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Local Cycling and Walking Infrastructure Plan

Buckden Parish Council

August 2019

ActivePlanning with CityInfinity and Maps4Planners

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1 Executive Summary



At very modest cost compared with road building we can provide an outstanding network across the Parish and beyond for people travelling on foot and cycle. Every time we choose to travel actively instead of driving, we save ourselves money and make ourselves healthier and happier. We increase our feeling of being part of a community and making a positive and welcome contribution to making Buckden a fine place to live.

The cost of building active travel networks is minimal when you count the huge benefits they bring, including savings to health and social services and the opportunity to avoid building intrusive roads across our countryside. Of great importance are the personal benefits that can be gained – a long, active life enjoyed in good health is clearly so much better and more rewarding than an inactive life that results in years spent in preventable diabetes, heart disease, cancers and reduced quality of life.

We have published this *Local Cycling and Walking Infrastructure Plan* as part of the village's Neighbourhood Plan, to help residents and visitors leave their cars behind more often. We hope that it will have an influence over future funding. It will be used to bid for projects in Cambridgeshire paid for by developer contributions and Local Transport Plan funds. It will also influence the 'shape' of the allocated development sites that may come forward in the medium term. The Parish Council's aim is to make sure that the design of buildings and infrastructure is exemplary and that it meets the needs of the village's population – recognising both the importance of ageing and the desire to make Buckden a diverse and vibrant place that appeals to young people and families.

Like so many villages, Buckden is a strong and tight-knit community where everyone has a contribution to make. We have a vibrant high street, a local shopping parade and a popular school and community centre in the form of the Village Hall. Together, by walking and cycling more often, we can strengthen our sense of community and improve people's health and wellbeing still further. To tackle loneliness, we are already promoting our circular village health walks. The Parish Council has campaigned on behalf of local residents and businesses for new routes beyond the village for leisure cycling, most notably a family route to Grafham Water which has won huge support, and we established a Cycle Routes Group in 2016.



Signs for every mode against a wall that has overseen the advent of telecommunications, the bicycle and the motor car – Church Street

The Government requires local planning authorities to sustainably accommodate their shares of upwards of 300,000 new dwellings every year and to do so whilst prioritising walking, cycling and public transport. Much of the growth is happening on the edges of existing settlements and villages and in new garden communities. Buckden is no exception to this, with a mixture of allocated and unallocated sites bringing the potential of up to 750 new homes on three sites, almost doubling the size of the existing village. The implications of this, without action to diversify transport choices, is increased congestion and pollution, more rat-running through residential streets and rural lanes, more road danger, which can result in conflict between drivers and cyclists in particular, and further entrenchment of inactive lifestyles.

At a public engagement event held on 21 May 2019, the Parish Council's Cycle Routes Group discovered a real enthusiasm for making things better for active travel. We were delighted to find that children want to cycle to school independently and everyone wanted to feel and be safe from motor traffic when walking and cycling around the village. Our starting point was an active travel route to Grafham Water – the most popular suggestion by far – and improvements to the cycleway from Buckden to Hinchingbrooke School and Huntingdon Station. Discussions quickly extended to how the village could be made safer and more accessible for disabled people, how Mill Lane could become more walking and cycling friendly and which route would be the best through Diddington to the planned Paxton Pits circular cycle route and onwards to Little Paxton and St Neots.

This Local Cycling and Walking Infrastructure Plan distils everyone's ideas into a series of proposals to improve conditions for active travel in and beyond the village. Ideas are prioritised according to whether they facilitate routes on the basis of utility use, or a mix of utility and recreational use, or mainly recreational use. Whilst this does not necessarily reflect exactly what we were told about the favourite route – from Buckden to Grafham Water – we need to understand that funding is most likely to be achieved when a route provides connections between useful places, for example the village and a secondary school or station. Overall, we have decided that we need to maximise the prospect of funding and delivery of a high-quality network of routes for the parish.

The key, broadly costed proposals contained in this report are:

- An improved walking and cycling route between Buckden and Huntingdon.
- A new walking and cycling route through Paxton Pits, towards Little Paxton and St Neots. This includes a link via Diddington and the planned Paxton Pits circular cycle route.
- An improved walking and cycling path from Buckden to the Offords, with a brief exploration of what might happen if the level crossing is closed.
- A fantastic new leisure route linking Buckden and Brampton with Grafham Village and the reservoir via Brampton Road.
- Accessibility and road danger reduction measures throughout Buckden, prioritised based on 400m isochrones from the three main trip generators. These are aimed principally at making the village more accessible for wheelchair users and pedestrians.

Concept exploratory designs have been developed for the mainly leisure route between Buckden and Grafham, on the back of Highways England's scheme to resurface the existing byway between Buckden Road and Brampton Road. These are provided in a separate document.

We hope that you find this plan exciting and inspiring. Of course, we are always open to new ideas so do stay in touch.

Buckden Parish Council
August 2019.

2 Introduction



2.1 Context

Walking and cycling will become increasingly important as modes for short journeys and connections within and between settlements, and especially so with the growth in popularity of pedal-assisted electric cycles. This is important because of rising awareness of climate heating and the public health consequences of widespread inactive lifestyles. An increasing number of authorities have declared a climate emergency, including for example Cambridge City Council, which is calling on Government, industry and regulators to implement the necessary changes to enable Cambridge and the rest of the UK to reach net zero carbon by 2030[1].

Inactive lifestyles and poor diet act together to increase the risk of preventable heart disease, type 2 diabetes and cancer. Currently, two-thirds of adults do not take enough exercise to benefit their health, and 60% of adults are overweight or obese, with a quarter of adults being obese. Type 2 'sugar' diabetes is caused by the inhibition of cells that produce insulin due to overweight and obesity – and can be slowed or even reversed by a combination of better diet and exercise. To achieve this, it is imperative that people take more exercise every day as part of healthy preventative lifestyles, and the most effective way of doing so is by making walking and cycling part of people's daily routines.

Context for this Local Cycling and Walking Infrastructure Plan is provided by the requirement for local authorities collectively to deliver 300,000 new dwellings each year across England through their Local Plans and to provide and manage demand for the necessary infrastructure. An essential part of this requirement, as established in the National Planning Policy Framework, is making the most of opportunities to reduce car dependency in order to make efficient use of the transport system and its infrastructure.

[1] https://www.cambridge.gov.uk/news/2019/02/22/cambridge-city-council-declares-climate-emergency



Lucks Lane. A development of 180 dwellings is permitted on the field to the left



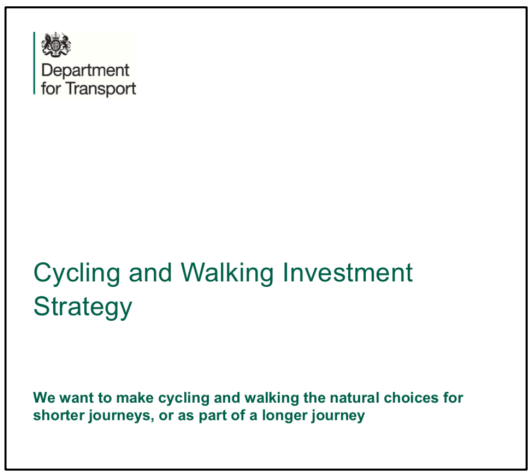
Level crossing at the Offords – during peak times the gates are closed for over 40 minutes per hour.

In Buckden, three major development sites have come forward. At the time of writing (August 2019), a site at Lucks Lane for 180 dwellings has been permitted at Appeal and is now allocated for development in the Local Plan. A second site, off Silver Street, is allocated in the Local Plan. A third, unallocated site, has been subject to preliminary planning activity. If all are given planning permission, a total of over 700 new dwellings will be built, approaching a doubling of the size of the village.

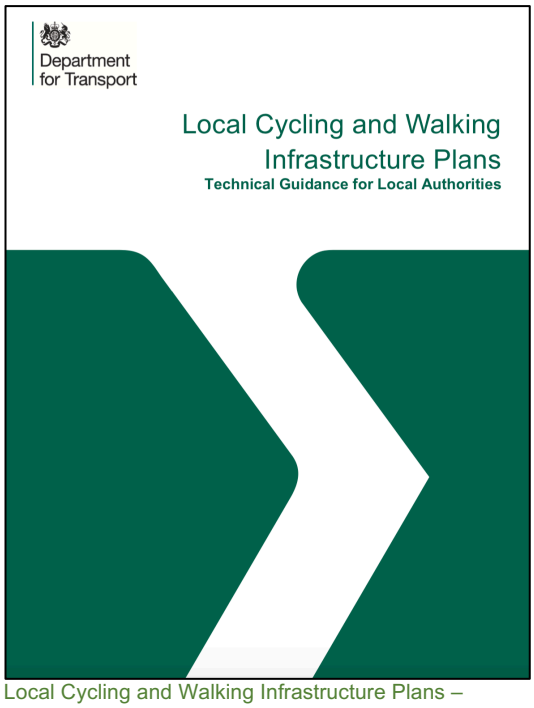
The Parish Council is understandably concerned about the likely adverse traffic impacts of the developments, which are poorly located with regard to existing public transport and active travel links.

At the same time, villagers including children have expressed considerable support for enabling more people to walk and cycle within and beyond the village boundaries, citing poor quality, inaccessible footways, poor conditions for cycling on some village streets and on routes to neighbouring settlements, and inaccessible and poorly-maintained public rights of way.

However, in anticipation of the remaining two developments gaining planning permission, this LCWIP provides a means to negotiate contributions designed to reduce their combined impact. At the very least, advice in the National Planning Policy Framework should be met – that in policy and planning decisions when considering transport, authorities should give priority first to movement on foot and cycle.



Cycling and Walking Investment Strategy



Local Cycling and Walking Infrastructure Plans – technical guidance

Whilst this LCWIP prioritises utility walking and cycling including accessible environments, it also acknowledges villagers' desire to enjoy the surrounding countryside and key attractions, particularly Grafham Water, Paxton Pits and the Ouse Valley Way. The mechanism of creating an informal 'country park' is suggested as a means of linking the various attractions together, providing a major tourism and leisure destination made up of attractions linked by active travel modes. A Green Infrastructure Plan would be the appropriate mechanism to take this forward and ensure that any impacts (further housing development, additional traffic, visitors) are minimised and managed whilst incorporating proposals for increased habitat creation and biodiversity.

In 2017, the Government published its first Cycling and Walking Investment Strategy (CWIS), which it intends to deliver in partnership with local bodies such as parish and district councils and highway authorities.

The CWIS strategy aims to:

- Increase levels of cycling, where cycling activity is measured as the total number of cycled journey stages made.
- Increase walking activity, where walking activity is measured as the total number of walking stages per person.
- Reduce the rate of cyclists killed or seriously injured on England's roads, measured as the number of fatalities per billion miles.
- Increase the percentage of children aged 5 to 10 who usually walk to school.

Targets are established for walking and cycling to 2025 – a doubling of cycled stages between 2017 and 2025; and to increase walking to 300 stages per year per person by 2025. The Government also wishes to see the percentage of children walking to school increase from 49% to 55% by 2025.

Ultimately the plan seeks a situation of better safety, better mobility and better streets that are inviting and safe for enjoyable all-purpose walking and cycling.

Outputs of this Local Cycling and Walking Infrastructure Plan reflect those of the LCWIP technical guidance. They:

- Establish a network plan for walking and cycling, identifying core zones and routes for further development.



Proposed project: widen and level this path to make it accessible for wheelchair users, pedestrians and cyclists (with pedestrian priority clearly indicated).

- Identify a prioritised programme of capital and revenue infrastructure improvements for future investment, including general and specific projects. This is supported by a set of outline design principles.

- Demonstrate the underlying analysis which has been carried out, incorporating narrative to support the process of identifying the network and improvements.

2.2 Role of Buckden Parish Council

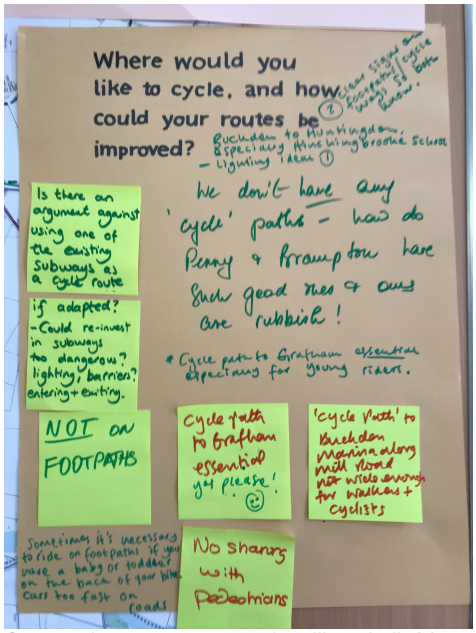
Buckden Parish Council's Cycle Routes Group was established in 2016. The group has been working with Cambridgeshire County Council and has secured funding from Cambridgeshire Community Foundation via the A14 Legacy fund to enable the preparation of this LCWIP.

The Parish Council, through its Cycle Routes Group commissioned ActivePlanning to write the narrative components of this Local Cycling and Walking Investment Plan and to undertake site visits and public engagement. The outputs of this activity are presented throughout this document. The parish council kindly organised all of the public engagement activities undertaken to inform this project.

Maps4Planners and City Infinity have provided technical support. Maps4Planners digitised all of the on-site survey information and relevant engagement outputs into GIS format to enable integration with the District and Highways Authority mapping database. CityInfinity has provided engineering advice where necessary and has supported the public engagement process whilst also undertaking a parallel project to identify conceptual ideas for the Buckden to Grafham Water route.

