

Environment and Transport Commissioning Framework

Market Harborough Area LCWIP

Phase 1 Report – Network Planning for Cycling and Walking

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Document Sign-off

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1. Introduction

1.1. Background

1.1.1. Leicestershire County Council Network Data and Intelligence has been commissioned by Assets and Major Projects to provide evidence to inform the preparation of the Market Harborough Area Local Cycling and Walking Infrastructure Plan (LCWIP).

1.1.2. Figure 1 shows the extents of the LCWIP study area which was identified prior to this study. The area comprises of Market Harborough, Great Bowden, Little Bowden, Lubenham, Foxton and Gartree and covers an area of roughly 7.2km (east - west) by 6km (north - south).

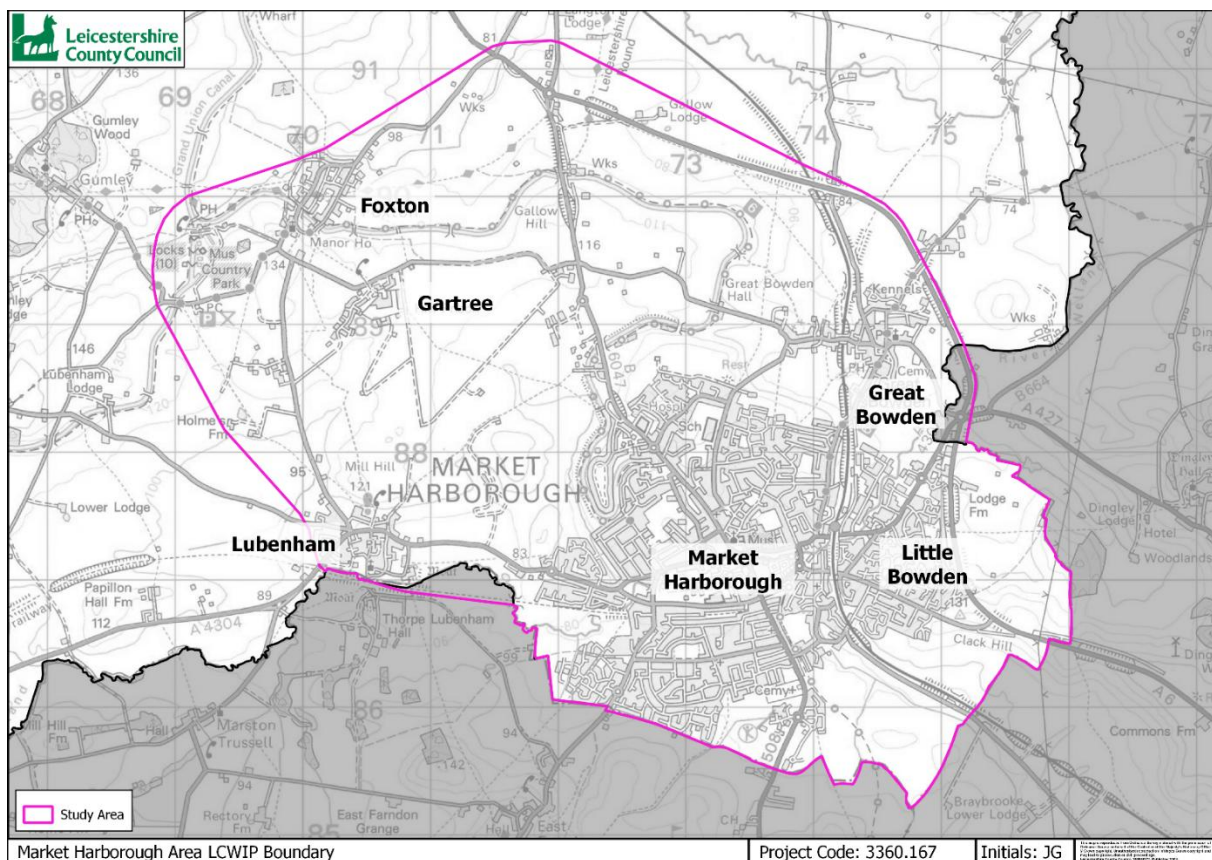


Figure 1. Market Harborough Area LCWIP Boundary

1.1.3. The aim of this study is to provide the following 2 sources of information necessary for developing a robust LCWIP submission:

- Phase 1 - to produce cycling and walking network plans which identify where investment in active modes should be targeted.
- Phase 2 - to provide a value for money assessment on each of the proposed schemes and score several factors in a prioritisation table.

1.1.4. This document summarises the work undertaken during Phase 1 of the project, including the methodology adopted, evidence gathered, and network plans produced.

1.2. LCWIP Process

1.2.1. The Department for Transport (DfT) have published the [Local Cycling and Walking Infrastructure Plans Technical Guidance](#) which sets out a recommended method for producing LCWIPs. Table 1 outlines the full process, parts of which are addressed in the analysis of this report.

Table 1. LCWIP Process

Stage	Name	Description
1	Determining Score	Establish the geographical extent of the LCWIP, and arrangements for governing and preparing the plan.
2	Gathering Information	Identify existing patterns of walking and cycling and potential new journeys. Review existing conditions and identify barriers to cycling and walking. Review related transport and land use policies and programmes.
3	Network Planning for Cycling	Identify origin and destination points and cycle flows. Convert flows into a network of routes and determine the type of improvements required.
4	Network Planning for Walking	Identify key trip generators, core walking zones and routes, audit existing provision and determine the type of improvements required.
5	Prioritising Improvements	Prioritise improvements to develop a phased programme for future investment.
6	Integration and Application	Integrate outputs into local planning and transport policies, strategies, and delivery plans.

1.2.2. The work of this commission is split into two phases. This report deals with phase 1 and reviews how the evidence gathered has been used to develop the network plans for the study area, contributing towards stages 2 – 4 of the process. The phase 2 report will show the network priorities in the form of a prioritisation table, contributing towards stage 5 of the LCWIP process.

1.3. Policy Context

1.3.1. The DfT's [Second Cycling and Walking Investment Strategy](#) (CWIS2) was published in 2022, covering the period between 2021 and 2025. LCWIPs are a tool for supporting the delivery of objectives in the CWIS2, which are to:

- increase the percentage of short journeys in towns and cities that are walked or cycled from 41% in 2018 to 2019 to 46% in 2025,
- increase walking activity, where walking activity is measured as the total number of walking stages per person per year, to 365 stages per person per year in 2025,
- double cycling, where cycling activity is measured as the estimated total number of cycling stages made each year, from 0.8 billion stages in 2013 to 1.6 billion stages in 2025
- increase the percentage of children aged 5 to 10 who usually walk to school from 49% in 2014 to 55% in 2025

1.3.2. LCWIPs enable a long-term approach to developing local cycling and walking networks, ideally over a 10-year timescale, and represent a vital part of the Government's strategy to increase the number of trips made on foot or by cycle.

1.3.3. The key outputs of LCWIPs are:

- a network plan for walking and cycling which identifies preferred routes and core zones for further development,
- a prioritised programme of infrastructure improvements for future investment; and
- a report setting out the underlying analysis carried out with accompanying narrative supporting the identified improvements and network.

2. Evidence Base

2.1. Introduction

2.1.1. This section displays a collection of evidence from national and local databases to support and inform the development of the LCWIP cycling and walking network plans. The evidence identifies the existing geographic, environmental, demographic, and existing and forecasted travel situation in the area.

2.2. Local Geography

Topography

2.2.1. Figure 2 shows the topography of the study area; contour lines that are closer together indicate a steeper slope and contour lines that are further apart show flatter slopes. Steep gradients are an impedance to cycling and are an important factor in the choices that users make when considering route options. Whilst most of the study area has minimal topographical variation there are sections that could present a challenge to cyclists, such as Clack Hill.

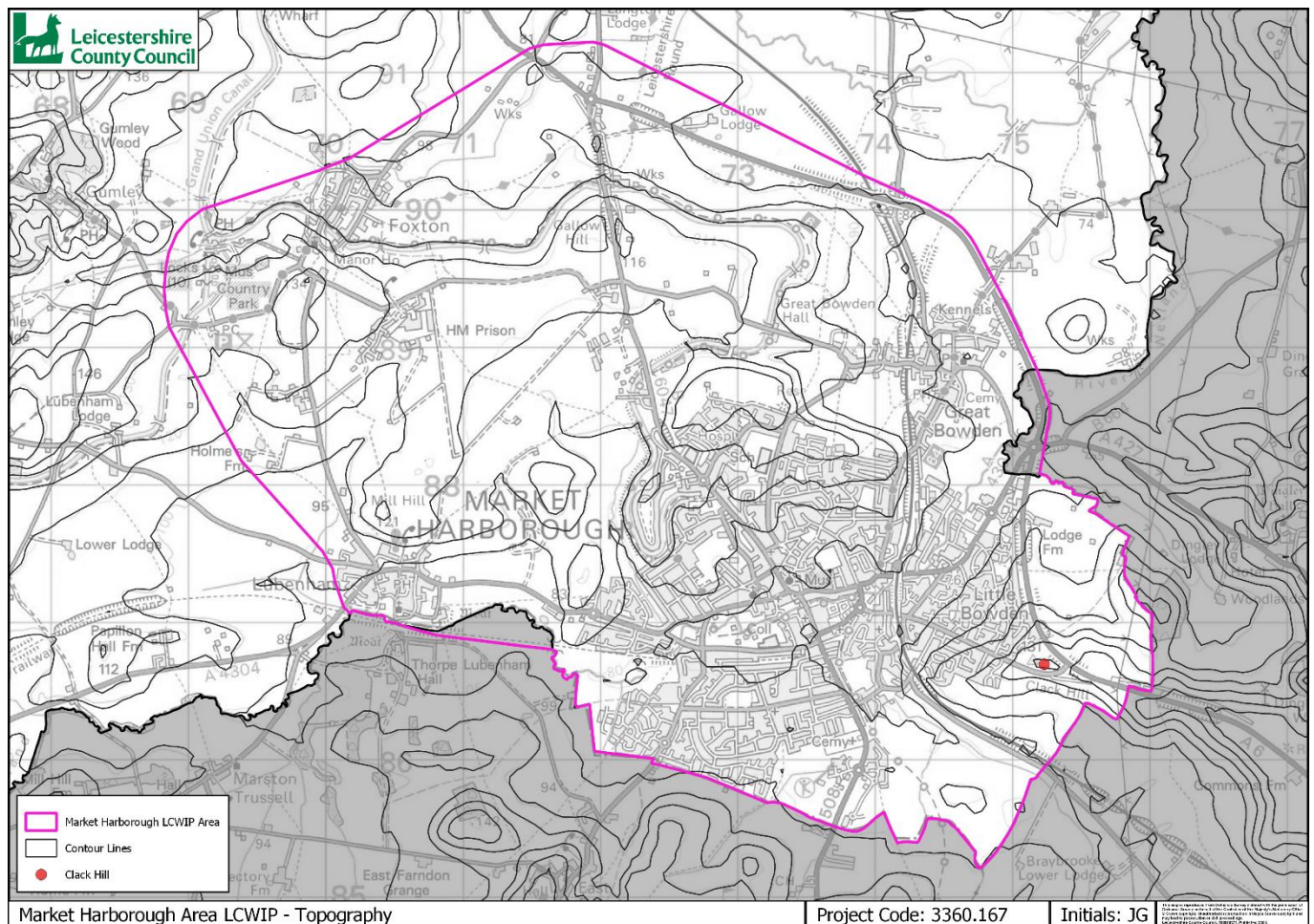


Figure 2. Topographic Map

2.2.2. According to the Department for Transport's [Cycling Infrastructure Design \(LTN 1/20\)](#), cycling routes should avoid steep gradients where possible. People can cycle steep gradients that are fairly short but are not capable of maintaining high levels of effort over longer distances.

