Buckinghamshire Local Cycling & Walking Infrastructure Plan (LCWIP)

Beeches Community Board Profile

The Buckinghamshire LCWIP will identify and develop a strategic network for walking, wheeling and cycling (active travel) between and through settlements across the County. This profile presents an overview of information relevant to the LCWIP network planning for the Beeches Community Board area. This data includes: local population; key origins and destinations for travel; travel patterns; physical geography; existing active travel infrastructure; committed schemes and local aspirations for new active travel infrastructure. The contents of this profile will be used for baseline evidence to help understand the current context and inform network planning.

Comments are welcomed on the material presented.

Please visit: **bit.ly/BucksLCWIPEngagement** to submit your comments.

January 2023

The People

In comparison to the Buckinghamshire average, the Community Board area has greater proportions of people aged over 45 and generally smaller proportions of younger people. 13.7% of the Community Board area population have long-term health problems or disabilities which affect their day-to-day activities, which is slightly higher than the Buckinghamshire average of 13.4%.
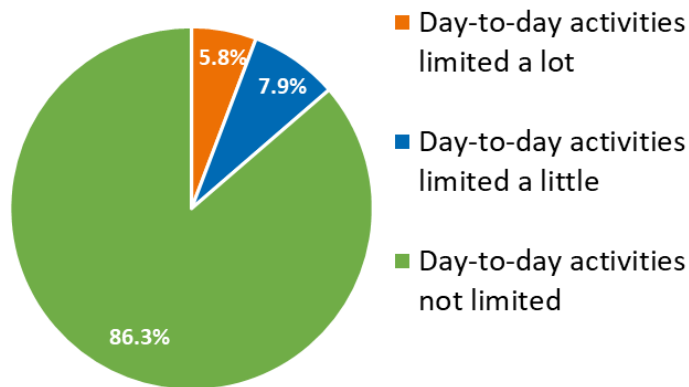
The English Indices of Multiple Deprivation is a relative measure of deprivation in small areas or neighbourhoods. It comprises seven themes, covering income; employment; health and disability; education, skills and training; crime; barriers to housing and services; and living environment. The higher the deprivation score, the more deprived an area is. The Community Board area has an average deprivation score of 9.7 (compared to Buckinghamshire as a whole at 10.1), with comparatively more deprived neighbourhoods at North Burnham and Stoke Green.

Total population in Community Board

24,775

Source: Census 2011

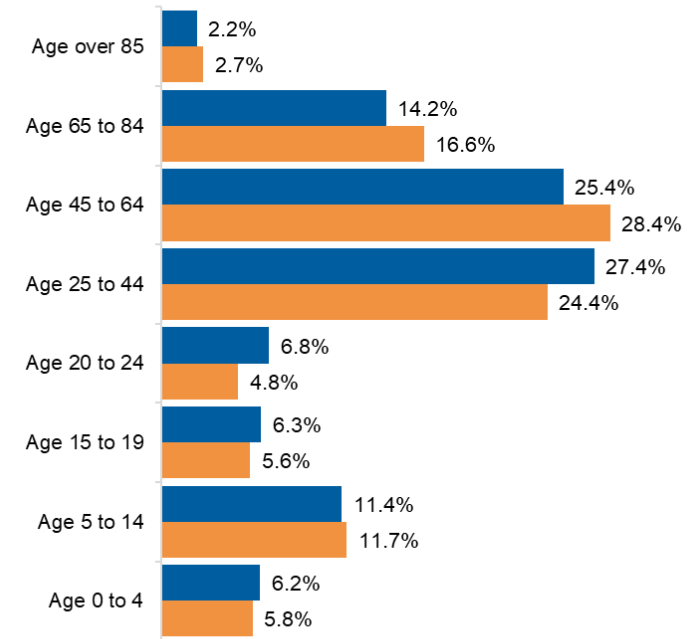### Proportion of Population with Long-term Health Problems or Disability in the Community Board

- 5.8% Day-to-day activities limited a lot
- 7.9% Day-to-day activities limited a little
- 86.3% Day-to-day activities not limited

Source: Census 2011

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Index of Multiple Deprivation in Community Board

less deprived — more deprived

North Burnham

Stoke Green

Source: https://www.healthandwellbeingbucks.org/local-profiles

Age Distribution

| Age group	Buckinghamshire Average	Beeches
Age over 85	2.2%	2.7%
Age 65 to 84	14.2%	16.6%
Age 45 to 64	25.4%	28.4%
Age 25 to 44	27.4%	24.4%
Age 20 to 24	6.8%	4.8%
Age 15 to 19	6.3%	5.6%
Age 5 to 14	11.4%	11.7%
Age 0 to 4	6.2%	5.8%