Buckden Parish Council will use this LCWIP as part of the suite of documents comprising its Neighbourhood Plan. It sets out proposals based on site analysis and feedback from a public engagement event held on 21 May 2019. The LCWIP will be used to ask for developer contributions, revenue and capital funding to build and maintain infrastructure in the village as well as improvements to the design of proposed infrastructure.

Schemes on public Highway Land shall be delivered by, or under the direction of, the Highways Authority, Cambridgeshire County Council.



Community engagement at the village hall: 21 May 2019.

2.3 Statement of Community Involvement

The entire community has had the opportunity to contribute towards making this Local Cycling and Walking Infrastructure Plan. Key stakeholders contacted during and following adoption of the plan include:

- Villagers and neighbouring Parish Councils (public engagement event and questionnaire), 21 May 2019 at the Village Club.
- Buckden Primary School (head teacher and pupils)
- Highways England
- Cambridgeshire County Council (the Highways Authority)
- Huntingdonshire District Council (the Planning Authority)
- Brampton Parish Council
- Grafham Parish Council
- Offords Parish Council
- Southoe Parish Council
- Friends of Paxton Pits
- Affected landowners.

2.4 Summary of land use and transport planning policies affecting Buckden

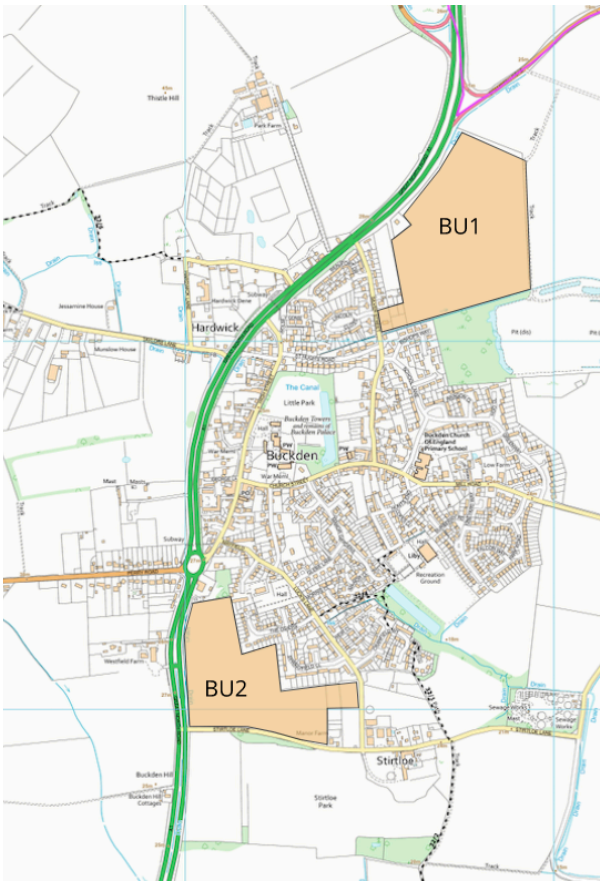
Location and extent of public highway land

Buckden is situated in the district of Huntingdonshire, in West Cambridgeshire. Cambridgeshire County Council is the highways authority for the roads and streets in and around the village, and Highways England is the highway authority for the A1 and A14 trunk roads, including short sections of the side roads at each junction.

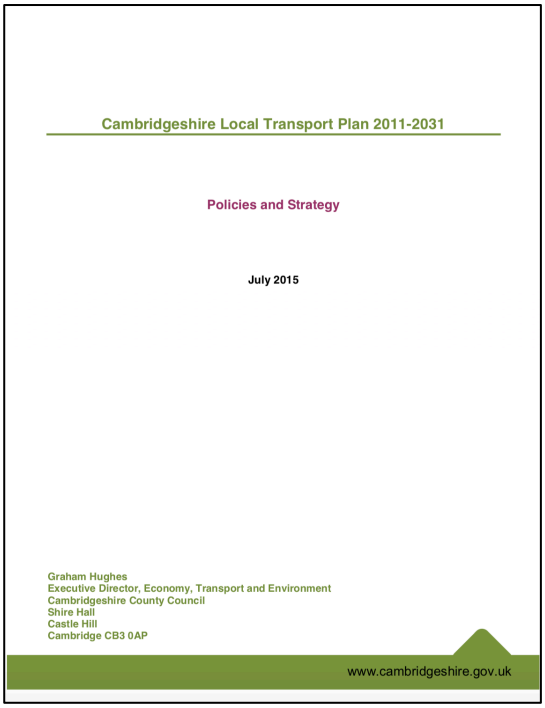
Highway boundaries are normally situated at the 'back of the footway' or residents' garden fences whichever are farthest from the road's centre line. The Parish Council owns or manages certain paths and areas of land, such as the community hall, recreation ground and some of the footpaths leading from them. Map 2.1 indicates in red the extent of land accessible to the public and also defined public rights of way over third-party land within the village.



Map 2.1 Extent of public walking surfaces – Buckden.
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Map 2.2 Huntingdonshire Local Plan 2019 site allocations © Crown Copyright and database rights 2019 Ordnance Survey 0100054815


Cambridgeshire Local Transport Plan 2011-2031

Policies and Strategy

July 2015

Graham Hughes
Executive Director, Economy, Transport and Environment
Cambridgeshire County Council
Shire Hall
Castle Hill
Cambridge CB3 0AP

www.cambridgeshire.gov.uk

Cambridgeshire Local Transport Plan

The main policy documents covering Buckden are the Huntingdonshire Local Plan (adopted 2019), which allocates forthcoming development sites and provides the planning policy context for all new development in the village, and the County-level Local Transport Plan. Cambridgeshire Health and Wellbeing Strategy provides additional support by making the health case for active travel.

Local Plan Policy BU1 allocates land for housing (marked yellow in the extract above) for approximately 270 homes. The policy states that successful development of the site will require (of relevance to transport):

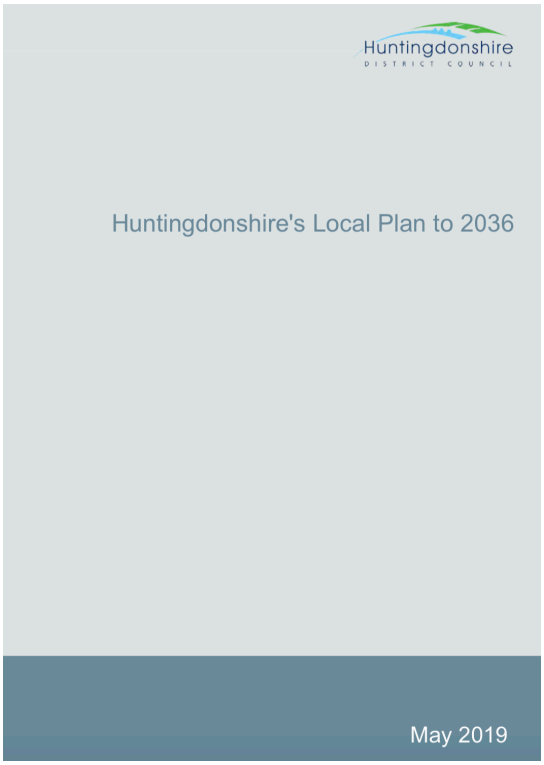
a) Provision of suitable access and satisfactory resolution of additional traffic impacts on local roads and the A1
b) Noise attenuation (A1/A14)
c) Provision of a sustainable transport network for pedestrians, cycles and vehicles which facilitates integration with the village

A travel plan and transport assessment are also required.

Local Plan Policy BU2 allocates a site off Lucks Lane for approximately 165 dwellings (outline permission given at Appeal). The policy requires the following transport measures:

a) Noise attenuation (A1)
b) Satisfactory resolution of additional traffic impacts on local roads having regard to a transport assessment and travel plan
c) Provision of safe access to the site from the A1 via Stirtloe Lane
d) Provision of a sustainable transport network for pedestrians, cycles and vehicles which facilitates integration with the adjoining residential area

Associated with the Local Plan, Huntingdonshire District Council's Community Infrastructure Levy policy sets out the expected developer contributions towards infrastructure in the community. This is currently set at £7,000 per dwelling. Unlike S.106, CIL is not dedicated to addressing the specific impacts of each development; instead it is collected as a single pot of money that is used across the district in order to compensate for rising demand for all services. Section 106 planning agreements are a source of direct funding and planning conditions designed to mitigate immediate impacts as well as access, phasing and the timing of interventions.



Huntingdonshire Local Plan 2019

The Local Plan is built on an evidence base including an Infrastructure Development Plan and accompanying schedule (IDP). No information has been provided in the IDP about active travel in Buckden, St Neots, Brampton or Grafham, so this LCWIP has been prepared to fill the gap. It will support the planning authority as it decides the best way to allocate developer funding. The document should be updated so that it can continue to form part of the Local Plan evidence base. Information in the LCWIP should be transferred to future updates of the IDP.

Cambridgeshire Local Transport Plan 2011-2035 makes a policy commitment to promoting walking and cycling across the borough for the purposes of funding. However, there is no guarantee of funds and there are no specific active travel proposals for Buckden. The LTP refers to road capacity improvements at the A1 Buckden Roundabout (to be delivered by Highways England) which could provide opportunities to develop quality solutions for active travel. This opportunity is reflected in the LCWIP as a priority scheme for overcoming barriers.

Cambridgeshire Health and Wellbeing Strategy 2012-2017 observes that health and life expectancy in Cambridgeshire as a whole is higher than the national average. In 2012, death rates from a range of diseases had fallen and were better than the England average. Even so, acute disease still has a considerable impact on health and wellbeing that could be substantively addressed by lifestyle changes. To achieve this, the County sets out six priorities, the most relevant of which are:

- Priority 3 – encouraging healthy lifestyles – includes increased participation in physical activity including among older people to increase the proportion of adults and children with a healthy weight
- Priority 5 – creating a sustainable environment in which communities can flourish. This includes encouraging active transport and improving road safety

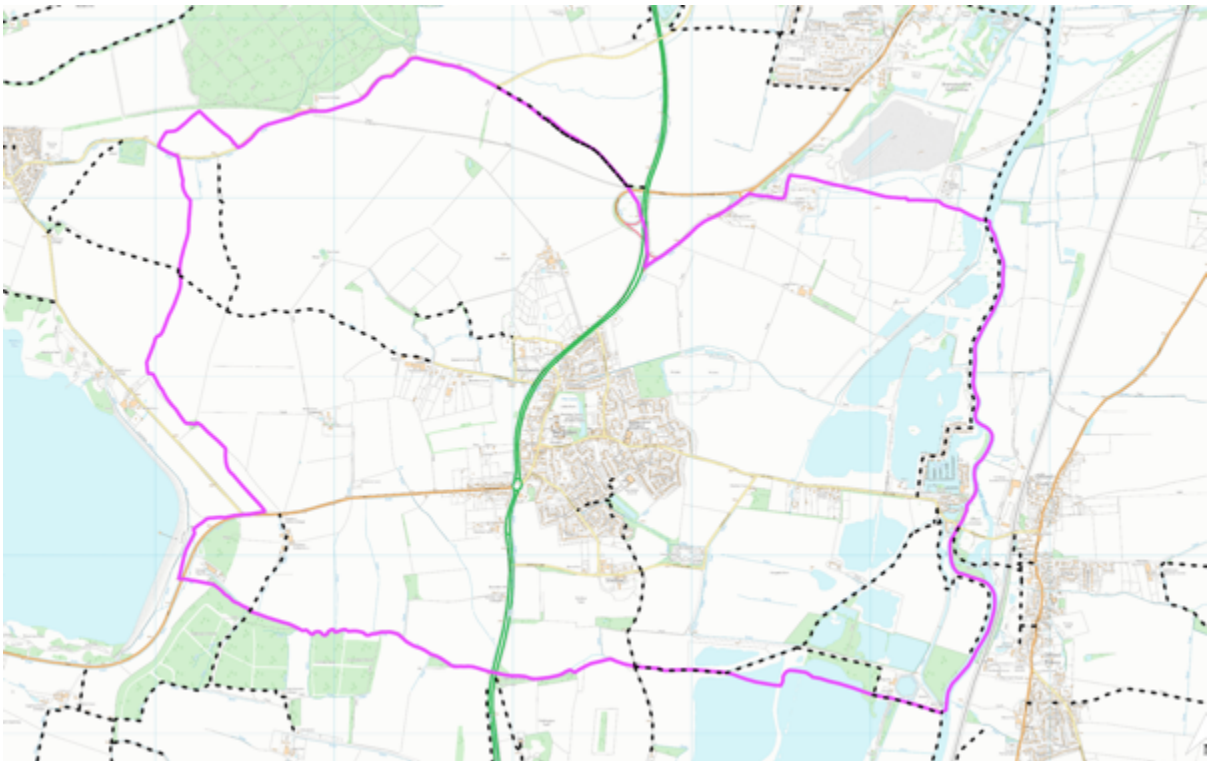
2.5 Synergies between investment in cycling and walking

Given very restricted funding, best value for money will be achieved by prioritising schemes that combine investment in walking and cycling together. This is particularly true on inter-settlement routes where there are very low volumes of pedestrian traffic but potentially significant flows of cycle traffic.

Within the village, measures introduced for pedestrians and cyclists will produce mutual benefits to both, for example:

- A 20mph zone across the entire village supported by speed reduction measures will make both walking and cycling safer. For pedestrians it will become easier to cross the road.
- Junction treatments will reduce instances of speeding into and out of side streets, a benefit for cyclists, and it will reduce crossing distances for pedestrians. Older and disabled people will gain particular benefits from shorter crossings, and children will also be safer. It is important to ensure that drivers realise that pedestrians have priority when crossing side road junctions.
- Better management of parking will improve conditions for children going to school and also assist wheelchair users. Cycle parking should normally be placed in the carriageway and will improve accessibility to village shops and services.