Barriers to Movement

2.2.3. A major barrier to active modes is the perception that roads are dangerous and unpleasant. However, there are also several physical barriers to active movements including rivers, canals, railway lines and heavily trafficked roads which have limited crossing points. Figure 3 illustrates where these features are in the study area.

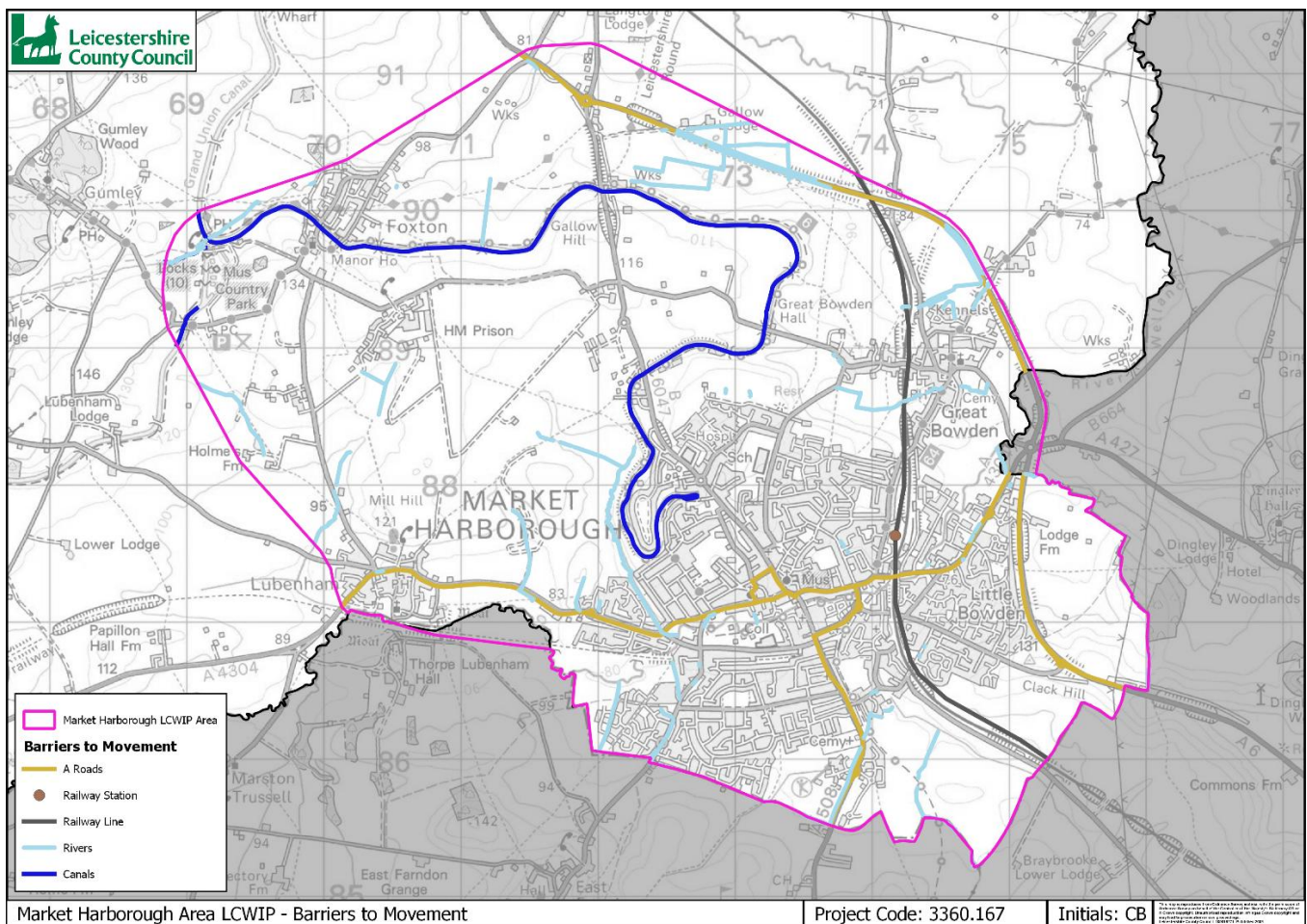


Figure 3. Barriers to Movement

2.2.4. There are also several design and maintenance issues that could act as a barrier to active modes, such as overgrown plants, damaged or unsuitable surfaces, parked cars, chicanes, flights of steps, gates, narrow widths, gaps in the infrastructure, and so on.

2.3. Environmental Considerations

Place-Based Carbon Calculator (PBCC)

- 2.3.1. The [PBCC](#) is a tool which estimates the per-person carbon footprint for every Lower Layer Super Output Area (LSOA) in England. The tool uses a consumption-based approach to carbon footprints, meaning that the emissions are counted by the consumer of a good or service not the producer. The tool provides a wide range of layers, but only total emission grade and car emissions grade have been explored for the LCWIP.
- 2.3.2. The PBCC draws on a wide range of data and research to give an overview of the carbon footprint for an LSOA. This is divided by the population in the LSOA to get an average carbon footprint per person. Each area has a grade from A+ (low emissions) to F- (high emissions) in comparison to the England average.
- 2.3.3. Figure 4 shows the total emissions grade for each LSOA in the study area, which is the estimated average annual carbon footprint per person. Foxton has the worst carbon footprint in the area followed by Market Harborough and Little Bowden.

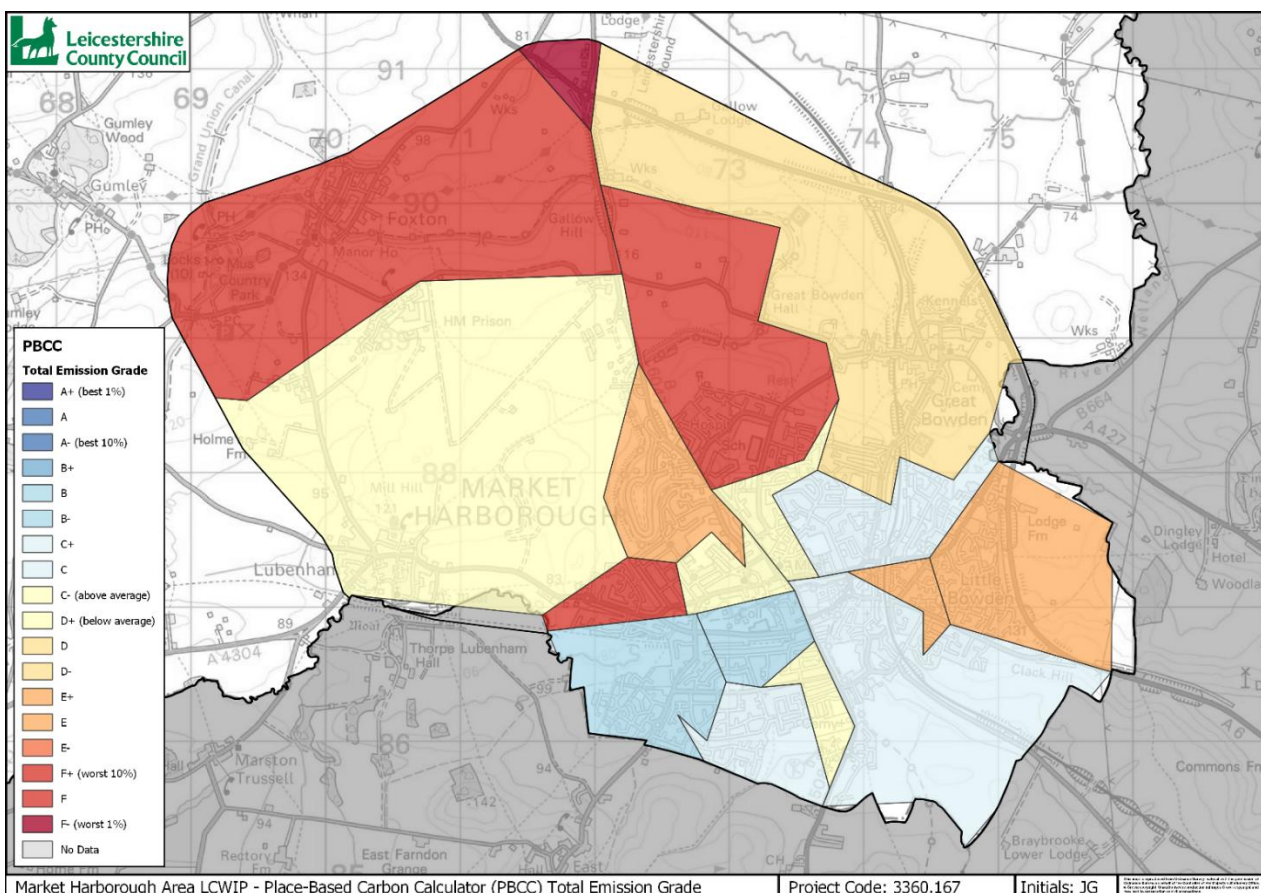


Figure 4. Place Based Carbon Calculator (PBCC) Total Emission Grade

- 2.3.4. Out of 17 LSOAs in the study area, 9 are above average for total emissions grade and 8 are below average. Furthermore, there are no LSOAs in the best 10% in England and 4 in the worst 1%.

2.3.5. Figure 5 shows the car emissions grade for each LSOA in the study area, which is the estimated average carbon footprint per person from driving cars. The LSOAs in and around Market Harborough have the best grades in the study area, likely due to the public transport options available in the town centre.