■ Buckinghamshire Average ■ Beeches

The Places

The map below shows the broad location of the main settlements in and around the Community Board area, categorised by population size. The built-up area boundaries are approximate, reflecting the high-level national dataset used. The population data is based on 2019 estimates.
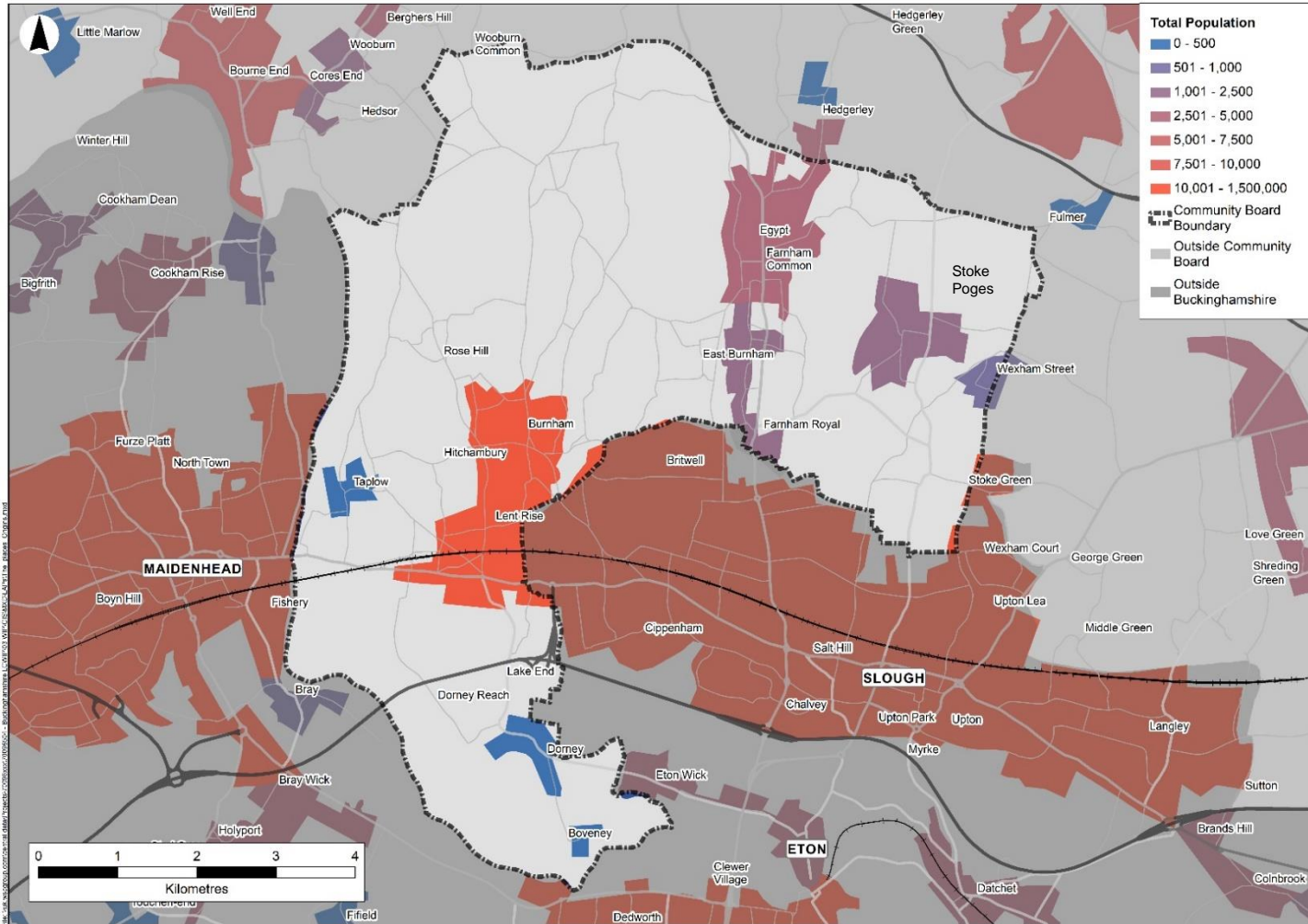
Within the Community Board area, Burnham has the largest population (11,630, equating to 47% of Community Board area population).

The next largest settlements in the Community Board area are Farnham Common / Egypt, Stoke Poges, Farnham Royal and East Burnham. Smaller villages, scattered hamlets and more sparsely populated rural areas are characteristic of other parts of the Community Board area.

Surrounding the Community Board area, the largest settlements in terms of population are Maidenhead (56,738), Slough (141,376) and Windsor (32,928).