2.6 Scope including extent of LCWIP (map of parish)



Map 2.3 Geographic extent of this Local Cycling and Walking Infrastructure Plan (pink line)
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The geographical extent of this LCWIP encompasses and goes beyond the parish boundary, with proposals to establish local improvements within the village mainly for pedestrians, and longer-distance strategic routes connecting Buckden with the Offords, Paxton Pits, Little Paxton, Diddington, St Neots, Grafham, Brampton and Huntingdon that will mostly benefit cyclists and wheelchair users.

3 Engagement



Public engagement has been the most important component of this project. It has generated a wealth of ideas and demonstrated very clearly villagers' enthusiasm for active travel projects and strong desire to attract investment. The Parish Council was very keen to ensure that local children were able to express their concerns and ideas during the process. Engagement should continue as schemes are developed further.

Engagement for this project has taken a number of forms. The two main methods were the questionnaire and a one-day drop-in workshop which invited stakeholders to comment on what they would like to see in the Local Cycling and Walking Infrastructure Plan. Other interactions have been more general in nature including an accompanied walk to Little Paxton, conversations with the client team about conditions in the village, tours with parents of local school children and wheelchair users and ad-hoc interactions with people living and working in the village. This, in aggregate, has built up a reasonable picture of what local people would like to see in Buckden and surrounding areas.

The workshop and associated walking tours proved to be the main focus of ideas. An entire year group from the primary school attended the workshop and made extensive and really useful comments, followed by members of the public and also Parish, District and neighbouring Parish council representatives whose areas would be affected by the proposals. The children's comments are of particular importance since the LCWIP is about their future most of all.

An online questionnaire was made available for people to input ideas and concerns about walking and cycling in the parish, and this attracted over 30 responses.



To the able bodied this footway looks perfectly accessible. To a wheelchair user it is an alarming tipping hazard.



Gates, stiles and uneven surfaces present a real barrier to disabled users of adapted cycles and wheelchairs. They prevent equal access to the countryside.

A more detailed appraisal of the engagement outputs has been included in Appendix 3. However, our observation is that the main themes were as follows:

- Children were clear that they wanted to travel independently and not always in cars, and to feel safe around the village. Their comments reflected concerns about instances and locations of poor driver behaviour including footway parking and speeding. Children told us they want access to the countryside including safe routes to Hinchingbrooke, the Offords ('a bridge' over the railway) and Grafham Water. Parents also told us of their children's desire to travel independently to Hinchingbrooke School and about their concerns about safety, particularly at the crossing point midway along Buckden Road between Buckden and Brampton. Children told us they want more access to green areas (in private ownership) to the east of Buckden.

- Footways in the village are very narrow, in poor condition and inaccessible to people with disabilities, particularly those who use wheelchairs who are obliged to exhaustively plan their routes. The Highways Authority is likely to specify footways of a minimum of 2m width where they are replaced. Key issues include the risk of being tipped out of wheelchairs by dropped kerb aprons, kerbs that are too high for wheelchairs with smaller wheels, wide junctions, poor surface quality, cobbled strips and a lack of tactile paving that would otherwise enable those with visual impairment to detect crossing points and edges. For wheelchair users, roadworks present particular problems because in some situations they block the only available route and wheelchairs are not necessarily accommodated.

- Two disabled attendees expressed a strong desire to access the countryside and to be able to enjoy routes around the recreation ground and lake that would improve their quality of life. Key issues included the need to access smooth paths leading to Paxton Pits, which are currently inaccessible due to a kissing gate, barriers and unmade footpath surfaces.

- Issues were raised about poor parking and a lack of any ability to enforce traffic regulations that are brought in. The issues did not (necessarily) stem from poor intention from drivers, but simply a lack of appreciation of the impacts of even small actions on the safety of others. Footway parking, conflicts leading to footway driving, and dropped-kerb obstructions were raised, as was the issue of speeding on some routes, notably Church Street. Some near-misses were recalled, such as a van mounting the footway when children were walking along.



The shared use path and crossing on Buckden Road was highlighted as an important safety issue by a number of participants. The crossing has good visibility in one direction (westbound); but in the other, poor sight lines make crossing unsafe. The shared use path is itself substandard, placing cycles directly adjacent to motor traffic on a 60mph road.

- Cycle ways to Grafham Water were strongly supported as the favourite suggestion with participants describing their own routes to the destination and reporting that they feel obliged to drive their children there at the moment on safety grounds. Perry Road was highlighted as being particularly dangerous, having no footway.

- A safe route to Brampton was strongly supported. A number of people commented that their children want to travel to school independently. Parents felt (understandably) very anxious about letting their children use the inadequate cycle infrastructure alongside Buckden Road.

- A route to St Neots via Diddington and the planned circular cycle route around Paxton Pits was strongly supported, particularly by disabled participants who would value it as a means of accessing the countryside and also by people wanting a summer cycle commuting route to St Neots town and station. Several people identified other potential recreational footpath links to the east of Buckden (on private land) that would create circuits for walking. Participants were less keen on the existing footway alongside the A1; indeed, the dangers of the A1 path and past collisions were strongly highlighted by participants as a reason to favour an alternative route via Paxton Pits and Diddington.

- Members of the Offords Parish Council requested consideration of a shared-use cycling and walking route alongside the river Ouse, giving access to Hinchingbrooke School (this suggestion was not universally supported). Children asked for a bridge to cross the railway line, and a number of people asked for improvements for active travel along Mill Road, citing speeding traffic and the narrow shared-use foot/cycleway.



Access route to the National Cycle Network which runs along Brampton Road.


Approaching the new crossing by the primary school on Church Lane


Narrow yet quite straight and fast rural roads are not suitable for family cycling

- Offords Parish Council also expressed concern (and some frustration) that the cycleway on the new bridge provided as part of the Highways England A14 improvement simply stops at the scheme boundary with no clue as to how it might continue beyond. The value of having a LCWIP is that these issues can be addressed at the earliest stages of planning.

Conclusion

Significant investment is desired by the community to support active travel and improve accessibility for people with disabilities throughout the village. It is clear that investment for one group should, where possible, confer benefits on everyone else.

Whilst it is noted that a route to Grafham Water is considered by villagers to be most important, financial considerations will most likely require prioritisation in terms of the range of uses any given route will be put to. In order to prioritise the long list of suggested projects for funding, three strands were identified, in order with the highest priority first:

1. **Safety, accessibility and utility.** Routes used for utility purposes should be improved with an emphasis on reducing road danger and risk to users. Safe safe networks within settlements should also be established within the village to serve local trips mainly made by women, children, older and disabled people.

2. **Utility and recreation.** Routes that would encourage people to walk and cycle for enjoyment, leading to more utilitarian uses of the same routes. Leisure may be the best way of stimulating longer term active travel habits. This applies to the Buckden to St Neots and Offords to Buckden routes.

3. **Recreation.** Routes that do not serve major areas of employment, local shops, schools or social activity within settlements but still provide a valuable social and economic role, reducing car-borne leisure journeys and supporting independent shops, restaurants and hotels. Routes in this classification would need to 'work harder' to prove their value. Establishing an informal 'country park' could give impetus to this proposal.



Good networks of walking and cycling paths exist around Grafham Water.

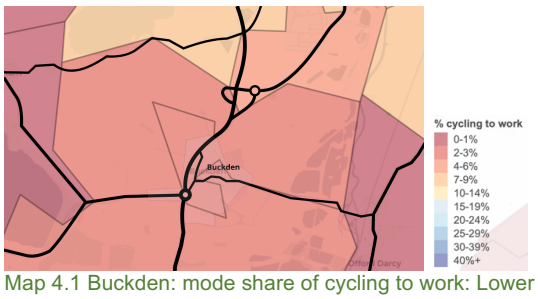
The suggested ‘informal’ country park would stretch from St Neots to Grafham. It would encompass the Paxton Pits nature reserve, Ouse Valley Way, Brampton Wood and Grafham village and reservoir. It would provide linked, water-themed public spaces interspersed with agricultural and other private land, providing opportunities to improve biodiversity, introduce re-wilding and also economic opportunities. To make it sustainable, each part would be connected by active travel infrastructures and bus service 66 would provide access to cycle hire and other opportunities – leading to improved services and perhaps the addition of some more direct routes.

A Green Infrastructure Plan could potentially be developed in partnership between the various parish councils and the District Council to identify the main existing and potential attractors, linked to opportunities to promote public understanding of landscape and biodiversity and to conserve the semi-natural beauty of the Ouse Valley and Grafham Water. The plan would incorporate active travel and public transport infrastructure, accessible routes for people with disabilities and means of protecting and building economic activity.

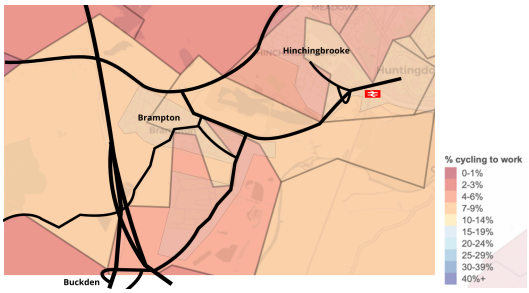
4 Potential for cycling and walking in Buckden

4.1 Overall impression

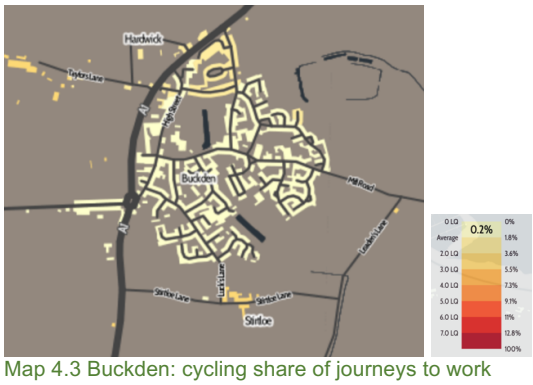
Datashine provides mapped representations of 2011 Census journey to work mode choice, indicating that the overwhelming majority of trips to work are made by car. Even so, there are pockets of both Brampton and Buckden that have (for the area) relatively high levels of walking and cycling. Higher levels of cycling in Brampton may be explained in part by the presence of the recently-closed RAF base and also the existence of a reasonable cycleway connecting the village with Huntingdon Station and Hinchingbrooke School (about two miles distant).



Map 4.1 Buckden: mode share of cycling to work: Lower Super Output areas (source: PCT.bike)



Map 4.2 Brampton: Current cycling levels in Lower Superoutput areas (Source: PCT.bike)



Map 4.3 Buckden: cycling share of journeys to work average 1.8% (source: Datashine)

4.2 Cycle commuting

Census data on cycling to work is represented via Datashine and has also been translated into a Department for Transport Propensity to Cycle tool which uses the base scenario (2011) household profiling to model potential demand for cycling at various levels. However, there is no data on active travel for everyday purposes other than commuting between settlements and within the village itself.

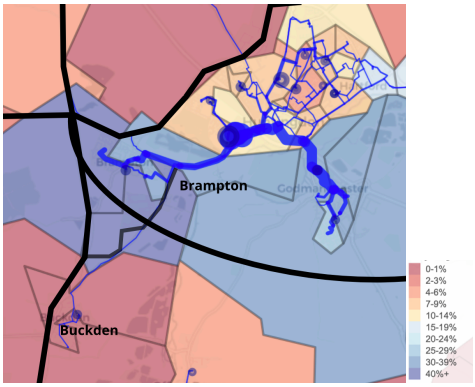
Pct.bike and Datashine can be used to visually compare cycling levels and potential in Buckden with those in the neighbouring village of Brampton. Datashine indicates that a few locations in Brampton, have relatively high uptake of the mode, up to three times higher than the national average of 3%. A possible explanation of the difference is the former RAF facility (still operational in 2011), but the cycle track to Hinchingbrooke School and Huntingdon may also be a factor.

During the public engagement exercise it became clear that there is keen demand for safer cycling conditions between Buckden and Brampton, which if delivered may result in more uptake. Children in particular (not counted in the Census for journeys to work) said that they want better facilities.

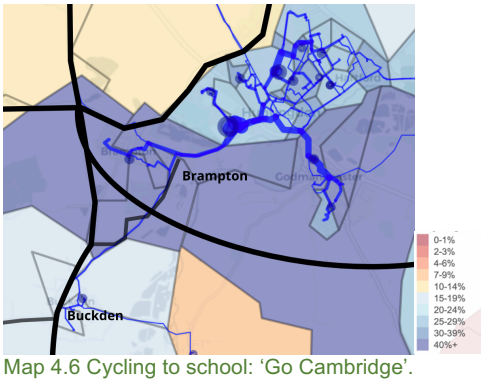
Demand for walking and cycling to work is likely to be suppressed by a combination of travel distance to work, modal preference and a lack of safe infrastructure. A more in-depth household survey would enable the LCWIP to show actual levels of cycling for all purposes as well as attitudes to mode choice and travel and suppressed demand for walking and cycling. Such information could be more widely useful as an evidence base supporting plan-making and decision-making. The engagement event provided some indication of interest in active travel, but it was not statistically significant or randomised.



Map 4.4 Brampton – average cycling to work 1.8% of trips (source: Datashine)



Map 4.5 Cycling to school: at present just 1% of children cycle to school, with the volume of cyclists on Buckden Road between Buckden and Brampton indicative of current demand. (Source: pct.bike 2019).



Map 4.6 Cycling to school: 'Go Cambridge'. Pct.bike uses Cambridge levels of cycling to school as a proxy for what could be possible if investment caused a substantial increase in cycling. More cycling would occur along more routes, with up to 19% of journeys cycled (Source: pct.bike 2019).