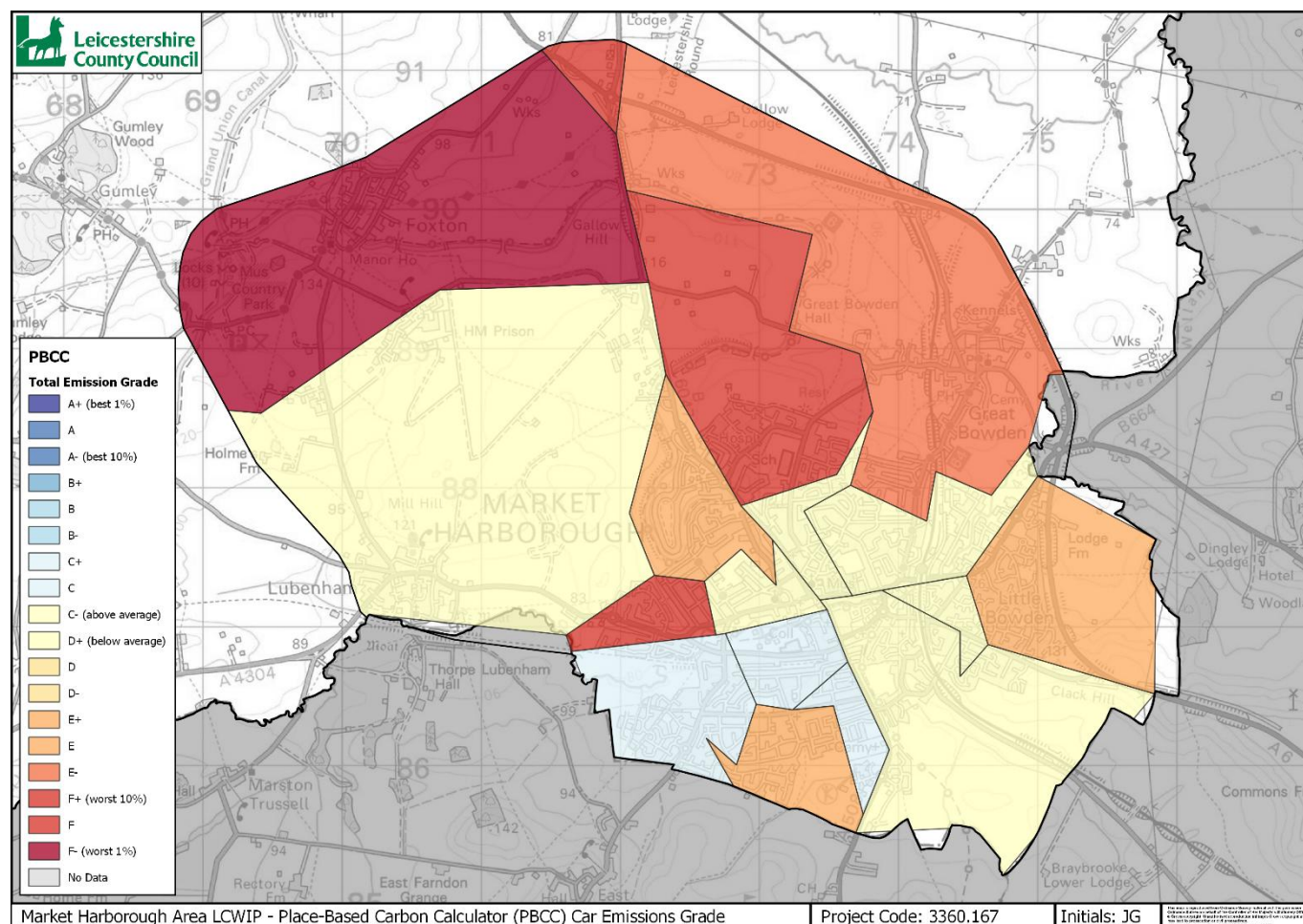


Figure 5. Place Based Carbon Calculator (PBCC) Car Emissions Grade

2.3.6. Out of 17 LSOAs in the study area, 5 are above average for car emission grade and 12 are below average. Furthermore, there are no LSOAs in the best 10% in England and 4 in the worst 1%. Those LSOAs with the worst car emission grades may be targeted for behaviour change towards active modes to improve the carbon footprint in those areas.

Flood Risk Zones

2.3.7. Figure 6 shows the Environment Agency flood zones 2 and 3. The flood zones are based on the likelihood of an area flooding; flood zone 1 areas have a low probability of flooding from rivers and the sea, flood zone 2 areas have a medium probability and flood zone 3 areas have a high probability.

2.3.8. Flooding can have significant impacts on the operation and safety of walking and cycling routes. According to the [Traffic-Free Routes and Greenways Design Guide](#) by Sustrans, the inundation of a traffic-free path can serve to:

- Sever a traffic-free route.
- Cause substantial damage to the composition of the path.
- Exclude certain user groups from the path.
- Lead to serious injury where the alignment of the path cannot be determined.

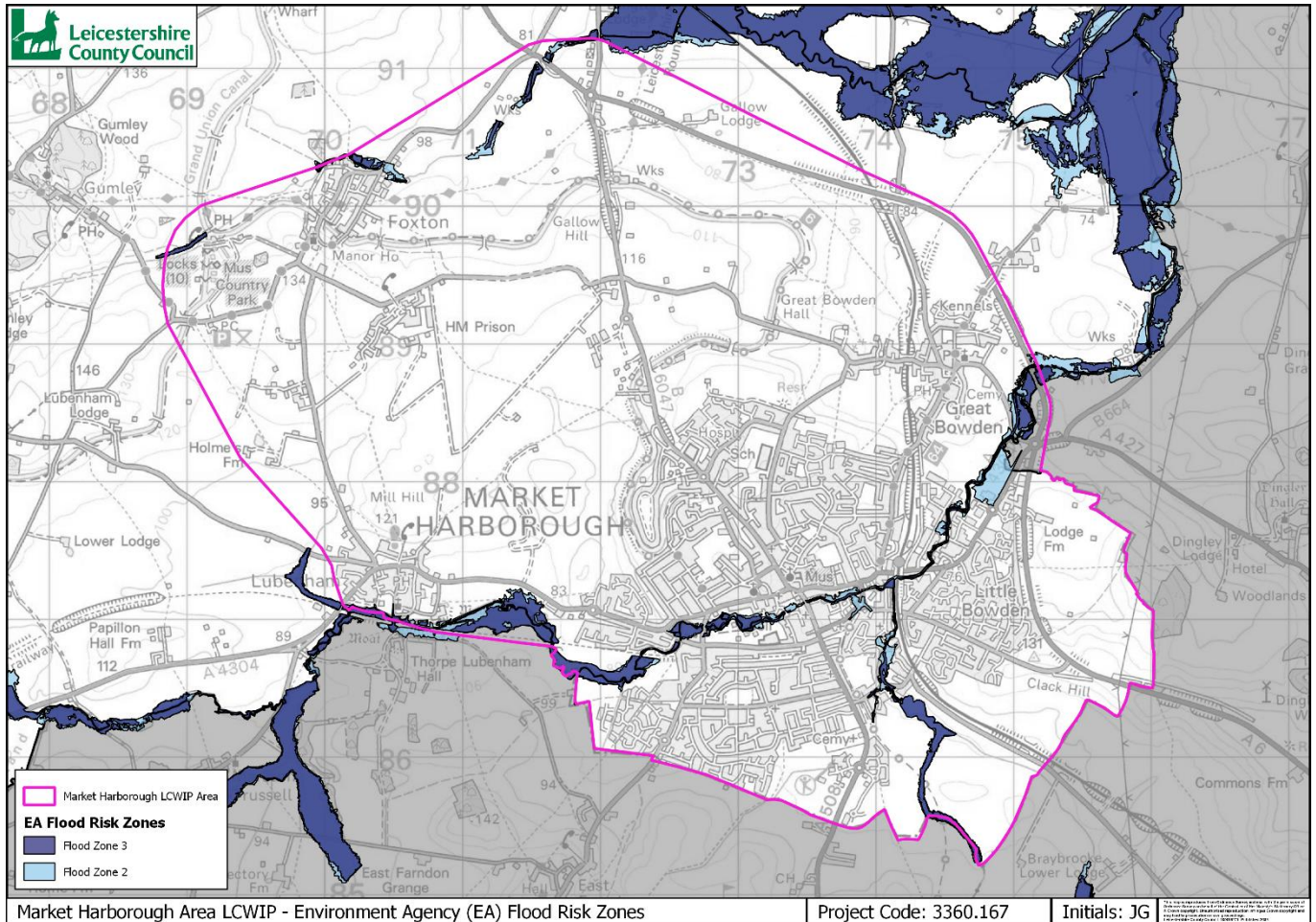


Figure 6. Environment Agency Flood Risk Zones

2.3.9. The risk of flooding should be a significant consideration during the design and planning of a traffic-free route. There are several design recommendations for routes prone to flooding in the LTN 1/20.

Nationally Protected Sites

2.3.10. The [Heritage List for England](#) (NHLE), developed by Historic England, is a register of all the listed buildings, scheduled monuments, protected wrecks, registered parks and gardens, and battlefields in England. There are many protected heritage assets in and around Market Harborough due to the positive contribution they give to the character and sense of place of the area.

2.3.11. There are also several conservation areas within the study area, which are listed on the [Harborough District Council](#) website, namely the Foxton, Grand Union Canal, Great Bowden, Lubenham and Market Harborough conservation areas.

2.3.12. Figure 7 shows the heritage assets and conservation areas in the study area. Any cycling or walking interventions proposed should be conscious of these areas and, as a minimum, the preservation of the assets should be sought.