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Source: Experian 2019 data

The Places

The map below identifies the location of selected key facilities and services in and adjacent to the Community Board area. These locations include education, employment, healthcare, rail stations and selected leisure/tourism sites. Commercial addresses are shown as hexagons on the map below and are assigned colours based on the concentration of employment, retail and facilities across the Community Board area.
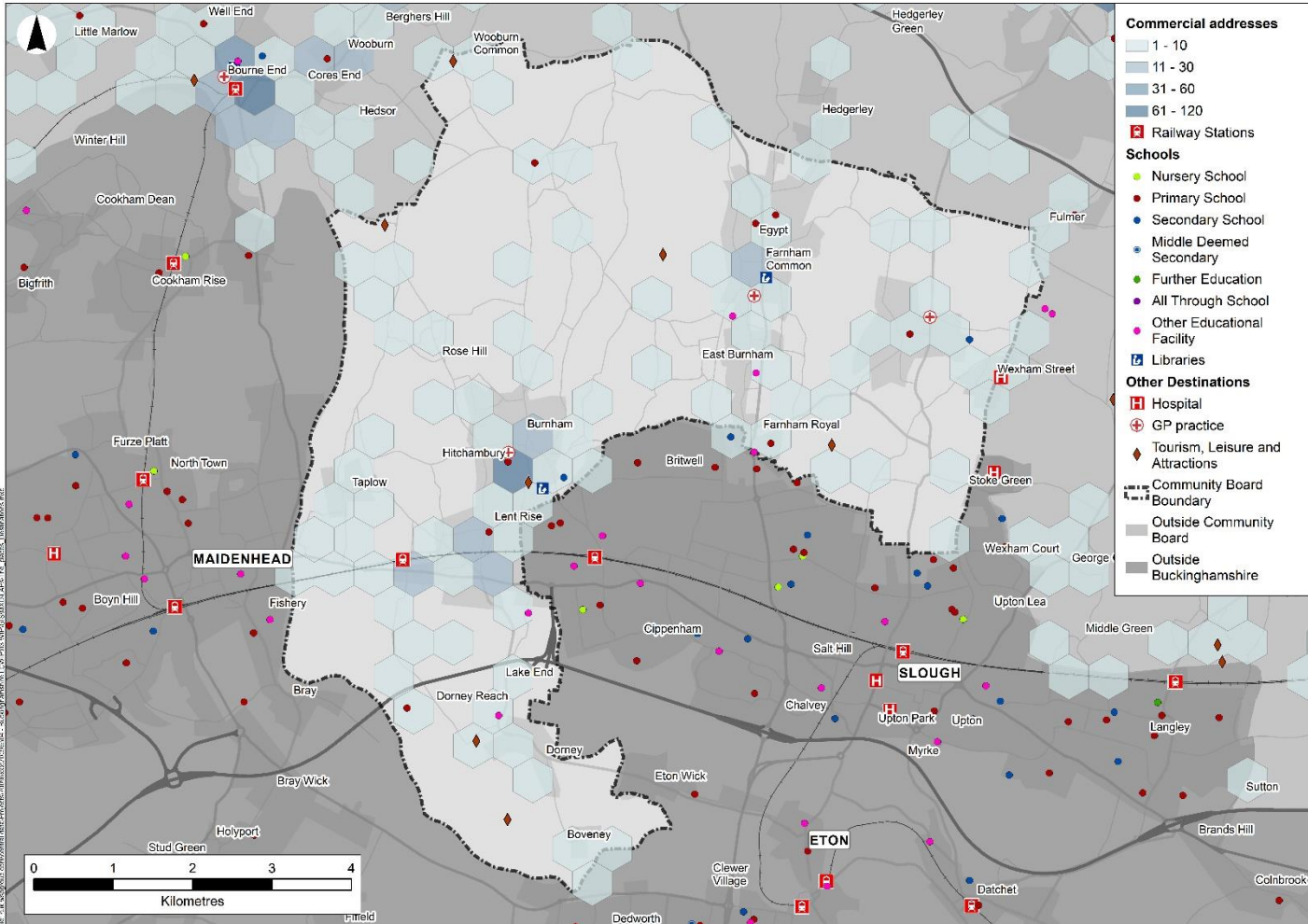
Burnham and Farnham Common are the key hubs within the Community Board area, with a range of services, facilities and businesses. Burnham has grammar school provision, whilst the one rail station within the Community Board area is Taplow, located to the south of the main village. Further shopping and employment is located along the A4 Bath Road corridor.

Key leisure and tourism locations include Dorney Lake, Dorney Court, Cliveden and Burnham Beeches National Nature Reserve.

Key locations outside of the Community Board area, such as Slough and Maidenhead, have significant education, employment, leisure and shopping destinations which are likely to serve residents within the Community Board area. The secondary catchment school for the area is Bourne End Academy, to the north-west.

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The Geography

The map below outlines key aspects of geography which can influence active travel journeys within the Community Board area.
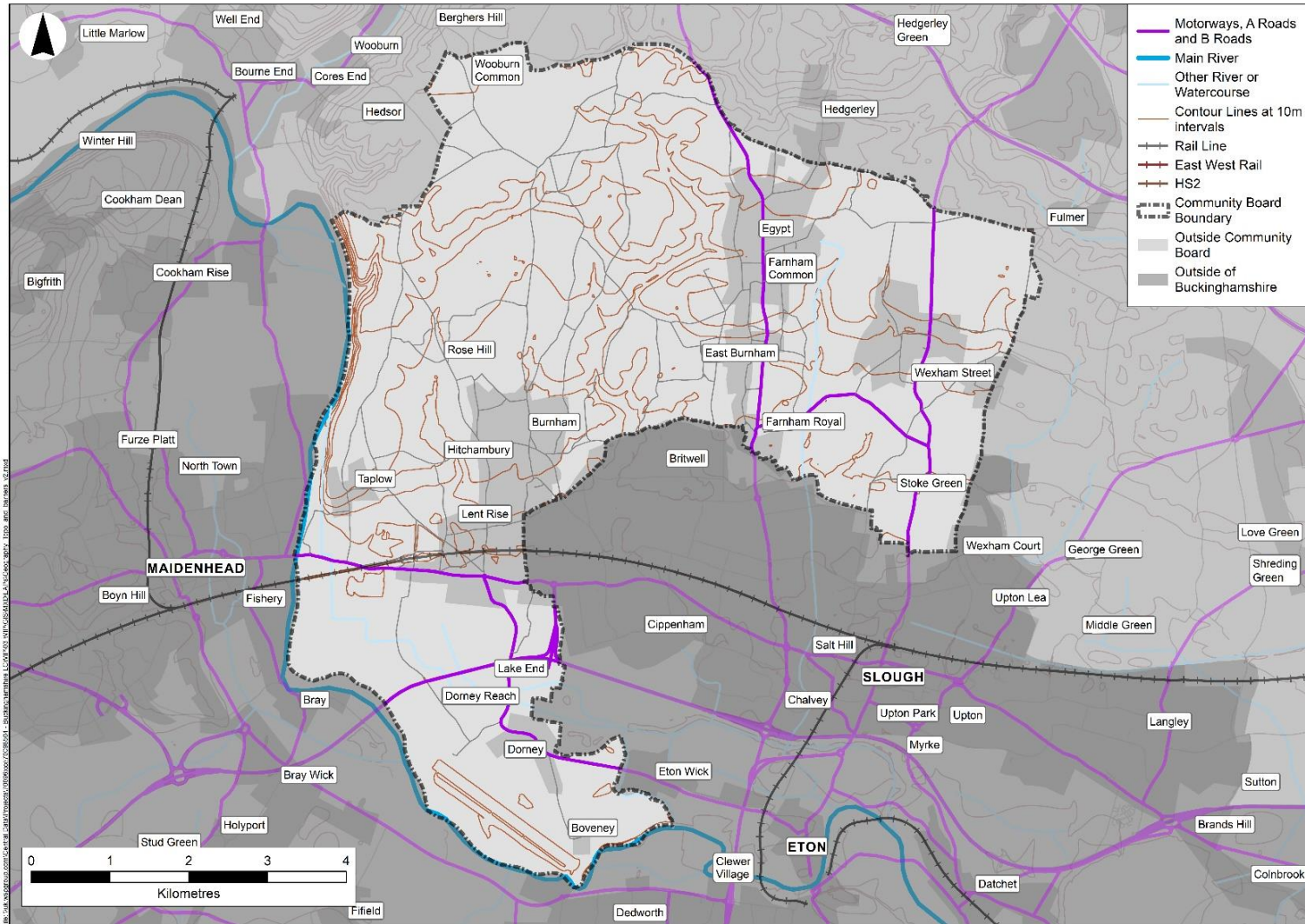
Most of the Community Board area topography is relatively gentle, rising from 21m above sea level at the River Thames by Dorney Lake, to 100m at Wooburn Common on its north-western edge.

