Draft Active and Healthy Travel Strategy (AHTS)

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Local Transport and Connectivity Plan – Supporting strategy

Contact: **activetravel@oxfordshire.gov.uk**

OXFORDSHIRE COUNTY COUNCIL

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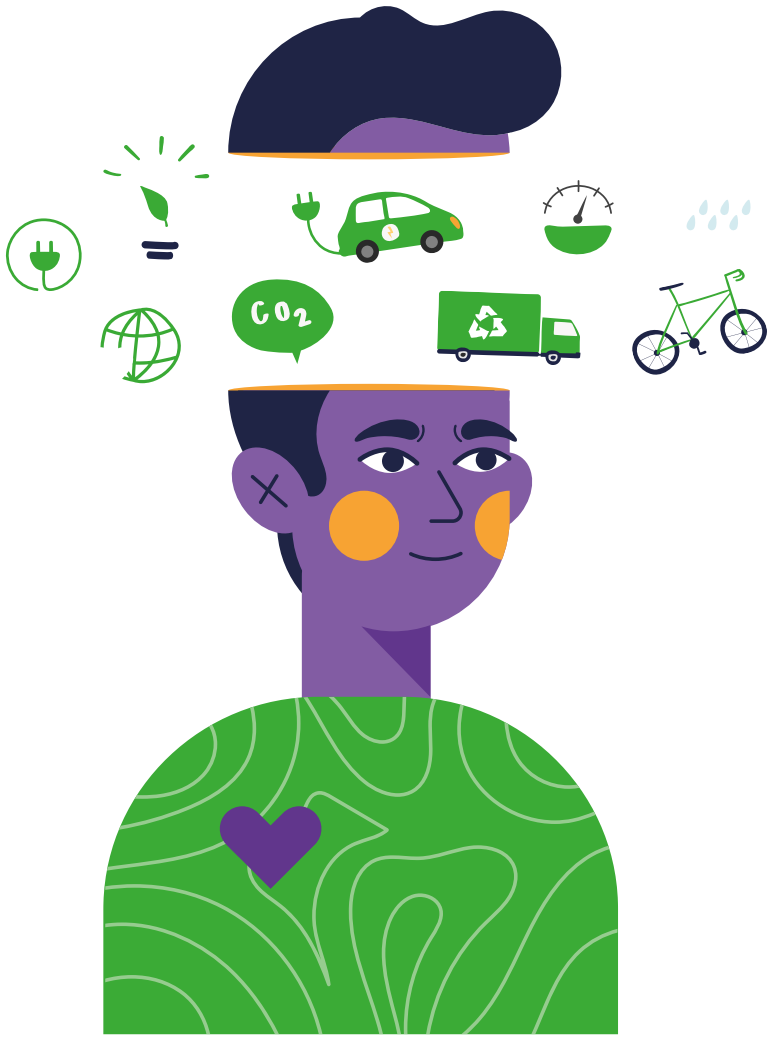

Summary

The Active and Healthy Travel Strategy (AHTS) sets out Oxfordshire County Council's policies and plans over the next 10 years from 2022 to 2031 to make active travel the natural first choice for its residents for short journeys.

By active and healthy travel, we mean mostly cycling and walking, but the strategy also encompasses other low carbon and low impact forms of travel. Cycling policies also include e-cycles and e-scooters and walking policies include wheeling (using wheelchairs and mobility scooters).

1. Introduction

1.1. Document status

The AHTS is a supporting strategy of Oxfordshire County Council's (OCC) Local Transport and Connectivity Plan (LTCP). The LTCP is the County Council's statutory Local Transport Plan, required under the Transport Act 2008. It outlines our long-term transport ambitions for the county and the policies required to achieve them.

The LTCP identifies walking and cycling as central to delivering the vision for travel in Oxfordshire. The LTCP highlights the importance of physical activity for all ages – children, adults and older adults. LTCP policy 1 sets a transport user hierarchy with walking and cycling at the top, which is supported by policy 2 to develop comprehensive walking and cycling networks in all towns. Local Cycling and Walking Infrastructure Plans (LCWIPs) will be the way of doing this. LTCP policy 4 states that LCWIPs will be prepared for all larger towns in Oxfordshire to achieve a step change in the use of cycling and walking. LCWIPs will be developed in line with both LTCP and AHTS guidance. This AHTS supersedes the LTP4 AHTS.

1.2. Relationship between the AHTS and the LTCP

Whilst walking and cycling lies at the centre of LTCP policies, it considers all modes and the impact of other measures such as working from home and digital connectivity. The AHTS is focused only on walking and cycling and brings together and expands on LTCP policies related to active travel. The AHTS is laid out in terms of the measures needed to realise the cycling targets and improve the walking experience. The AHTS expands on the measures needed to create successful cycle and walking networks.

However, the AHTS also considers the importance of traffic management techniques such as speed, parking management and low traffic neighbourhoods because these measures are integral to successfully promoting walking and cycling.

The AHTS sets out the basic cycling and walking design requirements, but these will be set out in more detail in the updated Oxfordshire Cycling and Oxfordshire Walking Design Standards (OCDS and OWDS).

1.3. National policy

The 2015 Cycling and Walking Investment Strategy (CWIS) sets out a requirement for Government to fund active travel and includes targets to double cycling in England by 2025. In 2020 the Government issued the policy document "Gear Change", which sets out a range of policies to promote walking and cycling, backed up by new guidance (LTN 1/20) and funding for local authorities. The Government has indicated that future active travel funding will be based on "Local Cycling and Walking Infrastructure Plans" (LCWIPs) prepared by local authorities. A new Government body "Active Travel England" will also have powers to assess all local authority transport schemes to ensure conformity with high standards of cycling schemes set out in Gear Change and LTN 1/20.

Oxfordshire AHTS policies are in conformity with Gear Change and LTN 1/20 but designed for the particular needs of Oxfordshire cyclists and pedestrians and Oxfordshire towns and culture. The AHTS also supports CWIS cycling targets and Public Health England objectives and targets on increasing physical activity and reducing obesity and reducing health inequalities.

1.4. Why active travel is important

Increasing active travel will have a significant impact on the following Government and Council policy priorities:

- Tacking Climate Emergency
- Public health priorities including
  - Improving health and wellbeing
  - Tackling the overweight and obesity crisis
  - Reducing health inequalities
- Decongestion – reducing urban traffic congestion
- Improving air quality and reducing traffic noise
- Levelling up of travel opportunities, including
  - Children, disabled and those living in areas of deprivation

2. Vision and targets by 2031

"Oxfordshire towns and villages will be places where most residents choose active and healthy travel (walking and cycling) as the natural first choice for making most of their local journeys and many of their longer journeys in tandem with train and bus. Oxford will become a world class cycling city where cycling is celebrated and open to everybody, regardless of age, background or cycling experience".

The active travel vision supports the LTCP vision of supporting clean growth, tackling inequality and promoting better health, well-being and inclusivity.

2.1. Cycling targets

1. Oxfordshire County Council will plan to increase the number of cycle trips in Oxfordshire from 600,000 to 1 million cycle trips per week by 2031
2. Targets and monitoring will be set for each LCWIP town and for each district in support of the County-wide target
3. Existing LCWIP targets
    - Oxford LCWIP target OC3: Baseline 300,000 cycle trips a week with a target of 450,000 cycle trips by 2031 (50% increase)
    - Bicester LCWIP target BCW1: Baseline 20,000 cycle trips a week with a target of 60,000 cycle trips by 2031 (200% increase)
4. Interim targets to be calculated, allocated and confirmed in policy
    - Rest of Cherwell from 55,000 to 100,000 cycle trips per week
    - West Oxfordshire from 50,000 to 100,000 cycle trips per week
    - VOWH: from 75,000 to 150,000 cycle trips per week
    - South Oxfordshire from 75,000 to 150,000 cycle trips per week

Target data is calculated from 2015-7 Active Lives Survey (ALS). ALS is a national survey conducted on a continuous rolling basis with data published yearly for all English authorities

Actions

1. Town LCWIPs will establish local targets in line with AHTS targets and measures to monitor the targets at town level
2. OCC will report on progress towards targets each year

2.2. How will we realise our vision and reach our cycling targets?

Creating a culture where active travel is the natural choice is an enormous challenge. Because the challenges but also the opportunities are greater for cycling, the AHTS first looks at cycling. However, many of the policy recommendations apply to both cycling and walking. The reasons for this are set out below.