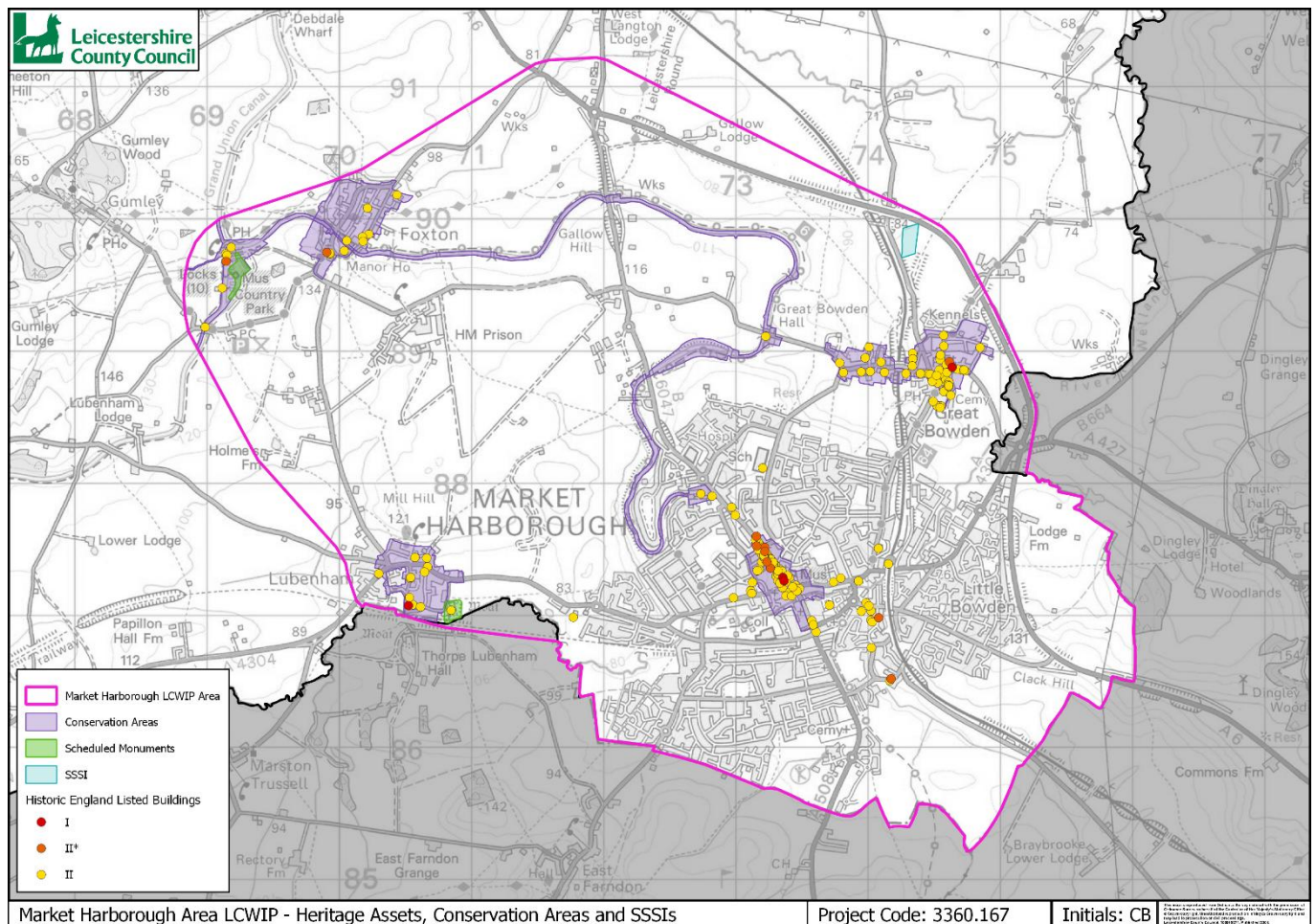


Figure 7. Heritage Assets, Conservation Areas and SSSIs

2.4. Demographics

Population and Age

2.4.1. [ONS Mid-2019](#) population estimates have been analysed to determine information about the population. In 2019, the LSOAs in the study area had an overall population of 26,059, made up of 49% male and 51% female.

2.4.2. According to the DfT's [National Travel Survey \(NTS\) 2022](#), the age group most likely to cycle at least once a week for travel were 16- to 24-year-olds, followed by 25 to 34-year olds and 35 to 44-year-olds. Table 2 indicates that these age groups accounted for 33.2% of the population in 2019, which suggests that there is a good opportunity to encourage cycling in this age range.

Table 2. Age of Population in Market Harborough Area (ONS Mid-2019 Population Estimates)

Age Group	Residents	Proportion
0-4	1,400	5.4%
5-9	1,579	6.1%
10-15	1,636	6.3%
16-19	1,443	5.5%
20-24	1,013	3.9%
25-29	1,451	5.6%
30-34	1,506	5.8%
35-39	1,531	5.9%
40-44	1,694	6.5%
45-49	1,912	7.3%
50-54	2,029	7.8%
55-59	1,608	6.2%
60-64	1,481	5.7%
65-69	1,395	5.4%
70-74	1,582	5.9%
75-79	1,114	4.3%
80-84	885	3.4%
85-89	544	2.1%
90+	310	1.2%

English Indices of Deprivation 2019

2.4.3. The [Index of Multiple Deprivation](#) (IMD) is an overall measure of deprivation that is made by combining seven domains of deprivation, namely:

- Income Deprivation,
- Employment Deprivation,
- Education, Skills and Training Deprivation,
- Health Deprivation and Disability,
- Crime,
- Barriers to Housing and Services; and
- Living Environment Deprivation.

2.4.4. The figures below show the levels of deprivation in deciles. These deciles are calculated by ranking all LSOAs in England from most deprived to least deprived and dividing them into 10 equal groups, with 1 being the most deprived 10% of LSOAs nationally to 10 being the least deprived 10% of LSOAs nationally.

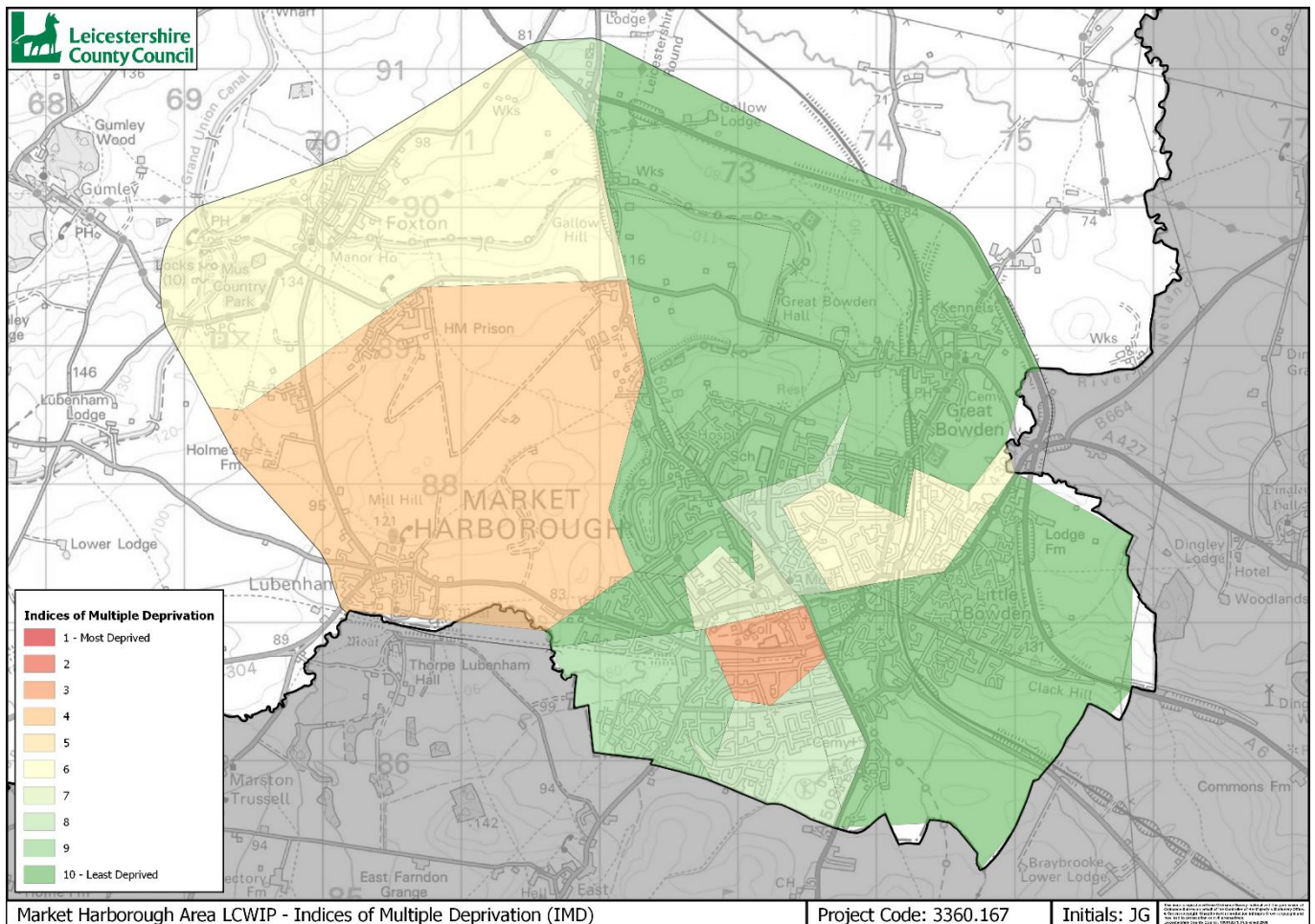


Figure 8. Indices of Multiple Deprivation

2.4.5. Figure 8 shows the overall IMD for each LSOA in the LCWIP area. Out of the 17 LSOAs, 15 are in the 50% least deprived areas in England (deciles 6-10), 7 are in the 10% least deprived and none are in the 10% most deprived. The least deprived LSOAs are mainly located in Great Bowden, Little Bowden and Market Harborough, and the most deprived LSOAs located in and around Lubenham and Foxton.

2.4.6. The most deprived areas are likely to have lower levels of car ownership, so the use of public transport and active modes is more likely. According to [The Health Foundation](#), 'more than one-third of households on the lowest incomes do not have access to a car, which is 4.5 times higher than households on the highest income'. The [NTS](#) cites that people without access to a car walk and cycle more and further than those that have access to a car.

Health Deprivation and Disability

2.4.7. The Health Deprivation and Disability Domain measures the risk of premature death and the impairment of quality of life through poor physical or mental health. Health deprivation is an important aspect to consider in terms of walking and cycling as these activities can have a positive impact on both mental and physical health.