4.3 Cycling to school

Pct.bike has introduced a new layer to its mapping which shows existing and scenario-based levels for cycling to school. Unlike commuter journeys, trip ends for cycling to school are very clear since there are fewer of them at the school end. Thus it is more worthwhile showing the routes most and least used by students. The tool grades routes by percentage of cyclists using them, so that thicker lines indicate more usage. In Buckden, cycling accounts for only 1% of journeys to school, compared with Brampton where the figure is around 40%. The blue lines on the map show routes taken by volume of cyclists with concentrations seen on the cycleway between Brampton and Hinchingbrooke School.

Very few journeys to school were cycled from Buckden. This is partly explained by the walkability of the village (most of which is within 400-600m / 5-8 minutes' walk of the primary school), the availability of cars and buses, and the unattractiveness of the route to Brampton via Buckden Road for which no safe and direct alternative is available. School children who attended the engagement event in the village hall variously expressed a desire for safer conditions with several stating a desire to cycle to Hinchingbrooke School. Further study associated with specific infrastructure proposals would provide statistical grounding for this.

4.4 Walking

The only available data specifically for walking in Buckden is the travel to work information provided in the Census and represented by Datashine. This LCWIP therefore relies on feedback about walking from the public engagement event as evidence of demand for measures and potential for uptake.

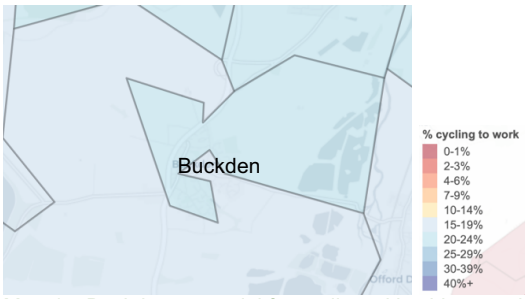
4.5 Enabling active travel

People will not travel actively in larger numbers until three conditions are met:

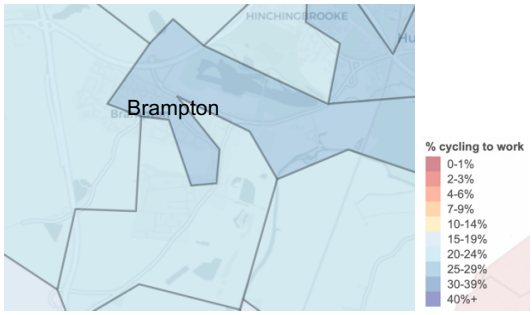
- Safety and status. When people feel safe, invited and welcome to walk and cycle through a combination of measures to reduce vehicle speeds and, where appropriate, to separate cycles from motor-traffic and pedestrians. Dutch experience shows that public realm quality is also important – with trees, grass and the use of high-quality materials and finishes considered essential. In Waltham Forest, community involvement in creating and maintaining new gardens and planters has contributed to the success of widespread filtered permeability schemes at low cost.

- Car restraint (follows implementation of active travel infrastructure). People will only travel actively when it is the easiest option. Driving does not need to be made impossible, but it should not be so easy that it is the default option for every short journey. Evidence from the London Borough Waltham Forest shows that whilst there was a substantial minority opposed to proposed area-wide filtering in the borough, once it had been implemented almost nobody said they would favour a return to the original conditions.

- Effective messaging and engagement. An ongoing study by Kate Pangbourne, Academic Fellow at the University of Leeds, has revealed that people will respond best to health and financial imperatives for cycling, and to health imperatives for walking. People respond best overall to positive 'consequences' of active travel, such as 'saving money' and 'feeling healthy and well', as opposed to negative consequences of not being active, such as 'obesity', 'climate change'. Other incentives include the relative ease of e-biking (see maps 4.7 and 4.8).



Map 4.7 Buckden: potential for cycling with widespread electric cycle ownership encouraging take-up (source: PCT.bike)



Map 4.8 Brampton: potential for cycling with widespread electric cycle ownership encouraging take-up (source PCT.bike)

5 Network planning for cycling

5.1 Cycling network

The legal cycling network in the parish comprises every 'all purpose' road and street. Cycling is also permitted on bridleways and byways, but not on public footpaths. Traffic Orders and changes to the status of public footpaths can be introduced to change this situation, for example by creating a shared walking and cycling track or converting a footpath to a restricted byway or bridleway.



Typical 'Level 1' conditions



New Level 1 cycle track but with a Level 3 junction layout – this is not considered acceptable.



Typical 'Level 2' conditions

5.2 Network assessment

Conditions on the network vary, and this influences how confident and safe people feel when cycling. Since around 60% of the population do not cycle because of fears about their safety, this is an important consideration. To inform the baseline, a semi-subjective assessment was undertaken to identify which streets are safest, which feel less safe, and which are considered generally unsuitable for cycling. The assessment includes selected key footpaths that have potential to provide cycle connections even where cycling is not currently permitted – these are represented as dotted lines.

The method used to assess the network is based on the national Bikeability training course which has three distinct skills levels:

- **Level 1**, in which someone has just learned to balance a pedal-cycle and is able to undertake basic manoeuvres, such as turning a corner or riding with one hand off the handlebars. At this level, riders progress to looking behind them and signalling with both arms. Cyclists at this level are usually based in parks, playgrounds and very quiet cul-de-sacs.

- **Level 2a**, in which the skills learned in Level 1 are taken onto quiet roads including simple junctions. The majority of streets in Buckden are suitable for a Level 2 cyclists, although **Level 2b** streets are only suitable for these cyclists during 'off-peak' periods when there is less motor-traffic.

- **Level 3**, which is achieved when a cyclist has practiced the skills for Level 2 and is ready to tackle more complex junctions and busier roads. This level generally comprises 'experienced' cyclists who are comfortable in most situations. The cyclist knows how to position themselves safely on the road so that danger is reduced for both the rider and, incidentally, for drivers (for example taking the centre of the lane when it would be dangerous for a driver to overtake),



Typical ‘Level 3’ conditions



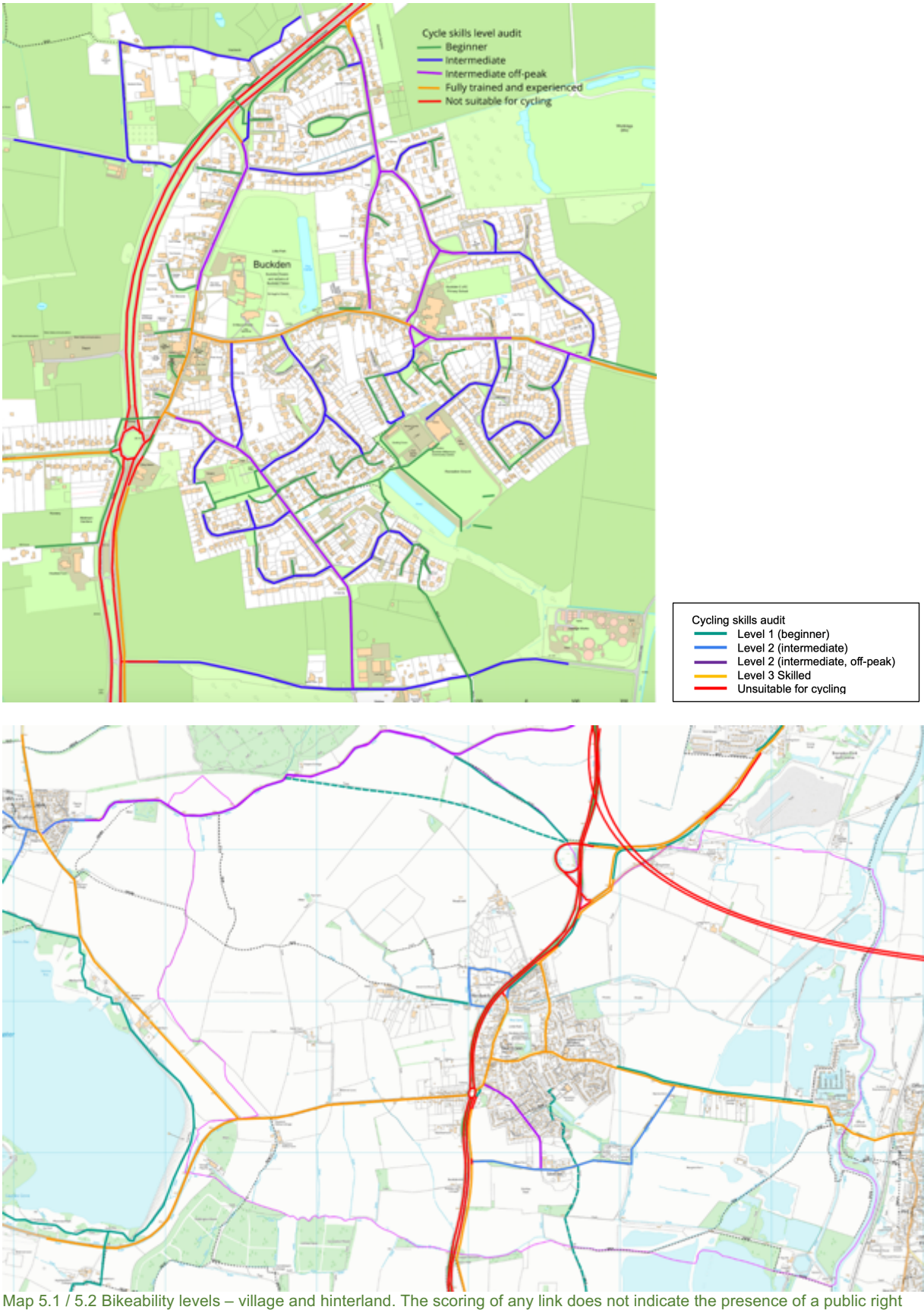
Unsuitable for cycling

and when it is safe to move over to the left to allow drivers to pass safely.

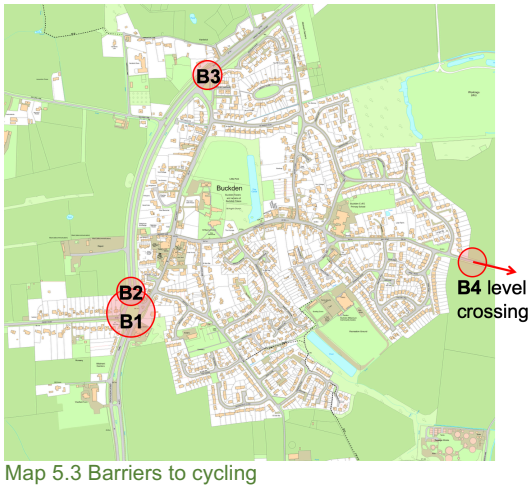
Note that the LCWIP proposals recognise that junction design is also a contributor to the sense of safety, so the aim is to make all key junctions suitable for Level 2 cyclists and more accessible for pedestrians. Junctions considered suitable for the ‘target’ level 2 cyclist are those which are:

- Located within a network of quieter streets with a speed limit of 20mph which has good compliance (due to the road layout). The latter part of this is fairly subjective because there is no data on traffic speeds across the entire network, and

- Designed with layouts that reduce motor vehicle speeds so that a driver is required to slow down and turn at somewhere around walking pace. This requires tight corner radii. The exception is existing junctions that access cul-de-sacs – traffic volumes and speeds are likely to be sufficiently low to produce a very low risk of collision.



Map 5.1 / 5.2 Bikeability levels – village and hinterland. The scoring of any link does not indicate the presence of a public right of way. © Crown Copyright and database rights 2019 Ordnance Survey 0100054815



Map 5.3 Barriers to cycling
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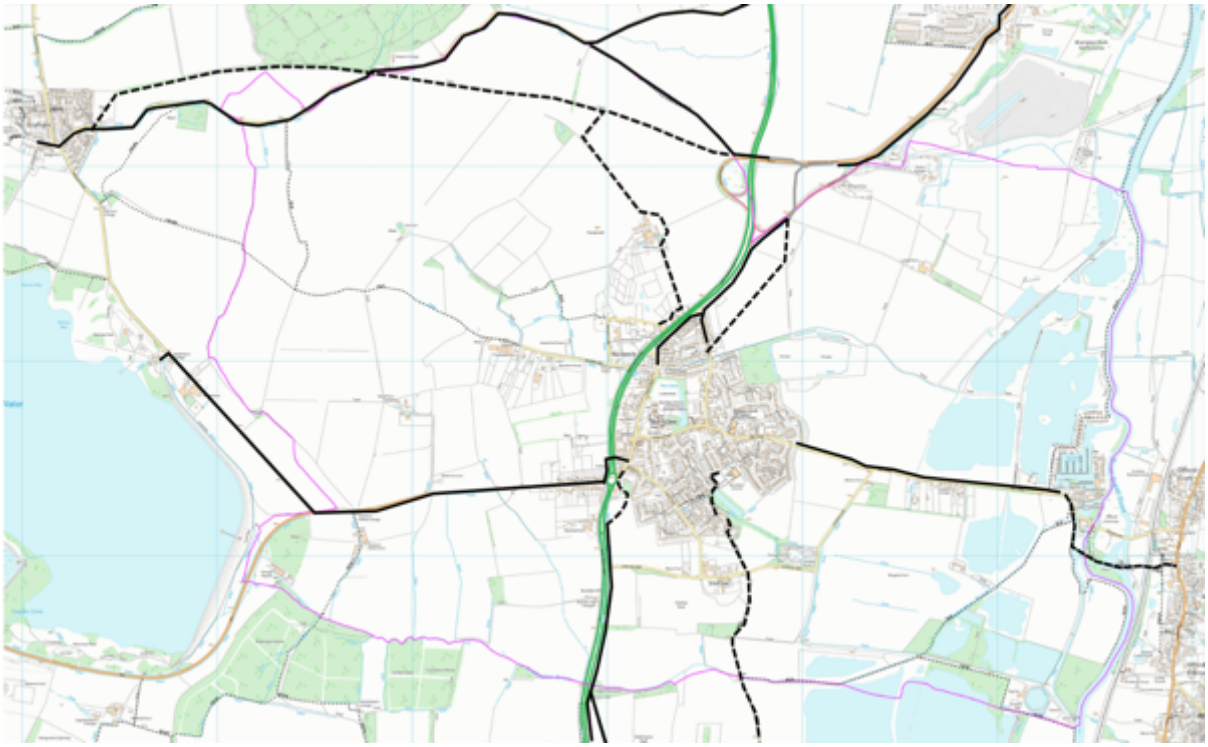
5.3 Barriers

In addition to measures needed to implement the core cycling and walking network there are some specific barriers that need to be addressed, namely:

- **B1** Buckden Roundabout, with potential improvements associated with proposed capacity increase.
- **B2, B3** The two A1 subways
- **B4** Offords level crossing (negotiations with Network Rail)

The parish council has formed an A1 safety group which regularly meets with Highways England. The A1 barriers listed above will be raised for discussion.