Cycling levels in the UK and most of Oxfordshire are very low compared to most European towns. This creates a travel gap, principally between 1 and 5 miles length, which is mostly filled by car travel but is ideal for cycling. For this reason, the AHTS focuses on increasing cycling. Only a few towns anywhere in UK or Europe have achieved a substantial increase in cycling. The AHTS is based on the evidence and experience of those few successful UK and European towns that have achieved this.

The second section looks at walking. Walking levels in Oxfordshire are already high (particularly in Oxford) compared both to UK and Europe. Most trips under 1 mile are already walked. We will build on our current success by providing better connected walking routes combined with more attractive and welcoming urban spaces and village centres. There are still many gaps in the walking environment particularly in villages. There are also low levels of physical activity among some groups in our communities. The strategy will be to generally improve the experience of walking and expand walking among specific groups and in specific areas.

2.3. Increasing walking and cycling

There is no "magic bullet" or single way of increasing cycling. An increase in cycling depends on a number of key policies and practices working together. A better analogy is completing a "jigsaw". As each new policy and practice to promote cycling is implemented, they work together to complete the picture. A review of the evidence, in particular UK, Dutch and other European evidence, identifies five broad factors which are crucial in promoting and increasing cycling:

1. **Council commitment** at all levels to increase cycling as a policy priority
2. **An urban cycle network** which is identifiable, visible, high quality, comprehensive and town-wide, including links to surrounding villages
3. **Traffic management** measures such as traffic filters, reducing traffic speeds, reducing road capacity and increasing the cost of parking, which give comparative advantage to cycling
4. A **cultural norm** among the local population which supports and promotes cycling so that people increasingly build their lives round cycling for local journeys
5. A compact **urban realm** with easy to reach destinations on foot and by cycling

Together these factors can create a society where active travel becomes the norm. The following sections expand these 5 factors in greater detail. Factors 1 to 4 are set out under the cycling section. Factor 5 is set out under the walking section. Generally, all 5 factors also apply to walking.

3. Commitment and governance

The actions that the council take are key to whether active travel is successfully supported and cycling increased. The evidence is that where a council is serious about cycling and willing to take the bold decisions necessary to promote cycling and manage car use over a timeframe of around 10 years, an increase in cycling will result.

3.1. Mainstreaming cycling within the council

Mainstreaming cycling is shorthand for cycling being central to council policies, funding decisions, scheme design and implementation. The LTCP establishes a transport user hierarchy with walking and cycling at the top. The first challenge of mainstreaming cycling is ensuring that all management processes support the LTCP and AHTS objectives. There are many teams whose decisions have an impact on the attractiveness of cycling.

- Ensure that senior management and elected members are signed up and supportive of the AHTS objectives
- Ensure that all teams whose decisions impact in any way on the transport network are aware of and supportive of AHTS objectives
- Create internal governance processes that ensure active travel is at the centre and AHTS objectives and targets at the forefront of every decision-making opportunity throughout transport policy, programming, planning and delivery.

Teams involved include those managing school travel, planning applications, setting funding priorities and allocation of staff resources, traffic modelling and traffic management, scheme designs, junction changes and maintenance regimes.

OCC has already created the Active Travel Hub (ATH) to be at the centre of mainstreaming cycling in County processes and delivery. Active Travel Programme Board (ATPB) has been established to oversee the AHTS delivery.

Actions

3. ATH will develop a framework to monitor and report to ATPB on progress in mainstreaming cycling.
4. ATH will develop processes and guidance to ensure that all teams are aware of best practice.
5. ATH will arrange visits for key Councillors and Officers to understand and experience best practice delivery first-hand
6. ATH will organise or undertake training programmes for other teams

3.2. Policy documents

The AHTS is embedded within the LTCP and supports the LTCP policies which set the framework for planning travel and transport in Oxfordshire. AHTS policies will be implemented via Local Cycling and Walking Infrastructure Plans (LCWIPs). The policies of the AHTS will also need to be embedded in a wide range of other neighbourhood, local, county-wide and regional planning and policy documents. For example, these include

- The Oxfordshire Plan 2050
- Neighbourhood plans
- District local plan policies
- County policies on climate emergency, new development, maintenance, scheme prioritisation etc

Actions

7. ATH will work with internal teams, other councils and external agencies to ensure that AHTS policies are embedded in all relevant policies
8. ATH will set up SMART targets to ensure that AHTS actions and policies are being implemented
    - (Specific, Measurable, Achievable, Relevant and Timed)
9. ATH will review, report on and update AHTS policies on a yearly basis in the light of progress and new evidence

3.3. Commitment to Active Travel (CAT) scale

The Commitment to Active Travel (CAT) scale is a five-point scale from A-E for measuring the commitment to active travel i.e. the commitment to improving and increasing active travel according to best practice. The CAT scale was first set out in the Bicester LCWIP. This chart looks at the impact on cycling (rather than walking) in particular where the challenges are greater and commitment more often lacking. Evidence shows how to increase cycling, including ways that will **not** work, ways that will work **a little** and ways that will work **much better** than others.

Different areas and towns have different levels of cycling and other local cultural factors, which can make it easier or more difficult to implement the measures needed. The CAT scale identifies the readiness of an area or town to move onto more challenging forms of cycle priority and traffic management. Scale A represents commitment to the most effective ways. At the other end of the scale, E represents no commitment to active travel.

Table 1. CAT scale summary

Level	E	D	C	B	A
Mnemonic	Exclude Erode	Do minimum	Committed Comprehensive	Brave Bold	Ambitious Aspirational
Summary	Exclude needs of cyclists as marginal and unimportant	Provide basic and often inadequate cycle paths	Committed to making cycling convenient and comprehensive	Brave decisions in managing cars to promote cycling	Ambition and aspiration to put cycling at centre of travel
% of all trips by cycle	2%	5%	10%	20%	40%

On the basis of the measures adopted in the CAT scale, different travel outcomes and mode shares can typically be expected in terms of urban travel as set out in the diagram below. Note bus use is included in the walking share.

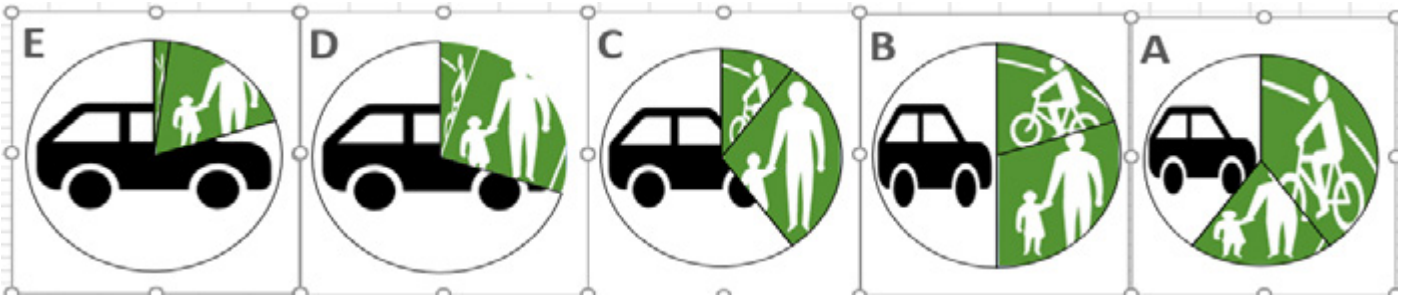

Figure 1. Typical modal share of local trips (people trips rather than vehicle trips)

As the consequence of following each CAT scale (Car % includes car passengers, taxi and motorcycle; Cycle % include e-cycles and potentially e-scooters; Walking % includes bus trips).

Policies

1. Active Travel proposals, schemes and designs will be evaluated against the commitment to active travel (CAT) scale.

2. As cycling levels increase locally over the AHTS period, it will be expected that schemes will become more ambitious on the CAT scale. Active Travel proposals in a town should align the LCWIP cycling and walking targets for the town with the expected CAT travel outcome.

4. Cycle network

4.1 Meeting cyclists needs

Creating a cycling culture means creating an urban environment which supports and encourages cycling. There are many and often contradictory views of what constitutes an attractive environment for cycling. To better understand what actual cyclists want, OCC conducted a survey of cyclists in Oxfordshire in 2019 (OCS19). Over 3750 cyclists made comments on the existing infrastructure and said what kind of infrastructure they liked, didn't mind, tolerated or avoided.

OCS19 responses indicated that there were two cohorts of cyclists in terms of their infrastructure preferences. Group 1 (Confident or "Quick" Cyclists) prioritised directness and didn't mind cycling alongside motor traffic. Group 2 (Cautious or "Quiet" Cyclists) preferred routes segregated and separated from motor traffic as far as possible even at the expense of some loss of directness. There are also two other distinct groups of cyclists – Competitive Cyclist and Child Cyclists. Currently, there is very little research on the infrastructure preferences of these 2 groups, but we expect that Competitive Cyclists fall into group 1 and Child Cyclists fall into group 2.