The M4 motorway, Great Western Mainline, River Thames, Jubilee River and roads with high traffic flows can create severance effects for people walking, wheeling and cycling. If crossing points are limited in number, poorly located, or unsuitable for some users, people will be deterred from making active travel journeys or will use alternative routes, which may be longer.

The Community Board area has several roads used by more than 5,000 vehicles per day, and/or with vehicle speeds in excess of 30mph. Government guidance identifies that these conditions will exclude most people from cycling along these roads; these vehicle speeds and flows will similarly limit or prevent safe crossings by active travel without dedicated infrastructure.

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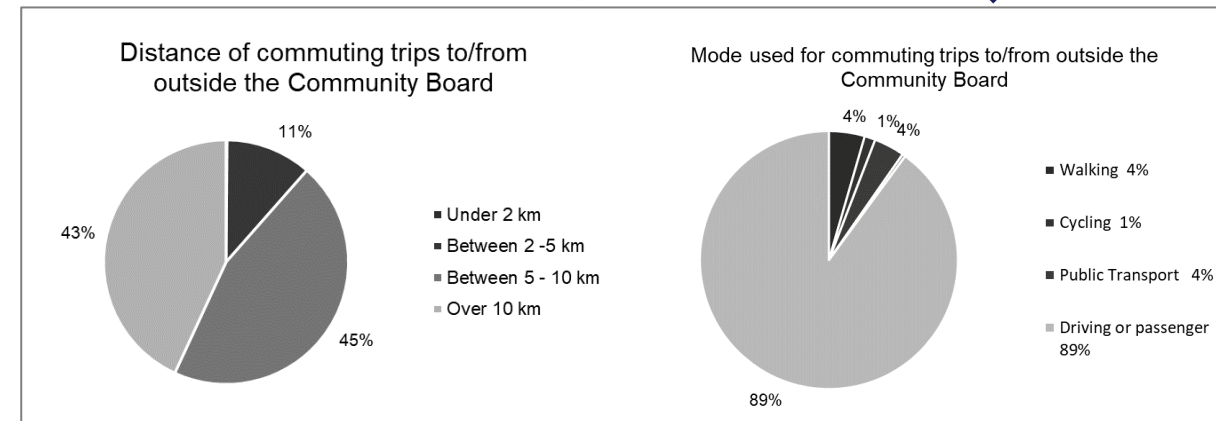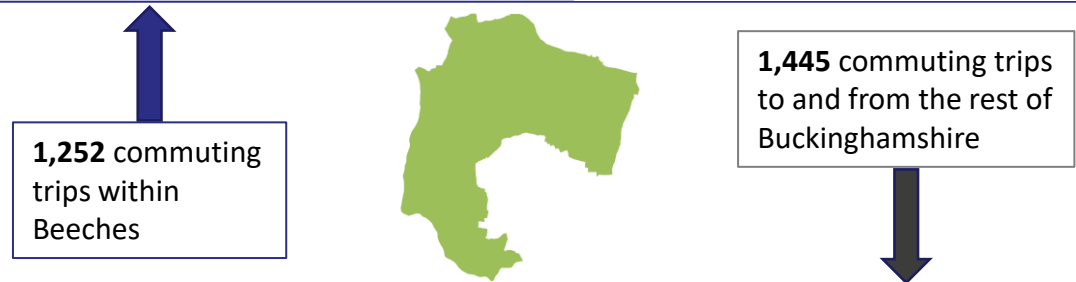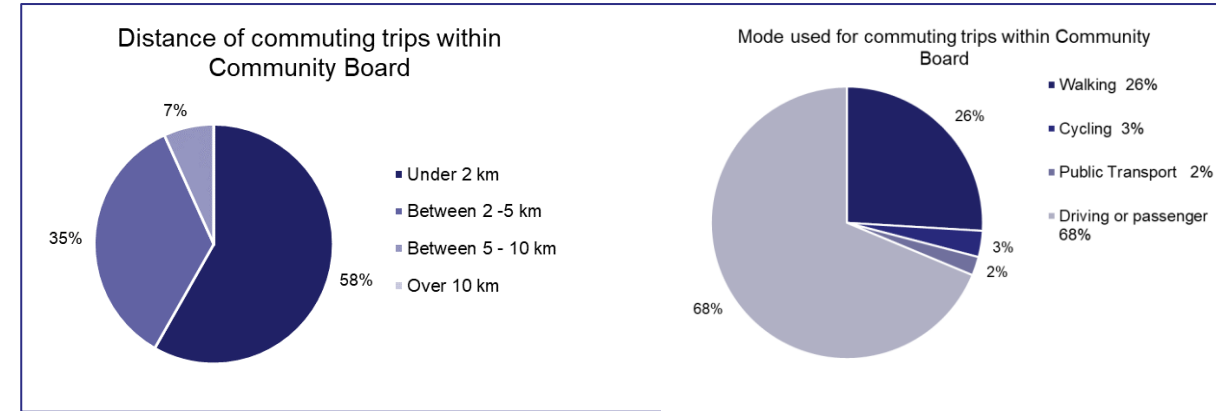
The Movement: Existing Travel Patterns