5.4 Core cycling network and desire lines



Map 5.4: Proposed core network for cycling. Dashed lines show routes across third party non-highway land
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A proposed core network for cycling has been established at the parish level and beyond, linking trip origins and destinations. All streets in the village are considered to be part of the core network for the purposes of investment. Trip origins comprise the main settlements and all of the residential areas within them. Trip destinations include other village and town centres, residential areas, schools, local centres, places of gathering and worship, leisure attractors, employment and public transport. Trip origins also include proposed and permitted new developments that should be designed to generate demand for cycling rather than driving for short trips. The network map is based on known and potential desire lines identified during the baseline site visits and the stakeholder engagement process.

Dashed lines show proposed routes that are not on the public highway and will require third-party landowner agreement to achieve.

Investment is most likely to be attracted to deliver essential infrastructure that supports housing and other development, which provides access to education and schools. Given the current funding situation routes that can only really provide a recreational service are, out of necessity, likely to be considered a secondary priority. However, there are helpful coincidences, notably the resurfacing of the byway between Buckden Road and Brampton Road. Prioritisation is, therefore, broadly as follows:

1. Strategic routes with a utility function on or immediately adjacent to existing public rights of way or highway land – a priority for investment. Some sections of these routes may require the purchase of private land.

2. Strategic routes with a leisure / recreation function on or immediately adjacent to existing public rights of way or highway land – a secondary priority for investment. Routes on established rights of way across third party land will require landowner consent for access. Such routes may be difficult to fund.

3. Strategic routes with a mostly leisure / recreation function with a mix of road and public rights of way – a tertiary priority for investment.

5.5 Core design outcomes

The Neighbourhood Plan design guide provides information about expected public realm treatments including the design of alleyways.

Core network design outcomes are as follows:

Principal roads and other busy distributors	 The A1 is not suitable for cycling. Separate provision should be made.  This major inter urban road in Denmark has high quality cycle track that pedestrians may use - with gradients and curves suitable for cycling.	On principal and other busy distributive roads, cycles should be separated from motor traffic and pedestrians. Where pedestrian flows are very low (typically between settlements), shared facilities are acceptable subject to a minimum width of 3m and an ideal width of 4m. These could be called 'cycleways that pedestrians may use' – as in Denmark. Cycleways should be separated from motor traffic by a verge or other physical delineator. Within the village, cycle tracks are unlikely to be a suitable solution on local distributor roads given available space, so a combination of other treatments will be necessary including speed reduction.

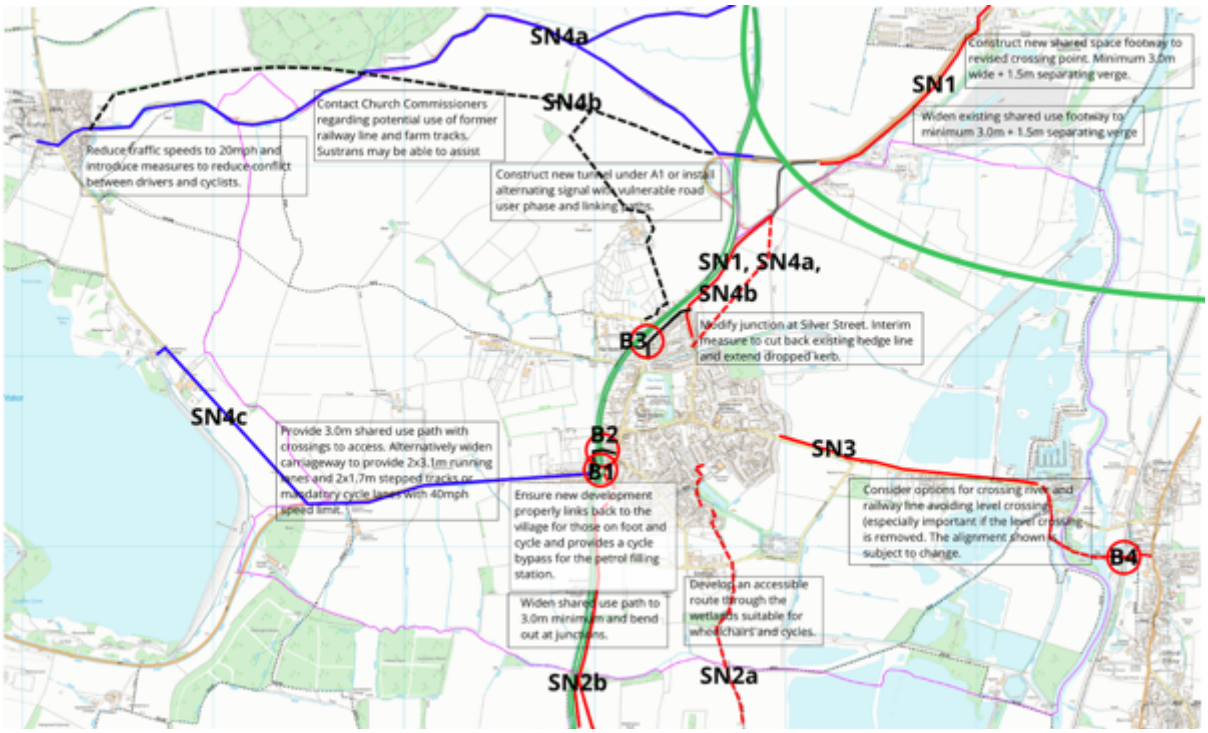
(Potential) low traffic streets within 20mph zones		Within 20mph speed limited zones, the most basic acceptable treatment is some form of traffic calming whether vertical measures, or cul-de-sacs, or junction changes. More sophisticated measures include the creation of community gardens that add colour and attractiveness to public spaces, helping to moderate driver behaviour and change perceptions about how the street can be used. The community should certainly be engaged in the design of such measures since local people will also be asked to maintain them!
Making active travel the favourite option	 New public spaces can be created by filtering streets. This one in Walthamstow immediately became a popular place for playing boules.	Driving should become less convenient than active travel for ultra-short journeys, and in general motor traffic should be directed to the main road network. Measures to assist this objective include: • Filtered permeability, which results in cycling having quicker and more direct journeys than drivers with the added benefit of improved safety. • Reduced parking and additional cycle parking at key destinations including the village centre and at key destinations beyond the parish boundary. Such measures are frequently controversial, however if they are implemented as temporary trial measures for a period, local people may reach the conclusion that they are worth having because the gains are greater than the losses. In Waltham Forest, measures implemented in the face of fierce opposition are now supported by the overwhelming majority of those asked in a post-scheme survey. Most people would not choose to have the roads put back to the way they were before. This LCWIP does not recommend specific locations for filtered permeability but instead provides an indicative cost of a typical, simple measure. It does, however, recommend the creation of a ‘school street’ which is manually closed to motor traffic during school pick up and drop off times.

Cycle parking	 Cycle parking within the carriageway keeps the footway clear of obstruction.  Cycle parking incorporated into a parklet	Cycle parking should be provided on the carriageway rather than on the footway, if necessary replacing car parking spaces or placed on street parklets. Sheffield type (upturned U-shaped) stands should be installed as follows: • Minimum 60cm from the end of the stand to the nearest 'obstruction' – a wall, kerb or carriageway • Minimum 1.2m apart, with 60cm between the end stand and the nearest obstruction – a build-out, kerb or wall. • Space should be provided to lock non-standard cycles such as cargo bikes and cycles adapted for disabled users. This could simply be a double-sized, 2.4m gap between stands.
Helping people decide to cycle.		Some means of helping people to try and take up cycling is essential. Behaviour-change measures delivered in association with other village events could include: • Village bike rides – explore your area – perhaps ending at a pub or restaurant or associated with an event such as an open gardens scheme: an opportunity for gardeners to show off their beautiful creations and for visitors to enjoy cycling between gardens! • Accompanied rides – where volunteers who are already regular cyclists accompany people who are just starting out. This could be for the journey to work, school or the station, for example. • Free loan of standard and electric cycles for both children and adults. • Free loan of multi-purpose cargo-bikes and child carrying 'kit' such as rear seats and trailers • A business cargo-bike loan scheme that allows deliveries to be made within the parish and into neighbouring areas.

5.6 Proposed investment

Core network

The core proposed network for cycling is indicated in Map 5.5. Priority routes will be those that offer the greatest value in terms of utility accessibility, since these are most likely to be funded.



Map 5.5: Proposed strategic cycling network
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Proposals in this LCWIP include the following 'first priority' strategic utility routes:

- **SN1** Buckden to Brampton route improvements.
- **SN2a** Buckden to St Neots via Diddington and the proposed Paxton Pits cycle circuit
- (**SN2b** Buckden to St Neots via a greatly improved A1 cycle path that pedestrians may use)*.
- **SN3** Buckden to Offords Mill improved cycleway or safer carriageway (this depends on Network Rail's decisions about the level crossing)

* This is a theoretical priority only as, on safety, conviviality and comfort grounds, the Parish Council prefers the route via Diddington and Paxton Pits Nature Reserve.

Proposals in this LCWIP include the following 'second priority' 'mostly recreational' routes:

- **SN4a/b** Buckden to Grafham Water via Brampton Road, with consideration of alternative routes including across farmland to the north west of the village and the former railway alignment, subject to negotiation with tenant farmers and the Church Commissioners.
- **SN4c** Buckden to Grafham Water via Perry Lane (new cycleway)

Within Buckden itself, some cycleway construction is anticipated, but cyclists will mostly gain incidental and add-on benefits from investment in pedestrian infrastructure. First priority proposals in this LCWIP, within Buckden, include:

- Widening of footpaths and replacement of wooden bridges in the vicinity of the community centre to accommodate cycles, taking the opportunity to improve wheelchair accessibility. If cycles are to use these links it will be made clear that pedestrians have priority.
- Extension of the 20mph speed limit across the entire settlement
- Reduction of the existing speed limit on Mill Road and a 20mph speed limit on Station Lane
- Consideration of options for a footbridge over the River Ouse and either a bridge or subway to cross the railway line.
- Improvements on the High Street to reduce conflicts between motor traffic and cycles
- Cycle parking on the High Street.

Addressing barriers



Map 5.6 Barriers to cycling and walking
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A number of specific barriers to movement were identified in the LCWIP baseline site visits; these have resulted in proposed measures including:

- **B1** Cycling and pedestrian infrastructure to be provided as part of any future upgrade of the Buckden Roundabout (A1). The Parish Council's A1 Safety Group should seek early engagement with Highways England to secure a commitment to this, as well as safer access and crossings for other traffic.

- **B2, B3** Physical improvements to the two subways in the village, with two options:
  - Minor improvements including repainting, better lighting and improved mirrors, or
  - Major improvements, subject to available space, specifically re-grading of the access ramps which do not meet current accessible design standards.

- **B4** Recommended engagement with Network Rail about their plans for the Offords level crossing. Potential options to explore include:
    - Provision of an all-traffic bridge or subway to replace the existing level crossing, to include a cycleway. However, a bridge would need to be built with a 6m headroom above the operational railway and is therefore subject to the cost and ability to construct approach ramps.
    - Provision of a pedestrian and cycle subway to replace the existing level crossing if it is closed – creating a modal filter. This would require excavation to a depth 3m below the operational railway and could be achieved using 'push through' technology to avoid line closures. A subway would require pumping plant to remove water.
    - Provision of a pedestrian and cycle bridge to replace the existing level crossing if it is closed – creating a modal filter. This would require a 6m headroom and 1:20 ramps to meet Equalities Act requirements.
    - Revision of the existing community bus service to ensure a connection is maintained between Offords and Buckden (provide a turnaround on the Buckden side of the railway line).

Cycle parking

Cycle parking should be provided in the village centre, the local centre and school and at the recreation / community centre. It should be prominently placed near to the entrances of key buildings and facilities.

Proposals in the LCWIP include:

- **CP1** On-carriageway cycle parking at two points on the High Street, with four Sheffield stands in each (16 spaces in total).
- **CP2** A cycle storage hub at the local centre for bus passengers. This could take the form of Bike Hangars and be paid for via user subscription. To an extent this is reliant upon bringing eastbound buses into the village.

5.7 Programme of infrastructure measures

Appendices 1 and 2 provide a costed and prioritised programme of cycle infrastructure measures for cycling and walking.