Figure 2. Cyclists differ in their infrastructure preferences

4.2 Design standards

Using OCS19 responses, backed up by evidence from international surveys of around 15,000 cyclists, OCC developed the Oxfordshire Cycle Route Assessment Matrix (OxCRAM) to measure the attractiveness of existing and new cycling infrastructure according to the preferences of confident and cautious cyclists.

In 2020, the Government issued LTN 1/20 Cycle Design Standards to guide local government infrastructure. LTN 1/20 sets out high quality and mandatory standards how to provide for cycling. However, its guidance is very much designed for wide roads and areas with low levels of cycling as its main focus. It is unhelpful in guiding what the best solutions are when there is insufficient space and the need is to provide for high cycle numbers, sometimes in their thousands as in Oxford. For instance, it is impossible to provide the LTN 1/20 standards along most of Oxford's main roads because the highway widths are insufficient. Inevitably compromises need to be made. LTN 1/20 also does not include more innovative designs suitable for high cycling areas, such as cycle streets and turbo-roundabouts.

Actions

10. ATH will develop updated Oxfordshire Cycle Design Standards (OCDS) to meet the needs of Oxfordshire cyclists in line with LTN 1/20 and OxCRAM. The OCDS will embed LTN 1/20 guidance into local guidance suitable for Oxfordshire. OCDS will be the way LTN 1/20 standards are implemented.

Policies

3. All new active travel schemes (including any schemes with an active travel element) will be designed according to the updated Oxfordshire Cycle Design Standards (OCDS) and Healthy Streets standards. The OCDS will take into account the needs of confident and cautious cyclists and ensure accessibility for pedestrians including addressing the needs of older people, parents with young children, and people with a disability.

4. Where OCDS standards cannot be met, teams will submit a Departure from Cycle Standards (DCS) form and consult with ATH for a viable solution in line with all the 5 core cycle design principles (as below).

4.3 Core Cycle Design Principles (CCDPs)

The Dutch formulated five core cycle design principles (CCDPs). CCDPs underpin LTN 1/20 guidance and the updated OCDS. All 5 CCDPs are important in designing a cycle network and cycle routes. The quality of most cycle routes in the past has been poor, in large part due to a failure to incorporate all 5 principles. The AHTS requires that cycle routes are delivered to a high quality. As an analogy, for those used to planning for car traffic rather than cycling, high quality urban and inter-urban cycle routes should be delivered to the same quality as trunk roads for cars, with excellent sightlines, superb surfaces and minimal stops or delay.

The 5 CCDPs are set out below. These capture the experience of cycling. Designers need to be cyclists (LTN 1/20 requirement) and experience cycle routes both as confident and cautious cyclists to ensure that they fully understand the dynamic of cycling.

- **Coherent**: Cycle routes should work from end to end including somewhere to park your bike at both ends, be easy to follow, consistent in quality and continuous (without any breaks) and form part of a comprehensive cycle network

- **Direct**: Cycle routes should have minimal and ideally no diversion, detours, deterrents or delays and no dismount signs. The cyclist will be able to travel at their chosen design speed without having to stop or slow down, with good sightlines and sufficient width to overtake other cyclists, bypass queues of cars and not be delayed by pedestrians.

- **Safe**: This principle includes all the elements which make cycle routes safe. Slow traffic speeds, superb surfaces and safe junctions are the 3 main elements. In urban areas, sharing low traffic streets (LTNs and cycle streets) is one main measure. Separation (cycle lanes) and Segregation (cycle tracks) becomes important when traffic volumes are high and speeds are 20-30mph (on-road lanes) or over 30mph (off-road tracks). Perception of safety is covered in comfort.

- **Comfort**: This principle means that the cycling experience is easy and pleasant. It includes feelings of personal security, sociability (able to ride 2 abreast), perceptions of safety, minimising stress and psychological discomfort such as from traffic noise, air pollution, driver intimidation and complex junctions or routes. Signing is also a factor to remove the discomfort of getting lost.

- **Attractive (Advantage)**: This principle is the most important of all. It means that you want to do it, are attracted to cycle more than using other modes – it is your first choice and should be easier, quicker and more pleasant than for instance using a car. The word advantage better sums up the principle.

Actions

11. ATH will develop a checklist of criteria in line with the 5 core cycle design principles as part of the OCDS for designers to evaluate their schemes, forming part of a Health Impact Assessment Tool for infrastructure improvements. This will be based on the LTN 1/20 cycling level of service and Junction Assessment Tools.

Policies

5. 5 CCDPs will be used, together with a Health Impact Assessment of proposed network improvements, to evaluate schemes as a way of understanding the totality of the cycling experience in designing new and reviewing existing infrastructure.

4.4 Urban cycle networks

Single cycle routes rarely have much impact on cycling levels. The evidence is mostly that one single route attracts cyclists from other less attractive routes, but does not increase cycling levels. What is necessary is a high quality and dense cycle network which links to every neighbourhood. This means that all trip attractors (particularly town centres, major employment, healthcare facilities, shops and schools) are connected and linked to the cycle network. Another failure is that cycle designs are based on current flows on the underlying assumption that cycling levels will not increase, rather than target flows. Local cycling and walking infrastructure plans (LCWIPs) will be the way that this network is identified and prioritised. LCWIPs will identify the strategic town-wide cycle network.

Policies

6. OCC will develop LCWIPs for all main urban settlements (over 10,000 inhabitants) by 2025

7. All routes should be designed to the cycle design standards of the LCWIP target flows, not the current cycle flows.

4.5 Prioritising cycle infrastructure (OxCRAM)

Network prioritisation is crucial to achieving cycling targets. There is an on-going debate whether it is better to build sections of routes to a very high quality or build a wider network to a lower 'good enough' standard. OxCRAM provides a way of assessing whether improvements are good enough (7+) and a way of comparing value for money of the two approaches.

To meet targets in LCWIP towns, it is essential that the whole cycle network and individual cycle routes over their entire length are improved in as short a time as possible. Many cycle schemes take years to deliver short sections of a route at great cost because of the costs of traffic management and utilities in moving kerblines. Signing and lining can often provide significant improvements. By improving routes to a similar "good enough" consistent standard, a complete cycle network can be implemented in a shorter timescale and lower cost.

Policies

8. OCC will plan networks and design routes that will maximise the attractiveness to both confident and cautious cyclists according to OCDS and OxCRAM

9. OCC will use OxCRAM as an audit and review process for new and existing infrastructure.

10. For major schemes an independent expert reviewer will be employed to review plans at the early design stage.

11. Cycle routes will be improved to a consistent OxCRAM standard over their whole length (in line with the preferences of confident or cautious cyclists)

12. Generally, where there is competition for funding, network improvements will be prioritised over individual route improvements.

4.6 Dual choice network

OxCRAM level 7 is the level at which cycle routes become acceptable and attractive. In many cases, it may not be possible to design for both cautious and confident cyclists along the same route at OxCRAM 7+. In such cases, it is recommended that a dual choice network is implemented. A dual choice network consists of two types of strategic cycle routes.

- Quickways are routes along main roads, which also serve essential motor traffic such as deliveries and bus services, designed to the standards and preferences of confident cyclists

- Quietways are routes along quiet residential streets or along cycle paths which meet the needs of cautious cyclists

Most cycle journeys are made by confident cyclists. High cycling levels are the most visible outcome of a cycling culture and are essential for creating a cycling culture which leads to more people cycling and greater safety. Encouraging confident cyclist journeys is key to increasing cycling levels.

Policies

13. Where it is impossible to design adequately for both confident and cautious cyclists, a dual choice network should be introduced allowing cyclists to choose the type of route they want to cycle on.

14. There is a strong correlation between confident cycling and frequent cycling. It is essential that the needs of confident cyclists are therefore adequately met in support of LCWIP cycling targets.

4.7 Cycle Streets

A key element of a town wide cycle network are cycle streets. Cycle streets are part of the strategic cycle network along low-traffic residential roads designed for cautious cyclists. They are also be likely to be attractive to confident cyclists. These streets are designed to have the feel of cycle paths where cyclists of all abilities feel confident and happy to cycle. Low traffic speeds and low traffic volumes (typically under 1000 motor vehicles a day) are key elements.