The National Travel Survey (NTS) is the primary source of data on personal travel patterns. A representative sample of around 7,000 English households are surveyed each year. According to the 2019 NTS, the most common trip purpose was for leisure (26% of all trips), followed by shopping (19%) and commuting (15%). Detailed travel pattern data is not available for most journey purposes. Therefore, the Travel to Work data collected in the Census is presented as a proxy for wider travel patterns. Detailed 2021 Census data is not yet available (and will reflect Covid lockdown travel behaviour); therefore 2011 data was analysed.

While trips across the county border will be considered for the network planning, Census data presented in this Community Board Profile focuses on trips within the council area. This enables trends in mode used and distance to be more clearly identified.

Within the Beeches Community Board area, 58% of commuting trips are under 2km and 35% of commuting trips are between 2 and 5km (93% of all trips when taken together). Based on their shorter distance, many of these trips could be walked, wheeled or cycled; however, only 29% of trips of 5km or less are currently undertaken using active modes of travel.

Commuting trips into and out of the Community Board area are generally longer, with 45% of the trips between 5 and 10km and 43% of the trips over 10km. Car use for these trips is high at 89%, however, public transport use is also higher than within the Community Board area, at 4%. This suggests there may also be potential for encouraging active travel to and from public transport facilities.

Source: Census 2011

Distance of commuting trips within Community Board

- Under 2 km
- Between 2 - 5 km
- Between 5 - 10 km
- Over 10 km

7%
35%
58%

Mode used for commuting trips within Community Board

- Walking 26%
- Cycling 3%
- Public Transport 2%
- Driving or passenger 68%

26%
3%
2%
68%

1,252 commuting trips within Beeches

1,445 commuting trips to and from the rest of Buckinghamshire

Distance of commuting trips to/from outside the Community Board

- Under 2 km
- Between 2 - 5 km
- Between 5 - 10 km
- Over 10 km

11%
43%
45%

Mode used for commuting trips to/from outside the Community Board

- Walking 4%
- Cycling 1%
- Public Transport 4%
- Driving or passenger 89%

4% 1% 4%
89%

The Movement: Potential Cycling Trips

The government-funded Propensity to Cycle Tool (PCT) is a nationwide web-based tool for estimating cycling potential. The PCT presents scenarios indicating how levels of cycling to school and to employment might change in the future. The most ambitious scenarios for both journey purposes are presented in this profile – 'Go Dutch' for trips to school, and the e-bike scenario for trips to employment.

In most scenarios, cycling potential is based on trip distance (people are more likely to cycle a shorter trip than a longer trip) and hilliness (people are generally less likely to cycle a trip involving hills).

The adjacent figure shows trips to school which could be cycled under the Go Dutch scenario, mapped to the most direct road or route. The scenario shows the expected levels of cycling if infrastructure was provided in a similar way to The Netherlands. Note that the PCT considers hypothetical future scenarios and assumes any cultural, safety and other barriers to cycling have been removed. The scenarios are based on the most recent publicly available data (from 2011). The tool is designed to support planning based on local knowledge; therefore the outputs are indicative and require careful interpretation.
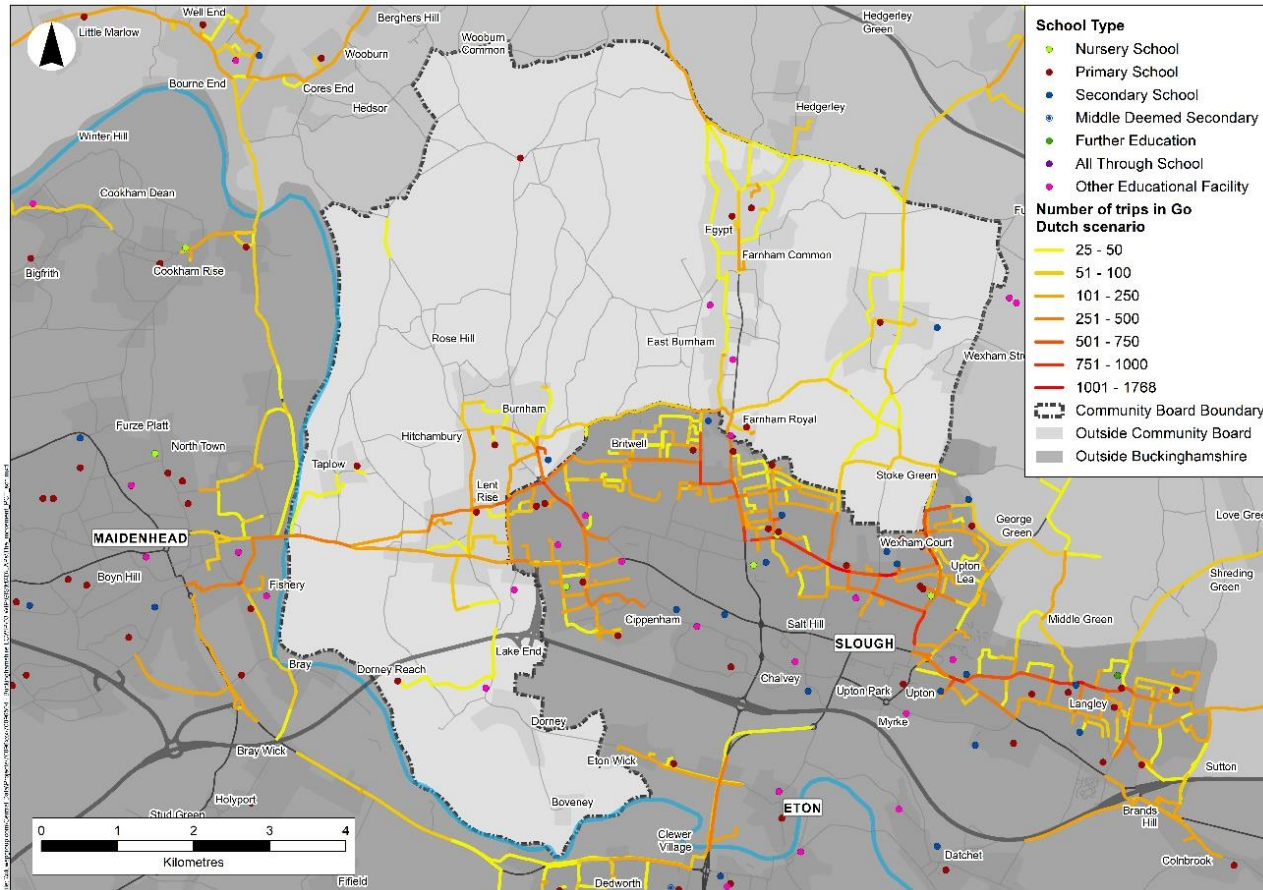