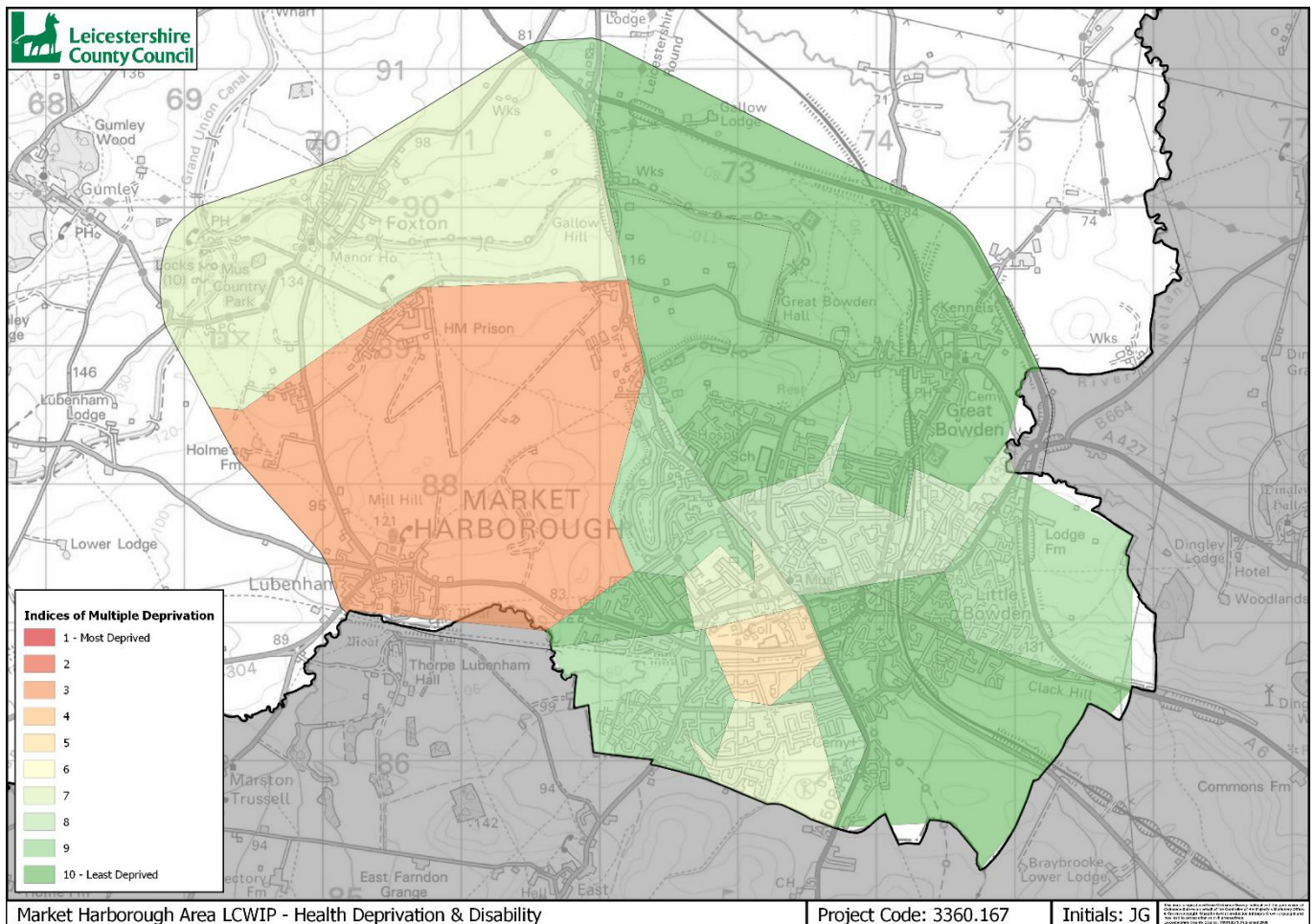


Figure 9. IMD - Health Deprivation & Disability

2.4.8. Figure 9 shows the level of health deprivation and disability in the LCWIP study area. Out of the 17 LSOAs, 15 are in the 50% least deprived areas in England (deciles 6-10), with 5 in the 10% least deprived and none in the 10% most deprived. The patterns of deprivation are similar to the overall IMD, with the most deprived LSOAs in and around Lubenham.

Barriers to Housing and Services

2.4.9. The Barriers to Housing and Services Domain measures the physical and financial accessibility of housing and local services. Figure 10 illustrates the levels of deprivation relating to barriers to housing and services across the study area. Out of the 17 LSOAs, 14 are in the 50% least deprived areas in England (deciles 6-10), with 2 in the 10% least deprived and 2 in the 10% most deprived. Again, the patterns of deprivation are similar to the overall IMD, with the most deprived LSOAs in and around Foxton and Lubenham. Much of the area appears to have good access to housing and services.

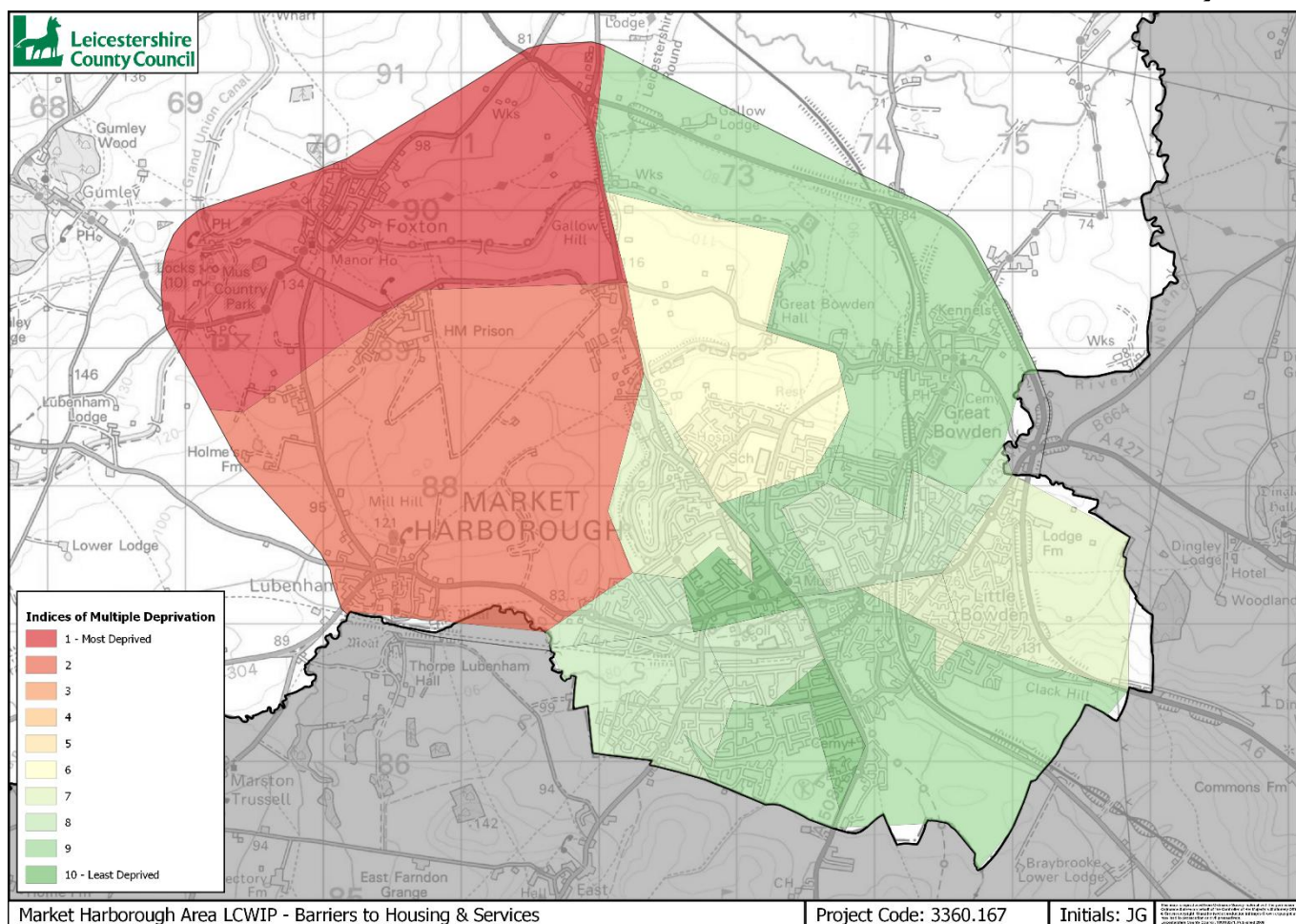


Figure 10. IMD - Barriers to Housing & Services

Living Environment Deprivation

2.4.10. The Living Environment Deprivation Domain measures the quality of the local environment, both indoors (quality of housing) and outdoors (air quality and road traffic accidents). Figure 11 shows the level of deprivation for the living environment domain in the study area. Out of the 17 LSOAs, 14 are in the 50% least deprived areas in England (deciles 6-10), with none in the 10% most deprived areas in England. The most deprived LSOA is located in and around Foxton.

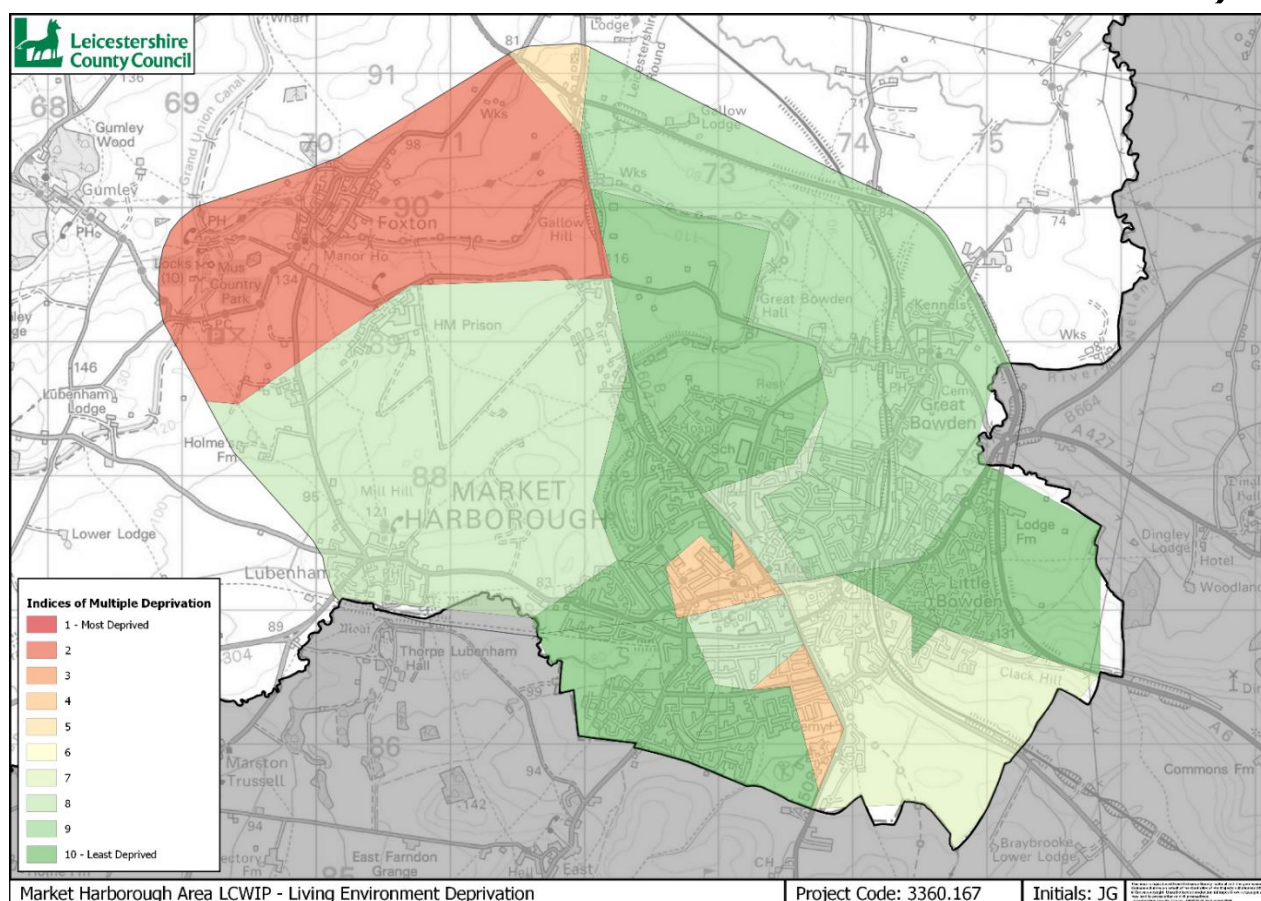


Figure 11. IMD - Living Environment Deprivation

2.5. Public Health

2.5.1. [Fingertips](#) is a source of public health data developed by the Office for Health Improvement & Disparities. Several of the indicators available are useful for gauging the current health and wellbeing in the LCWIP area, and can relate to walking and cycling activity, such as obesity, asthma, and physical activity, etc.