In many towns, in part because of satnav, suitable residential streets may also be used by car and van drivers looking for a quicker alternative to the main roads. In such cases, it is necessary to introduce modal filters to prevent through motor traffic to prioritise cycling. Additional benefits can be created by introducing modal filters as part of low traffic neighbourhoods (see section 3).

Policies

15. OCC will introduce cycle streets as part town-wide cycle networks to provide high quality continuous cycle routes for cautious cyclists (Quietways)

16. OCC will use modal filters and other design features to make cycle streets meet CCDPs and 7+ OxCRAM design criteria.

4.8 The importance of providing for existing cyclists

There is a prevalent but mistaken belief that existing cyclists are unimportant and can be ignored and that all efforts should be applied to new cyclists along with a view that new cyclists will inevitably be cautious. Evidence shows that there are several fundamental errors in this approach which could undermine achieving AHTS targets.

Nearly all cycle journeys are made by frequent and therefore mostly confident cyclists. National data shows that around 8% of the population who cycle 3+ times a week make 80% of all cycle journeys. If you also include the 7% of population who cycle weekly, normal cyclists (15% of the population) make 95% cycle trips, whereas 20% of the population who are infrequent (less than weekly) cyclists make only 5% of all cycle journeys.

Increasing cycling depends on more people taking up frequent cycling (3+ times a week). In Oxford, frequent cyclists make up 20% of the adult population and in Cambridge 35% of the population. This reliance on frequent cyclists in high cycling towns is found across Europe. Towns and countries with more cycle journeys have higher percentages of frequent cyclists, but often quite similar levels of infrequent cyclists.

There is also considerable churn where every year some people start cycling or cycle more and others stop cycling or cycle less. Reducing losses to cycling by improving the cycling experience for existing cyclists is likely to be as important or more important than getting new cyclists.

The increase in frequent cycling relies mostly on existing cyclists cycling more. In other words, it is easier to persuade existing weekly cyclists to cycle 3+ times a week than a non-cyclist to take up cycling.

New cyclists generally have similar views to existing cyclists in terms of infrastructure choice. OCS19 found that new cyclists typically only differed in underlying categories, such as attitude, gender, age or frequency cycling rather than how recently they took up cycling. The evidence indicates as they become more regular cyclists, they take on the infrastructure choice of confident cyclists.

Cyclists also differed between Oxford and outside Oxford. Oxford cyclists by each category (such as age) were more likely to be confident cyclists than cyclists of the same category from outside Oxford, suggesting that the prevailing cycle culture has an even more important impact than personal characteristics. That means a new cyclist in high cycling culture is more likely to be a confident cyclist from the start.

Policies

17. OCC will prioritise and concentrate on measures that increase the number of frequent cyclists in the short term, as a way of increasing cycling and thereby creating a visible cycling culture

4.9 People versus journeys

There is a short-term conflict between two policy objectives of public health and cycling targets on who to prioritise. On the one hand, public health priority is to encourage more people, who currently take no exercise and do not cycle, to take up cycling because of the greater health benefits compared to existing cyclists who are already mostly healthy. On the other hand, cycle research shows that increasing cycling trips is mostly dependent on persuading existing cyclists to cycle more.

Getting harder to reach groups such as children and older cyclists is dependent on living in a cycling culture and requires specific interventions to address the barriers they may experience to cycling. Good quality routes alone are unlikely to have much impact without an established cycling culture, as people's choices, or parents' willingness to let children cycle, are more dependent on living in a cycling culture rather than the existence of a good cycle route (though a good cycle route is also necessary). Together with cycle route improvements, cycling activation measures are important in enabling residents who feel that cycling is not an option for them due to cost, cultural or confidence barriers to change behaviour. Activation measures focus on working with local community groups to engage residents who may experience greater barriers to enjoying a healthy lifestyle, due to a range of social factors that mean that they experience greater health inequality.

Policies

18. Oxfordshire County Council will ensure that improvements to cycling and walking networks and access to green infrastructure are supported by community activation measures that enable the whole community and particularly those with greatest need to benefit from these improvements and to become more active and for healthy day-to-day behaviours to become the norm.

4.10 Stakeholders

Cycle and walking campaign groups along with other environmental groups are key partners in developing new cycle routes and promoting active travel. These include local groups, such as Cyclox and OxPA, county-wide groups and umbrella groups such as Oxfordshire Cycling Network and COHSAT, along with national groups such as Cycling UK (formerly CTC) and Sustrans. These groups can help to identify new routes, suggest improvements, critique designs and publicise surveys and new routes. A good working relationship with local stakeholders brings many benefits to both sides.

The Council has signed up to co-production in developing new schemes. Co-production should be an equal exchange of ideas to understand different priorities and problems. When seeking to identify design solutions, plans should be shared at an early stage. At times there are likely to be differences of opinion between different stakeholders or designers. Designers have the responsibility of ensuring that the final designs accord with Oxfordshire Design Standards and core cycle design principles.

Policies

19. OCC will work closely with and seek the views of stakeholders when developing and improving the active travel network in line with AHTS

20. OCC will work closely with stakeholders using co-production methods to develop and improve cycle and walking designs of new infrastructure.

4.11 Strategic Active Travel Network (SATN)

Oxfordshire is a rural county with many villages. These settlements are currently mainly dependent on car travel to get to facilities such as shopping, nearby town centres and access to work or train stations. Unlike many intra-urban journeys, distances can sometimes be at the longer end of what may be comfortably cycled. The increasing availability of e-bikes makes such journeys more practical and appealing to a wider audience.

The intention is to identify and then improve an Oxfordshire-wide strategic active travel network (SATN). This will primarily be for utility cycle journeys, linking villages to towns, other centres of employment and public transport connections. The SATN will also act as a recreational network, providing urban and rural residents with ways of going for cycle rides to visit nature and other areas of recreation. This will also support the rural economy by encouraging economic tourism.

Policies

21. OCC will develop an Oxfordshire-wide strategic active travel network (SATN). The SATN will be designed as far as possible to link all villages to urban areas and areas of employment by high quality and attractive cycle routes designed in conformity with Oxfordshire Cycle Design Standards and in line with core cycle design principles.

The SATN improvements will be prioritised in the following ways:

- Links to rural train stations, particularly from towns not served by a train station, such as Witney and Abingdon
- Links to urban areas and employment from nearby villages identified in LCWIPs
- Links to larger settlements where there are more potential cyclists
- In support of National Cycle Network routes

The SATN will consist of the following types of routes:

- Routes alongside rural main roads by off-road cycle tracks
- Routes (mostly on road) along rural minor roads made attractive by low traffic volumes and low traffic speeds
- Routes along upgraded public rights of way and other permissive paths (also known as Greenways)

Implementing the SATN will require significant funding and resources (such as land acquisition). Routes along rural minor roads in most cases will need significant improvement to make them attractive to cyclists. This may include modal filtering or junction changes to remove unsuitable rat running traffic, lower speed limits, speed enforcement, traffic calming measures, lighting, converting roads into Quiet Lanes and other measures. Schemes will be designed to be sensitive to the rural and village environment.

5. Managing car use

The main competitor for cycling over the distance between 1 mile and 5 miles is car use. Nearly 60% of car journeys are under 5 miles. To promote cycling it is essential that cycling is given a realistic competitive advantage over car use. Car use has many negative externalities which are not factored in by a car user and thereby car use is encouraged in an un-economic way for shorter journeys. AHTS policy is for a fairer distribution of benefits, so that cycling replaces the car as the usual way of linking residents to urban facilities – such as shopping, visiting town centres, seeing friends and such like.

There are strong and compelling reasons why it is necessary that individuals must change travel behaviour, but on the positive side, the evidence is also that such changes will ultimately and increasingly be beneficial to everyone.

Managing car use is the main challenge in promoting cycling. Its impact is often more important than providing cycle routes. In many ways this needs a fundamental cultural shift among providers and the population.

5.1 Traffic management measures by CAT scale

Traffic management is essential and crucial to promote cycling beyond a certain level. A major barrier however is the acceptability of more effective forms of traffic management. The chart below gives an idea of different traffic management schemes at different CAT scales.