The PCT analysis suggests that the greatest potential number of cycling to school trips between settlements are on the following corridors:
- Between Burnham and Maidenhead;
- Between Burnham and Slough;
- Between Slough and Maidenhead along the A4 corridor; and
- Farnham Common to Beaconsfield.

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The Movement: Potential Cycling Trips

The figure below shows the potential for commuting cycling trips in the e-bikes scenario, which takes account of electric cycles in boosting cycling in hillier and more rural areas.
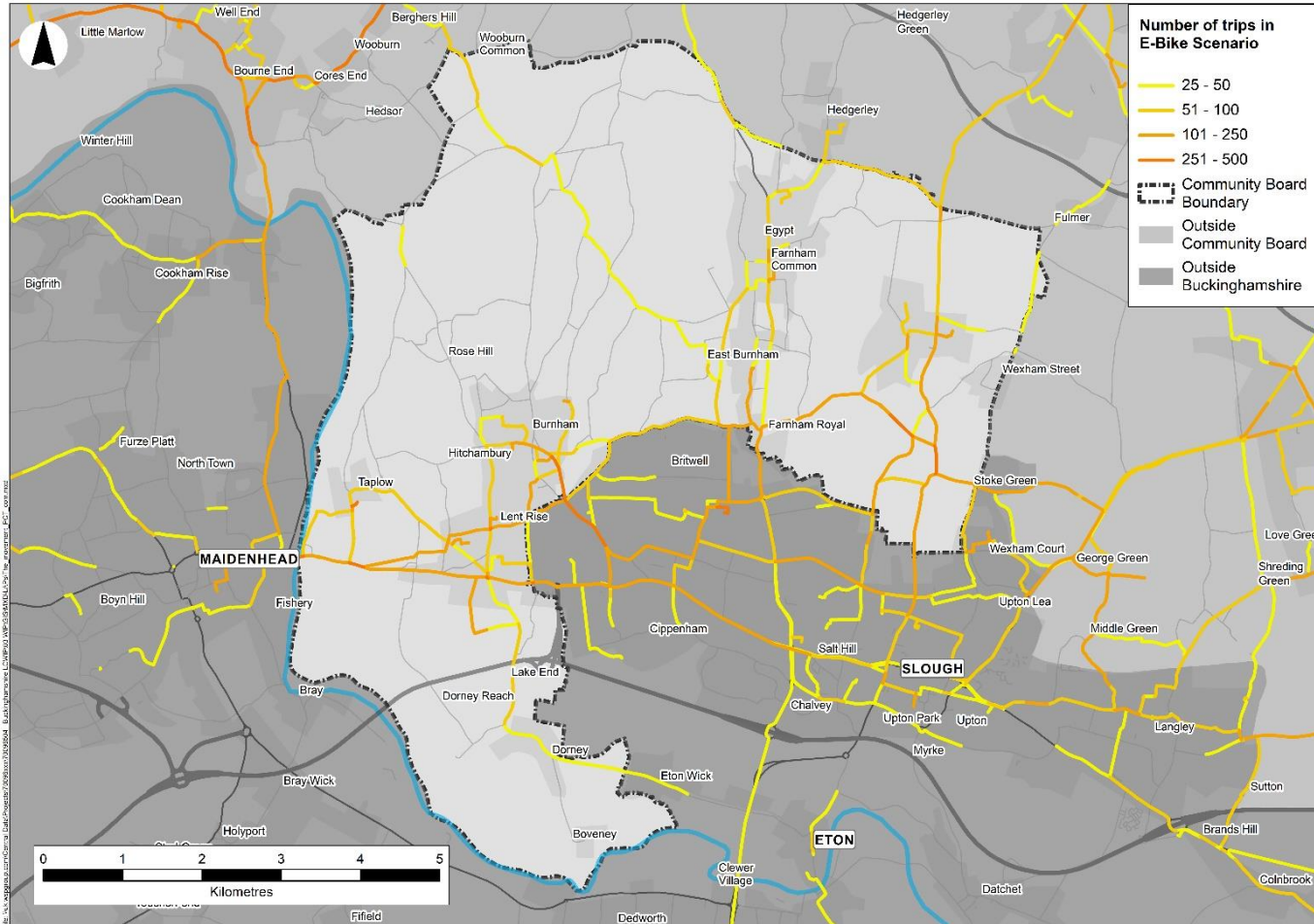
It shows journeys which could be cycled based on trip distance and hilliness, with e-bikes enabling some longer or more hilly journeys to be made, based on Dutch and Swiss data. Trips are mapped to the most direct road or route.