Obesity

2.5.2. Obesity is a complex public health concern that is associated with reduced life expectancy, is a risk factor for a range of chronic diseases, and can impact on mental health¹. The proportion of adults in England living with obesity has seen a large increase in the last four decades. Walking and cycling should be considered, alongside other interventions, when working to achieve health outcomes in relation to obesity².

1

https://fingertips.phe.org.uk/search/obesity#page/6/gid/1938133001/pat/6/par/E12000004/ati/401/are/E07000131/iid/93881/age/168/sx/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1/page-options/ine-yo-1:2021:-1:-1_ine-ct-17_ine-pt-0

2

https://assets.publishing.service.gov.uk/media/5bf41840e5274a2af47c464e/Cycling_and_walking_for_individual_and_population_health_benefits.pdf

2.5.3. The obesity indicator in Fingertips shows local authority estimates from the Sport England [Active Lives Adult Survey](#). Figure 12 shows the percentage of adults classified as obese in Harborough District from 2015/16 to 2021/22. While the percentage was below the average for England in 2021/22, the level had increased from the previous two years at 23.6%.

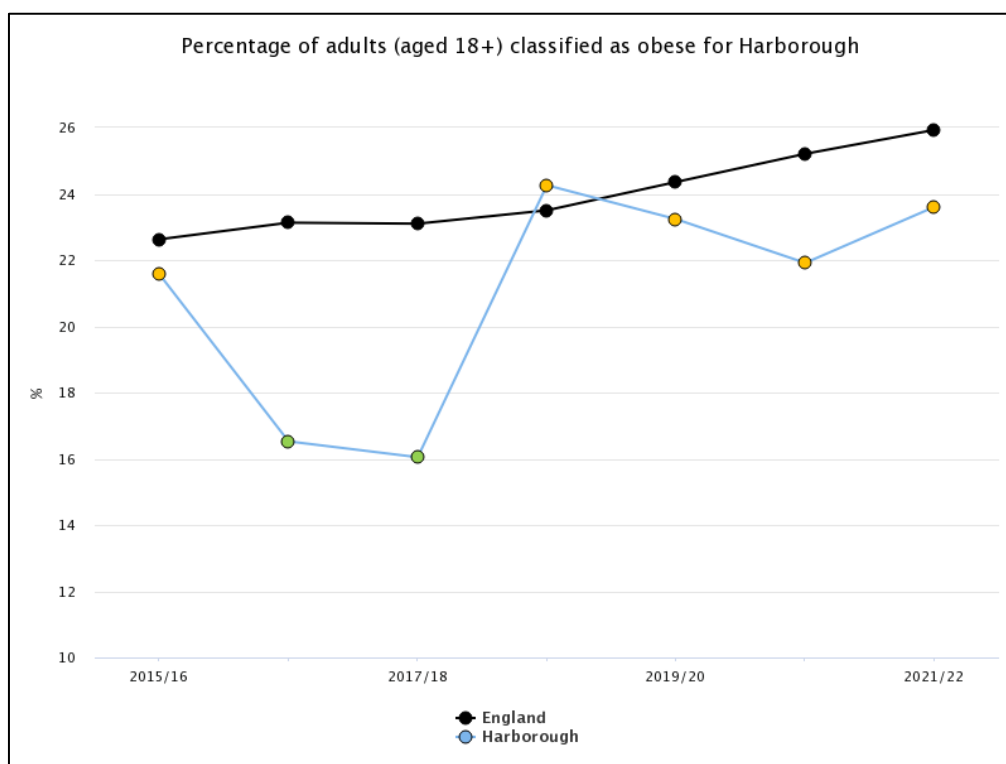


Figure 12. Fingertips Public Health Data - % of Adults Classified as Obese in Harborough District

Asthma

2.5.4. Air pollution can affect everyone, however those living with lung conditions are impacted more. Asthma is a common lung condition that can be triggered by air pollution³. By choosing active modes of travel, we decrease the contribution to greenhouse gas emissions; even modest improvements in air quality can lead to health benefits⁴.

2.5.5. The asthma prevalence indicator in Fingertips was originally informed by the [British Thoracic Society / SIGN guidelines](#). Figure 13 shows the percentage of patients aged 6 and over with asthma in Harborough, excluding those who have been prescribed no asthma-related drugs in the previous twelve months. The percentage was above the average for England in 2020/21, 2021/22, and 2022/23, at 6.7%, 6.8% and 6.9%, respectively.

³ <https://www.asthmaandlung.org.uk/support-us/campaign-with-us/clean-air-campaigns/what-effect-does-air-pollution-have-your-health>

⁴ https://www.sustrans.org.uk/media/4467/improving_air_quality_walking_cycling.pdf

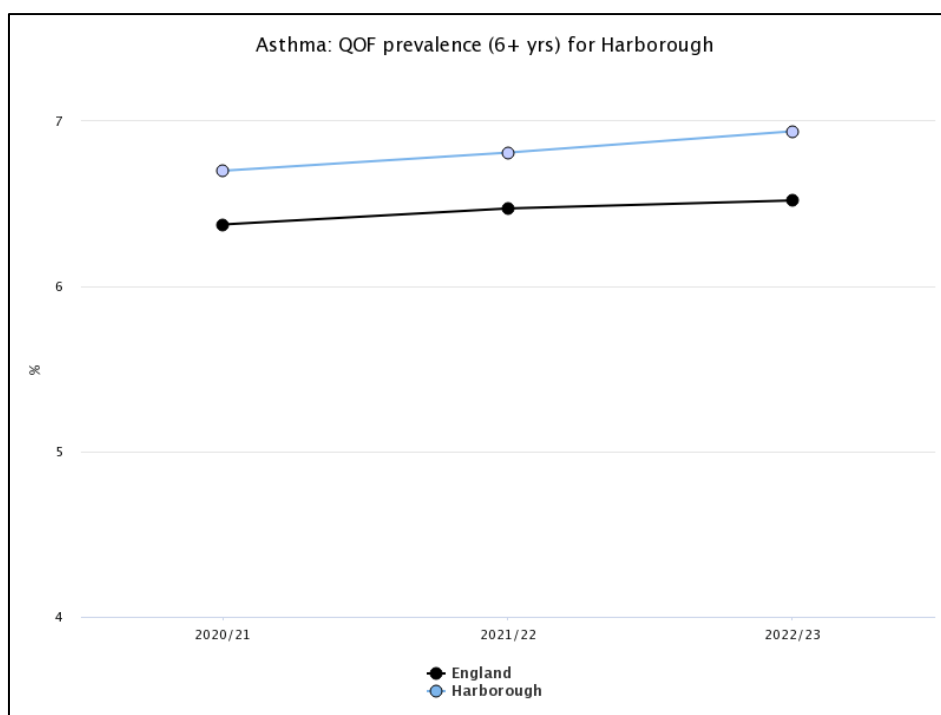


Figure 13. Fingertips Public Health Data - Asthma Prevalence (6+ Years) in Harborough District

Physical Activity

2.5.6. Physical inactivity is the fourth leading risk factor for global mortality, accounting for 6% of deaths globally⁵. People with an active lifestyle have a 20-35% lower risk of cardiovascular disease, coronary heart disease, and stroke compared to those with a sedentary lifestyle. Regular physical activity is also associated with a reduced risk of diabetes, obesity, osteoporosis, colon, and breast cancer, and improved mental health⁶.

2.5.7. The physical activity indicators in Fingertips use [Active Lives Adult Survey](#) data. Figures 14 and 15 show the percentages of physically active and inactive adults in Harborough from 2015/16 to 2021/22, based on the following definitions:

- Physically active – the number of respondents aged 19 and over doing at least 150 moderate intensity equivalent (MIE) minutes of physical activity per week in bouts of 10 minutes or more in the previous 28 days expressed as a percentage of the total number of respondents aged 19 and over.
- Physically inactive – the number of respondents aged 19 and over doing less than 30 moderate intensity equivalent (MIE) minutes physical activity per week in bouts of 10 minutes or more in the previous 28 days expressed as a percentage of the total number of respondents aged 19 and over.

⁵

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/830943/withdrawn_dh_128210.pdf

⁶ [https://fingertips.phe.org.uk/profile/physical-](https://fingertips.phe.org.uk/profile/physical-activity/data#page/6/qid/1938132899/pat/6/par/E12000004/ati/401/are/E07000131/iid/93014/age/298/sex/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1)

[activity/data#page/6/qid/1938132899/pat/6/par/E12000004/ati/401/are/E07000131/iid/93014/age/298/sex/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1](https://fingertips.phe.org.uk/profile/physical-activity/data#page/6/qid/1938132899/pat/6/par/E12000004/ati/401/are/E07000131/iid/93014/age/298/sex/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1)

2.5.8. The percentage of active adults has been above the average for England, and the percentage of inactive adults below average, for the last 6 years. This could suggest that Harborough is a good area to target for active travel interventions.