Table 2. Traffic management measures by CAT scale

CAT level	A	B	C	D	E
Traffic models base on:	Multi-modal models and traffic reduction	Peak traffic flows no longer priority	Meeting only existing peak traffic flows	Meeting Increase in car use in forecasts	Meeting high future forecasts in car use
Residential areas	Car free neighbourhoods	LTNs	CPZs	No car parking restrictions	Build urban freeways
Town Centre Car parking	Minimal car parking only for disabled and deliveries	Reductions in parking and high car parking charges	Car parking charges discourage excessive car use	Car parking with minimal charges	Central and free car parks with plentiful capacity
Main road network	Main roads closed to most traffic Average speed cameras	20 mph limits Junctions and vehicle lanes narrowed	Junction changes to cater for cycling	Junction changes to meet peak traffic	Junction widening New roads
Town circulation	Town centre traffic filters	Restrictions on some main routes to give cycling advantage	Minor road filters for benefit of cycling	Main road traffic capacity maximised	Expansion of ring roads
Signalised Junctions	Signalised junctions replaced by cycle friendly junctions	ASLs and lead in lanes and removing vehicle lane	ASLs at all signals	ASLs at a few junctions	Multi-lane signals with no cycle provision
Roundabouts	Shared space schemes with minimal traffic	Dutch single lane and turbo-roundabouts	Narrowing roundabout entries	Off road cycle track	Multi-lane entries

Policies

22. OCC will pursue traffic management schemes in accordance with proposed LCWIP targets and mode shift targets as shown by the CAT scale

23. OCC will assess the negative and positive impact on cycling and walking in any traffic scheme or proposal to ensure that they support the active travel targets.

24. OCC in tandem with District Councils will seek powers to implement traffic management measures in support of active travel targets, such as decriminalised parking powers and moving traffic offences powers.

5.2 Low Traffic Neighbourhoods (LTNs) and modal filters

Low Traffic Neighbourhoods (LTNs) are a key element in developing most town-wide cycle networks. Whilst the name is new, the concept of creating low traffic areas is well established in town planning, including Radburn design principles, cul-de-sacs and pedestrian precincts as advocated in 1960s publication "Traffic in Towns". There are many existing LTNs throughout Oxfordshire towns, some by original design, some introduced to prevent rat-runs and some by geographical accident. The urgency to protect other residential areas from through traffic has been exacerbated by a doubling in traffic since the 1980s and satnav technology which directs drivers along residential streets as a way of avoiding traffic on main roads.

Where LTNs also differ from many existing low traffic areas is the intention to alter the balance between motor traffic convenience and active travel convenience. Modal filters give advantage (CCDP 5) to cycling over car use by making cycle journeys more direct and quicker and car travel longer and more inconvenient. LTNs also work effectively in developing Quietways and cycle streets as part of a dual choice cycle network. The benefits of LTNs in terms of promoting active travel, reducing car use and improving safety, air quality and urban liveability are now well established in the research literature.

Policies

25. In developing LCWIP cycle networks, OCC will identify where LTNs can be created or improved to provide safe areas for local cycling and walking to promote strategic Quietway cycle routes.

5.3 Traffic speed

Traffic speed reduction and enforcement is essential to promote cycling. A major Government-funded research found that reducing traffic speed is the single most important element of improving cycling safety and encouraging more cycling (TRL Report PPR 580).

"Of all interventions to increase cycle safety, the greatest benefits come from reducing motor vehicle speeds. Interventions that achieve this are also likely to result in casualty reductions for all classes of road user. This may be achieved by a variety of methods, including physical traffic calming; urban design that changes the appearance and pedestrian use of a street; and, possibly, the wider use of 20 mph speed limits".

At 20mph speeds, there are very few serious cyclist injuries and virtually no cyclist deaths except those related to lorry turning movements. In rural areas and along rural roads, traffic speed is the main deterrent for more cyclists and the main reason for the higher rate of cyclist injuries in rural cycling.

Traffic speeds are related to speed limits, traffic calming measures and enforcement. Oxfordshire research showed that traffic calming schemes reduced casualties by 50% on average. Average Speed Cameras (ASCs) are a new form of enforcement where traffic speed is measured between 2 or more points over a route. Unlike the traditional spot camera enforcement, they are almost 100% effective in monitoring and therefore enforcing speed limits.

Policies

26. OCC will introduce 20 mph speed limits in all urban areas in Oxfordshire both in residential areas and along main roads as a way of promoting cycling.

27. OCC will assess and reduce and enforce speeds in villages in response to local demands in support of cycling and walking.

28. OCC will assess and reduce traffic speeds along rural lanes and roads as a way of encouraging more cycling and as part of the Strategic Active Travel Network proposals.

29. OCC will introduce traffic calming or Average Speed Cameras (ASCs) in urban areas, villages and along the SATN to enforce speed limits.

5.4 Parking policies

The other key policy is parking. The availability of free or low-cost parking at destinations is a major factor in generating car journeys. Reducing and restricting car parking availability and introducing parking charges are essential measures to induce behaviour change.

Policies

30. As part of developing LCWIPs and in LTCP area strategies, the following measures will be assessed:

- Introduce parking charges in Council-managed town centre car parks
- Introduce parking costs for businesses such as through a workplace levy charge
- Introduce on-street restrictions and control such as double and single yellow lines via decriminalised parking enforcement (DPE) powers
- Control on street parking in neighbourhoods via Controlled Parking Zones (CPZs)

5.5 Cycle parking policy

Good quality sufficient and secure cycle parking should be provided at both home locations and destinations. Districts should set out detailed cycle parking policies for new developments in line with best practice for both new dwellings and workplaces. Likewise there is a need to introduce secure parking in existing housing and existing cycling destinations such as shops, workplaces and leisure facilities.

Actions

12. As part of the Oxfordshire Cycle Design Standards, the Council will develop cycle parking standards and guidelines as a guide for District Councils and planning.

Policies

31. OCC will work with district authorities to introduce best practice cycle parking policies

32. OCC will work with businesses, train operating companies, shops and leisure facilities to provide high quality cycle parking

33. OCC will ensure that it provides high quality cycle parking at all its own premises such as libraries

5.6 Why traffic management is necessary

Traffic management is key to increasing active travel and cycling in particular. The alternatives of not managing and constraining traffic are many and can be summarised as:

- Increasing costs for individuals in loss of fitness and ill-health and for society in treating ill-health and premature death
- Worsening of obesity crisis leading to long term illnesses with additional cost burdens on the NHS
- Continuation of high traffic casualty rate with many unnecessary serious accidents and occasional fatalities
- Worsening of traffic congestion in both urban areas and on strategic inter-urban roads leading to individual frustration and a loss of income with economic disbenefits such as higher commodity prices
- Continuing issues of traffic noise and poor air quality leading to ill health, particularly affecting children and the elderly
- Worsening of climate emergency and failure to meet targets to reduce carbon emissions
- All of these harms falling disproportionately on those who are the most deprived in society, exacerbating inequality.

6. Cycling culture

The barriers to more cycling are mostly "normative" i.e. they represent an individuals' ideas of whether cycling is an acceptable mode of travel for themselves in terms of the prevailing culture. Social norms are mainly formed by what other people do. This helps to explain why "critical mass" of cyclists is effective in sustaining and increasing cycling. An examination of historical trends in cycling across UK towns between census results and European countries found that the strongest correlation was between cycling levels in previous and recent surveys even over 20 year periods. In low cycling areas there is a "chicken and egg" dilemma with very few cyclists and therefore no visible cycling culture, which helps explain why it is such a challenge to increase cycling.

Social norms or normative beliefs represent what a person's prevailing culture says is or is not acceptable. Surveys have shown that cycling still has a very low status among many sections of the population, though this has improved over the last 10 years. One negative connotation of cycling for many non-cyclists is that it is inherently dangerous, effortful and unpleasant.

An extension of this idea emanating from TRL research is that cyclists are an "out" group and car users an "in" group. This has been the prevailing culture for the last 50 years and is still reflected in a lot of media stories and complaints against cyclist behaviour.

6.1 Triggers

Most travel choices are of a habitual nature. In terms of changing behaviour, it is useful to identify barriers (real and cultural), benefits and triggers. Triggers are important in that travel is habitual and they can overturn the habit.

Triggers are events that make people consider changing travel behaviour. Triggers that have been associated with a change to cycling are London Congestion Charging, increasing parking charges at train stations, petrol price hikes in 2008 and most recently the COVID-19 lockdowns which saw a 46% increase in cycling in one year. In Ghent, the introduction of traffic filters throughout the town to make it like an LTN led to an increase in cycling from 22% to 35% of all trips over a few years. It is expected that Connecting Oxford proposals might have similar effects.

On an individual level, changes in house, job, school, life stages, loss of car or health warnings can trigger changes, but triggers can also work both ways, so for instance acquiring a driving licence or buying a car is highly likely to lead to less cycling.

Policies

34. Oxfordshire County Council will support transformative changes to the highway environment to kickstart levels of cycling and walking.

