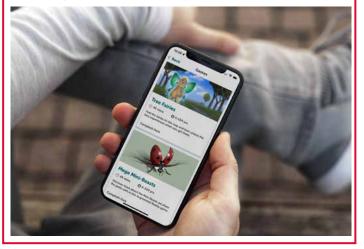
Above: e-bike parking, Hoxton, London

### Love Exploring App, Milton Keynes

The Love Exploring mobile app uses 'augmented reality' graphics that display on smartphones as you walk around. Thousands of people, families and children have taken to local parks and streets to use the app, exploring the game and trails since its launch in October 2021. Games change regularly, and include Dinosaur Safari, Space Walk, Tree Fairies, Mega Mini-Beasts, Butterflies and Moths and Spooky Halloween trails.

The app creates an opportunity for families to go for local walks, exploring their local area and the extensive parks network. As well as family trails, other features allow people to explore local heritage and places of interest, learning more about their area and encouraging regular physical activity.

https://www.milton-keynes.gov.uk/health-andwellbeing-hub/love-exploring



### Useful resources

The British Standards Institute publishes PAS 6463:2022: Design for the mind - Neurodiversity and the built environment.

Many cities have undertaken specific exercises in wayfinding to improve experience using active travel modes in their areas. These include Legible London<sup>58</sup>, Nottingham Navigator<sup>59</sup> and Legible Leeds<sup>60</sup>.

Changing Places toilets<sup>61</sup> are a recommended and highly valued facility for new developments and existing public venues to provide especially. They enable everyone, regardless of their access needs or disability, or reliance on assistance of others, to use a toilet facility safely and comfortably. They can help anyone to feel more able to use and access the places and spaces they want to visit. They include standard design, signage and visual information for people with sensory impairments and learning disabilities. They can also benefit other people whose first language is not English.



### **PRINCIPLE 8**

## Active buildings, inside and out

#### The aim

Buildings we occupy shape our everyday lives, both when users are inside and outside. Buildings should be designed with providing opportunities for physical activity at the forefront, considering the arrival experience, internal circulation, opportunities to get up and move about, and making the building an active destination.

#### How to do it

Consider the user journey of arriving at a building by active means – it should be easy to find the way in, park cycles and store belongings. Once inside, spaces should enable regular activity and active circulation, and should be connected to the outdoors through the use of space and landscape. Valued older buildings can be brought back to life through creative reuse, increasing vitality, community connections to a local place and make activity a visible and distinctive part of a place. Physical Activity can also be a method to re-utilise or regenerate places, taking advantage of the economic and social benefits it creates.

## 8.1 Orientate and design buildings to encourage activity

- Buildings should visually and physically interact with streets and spaces. Pedestrian entrances should be prominent, clear and face the street. It should be easy and obvious for a pedestrian to find the entrances and exits of buildings.
- Cycle parking and storage for other wheeled mobility options such as mobility scooters, wheelchairs or similar should be adjacent to the front door, or as close as possible. It should be visible, covered, secure and not tucked away. It should be more prominent and easier to access than car parking.
- Level access into buildings for those with limited mobility should be through the main entrance. It should not be separate, tucked away and difficult to find.
- Where it is necessary to provide car parking either for disabled users, operational reasons or other essential requirements, it should not dominate the front of a building. It should be located to the rear, side or underneath of a building, with appropriate overlooking for safety.
- Clear and safe footways from the car park should direct users to the main pedestrian entrance.

 Stairways should be prominent and obvious within buildings, with elevators and lifts conveniently located for people who need them but less prominent than the stairs. Where possible, stairs should be designed as a feature element in a building, encouraging their use.





Top: Cycle parking should be convenient, with a visible and secure location near the building entrance (Trumpington, Cambridge)

Bottom: Homes designed with convenient secure cycle parking adjacent to the front door (Great Kneighton, Cambridge)

## 8.2 Provide activity infrastructure inside and outside buildings

- Secure cycle parking should be provided at all key destinations. Shops and other facilities should have visitor cycle parking accessible in the public realm. Offices and employment buildings should provide cycle parking for employees as well as accessible visitor cycle parking.
- Showers, lockers, bike maintenance equipment and changing spaces should be provided and signposted within buildings, close to secure cycle parking, to encourage active travel.
- In homes, cycle storage should be conveniently located, helping to make it is easier to cycle for a journey than to take the car. Where it is not possible to easily provide accessible and convenient internal cycle parking, the provision of cycle hangars within the street should be considered. In flatted developments, space for cycle maintenance should also be provided alongside appropriate cycle storage.
- Pushchair and children's scooter parking can be provided in appropriate facilities to encourage families to arrive by active means. Access should be level following the principles of <u>Universal</u> Design<sup>62</sup>.
- As the population ages, it is crucial that buildings are adaptable for lifetime use and changing requirements. As a minimum, all buildings, whether residential or otherwise, will require wider doors, generous space for wheelchairs (and mobility scooters), handrails, enough space for circulation for those with limited mobility, and frequent and effective lighting.





**Top:** Secure cycle parking integrated within a building (Chiswick Park, London) **Bottom:** Visitor cycle parking integrated within the public realm and not blocking footways (Eddington, Cambridge)

## 8.3 Utilise areas within and around buildings to support activity

- Informal spaces within and around buildings can accommodate a range of physical activity uses e.g. table tennis tables, table football, swing seats, pocket play, food growing space, spaces for mini tennis, paddleball, street cricket or outdoor gyms.
- A landscape plan can identify areas where informal outdoor gatherings can occur, with appropriate provision made such as seating, planting or pathways, which can encourage people to use outdoor space. The inclusion of planting and natural habitats in these spaces can increase contact with nature.
- Covered spaces and shelters outside buildings can enable people to use outdoor spaces for more months of the year, or even throughout the year. Consideration of solar orientation and microclimates can also extend the use of outdoor spaces throughout the year.
- Office spaces can encourage movement, for example with sit-stand desks or the provision of spaces that encourage circulation and movement, including standing meeting rooms.



Below: Areas inside and outside buildings should be designed to encourage activity (TheCentre, MK)

## 8.4 Consider how to repurpose valued local assets into new physical activity destinations

- Existing valued heritage buildings can be transformed into valuable new assets that can encourage people to get out and be more physically active. When considering re-use, make sure that physical activity possibilities are considered along with other potential uses.
- Heritage buildings can form the centrepiece
  of local heritage or art trails, or become new
  community spaces that can host activities such
  as fitness or dance classes.
- Repurposing old department stores into new town or city centre leisure destinations can be a successful way of saving a local landmark.
   Schemes that integrate residential development alongside leisure and physical activity opportunities can ensure greater viability, as well as encouraging a mix of uses.
- Older buildings can often lack level access or infrastructure to support people arriving to them by active travel means. Where possible, sensitive interventions should be made to adapt old buildings and their surroundings to modern requirements to support active travel without harming their overall character.





**Above:** Repurposed local assets can become community centrepieces (Houlton School, Rugby)

### FitWel Building Accreditation Scheme

Fitwel is a certification system which is designed to demonstrate that buildings have been designed to improve health outcomes. US based, but applicable all across the world in many different contexts, Fitwel certifies buildings which pass its accreditation process. This process has been generated by analysis of 5,600+ academic research studies, with Fitwel implementing a vision for a healthier future where all buildings and communities are enhanced to strengthen health and wellbeing.

#### Useful resources

Centre for Accessible Environments and the National Register of Access Consultants (NRAC)<sup>63</sup> hold considerable resources and expertise on accessibility of buildings and other environments.