6 Network planning for walking

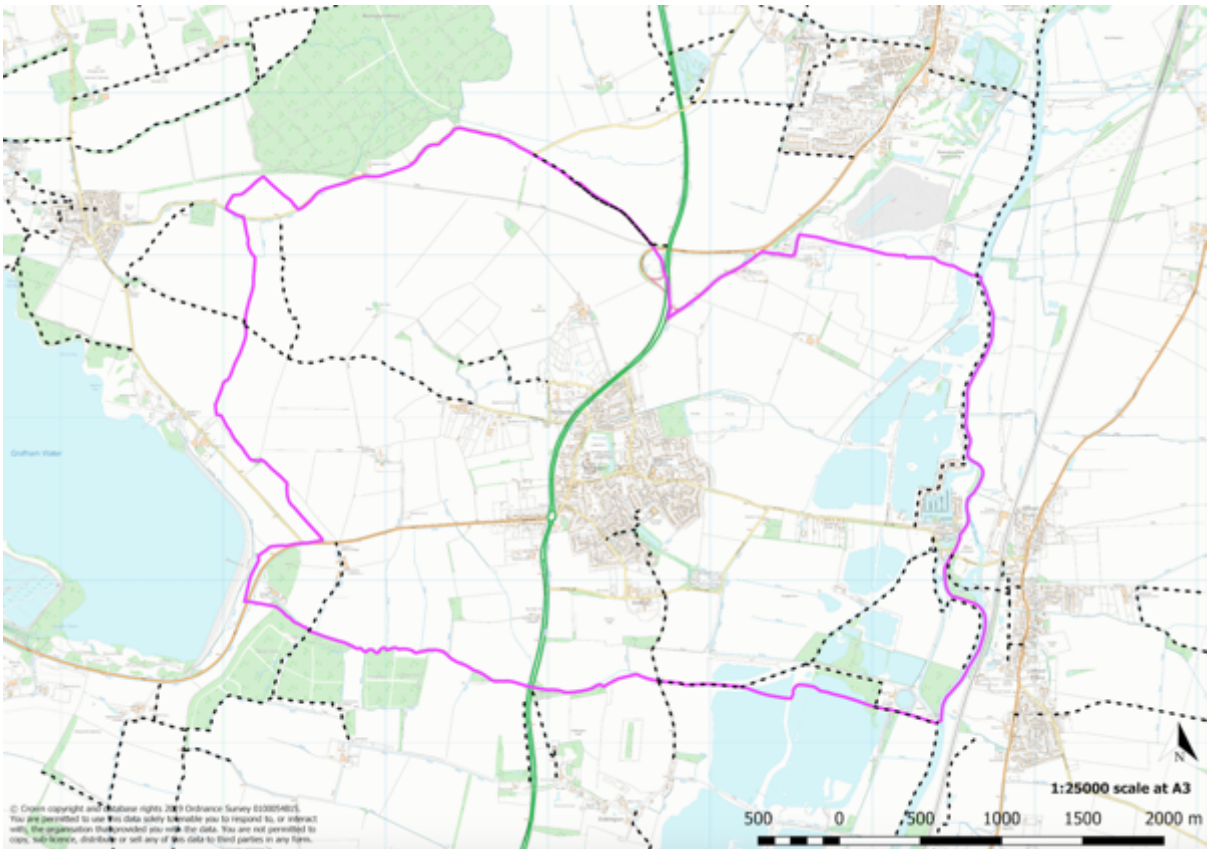


6.1 Walking network

Every street in the parish is available for walking. The pedestrian network also includes public rights of way of all types, alleyways and shortcuts, routes across public open spaces and permissive ways across private land. The parish has access to an enviable network of leisure walking routes and places to go walking – and villagers indicated a desire to strengthen this with more walking 'loops' with permissive or formal right of way access granted by landowners. Local concerns about public health have resulted in the founding of regular sociable led walks that get people into the outdoors, helping to address diabetes and loneliness, especially as people get older.



Map 6.1 Footways and non-carriageway surfaces available for public use.
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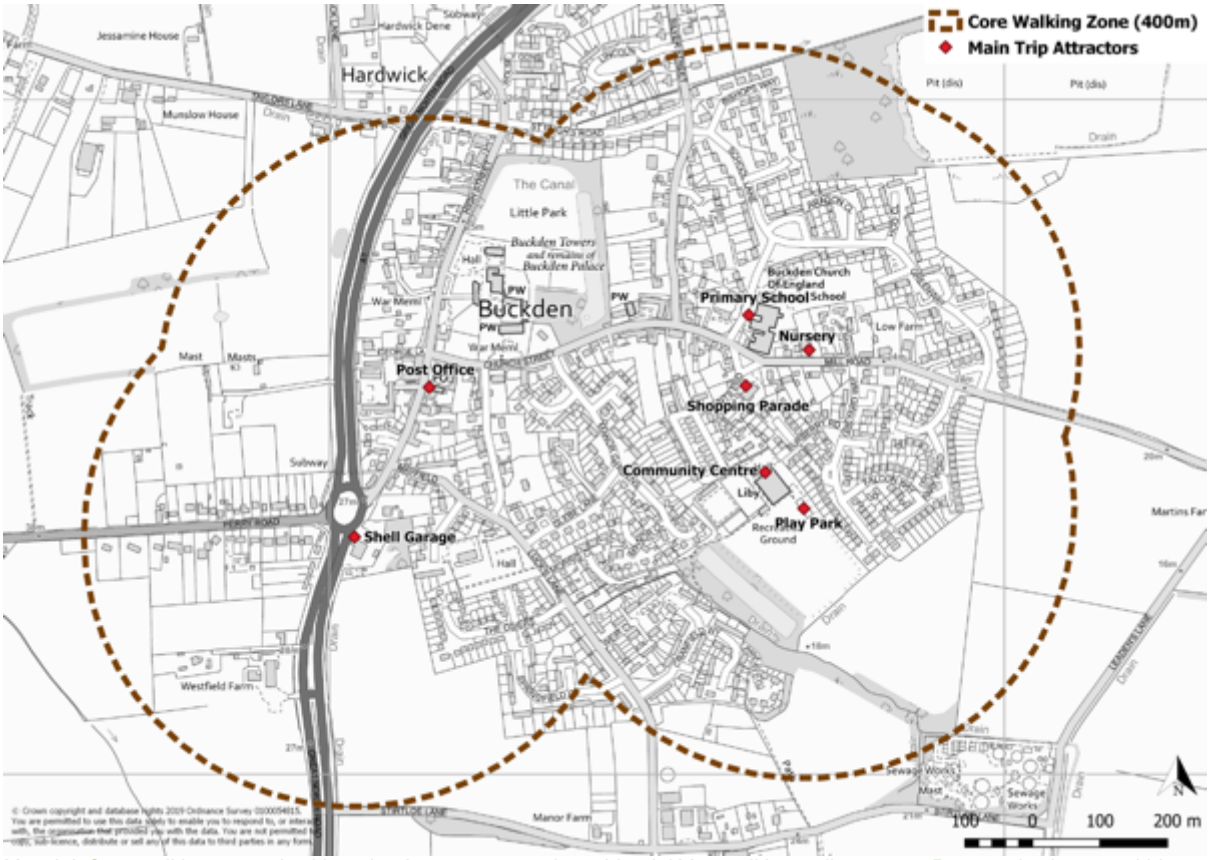
Map 6.2 Public rights of way – Buckden and parish (dotted black lines)
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6.2 Walking trip attractors

Buckden has four main walking trip attractors – the High Street, community hall and sports centre, and the local centre and primary school (map 6.4). These centres are distributed across the village core, with the school and local centre grouped as one. Other, 'lesser' trip attractors include the church, Buckden Towers, the petrol filling station (for employees) and Buckden Marina.

For recreational purposes the village's rural hinterland can be taken together as a single trip attractor, used extensively for dog-walking. Some residents and the neighbouring Offords parish council asked for the publicly accessible path network to be extended to create walking 'loops' and for repairs to be made to the Ouse Valley Way. Local children asked for a bridge crossing of the railway line.

6.3 Core walking zone



Map 6.3 Core walking network with main trip attractors and combined 400m walking radius zones. Proposed schemes within the zone have first priority unless there is an overriding accessibility or safety requirement to bring others forward. Some schemes outside of the 400m are addressed as cycling schemes, for example Silver Street, Luck's Lane and Mill Road.
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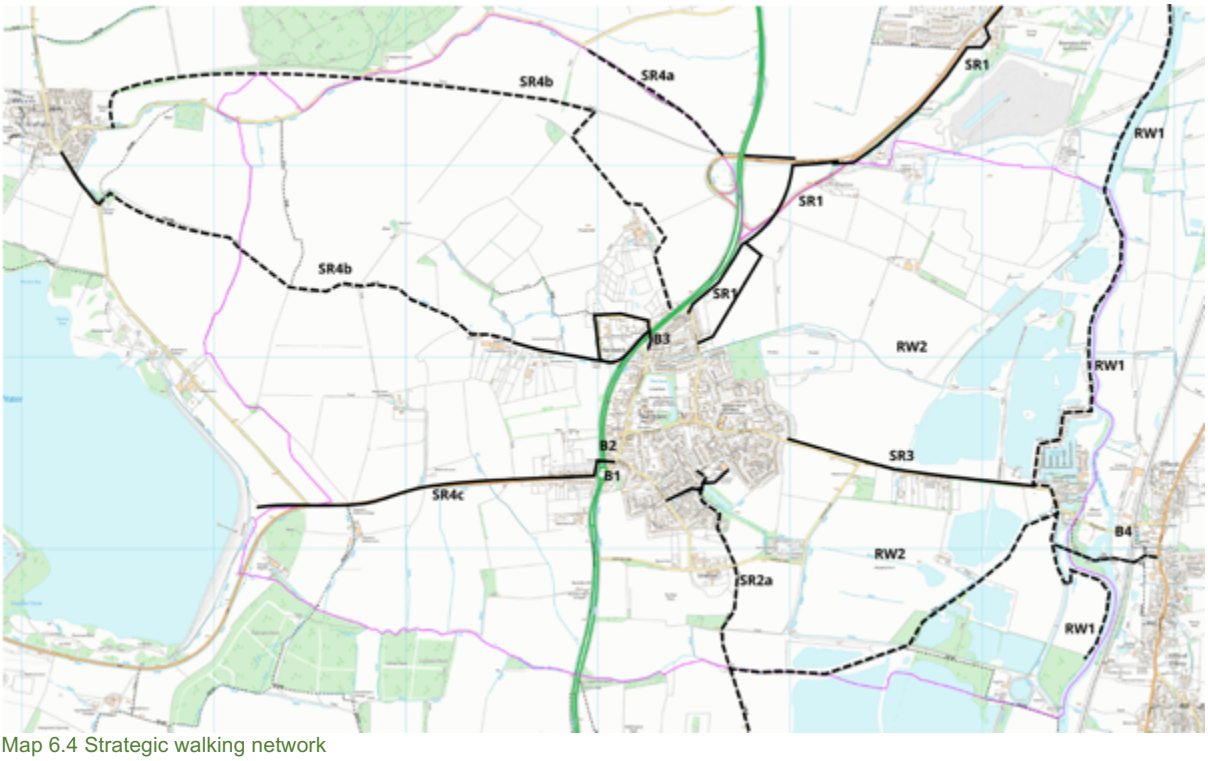
The main trip attractors, with a 400m buffer around each, together form a 'core walking zone' within which priority investment measures would take place. It is anticipated that developers of new housing sites will also contribute towards improvements within the core zone and also new and improved routes connecting their sites to the rest of the village. Once measures in the core zone are complete, remaining areas would be treated.

6.4 Core walking routes within Buckden village

Investment prioritisation is provided by the village's 'core walking routes' These comprise the four main routes that also carry the most motor-traffic and bus routes: the High Street, Church Lane, Silver Street and Greenway. In addition, sections of Lucks Lane and Glebe Lane are included where they form a 'collector' function bringing pedestrian traffic from several routes together. School Lane is also an important core route. 'Funnels' (the remaining route option after all collectors are brought together) are generally included in the list of priority schemes for implementation.

6.5 Core routes between settlements

Core dedicated pedestrian routes in the hinterland of Buckden are indicated below. These comprise selected footpaths and footways. Only a few of these routes are accessible to wheelchair users, and none meet current guidance for people with visual impairments.



Map 6.4 Strategic walking network
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6.6 Core design outcomes

Pedestrian infrastructure in the village comprises the following elements, which should be designed to the following standards:

Shared spaces with no footway	 Typical shared space. The brick-paved areas are essentially services ducts. This example is inaccessible for wheelchair users due to the kerb upstands and cobbles.	Where there are no footways it should be clear through street design that spaces are shared. Traffic calming, planters, filtered permeability and other measures should be used to reduce motor vehicle speeds to walking pace and make the street attractive and safe for walking, social activity and play.

Footways adjacent to the carriageway	 These footways are slightly too narrow and they have a severe crossfall (side to side) which makes them inaccessible for wheelchair users due to the risk of tipping. Moreover they are in a poor state of repair.	Footways meeting the following standards should be provided on at least one side of every 'through' street: • 1.5m minimum clear width not including street furniture • 1.2m minimum clear width for not more than 50m • 2.0m clear width is desirable, to allow two wheelchairs to pass each other. • Footway surface should be near-flat, with a crossfall gradient of not more than 1:40. At least 1.2m of flat area should be provided behind dropped kerbs to allow forward progress by wheelchairs. This means that crossovers should be ramped; or • Bollards may be used to delineate a footway where there is no kerb, and drainage and building thresholds do not permit construction of a standard footway.
Crossings		• In general preference should be given to narrowing the carriageway and introducing zebra crossings. • Informal island crossings should provide a waiting area at least 2m wide. The island should be at least 1.5m wide when looked at from the road (for pedestrians) or 2.0m wide for cyclists. • Wheelchair-accessible provision should be made for informal crossings between junctions by the use of dropped kerbs.
Junction bellmouths	 Very wide bellmouth, Church Lane  Blended junction design, Waltham Forest.	Pedestrians are most exposed to danger from motor traffic at junctions and when crossing informally. Buckden features, in the main, junctions with very wide bellmouths ('wide junctions') which remove priority from pedestrians crossing and create uncertainty about the direction in which drivers are going. Elderly and disabled people and children are particularly affected – wide junctions are hard to cross if you cannot walk quickly or if you are less able to judge the speed and direction of motor traffic. If slower pedestrians are forced to speed up, their potential risk of injury from falls increases and so does acute pain from physical conditions such as arthritis. • Opportunities should be taken to 'tighten' junction geometries in order to shorten crossing distances, reduce vehicle turning speeds and enable correct application of tactile paving. Bellmouths should be designed in accordance with Manual for Streets with corner radii as small as 1m. • Continuous footways should be provided in key central locations along the main streets (High Street, Church Lane, Silver Street) to maximise both priority and accessibility.