Active Travel Activation

Active travel activation (ATA) will be a key element of building confidence in encouraging people to take up cycling. ATA takes many shapes and forms. These include:

- Cycle network maps – both paper and electronic
- Wayfinding routes – to promote active travel in local neighbourhoods
- Web pages to advertise and publicise new routes and other information
- Electronic rides illustrating routes e.g. on YouTube, where cyclists can experience routes before trying out in reality
- Social media websites
- Competitions with rewards to incentivise new and existing cyclists
- Buddying up where confident cyclists take new cyclists for rides together
- Support and fun groups focused on cycle rides together
- Bike libraries offering the loan of free cycles and helmets
- Free Dr Bike sessions to help low-income cyclists to maintain their bicycle

Policies

35. OCC will continue to develop its ATA programme to support the AHTS targets to increase walking and cycling in line with best practice

36. OCC will ensure that local cycling and walking activation plans are developed in conjunction with the development of LCWIPs so that the impact of network improvements is maximised

6.2 Children and schools

A child cyclist is more likely to become an adult cyclist. Providing opportunities for children to learn to cycle and then to be able to cycle comfortably with parents and afterwards to gain independence by cycling alone to visit friends, go to school or visit places is a fundamental element of a civilised transport system.

The number of children cycling is a good indicator of the cycle friendliness of an urban area and evidence of a cycling culture. Higher levels of cycling are most associated with higher levels of everyone cycling where there is a cycling culture. For instance, Cambridge has the highest levels of children cycling of any local authority.

Over the last 50 years, children's right to travel independently in UK has been eroded, mostly through increased motorisation and parental restrictions. The UK has some of the lowest levels of children cycling throughout Europe. For instance, 50% of children's trips to education in Netherlands are by cycle compared to around 2% in the UK. Another study (Bly 2005) found that children on average cycled 18 minutes a day in Netherlands compared to 2 minutes a day in the UK. 41% of children in Oxfordshire currently do not meet physical activity guidelines.

However, around 90% of children own a cycle and many children use their cycles at least weekly. This represents a significant potential to increase cycling among children. Cherwell School in Oxford represents best practice in Oxford with 58% of children regularly cycling to school.

Policies

37. OCC will encourage active travel to schools by

- Encouraging schools to provide adequate cycle parking
- Reviewing and improving cycle routes to school
- Implementing LTNs and School Streets around schools wherever feasible
- Providing Bikeability opportunities for all children
- Providing Footsteps training to increase understanding of road safety in young children

38. OCC in partnership with district authorities will seek to ensure there are safe places for young children to learn to cycle by

- Providing paths in parks for young children to cycle
- Creating slow and low traffic streets in residential areas such as through LTNs

6.3 Safety perceptions and reality

There is a common popular perception that cycling is 'dangerous', which many surveys have shown to be one of the main reasons people give as to why they do not cycle. Furthermore, this perception of being at risk is reinforced by the actual road environment for cyclists. Research (Sissons Joshi and Aldred) found that cyclists experienced by far the highest number of "incidents or near misses" per mile travelled for any vehicle. These perceptions and experiences undermine a cycling culture.

Perceptions of safety however need to be distinguished from actual safety impacts. For Oxford, there were between 2014 and 2019 around 150 reported slight cyclist injuries and 30 serious injuries each year. Cyclist casualties are very rare events compared to the very large number of cycle trips (around 15 million cycle trips in Oxford a year). This indicates that the serious reported casualty risk for each cycle trip is 1 in a million. Put another way, a commuter cyclist would need to cycle for around 2000 years before they were likely to have a reported serious cycle accident. In other words, most people, especially non-cyclists, have a distorted idea of the risk of cycling. This is also shown in surveys comparing cyclists and non-cyclists which show that regular cyclists have a lower perception of road danger than non-cyclists.

6.4 Health benefits of cycling compared to risk

The health benefits of cycling far outweigh any casualty risk by a factor of at least 20 to 1. It has been calculated that on average every 20-minute cycle journey a day will be recovered in extra life. Cycling reduces the risk of heart attack by around 50%, reduces certain cancer risks by about a third, improves fitness, reduces depression and mental health problems, reduces the risk of dementia and improves muscle strength and co-ordination and helps prevent weight gain and obesity.

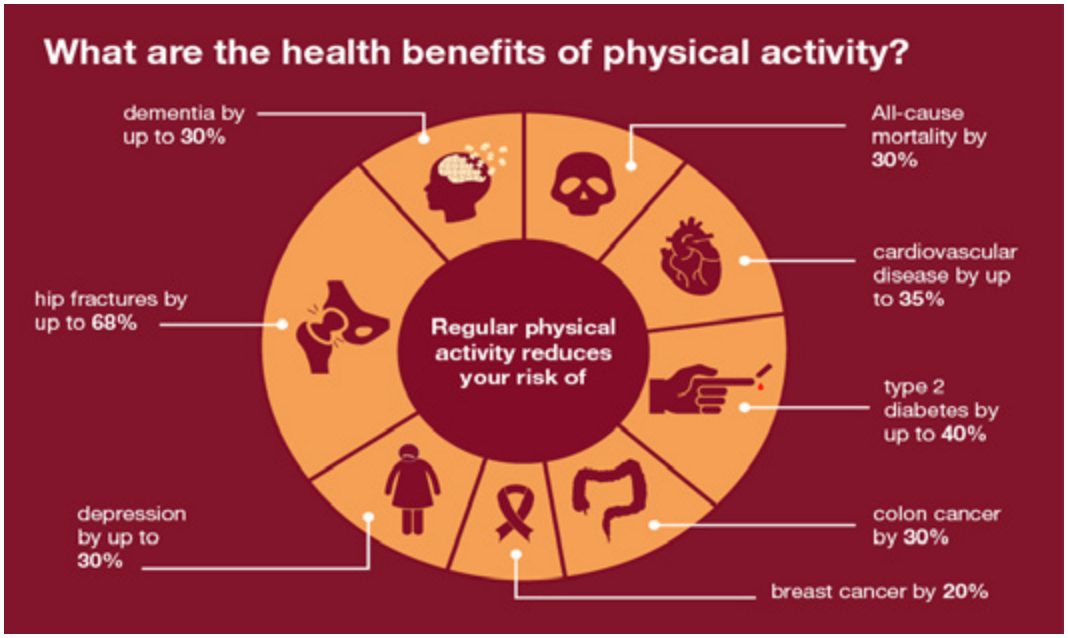

Figure 3. Health benefits of physical activity

Source: Public Health England (2019).

Cycling lies in the optimum range of physical activity and travelling is an activity that around 90% of people do for substantial length of time each day giving many people an easy way to build physical activity into their daily routine. Surveys also show that cycling is pursued over lifetimes (unlike most sports). In Netherlands, 24% of all journeys by over 75-year-olds are by cycle. Surveys show that most cyclists were sufficiently active to maintain good health. In brief, cycling prolongs a healthy life. The highest risks are not cycling but sitting for much of the day without taking any regular physical activity.

Policies

39. OCC will promote the significant benefits of everyday cycling and walking to health and wellbeing, with a particular focus on encouraging inactive people to take up cycling and walking.

6.5 Assessing the real risks of cycling

Police data miss two aspects of cyclist safety. First, the Police only collect data on public highways. Cycle tracks are excluded. Secondly, they depend on the casualty being reported so have a bias towards serious collisions involving motorised vehicles and cyclists.

The OxCam survey of cyclists in both Oxford and Cambridge found that around 33% of cyclists had had an accident (coming off your cycle whether or not there is any injury) in the last year. Scaling up responses suggests 17,000 cyclists of the 50,000 Oxford cyclists are likely to come off their bike each year, most of which would not result in any injury, 4000 would result in a slight injury and 800 in a serious injury. This suggests that a cyclist might have a serious cycling injury every 60 years of cycling, though this figure may be skewed on the high side because many respondents were younger and more likely to have cycle accidents.

The OxCam survey indicates that the majority of cyclist accidents are due to skidding because of surface problems or cyclists losing control. In contrast, Police STATS 19 data indicates that most (74%) cyclist casualties are in collision with a car. In the STATS 19, cyclists were only responsible in 11% of cyclist accidents, compared to 85% where the other vehicle driver was responsible, showing that measures to manage car traffic are likely to be most effective in reducing cyclist casualties.

Policies

40. OCC will produce an annual report and analysis of cyclist and pedestrian casualties to monitor the trend in STATS 19 casualty data

41. OCC will analyse the safety impacts of new and different infrastructure particularly innovative infrastructure to assess the safety impacts

42. OCC will undertake measures to reduce all cyclist and pedestrian casualties, including those not reported to the Police.