Note that the PCT considers hypothetical future scenarios and assumes any cultural, safety and infrastructure barriers to cycling have been removed. The scenarios are based on the most recent publicly available data (from 2011). The tool is designed to support planning based on local knowledge; therefore the outputs are indicative and require careful interpretation.


The PCT analysis suggests that the greatest potential number of cycling to work trips between settlements are on the following corridors:
- Between Burnham and Slough;
- Between Burnham and Maidenhead;
- Between Slough and Maidenhead along the A4 corridor;
- Between Farnham Royal and Slough;
- Between Stoke Poges and Slough; and
- Between Farnham Royal and Wexham Park Hospital.
Some of these corridors align with those identified in the cycling to school analysis.

The Network

The map below shows existing cycling infrastructure and waymarked cycle routes. The infrastructure shown is focused on that within Buckinghamshire; however many of the routes may continue outside the county area. Cycling infrastructure (shared use paths or segregated cycle tracks) are shown in green, while waymarked routes are shown in purple. The map does not give an indication of the suitability or quality of infrastructure. Most of the infrastructure shown is for walking, wheeling and cycling.
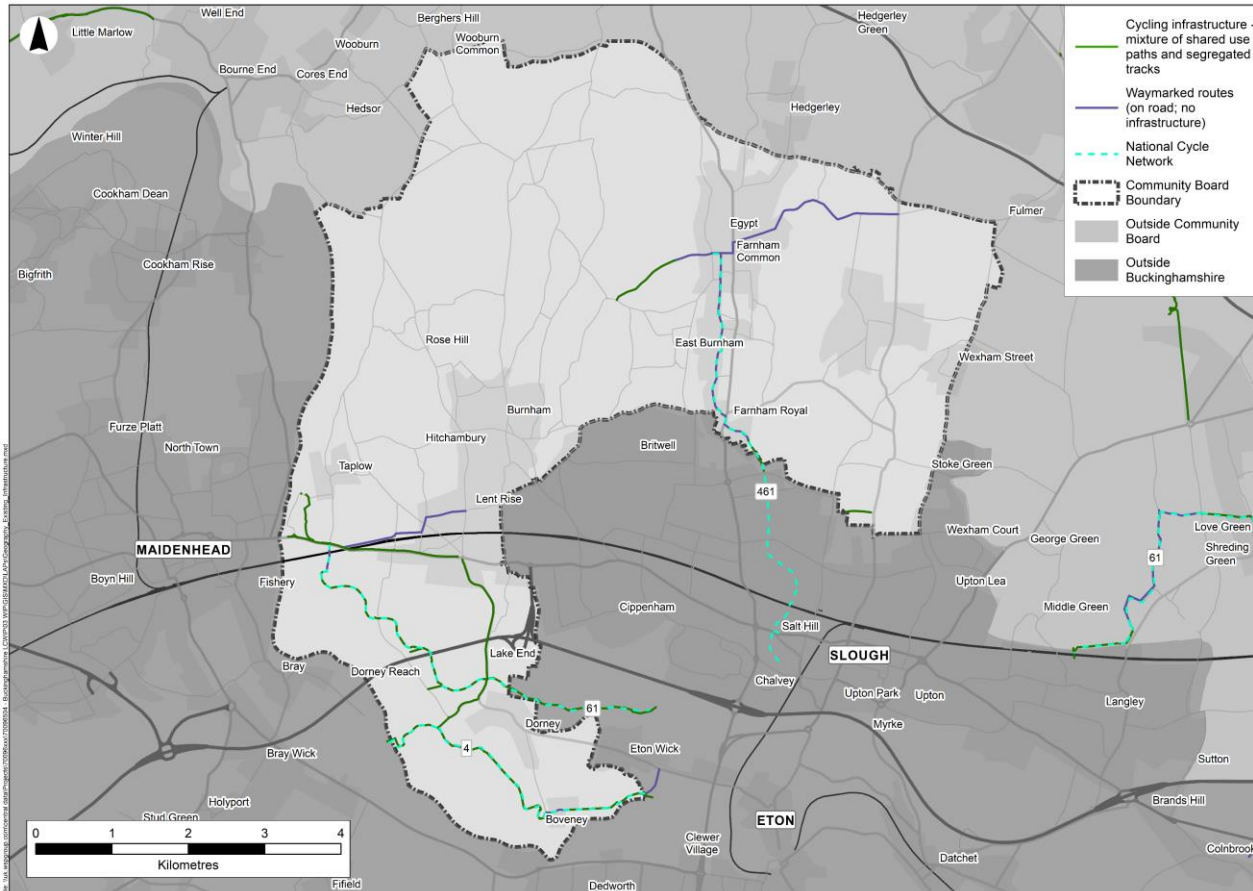
Within the Community Board area, cycle infrastructure is mostly concentrated in the area between Taplow and Eton Wick. This includes a section of National Cycle Network (NCN) route 4 from Dorney Reach to Eton Wick (passing Dorney Lake) and a section of NCN 61 following the south bank of the Jubilee River.

Cycleways/footways run along the A4 Bath Road between Maidenhead Bridge and the M4 Spur Roundabout, and from Burnham Sainsbury's store to Dorney Lake.