Tactile paving		• Tactile paving should be used in accordance with the guidance. Where tactile paving is used, kerbs should be flush. Where it is not used, kerbs should have a bullnose upstand that allows detection by white cane users. At no point should a flush kerb be unprotected by tactile paving. • Tactile paving is not needed where there are continuous footways where pedestrians have clear priority across the junction mouth. There is ongoing debate about this.
Footway parking	 Footway parking on the new shared use path in Brampton	• Footway parking should be prohibited through the use of a zone traffic order although the challenge of enforcement is noted. A traffic order would apply to a defined zone with signs at each point of entry. The cost of the Order would be in the region of £5,000 with another £5,000 for signing. An annual fee may be payable for a number of randomised Police visits to enforce the regulation.
Alleyway shortcuts		• Alleyways are not an ideal means of providing connectivity, especially where there is no natural surveillance from adjacent buildings. New developments should not feature narrow alleyways. The Parish design guidance provides further information. • Paths may be specified with good natural surveillance from windows and doors of adjacent development or good end to end sight lines. They should be at least 2m wide where designated for pedestrians only; 3m wide where designated as shared use between pedestrians and cycles, and 5m wide where separated cycle and pedestrian use is specified, with cycles having 3m. A margin of at least 1m either side should be left to maximise sight lines and natural light. Access points should be provided at least every 100m to provide escape routes.
Public rights of way		• Public rights of way should be maintained by local authorities and landowners with reference to the local, statutory Rights of Way Improvement Plan and Government Rights of Way Circular 1/09. • Accessible footpaths should have a hard surface (asphalt or recycled tyre surfacing) and should be 2m wide. Where shared with cycles (footpath creation and conversion via the Cycle Tracks Act 1984 or re-dedication of a footpath as a restricted byway), the minimum width should be 3m. • The use of gates and stiles that make access by disabled people difficult or impossible should be avoided. Where a gate is required, RADAR locks should be used to prevent unauthorised access.

Motorcycles and fast cyclists	 Spaced too close together, staggered half-barriers and other measures intended to slow cyclists or prevent access by motorcycles can exclude disabled people and those with non-standard cycles (tandems, cargo bikes, tricycles). Staggered barriers can be used to make a cycleway less attractive to motorcyclists, but they should be spaced so that they admit all types of cycle and cycle trailers.  Source: Nottinghamshire Live. The barrier has since been reduced.	• Motorcycles are an occasional issue on public rights of way and cycleways. This is indeed unfortunate, and in the past the issue has been dealt with by using very restrictive gates, barriers and other weird and wonderful contraptions, all of which exclude people in wheelchairs, with panniers and using non-standard cycles. • However, these measures act to exclude people with disabilities and also people on cycles – including children and older people who are do not have the physical strength to deal with obstructions. The obstructions also prevent access by cargo-bikes and adapted cycles used by disabled people. In principle they are contrary to the 2010 Equality Act which refers to the inclusion of target groups. • Physical barriers to motorcycle access should not be put in place on shared walking, cycling and wheelchair routes. Instead, occasional enforcement should be used together with acceptance that occasional motorcycles may be encountered. • Staggered half-barriers to reduce cycle speeds are acceptable – but only if they are not placed so close together that they impede non-standard cycles including tandems, recumbents, tricycles, cycle trailers and wheelchair hand-cycle attachments. The barriers should be angled so that they create a smooth slalom and regularly placed so that they make the route less appealing to motorcyclists.
Helping people to choose walking		• The parish already provides circular, social walks around the village and neighbouring countryside. This helps to combat loneliness and poor health arising from sedentary lifestyles. • Getting the community involved in local street greening initiatives could further create a culture of being more active because of the social rewards it brings.

6.7 Improving the walking environment – proposals to address walking infrastructure and barriers

Measures indicated in this section are mostly general – they can be applied across the entire village (of Buckden combined with Stirtloe and Offord Mill).

Map 6.3 shows the main walking trip attractors and 400m radius isochrones around them, forming the central 'walking zone'. First priority for proposed investment is given to improvements and schemes within the overlapping 400m walking distance isochrones including the **High Street**, **community centre** and **primary school / local centre**. Second priority is given to all other routes.



Lack of footway provision also contributes to poor intervisibility at the junction.



Continuous side street footway on Lea Bridge Road, Waltham Forest



A school street in Hackney

Footways

Several streets have no footway provision, whilst others have a footway only on one side. This is, of course, quite normal in rural areas where roads were not originally designed for motor vehicles travelling at speed. However, the absence of proper footways or pedestrian priority on shared streets renders walking an activity that feels dangerous and compromised. It means that walking cannot easily be a sociable activity. None of the footways in Buckden meet the advised minimum clear width of 2.0m which would allow two wheelchairs to pass or sociable walking to take place, and the lack of walking space is particularly acute in the village centre where pedestrians on footways less than 1m wide are hemmed in by parked vehicles.

General village-wide proposals in this LCWIP include:

- **LW1** A village-wide 20mph zone with associated Traffic Management Order and random enforcement.
- **LW2** Opportunities should be taken to prevent footway parking, which is antisocial, damages weak surfaces, reduces accessibility for people with wheelchairs and buggies, and makes walking less safe and attractive.
- **LW3** Opportunities should be taken to make footway improvements including localised widening (indicative locations expressed as a price per square metre for construction and kerb adjustment) and a new path across the green at Hunts End. **LW3a** footway maintenance.

Specific priority proposals in this LCWIP include:

- **LW4** Flush dropped kerbs and tactiles at various junctions.
- **LW5** A 'school street' by the primary school incorporating measures such as:



School Lane – a school street scheme?


Timed vehicle access for loading; bus gate on local high street, Walthamstow has resulted in a popular street where people spend time. There are no vacant premises following completion of this scheme.


Public footpath

- Traffic Management Orders and associated measures (yellow lines and signs)
- Traffic restriction measures (road closure at school arrival and leaving times)
- Public realm improvements (such as creating a permanent public realm scheme as part of any school reconstruction)
- **LW6** regular random enforcement

- **LW7** A High Street public realm scheme with, as a minimum:
  - Footway widening
  - Parking review
  - A new public space outside the Lion Hotel – with a temporary trial scheme to test the concept.

- **LW8** A new footway demarcated using bollards and / or planters on the southern side of Church Lane east of its junction with the High Street.

- **LW9** A zebra crossing of Church Lane at the junction of the High Street that reinforces the priority given to pedestrians by Highway Code Rule 170.

- **LW10** A new zebra crossing on the High Street.

- **LW11** Continuous footway treatments and junction tightening at the junctions of Church Street with:
  - Manor Gardens
  - Silver Street
  - School Lane / Hunts End
  - Vineyard Road
  - Park Road
  - Greenway (incorporating cycle facilities)

- **LW12** Continuous footway treatments and junction tightening at the junctions of:
  - Mayfield and Lucks Lane
  - Mayfield and High Street
  - Other junctions as required

- **LW13** Continuous footway treatments at the junctions of Silver Street with:
  - St Hugh's Road
  - School Lane

- **LW14** Various opportunities for modal filtering as required to address rat running issues and create a preference for active travel



Potential direct route through Paxton Pits nature reserve (not currently a public right of way)



A lack of dropped kerbs mean disabled people have to meticulously plan their routes



Cobbles and footways with no dropped kerbs create no-go areas for wheelchair users and hazards for cyclists

Public rights of way

Public rights of way are managed by Cambridgeshire County Council as highways authority under the Countryside and Rights of Way Act. Guidance as to the designation and maintenance of rights of way is provided in Circular 1/09 (version 2) available here: *https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69304/pb13553-rowcircular1-09-091103.pdf* . The Local Access Forum is a stakeholder and local authority group that advises the local authority about matters relating to existing and proposed rights of way and amendments to the definitive map, which is held at the District Council.

Proposals in this LCWIP include:

- **SR4a** Amending the existing byway between Buckden Road and Brampton Road to a restricted byway open to pedestrians, cycles, and wheelchairs / mobility scooters only or **SR4b** negotiating permissive access for pedestrians and cyclists to the former railway line (third party land).

- **SR2a** Amending the existing footpath between the village hall and Diddington, and between Diddington and Paxton Pond to a new, hard-surfaced permissive route or restricted byway accessible to pedestrians, cycles, and wheelchairs / mobility scooters only. Beyond Diddington, the route towards Little Paxton would require further discussion with Huntingdonshire District Council, Friends of Paxton Pits and Paxton Parish Council.

- **SR2a** Creating a new right of way or permissive route through Paxton Pits and applying a hard surface to the restricted byways and permissive route that can be used by wheelchair users and people on bikes

- **General** Applying appropriate cycle-calming measures, notably staggered half-width gates that are designed to reduce speeds whilst remaining accessible to wheelchairs, mobility scooters and all types of cycle.

More detailed proposals for the **SR4a** byway between Buckden Road and Brampton Road are provided in a separate report by City Infinity.



Inaccessible bus stops mean disabled people may not be able to travel independently


Subway gradient too steep


Subway – would feel unsafe at night

People with disabilities

Not every street in the village is available for people with disabilities. Wheelchair users who attended the engagement workshop said they are obliged to plan each journey quite meticulously to ensure the most accessible routes in a generally inaccessible network. They reported that they are also excluded from access to the surrounding countryside, which might otherwise offer a real benefit of living in Buckden.

It is important to realise that anyone can become disabled at any time. Due to accidents, illness, ageing, and other causes, environments that put up barriers to access mean that, gradually or suddenly, a person's ability to enjoy the countryside is put in jeopardy. Favourite routes they once explored are no longer available but for a little more consideration about ensuring good accessibility. This loss of freedom and access to nature can place a real strain on mental health.

Proposals in this LCWIP include the following measures:

- Refer to general footway improvements indicated above
- **LW9, 10** Improved and additional formal and informal crossings with appropriate dimensions, tactile treatments and flush kerbs (price per dropped kerb, zebra crossing and island). Candidate locations are indicated, although these may change.
- **LW16** Accessible bus stop designs including a review of bus stop locations, cage lengths to allow buses to pull into the kerb (price per accessible bus stop). Funding for this may be supported through the LTP Better Bus Fund or a similar scheme. The lack of bus and bus stop accessibility was highlighted by two disabled stakeholders.
- **LW17** New bus connectivity (two-way buses on route 66 within the village) if the northern development site does come forward. This will require early negotiations with the developer.
- **LW3, LW8** Additional footway and measures to improve crossing sight lines, including a footpath across the green at Hunts End.
- **B1** walking accessibility associated with future improvements to Buckden Roundabout.


Footway in need of maintenance

- **B2, B3** Physical improvements to the two subways in the village, with two options:
    - Minor improvements including repainting, better lighting and improved mirrors
    - Major improvements, subject to available space, specifically re-grading of the access ramps which do not meet current accessible design standards.

- **LW18** Accessible hard-surfaced public rights of way to create 'loops'. This includes the use of strategic cycling routes (price for footway or carriageway construction per square metre).

Antisocial footway parking

At school drop-off and collection times, some village roads are subjected to antisocial footway parking activity which not only causes obstruction but also damage footways, which are not constructed to the same specification as the adjacent carriageway. When people park on footways this can also cause damage to sub-surface services, leading to disruption caused by roadworks. Proposals in this LCWIP include:

- **LW2** Single and double yellow line markings ('conservation' standard) with or without traffic management Orders with indicative locations (cost per TMO and yellow lining per metre).

- **LW2b** Alternative cost for an area-based traffic regulation order and markings where parking is permitted (cost per traffic regulation Order and signed zone).

Lack of maintenance

A major issue for pedestrians is the poor condition of footways and crossings. This particularly affects disabled residents. Many sections of already inadequate footway have failed and been left in poor repair, with uneven and potholed surfaces, localised ponding and poor quality uneven dropped kerbs. Whilst many footways would be rebuilt as capital projects to address various issues, some only require maintenance and the addition of tactile paving and flush kerbs at crossings. The Parish Council carries out an annual visual assessment of local highways and footways and submits requests for maintenance to the Highways Authority.

Proposals in this LCWIP include:

- **LW3a** Footway maintenance – replacement of existing surface without kerb adjustment (cost per metre of 1.5m footway).

- Continued annual visual inspections and requests to the Highways Authority for footway and carriageway maintenance.

7 Developer negotiations: obligations and contributions



Given projected traffic demand from large-scale new development and the desire to retain Buckden's village feel and sense of rural community, the Parish Council is opposed to current plans to develop up to 750 new homes in the village.

New development proposals either proposed or coming forward, if they are to be permitted, should be subject to design and layout conditions as well as financial obligations to support local active travel infrastructure requirements.

7.1 Contributions and planning conditions

Agreement should be reached between the planning authority and developers to ensure that the design outcomes set out in this LCWIP for cycling and walking (together with other requirements including lighting and connectivity) are met both within the site and on off-site connecting routes funded through developer contributions. CIL and S.106 funding should be used to improve provision for walking to and from the site, including agreements for the developer to reconstruct footways and crossings to meet the desired standard.

The design guidance in this LCWIP is cross-referenced in the Neighbourhood Plan design guidance.