6.6 Maintenance

Good quality surfaces are essential for safe and comfortable cycling. Road maintenance is an important element in ensuring that road or path surfaces on the cycle network are smooth, well drained and attractive to cycling. In addition, regular pruning of vegetation overlooking cycle paths is important to create a safe and welcoming environment for cyclists.

Road improvements, especially routine resurfacing, also present a low-cost opportunity to make significant improvements to cycle routes, particularly those which are reliant on just line-marking and especially on main roads where traffic management is a substantial element of scheme cost. Longer term road closures, such as bridge closures due to weight restrictions, will be seen as opportunities to exempt active travel and thereby encourage active travel.

Policies

43. OCC will set up a maintenance regime to ensure that the cycle route surfaces are smooth, well-drained and safe, which takes into account the extra vulnerability of cyclists to potholes and rough and deformed surfaces. This will include following up re-instatement works which often deteriorate into surface un-evenness and hazards. A maintenance programme of cutting back vegetation overlooking cycle paths will also be established, working with local communities to identify problem areas.

44. OCC will prioritise maintenance of cycle routes to ensure high quality surfacing to minimise accident risk. Smooth machine-laid tarmac should be the default.

45. OCC will liaise internally and with cycling stakeholders to make sure that future maintenance schemes likely to affect cycling and particularly those on LCWIP cycle and walking networks are adequately assessed to identify potential added value improvements.

46. Where there are road closures or restrictions, every opportunity will be taken to see whether active travel can be exempted and thereby encouraged.

6.7 Disability, different types of cycles and barriers

Recognition of the use of cycles as a “mobility aid” is not yet widespread. This leads to the needs of disabled people using cycles not being recognised and not being catered for in changes to the urban environment (either through planning or highway changes). Around 10 million people have a limiting impairment in England and Wales (ONS).

A 2011 London survey (Attitudes to cycling) found that 62% of disabled people said they could ride a bike. A survey by Wheels for Wellbeing (Experiences of disabled cyclists) found that most disabled cyclists (52%) owned a normal standard bike, whilst 17% owned a hand cycle, 17% a recumbent bike, 13% a trike, 8% a tandem and 18% an e-bike.

Active Lives Survey shows that 7% of the adult population with a limiting impairment in England used a cycle at least monthly and 1% at least 5 times a week. In Cambridge, figures were much higher with around 40% of disabled cyclists simply using a regular two-wheeled bike. This implies that the major barrier to more disabled people cycling is not their disability, but the town cycling culture and level of cycle-friendliness of the infrastructure.

Policies

47. OCC will design all new and review all cycle routes to be accessible to most types of cycles. In particular, all barriers on cycle routes should leave a clear 1.5 m width between bollards and not introduce lateral diversions unsuitable for longer bikes.

48. OCC will ensure that the needs of disabled cyclists are recognised in design, particularly of Quietways and access to cycle parking.

7. Walking

Walking is the mainstay of urban areas.

Active Lives Survey data shows that Oxford is among the 10 local authorities with the highest levels of walking in England, vying with several central London boroughs. In Oxford, 65% of the adult population walk at least once a week for utility purposes, including 35% walking at least 5 times a week. In the other districts there are much lower levels, with around 40% walking at least once a week, including 15% walking at least 5 times a week.

7.1 Vision

Oxfordshire will be an area where walking is encouraged and provided for by good quality infrastructure. Town centres will have high quality urban squares and spaces to enhance the economic vitality and viability of towns. Walking routes will be improved along main urban corridors to create a pleasant and welcoming experience. Walking in villages will be safe and pleasant particularly to local shops, schools and recreation. Wayfinding will be used to enable people to use safe, attractive walking routes to access local facilities, including parks, schools, local retail centres and leisure and community facilities.

7.2 Planning for walking

Many of the policies set out under the cycling section also apply to walking. Council commitment, creating a walking network, and managing traffic are all important. Community activation measures to encourage people who are inactive to walk a little every day is important to improve their physical health and mental wellbeing. Strengthening and widening the existing culture of walking is also crucial.

This last section looks at the other key element – a compact urban realm that encourages active travel (walking and cycling) as part of policies to create 20 minute towns and neighbourhoods.

8. Urban realm

8.1 20 minute neighbourhoods and towns

The fifth factor in encouraging cycling and particularly walking is a compact urban realm with accessible destinations. 20 minute neighbourhoods is a new expression for a design concept that plans for essential facilities within 20 minutes' walk from home. A 20 minute walk will get most people around 1.5 km or a mile. The concept is that all essential everyday facilities should be within that distance so it is easy for people to base their lives on walking rather than using a car. Facilities should include shops, recreational opportunities, parks, community facilities, access to public transport (mostly bus stops) and such like. The concept fits in with the goals of low traffic neighbourhoods (LTNs) which minimise traffic within the neighbourhood.

Another popular new concept is the 20 minute town based on a 20 minute cycle ride where a wider range of facilities is within 20 minute cycle ride, which at very moderate pace is around 3 miles or 5 km. A 20 minute town should for instance include access to public transport for interurban travel (train or coach stations), employment and comparison as well as convenience shopping.

Policies

49. OCC will develop a 20 minute neighbourhood and town audit process and assess the accessibility of neighbourhoods

50. OCC will audit and improve the key routes within the 20 minute neighbourhood

51. OCC with the support of districts will support the provision of essential facilities within the 20 minute neighbourhood

52. New developments will be audited and designed in support of the 20 minute neighbourhood concept.

8.2 Town walking networks

Local authorities have been providing for walking by footways (popularly called pavements) in towns since at least Victorian times. Generally, unlike cycling, there is typically a nearly comprehensive network of footways along most roads in towns.

The quality of the walking network however is compromised at side road entries and when there is a need to cross main roads. Whilst footways on every street is important, funding will be focused on the main routes that make up the town-wide walking network. In most cases, the town-wide walking network will overlap with the cycle network. However, the infrastructure will be different, except where they both share off-road paths. There will also be a few additional routes not suitable for cycling, typically because of design constraints.

Action

13. LCWIPs will identify a town-wide strategic and neighbourhood walking networks in tandem with the cycling network.

Policies

53. Funding for improvements will be focused on the town-wide walking network, particularly on routes into town centres, work and transport hubs and suburban centres.

54. Walking improvements will conform to the updated Oxfordshire Walking Design Standards (OWDS) and Healthy Street Standards

8.3 Quality Pedestrian Corridors (QPCs)

Quality Pedestrian Corridors (QPCs) represents an approach to important corridors for pedestrian movement. In urban areas, the main road routes within a mile or two of the town centre typically serve the highest flows of pedestrians, along with routes within half a mile of local shopping centres. In QPCs, pedestrians are provided a smooth obstacle-free continuous footway. QPCs are designed to give all pedestrians a high degree of comfort and particularly disabled or visually impaired pedestrians the reassurance that they can be used without obstacles. This means among other design issues:

- A minimum width path (2 metres <1000 pedestrians a day and 3 metres >1000 pedestrians a day) where all obstacles (such as street lights, bus shelters or traffic poles) are relocated outside the clear width either to the inside or outside edge.
- The surface should have no upstands and no areas of ponding. Additionally. the crossfall should be constant at around 3% and driveway entries and dropped kerbs should lie outside the clear width path.
- Priority over side roads should be installed at all side roads with side road entry treatments consisting of raised footway extensions
- There should be no sharing with cyclists within the clear width.
- In preparation for hotter summers and the impacts of climate change, street trees should be preserved and new trees planted wherever possible to provide shade and shelter
- Many older and disabled people need to take a rest. Suitable sitting opportunities will be provided at regular intervals along the route in line with disability guidance.

Actions

14. OCC will assess the feasibility of Quality Pedestrian Corridors for all main radials within 2 km of town centres and 1 km of local shopping areas, as well as main pedestrian corridors in town centres

8.4 Priority for improvements

Train stations in Oxfordshire are typically located some distance from town centres and often are compromised by poor junctions and narrow footways.

Many retail parks, business parks and large supermarkets have been built in edge-of-town and out-of-town locations, focused entirely to car use, with little or no thought about access by pedestrians or cyclists. In many cases, however, they may have considerable populations within easy walking distance.