On-road cycle routes are waymarked between Burnham and Taplow Station as well as between Farnham Common and Farnham Royal.
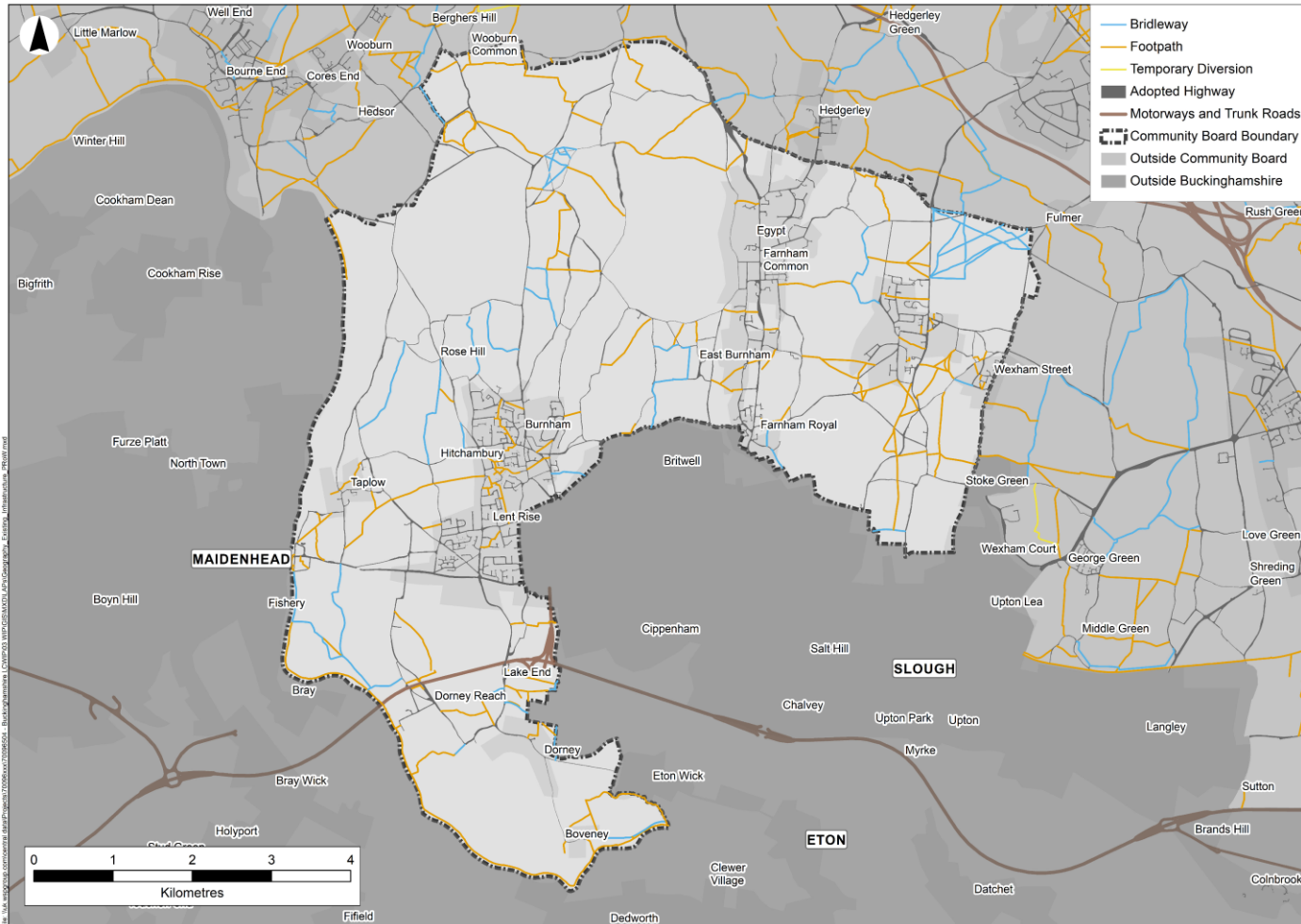
Much of the Community Board area does not have dedicated infrastructure for cycling. There is however a network of public byways and bridleways (see next slide).

The information shown on the plan has been compiled from data held by Buckinghamshire Council and OpenCycleMap, but may not represent the full extent of infrastructure.

The Network

The map below shows the extent of the combined public rights of way and highway (road) networks within the Community Board area. Taken together, the highway network and public rights of way (footpaths, bridleways, byways open to all traffic, and restricted byways) form an extensive dense network of routes.

Legend:
- Bridleway
- Footpath
- Temporary Diversion
- Adopted Highway
- Motorways and Trunk Roads
- Community Board Boundary
- Outside Community Board
- Outside Buckinghamshire

In some places, public rights of way provide alternative routes to the road network, however, there are locations where rights of way are disconnected from each other. Each link varies in its suitability for active travel, due to:
- High motor traffic flows on parts of the road network;
- The limited extent of footways;
- Routes which are unsurfaced or have poor surfaces, cross agricultural land or involve gates and stiles, limiting their use for everyday journeys; and
- The rural, unlit and isolated character of many of the roads and rights of way, which gives rise to personal security concerns and limits use outside hours of daylight.
- The public rights of way category which applies, and therefore which types of user, or vehicles, can legally use it.

Aspirations

The table below outlines known aspirations for walking and cycling infrastructure across the Community Board area with a focus on connections between and through settlements. Based on this focus, the list of aspirations considers projects that are either live, have been previously investigated, or are identified in adopted or emerging Council policies. The list of aspirations will be expanded through the Buckinghamshire LCWIP engagement and data analysis.

Indicative categories have been assigned to indicate the relative stage of development each proposal has reached in terms of investigation and design. These categories are not an indication of prioritisation.

Category 1	Fully formed scheme, awaiting funding and/or delivery
Category 2	Scheme with some design and study; needs some further investigation before ready for funding
Category 3	Scheme is in early stages of development; needs significant investigation to proceed
Category 4	Scheme is an aspiration only
Category 5	Scheme does not fit in the above categories

Corridor (if known)	Description	Policy Link/Source	Cross-Boundary connection?	Category
No aspirations within the Beeches Community Board area currently identified				

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