Where appropriate, new developments should be asked to take opportunities to overcome physical barriers to walking and cycling by including physical measures or funding as follows:

- Active travel links back to existing built areas, even if this means purchasing houses to enable the connections to be made. All new connecting paths should be suitable for shared use (5m overall width including a 1m grass or planting buffer each side, with good sight lines and no tight corners).

- Active travel links to the village's core activity hubs – the high street, school and community hall.

- Funding towards improving existing subways under the A1(T), measures to include minor improvements or, ideally, more ambitious proposals to reduce gradients and improve lighting and sight-lines.

- Funding towards replacing or substantially improving the existing subways under the A1(T), providing connections to the countryside beyond.

- Consider a new multi-modal link to a new junction on Buckden Road which would enable residents to enter and leave the village without using the A1 roundabout or Silver Street. This should be suitable for use by the 66 bus service (so that it can operate in both directions throughout the village) and pedestrians and cyclists and would accord with Local Plan policies BU1 and BU2.

- Contributions towards building the off-site strategic and local cycle route network – between Buckden and neighbouring and larger settlements of Brampton / Huntingdon, St Neots, Little Paxton, Diddington, Offords and Grafham. Huntingdonshire District Council currently collects CIL funding in the region of £7,000 per dwelling in the district, funding that goes towards a range of services including street infrastructure. Publication of the Neighbourhood Plan means that the village is able to collect 28% of developer contributions for local services and infrastructure. The Parish Council's preferred route between Buckden and Little Paxton is via Paxton Pits – not alongside the A1.

7.2 Establishing good design with early engagement

This LCWIP and the Buckden Design Guidelines[2] recommend early engagement between developers and the local planning and highway authorities to ensure that the proposed active travel network is fully integrated in development proposals from the outset of planning and all the way to completion. The Parish Council will push for the following principles to be incorporated:

- Street layout and development density principles, to ensure a 'critical mass' of residents that will support the retention and expansion of local services and also to enable good quality place making to occur which supports and stimulates active travel.

- Prior to the detailed application, the Parish Council may elect to influence the design as follows:

    - New development should be designed around well-established, good urban design principles of connected perimeter block layouts, integrated rather than 'screening' public open spaces, and good connectivity with existing streets and paths. Streets, paths and spaces should be landscaped and designed in a way that promotes play and social interaction. They should benefit from natural surveillance that reduces the likelihood of crime and improves people's sense of safety. Designers should refer to the Neighbourhood Plan and Buckden Design Guidelines[3] for additional information.

    - New development should take opportunities to ensure that walking and cycling are the favourite and easiest modes of transport to use for short journeys from the site to the village

[2] Buckden Design Guidelines 2019 (draft)
[3] ibid

and neighbouring settlements. Creating a culture of active travel has implications for street layouts, landscaping and the way social activity and children's play is integrated in the spaces between buildings.

- There should be accompanying measures to reduce the tendency to default to car use. Such measures include creating separate shared car parks rather than on-street and courtyard parking, complemented by landscaped streets designed for social activity and play which also discourage unauthorised parking. Cycle parking should be designed to accommodate children's and adults' bikes and adapted cycles. It should be conveniently located near to people's front doors and designed in a way that maximises uptake of the mode.

Appendix 1: Prioritised measures to support cycling

Scheme list, estimated cost range and prioritisation

A simple Red / Amber / Green prioritisation is established as follows:

- **Red:** highest priority. This scheme will have a mainly utility function, or it will link settlements together. At the engagement event, residents expressed the desire to use the routes for commuting to work or schools and making other local cycling journeys.
- **Amber:** Medium priority. This scheme is desirable but not immediately urgent. It will make a significant contribution to people's quality of life and provides a mix of utility and recreational benefits.
- **Green:** Low priority. This scheme is desirable but not essential. It will provide improved connections mainly for leisure purposes, or it will add convenience to walking journeys. The availability of a satisfactory alternative route or prohibitive cost reduces its importance.

Costs are indicative ranges. Further investigation may reveal a higher or lower budget requirement. NK = the cost cannot reasonably be estimated at this stage. In general, either a total or unit cost is indicatively estimated.

Coding applies as follows:

- **SR** = Strategic route (linking settlements or major attractions)
- **LW** = Local walking scheme (mostly within Buckden itself. Priority is given to schemes within the joined 400m isochrones. These are not mapped as most are general.
- **B** = barriers to overcome.

Ref	Priority RAG	Scheme description Note that schemes numbered with an 'a', 'b', 'c' etc are options within their numbering category, e.g. either of Strategic Route SR2a or SR2b may be considered. The option that is not chosen then has a lower priority.	Cost (range) in £'000s NK=not known	Unit cost £ (range) (eg square metre or item)	Notes (eg 'under construction' / 'programmed' / 'via new development' etc)
SR1	R	**Silver Street to Buckden Road**: • Reconstruction of existing shared use path; • Junction safety design at Silver Street. Associated signage		150-200	Cost per square metre footway construction
SR1	R	**Buckden Road to Brampton:** • Detailed design and implementation of 5m wide cycle track accessible by pedestrians • New crossing arrangement to replace existing		150-200	Cost per square metre footway construction Will require 3rd party land, embankment works and modification of existing drainage ditch

					Section within Brampton requires more detailed design consideration
SR1		**Silver Street to Buckden Road:** Alternative route via allocated development site	NK		Requires negotiation and planning conditions
SR2a	R	**Buckden to Diddington:** New 3m shared use path between Buckden and Diddington		150-200	Cost per square metre Requires landowner consent and amendment of right of way to restricted byway
SR2a	R	**Diddington to Little Paxton:** New shared use path between Diddington and Little Paxton		150-200	Cost per square metre. Requires landowner consent and amendment of right of way to restricted byway
SR2b	R	**Buckden to St Neots via A1 path** Improved, wider verge and barrier separated cycle way that pedestrians may use adjacent to A1. Attention must be paid to junctions and crossings, particularly at Southoe and Diddington.		150-200	Cost per square metre footway construction Highways England
SR3a	R	**Buckden to Offords,** wider shared use path		150-200	Cost per square metre footway construction Alternative to SR3b
SR3b	R	**Buckden to Offords,** carriageway treatments (cycle lanes including coloured surface dressing)	20-40		Cost per 100m line painting and anti-skid. Alternative to SR3a
SR4a	A	**Buckden to Grafham** via Brampton Road – provide signalised access under A1, resurface byway, provide speed limit, traffic calming and cycle passing places on Brampton Road. Outline concept design.	35-85	150-200	Unit cost of track construction per square metre. See accompanying outline report by CityInfinity
SR4b	G	**Buckden to Grafham** via former railway land – construct 3m wide shared walking and cycling path on original railway alignment (and negotiate access across farmland)		150-200	Cost per square metre footway construction
SR4c	G	**Buckden to Grafham Water** via Perry Lane – construct cycleway that pedestrians may use and	600-900	150-200	Cost per square metre

		connection to NCN and reservoir cycle circuit.			
LW1	R	**Village-wide 20mph** scheme including TRO and signage	25-35		
LW1a	R	**Mill Road 40mph** speed limit TRO and signage	7-10		
LW6	R	**Regular randomised traffic enforcement**	6-10		Purchase of Policing resource.
LW18	A	**Cycle route signage**	5-15		
B1	R	**Buckden Roundabout.** Negotiate active travel improvements in future design. Includes engineering layout concepts.	10-20		
B2	R	**Subway at Buckden Roundabout.** Minor, mainly cosmetic improvements; cycle speed control and intervisibility at corners, new convex mirrors and CCTV	20-50		
B2	A	**Subway at Buckden Roundabout** Extensive improvements to bring the subway up to current accessibility standards	500-1000		
B3	R	**Subway top of high street**. Minor, mainly cosmetic improvements; cycle speed control at corners, new convex mirrors and CCTV	20-50		
B3	A	**Subway top of high street.** Extensive improvements to bring up to current standards.	500-1000		
B4	R	**Offords level crossing.** Explore engineering options for alternative means of access if existing level crossing is closed. Representative in negotiations with Network Rail.	10-20		
CP1	R	**8x cycle parking stands** in High Street, two groups of 4 including build-outs. Other cycle parking to be provided where need identified	10-15	£200	per stand
CP2	A	**Cycle hub** – secure shelter for eight cycles at commuter bus stop. Requires some administration of duplicate keys and memberships.	5-10		

Appendix 2: Prioritised measures to support walking

Scheme list, estimated cost range and prioritisation

Red / amber / green prioritisation is established as follows:

- **Red:** highest priority. This scheme will have a mainly utility function, or it will link settlements together.
- **Amber:** Medium priority. This scheme is desirable but not immediately urgent. It will make a significant contribution to people's quality of life and provides a mix of utility and recreational benefits.
- **Green:** Low priority. This scheme is desirable but not essential. It will provide improved connections mainly for leisure purposes, or it will add convenience to walking journeys. The availability of a satisfactory alternative route or prohibitive cost reduces its importance.

Costs are indicative ranges, in '000s. Further investigation may reveal a higher or lower budget requirement. **NK** = the cost cannot reasonably be estimated at this stage. In general, either a total or unit cost is indicatively estimated.

Coding applies as follows:

- **SR** = Strategic route (linking settlements or major attractions)
- **LW** = Local walking scheme (mostly within Buckden itself. Priority is given to schemes within the joined 400m isochrones. These are not mapped as most are general.
- **RW** = improvements to rights of way
- **B** = barriers to overcome.

Ref	Priority RAG	Scheme description	Cost (range)	Unit (eg square metre, £ whole scheme, per unit)	Notes (eg 'under construction' / 'programmed' / 'via new development' etc) or measurement used
SR1	R	**Buckden to Brampton:** High Street to Buckden Road. Scheme as for cycling.		150-200	Cost per square metre footway construction.
SR1	R	**Buckden to Brampton:** Buckden Road east of A14/A1 junction scheme – scheme as for cycling		150-200	Cost per square metre footway construction. Requires embankment engineering and 3rd party landowner agreement.
SR2a	R	**Buckden to Diddington** accessible restricted byway		150-200	Cost per square metre footway construction (occasional heavy vehicle access)
SR2a	R	**Diddington to Little Paxton** via Paxton Pits nature reserve, linking		150-200	Cost per square metre footway construction

		with planned circular walking and cycling routes.			(occasional heavy vehicle access)
SR3	R	**Buckden to Offords:** widen and resurface existing footway		150-200	Cost per square metre footway construction
SR4a	A	**Buckden to Grafham** via Brampton Road.	35-85		
SR4b	G	**Buckden to Grafham** via former railway line and across farmland. Footway construction, permeable surface. Improvements to other existing public footpaths.		150-200	Cost per square metre footway construction
SR4c	G	**Buckden to Grafham Water** via Perry Lane – cycleway that may be used by pedestrians. 3.5m width including buffer.		150-200	Cost per square metre footway construction
LW1	R	**Village 20mph** TRO and associated signage		25-35	
LW2a	R	**Localised parking controls** to prevent unsafe parking including footway parking. Traffic regulation Orders, signs and lines.	7-10		Alternative to LW2b
LW2b	R	**Area parking zone** traffic regulation Order to prevent footway and other unauthorised parking; signs and lines.	7-10		Alternative to LW2a
LW3	R	**Footway reconstruction** as required including junction tightening		?	Unit price per 2mx10m
LW3a	R	**Footway maintenance** as required (kerbs replaced in situ)		?	Unit price per 2mx10m
LW4	R	**Flush dropped kerb and tactiles** (pair) including local footway reprofiling.		3k	Per pair, plus £5k for kerb tightening
LW5	R	**School Street** traffic order and signs	6-10		
LW6	R	**Random traffic enforcement** (parking and speeding)	10		
LW7	R	**Church Lane** – demarcation of footway (bollards)	10		
LW8	R	**Zebra crossing** at junction of Church Lane and High Street to reinforce Highway Code rule 170.	15-20		Note device is not yet DfT approved.
LW9	A	**New zebra crossing** on High Street and elsewhere if required	10-15		Add £15 if humped.
LW10	R	**Continuous footway** treatments (per scheme)		20-30	Per scheme
LW11	R				
LW12	R				
LW13	A	**Modal filter**		10-20	Per scheme
LW14	A	**Additional / modified crossing refuges** as required.		5-10	Per refuge
LW15	R	**Accessible bus stop** (bus stop cage, level kerb and footway)		6-8	Per stop
LW16	A	**New bus connectivity** via allocated site	NK		

LW17	A	**Accessible hard-surfaced public right of way circuit** – footway construction (width 2m)	-	?	Unit price per 3mx100m. Route TBC.
LW18	R	**High Street parklet**	5-25		
RW1	R	**Ouse Valley Way** maintenance and reinstatement of path; removal of fallen trees; preventative tree surgery; RADAR keys for gates	NK		
RW2	G	**Walking circuits** Establish dog-walking circuits via permissive access to tracks and paths to east of village (private land).	5-10		Negotiations with landowners.
B1	R	**Buckden Roundabout.** Negotiate active travel improvements as part of future design. Includes engineering layout concepts.	5-10		Price for professional negotiation
B2	A	**Subway at Buckden Roundabout** Extensive improvements to bring the subway up to current accessibility standards	500-1000		
B3	R	**Subway top of high street**. Minor, mainly cosmetic improvements; cycle speed control at corners, new convex mirrors and CCTV	20-50		
B3	A	**Subway top of high street.** Extensive improvements to bring up to current standards.	500-1000		
B4	R	**Offords level crossing.** Explore engineering options for alternative means of access if existing level crossing is closed. Representative in negotiations with Network Rail.	10-20		

Appendix 3: Public engagement outcomes

Please refer to the separate Excel document.

Appendix 4: Baseline maps

Please see separate document