Suburban and local shopping centres are often along main roads on the way to the town centre, but many suffer from excessive through traffic, undermining their viability and attractiveness. Research undertaken in Oxford shows how suburban shopping centres are reliant on local walking trips, which typically make up over 50% of trips, and also reduce car use and provide essential opportunities for car-free households. Summertown and Cowley Road in Oxford are good examples of the kind of measure that can be undertaken to improve the pedestrian experience

Actions

15. OCC will transform the pedestrian and cyclist experience from the train station to the town centre.

16. OCC will review the routes to retail parks, business parks and large supermarkets to provide better walking and cycling access

17. OCC will work with districts and businesses to improve the experience of pedestrians in suburban and local shopping centres

18. OCC will review the most important routes to suburban centres within half a mile (1 km) to ensure that they provide adequately for walkers of all abilities

8.5 Town centres

It is useful to distinguish between walking trips all the way from home and walking trips in town centres (often called footfall) where people arrive by other means – car, bus, train or cycle. In Oxford there were 24,000 walking trips a day to/from the city centre, making up around 15% all trips to the city centre. There were also around 30,000 walking trips a day in Oxford city centre per day along both Cornmarket Street and Queen Street. Many of these trips were in combination with other modes, so the flows are greatest linking to bus stops, train stations and car parks. There is less data on pedestrian flows in other towns and suburban district centres in Oxfordshire.

Actions

19. OCC will measure footfall in county town centres and other suburban centre as a measure of the retail health

20. OCC will concentrate on ensuring that conditions for pedestrians in town centres, particularly linking to train, bus stops and car parks are a priority for investment.

8.6 Villages and the rural network

Many villages in Oxfordshire do not have footways on many streets and very few villages have footway links between villages. Encouraging walking in villages in support of the 20 minute neighbourhood concept is therefore often very challenging.

Policies

55. OCC will undertake a review and audit of walking in all villages in Oxfordshire

56. OCC will introduce footways along main streets in villages wherever there are opportunities

57. OCC will support the reduction of speed limits in villages so that 20mph or 30mph is the default maximum speed limit

58. OCC will introduce rural traffic calming measures and speed enforcement, including average speed cameras, to enhance the character and attractiveness of villages

59. OCC will introduce measures to reduce traffic through villages by network management

60. OCC will seek to link villages for walking and cycling as part of the Strategic Active Travel Network, using wayfinding to promote safe, attractive routes

9. Designing for walking

9.1 Core Walking Design Principles (CWDPs)

The same 5 core design principles also apply to walking as cycling but adapted to the shorter distances. How they are measured and manifested is however typically quite different. Walking routes should be

- **Coherent**: Walking networks need to comprehensive and consistent in quality. Barriers and gaps, such as side road crossings, busy junctions and main road crossings need to have pedestrian priority.
- **Direct**: Walking is a relatively slow mode (2-3 mph). For pedestrians, desire lines are therefore even most important. Pedestrians do not divert from the most direct route. This is important at the micro-level (e.g. at crossings) as well as the over the whole journey.
- **Comfort**: In towns, level segregation from motor traffic is typically standard with footways. However, as a slower mode than cycling, pedestrians spend a longer time next to traffic and suffer more from the impact of traffic noise and air pollution Sufficient separation (distance) from traffic is therefore also important. Similarly, the speed difference between walking and cycling is considerable (with cycling 3-5 times as fast) so cycling should not share footways except where walking and cycling flows are very low such as on routes between villages. Shared off-road paths should be of sufficient width for cyclists to be able to pass pedestrians comfortably. Walking is also a sociable activity, so that sufficient width footways are essential for walking side by side. Lighting is also a key factor in people's willingness to walk at night. Shade, shelter and seating are also important.
- **Safety**: Most pedestrian reported casualties happen at the two locations where the walking network stops – at side roads and crossing main roads. Measures to ensure priority over traffic are an important step in making these locations safe. Traffic speed and volume are the other key factors.
- **Attractive (Advantage)**: Whilst walking is already perceived by some residents as the natural mode for short trips under a mile, too many people still opt to use their car even for short local trips. Walking can be improved by measures such as Low Traffic Neighbourhoods and parking restrictions to make short car trips less attractive and through community activation measures which enable inactive residents to walk as a means of improving both their physical and mental health.

9.2 Auditing the existing walking network

There are many problems on existing footways, often insufficient to deter walking for most people but potentially impossible and impassable for some less able groups to manage.

Actions

21. OCC will devise a Healthy Place Shaping Audit (HPSA) system to assess the quality of streets for audit and review in liaison with colleagues in Public Health. Particular focus will be on ensuring that needs of more vulnerable groups, such as children, those with mobility or sight disabilities and older people in general, are recorded.

22. The HPSA along with Core Walking Design Principles will be included in the Oxfordshire Walking Design Standards (OWDS) and used in reviewing existing infrastructure and assessing new infrastructure.

23. OCC will undertake a survey of pedestrians to better understand pedestrian problems, priorities and preferences, in a similar manner to the Oxfordshire Cycle Survey.

9.3 Oxfordshire Walking Design Standards (OWDS)

Unlike for cycling, there has been no recent update on walking design guidance from Government. In fact, national walking design guidance is spread over many documents on particular topics, including planning documents such Manual for Streets.

Actions

24. OCC will update the Oxfordshire Walking Design Standards (OWDS) to set out the ambitions to make walking central to local travel in Oxfordshire towns and villages.

Policies

61. All new active travel schemes (including any schemes with an active travel element) will be designed according to the updated Oxfordshire Walking Design Standards (OWDS).

62. Where OWDS standards cannot be met, teams will submit a Departure from Walking Standards (DWS) form and consult with ATH for a viable solution in line with all the five core walking design principles (OWDPs).

9.4 Crossings

Another key element in the pedestrian network are opportunities to cross main roads on desire lines. What is the best option for crossings? There is no single answer. Toucans, Puffins and Pelicans give the most surety but can create extra queuing and time delay to both pedestrians and vehicles and are not always safer in urban areas. Zebras allow pedestrians to cross without delay and fit in better with public realm improvements and are suitable for urban areas especially where speeds are 30 mph or 20 mph. Courtesy crossings can be used successfully in shared space schemes and areas of high-quality public realm.

Policies

63. OCC will consider the crossing needs of pedestrians on main roads to minimise delay or diversion and to satisfy existing or potential flows. The crossings will be designed as far as possible on desire lines to avoid diversion and delay

64. Zebra crossings will be the default option where there is a need for a pedestrian crossing in urban areas along main roads, unless other considerations take priority

65. OCC will review the timings of existing free-standing signalised crossings to respond without delay when called

66. OCC will install pedestrian phases on all arms of signalised junctions where there is a significant pedestrian demand

67. OCC will install Zebra crossings on all arms of urban roundabouts where there is a significant pedestrian demand

68. OCC will review all bus stops on main roads to ensure there is a nearby convenient crossing

69. The need for community cohesion and people to cross streets will be considered on both main and residential roads, such as providing gaps in long lines of parking.

9.5 Side roads

Another gap in the pedestrian network are side roads where pedestrians, in practice if not legally, lose their priority and feelings of safety in relation to traffic. The Government has indicated that it will review the Highway Code to give pedestrians much clearer priority across side roads. However, the design of many junctions put pedestrians at risk and unable to command their legal priority. There are many design solutions to reinforce pedestrian priority at side roads.

Policies

70. Wherever possible and funding is available, OCC will improve existing side road entries by

- Extending footways across side road entries so there is a raised crossing
- Setting the Give Way lines behind the footway to give priority to the pedestrian crossing
- Narrowing kerb radii to the minimum possible whilst maintaining access for appropriate vehicles
- New developments will design side road entry treatments in accordance with updated OWDS

9.6 Pavement parking

In many urban areas and some villages, pavement parking represents the greatest hazard and barrier to walking especially for those unable to step around the parking. The urban network of footways is increasingly threatened by the spread of parking on the pavement. Pavement parking is endemic in some areas, often without any plausible justification except habit.

Pavement parking adversely affects vulnerable protected groups, including those with visual impairments, those using mobility aids, those in wheelchairs, those needing the help of carer or parents with pushchairs or walking with children. Additionally, there are costs to the authority in terms of damage to kerbs and flagstones, creating trip hazards.

The Government undertook a consultation on pavement parking in 2020 and has indicated that it will introduce legislation to make enforcement much easier. The Council responded to the consultation expressing strong support for such measures.

Policies

71. OCC will support enforcement to ensure that all footways (pavements) are clear of pavement parking, except where legally marked out

72. OCC with support of district authorities will apply for the powers to enforce pavement parking e.g. decriminalised parking enforcement

73. OCC will take measures to reduce parking pressures on road space which result in pavement parking, by introducing parking enforcement, such as controlled parking zones (CPZs) and maximum residential parking permit numbers

Thank you for reading

To find out more please contact:
activetravel@oxfordshire.gov.uk

OXFORDSHIRE COUNTY COUNCIL