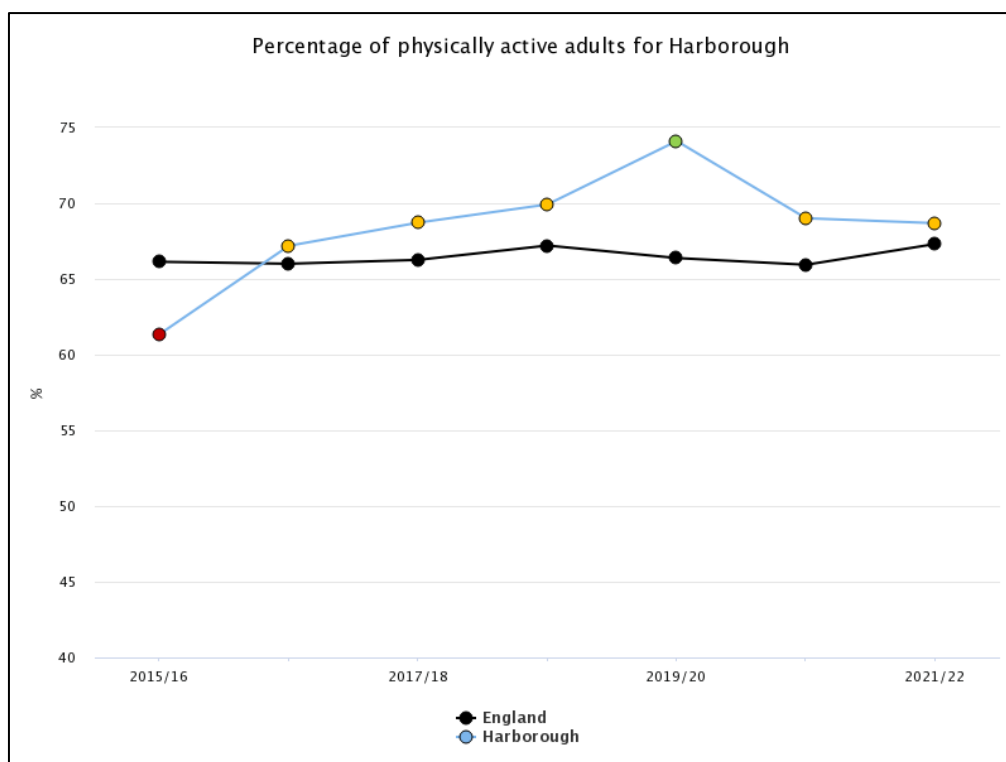


Figure 14. Fingertips Public Health Data - Percentage of Physically Active Adults in Harborough District

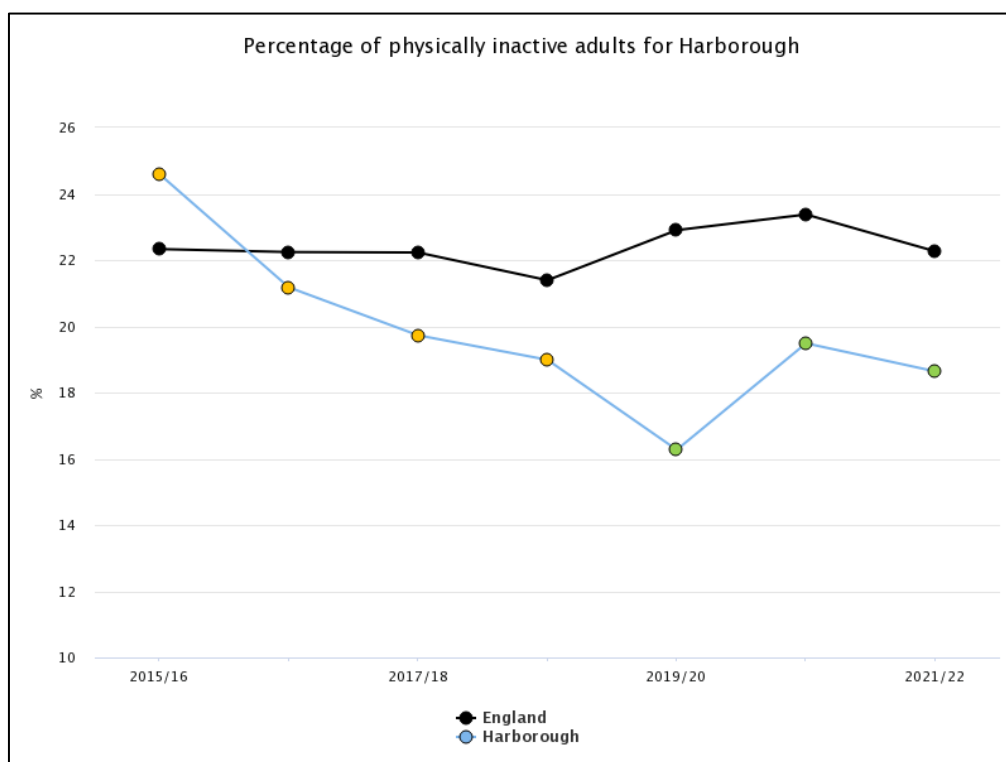


Figure 15. Fingertips Public Health Data - Percentage of Physically Inactive Adults in Harborough District

2.6. Journey to Work Travel Patterns

2.6.1. [2011 Census data](#) has been analysed to establish journey to work travel patterns. 2011 data has been used throughout this report as it was the latest census available when the assessments were undertaken.

2.6.2. Table 3 summarises where residents in the study area were travelling for work purposes, based on Lower Layer Super Output Area (LSOA) boundaries. The data illustrates that 53.2% of residents worked within the study area itself in 2011, and a further 9% of residents travelled to elsewhere in the Harborough District. Only 37.8% of residents were travelling to areas outside of Harborough District for work purposes.

Table 3. Journey to Work: Travel Patterns from the Study Area (Census 2011)

Location	No. in Employment	% of Total
Study Area	5,763	53.2%
Harborough District (excluding Study Area)	981	9.0%
Leicester	1,764	16.3%
Other (elsewhere in Leicestershire)	2,333	21.5%
Total	10,841	100%

2.6.3. Table 4 shows the origins of people who commuted to the study area for work in 2011. The data shows that 63.3% of people who worked in the study area were also residents, meaning that these were internal commuter trips. Moreover, 14.4% of the workplace population commuted into the study area from the wider Harborough District area, 7.7% from Leicester City and 14.5% from elsewhere in Leicestershire.

Table 4. Journey to Work: Origin of Trips into the Study Area (Census 2011)

Origin Locations	No. in Employment	% of Total
Study Area	5,763	63.3%
Harborough District (excluding Study Area)	1,311	14.4%
Leicester	701	7.7%
Other (elsewhere in Leicestershire)	1,323	14.5%
Total	9,098	99.9%

**The figures do not add up exactly due to rounding.*

2.6.4. The location of travel is important for understanding patterns of commuter trips. However, as the percentage of internal trips is so high, it is also important to look at the modal choice of internal trips to understand how the existing network is used. Table 5 summarises the modal split of internal commuter trips within the study area.

Table 5. Journey to Work: Modal Split of Internal Trips (Census 2011)

Mode	% of Travellers		
	Market Harborough	Foxton	Little Bowden
Car (Driver or Passenger)	49.0%	46.9%	54.8%
Bus	1.2%	0.4%	0.7%
Walk	40.6%	46.6%	38.4%
Cycle	8.2%	5.4%	4.8%
Other	1.0%	0.7%	1.3%

2.6.5. This data shows that there was a high number of trips made by car, either as the driver or passenger. 48.8% of internal trips from Market Harborough were made by walking or cycling, 52% from Foxton and 43.2% from Little Bowden. There may be barriers to why more internal trips aren't made by active modes.

2.6.6. Table 6 supports that there is scope to change people's behaviour and encourage more people to make trips by active modes such as walking and cycling, with 62.5% of people in the study area travelling less than 5km to work and 65.1% less than 10km, etc. These percentages are even higher for the LSOAs within Market Harborough Town Centre. The most common distance travelled to work for all areas is less than 2km.

Table 6. Distance Travelled to Work (Census 2011)

Distance Travelled to Work	% of Travellers					
	Market Harborough	Foxton	Great Bowden	Little Bowden	Lubenham	Overall
Less than 2km	53.2%	52.8%	52.6%	53.1%	54.8%	53.2%
2km to less than 5km	10.9%	1.4%	6.9%	8.7%	1.8%	9.3%
5km to less than 10km	2.4%	3.1%	2.0%	1.9%	7.3%	2.6%
10km to less than 20km	1.6%	4.3%	1.4%	1.1%	1.9%	1.6%
20km to less than 30km	5.4%	9.2%	5.4%	4.8%	6.3%	5.5%
30km to less than 40km	5.5%	2.7%	6.1%	5.8%	5.5%	5.5%
40km to less than 60km	1.1%	1.6%	1.2%	0.9%	1.1%	1.1%
60km and over	0.8%	0.9%	1.0%	0.6%	1.3%	0.8%
Work mainly at or from home	0.9%	1.0%	0.8%	0.9%	1.8%	0.9%
Other	18.2%	23.0%	22.5%	22.3%	18.2%	19.3%

2.7. Existing Cycling and Walking Networks

2.7.1. Public Rights of Way (PRoW) provide a great opportunity for walking and cycling and are a traffic free alternative to on-road routes. Figure 16 shows the existing Public Footpaths and Bridleways in the Market Harborough LCWIP area which are to be used by:

- Footpaths – pedestrians, mobility scooters or powered wheelchairs
- Bridleways – pedestrians, horse riders, bicycles, mobility scooters or powered wheelchairs

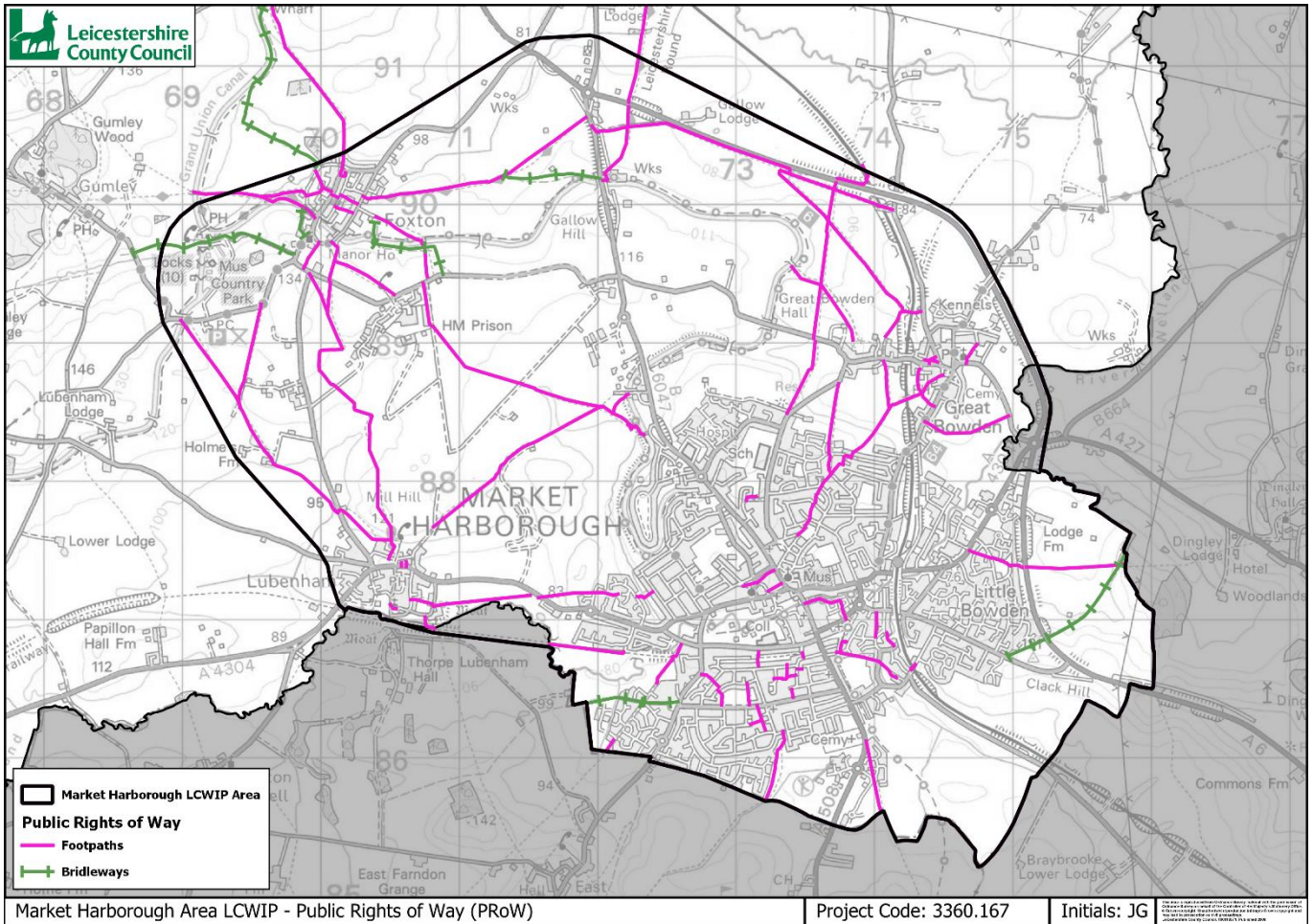


Figure 16. Public Rights of Way

2.7.2. Figure 17 shows the existing cycle network within the study area. It has been split into the DfT's Active Mode Appraisal Toolkit (AMAT) categories of:

- Off-Road Segregated Cycle Track
- On-Road Non-Segregated Cycle Lane
- Shared Bus Lane (there are currently no roads of this nature in the LCWIP area)
- On-Road Segregated Cycle Lane (there are currently no roads of this nature in the LCWIP area)
- Wider Lane (there are currently no roads of this nature in the LCWIP area)

2.7.3. National Cycle Network (NCN) Routes 6 and 64⁷ have also been identified on the map, running through Foxton, Market Harborough and Great Bowden. Looking at this in conjunction with the existing infrastructure allows for any gaps in the network to be identified between key attractors.

⁷ <https://data-sustrans-uk.opendata.arcgis.com/maps/5defd254e78745bfb12d0456abc1bcf1>

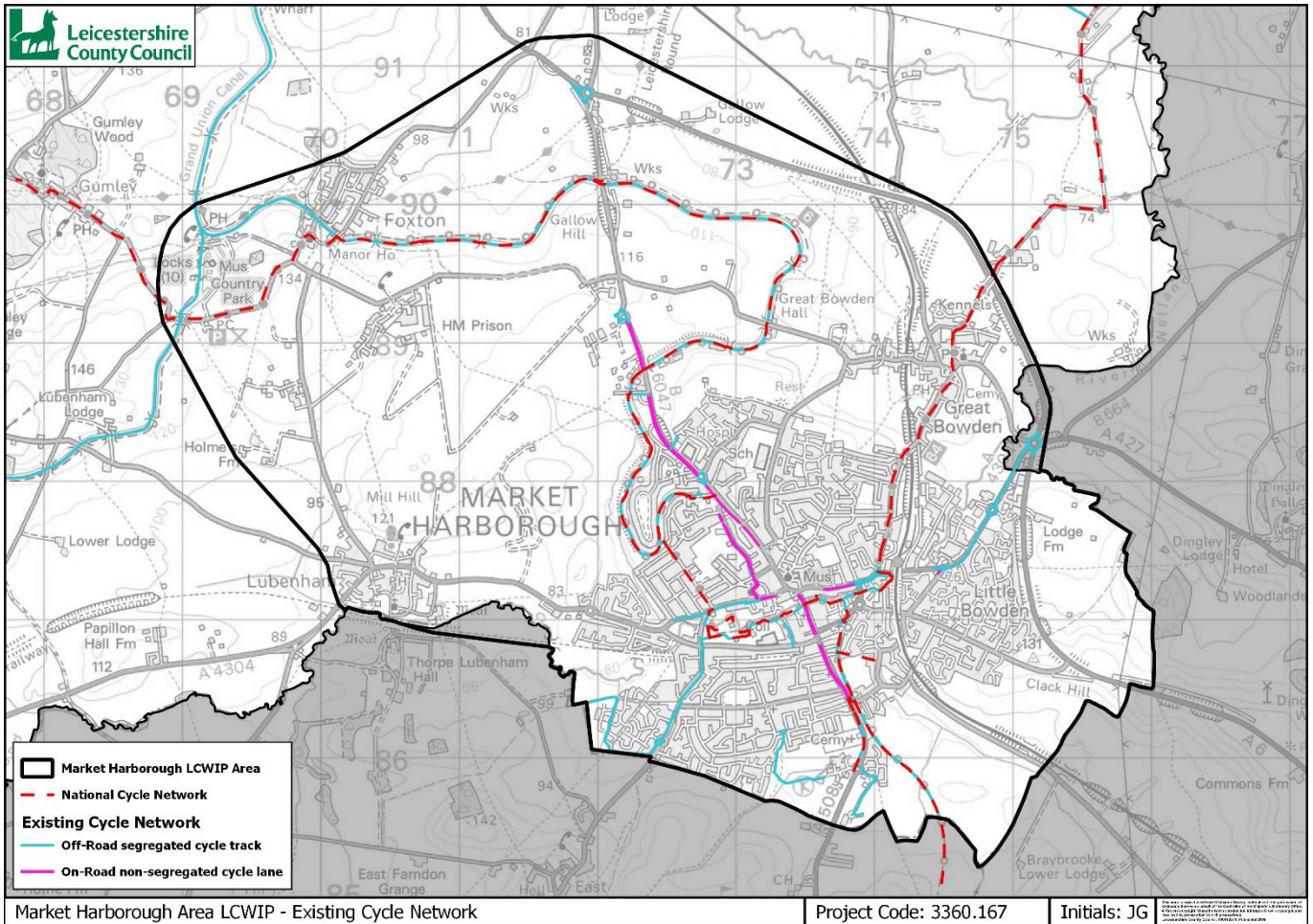


Figure 17. Existing Cycling Network (using AMAT Categories)

Public Suggestions for Improvement

2.7.4. As a result of the Covid-19 Pandemic, the government announced that councils should be creating new cycleways and wider pavements for physical distancing. Cycle Streets⁸ created the Widen My Path tool to enable the public to identify where changes are needed on the walking or cycling network in the UK⁹. The data is available to local authorities to see where changes should be prioritised. Figure 18 shows the location of walking suggestions put forward, categorised into the following:

- Crossing – where the pedestrian crossing needs improving
- Width – where the width of the path should be increased
- Parked cars – where parked cars are making path difficult to use / dangerous
- Multiple – where more than one of the above has been listed

⁸ www.cyclestreets.net

⁹ <https://www.widenmypath.com/leicestershire/#10/52.6672/-1.1137>

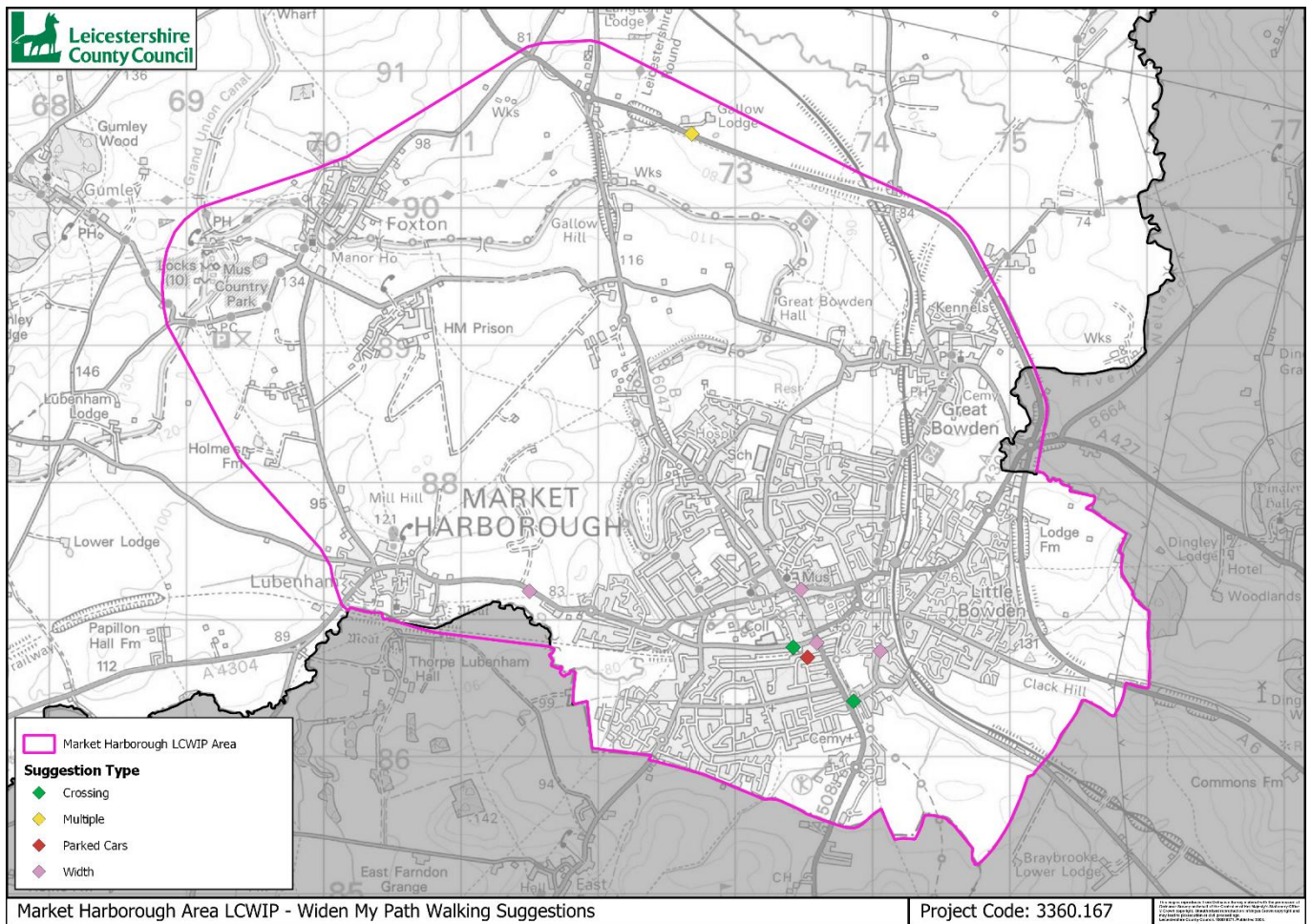


Figure 18. Widen My Path Walking Suggestion (as at Mar 2023)

2.7.5. Figure 19 shows the location of cycling suggestions put forward, categorised into the following:

- Width – same as above
- Crossing – where the cycling crossing needs improving
- Parked cars – same as above
- New cycle path – where a new cycleway is needed
- Multiple – same as above

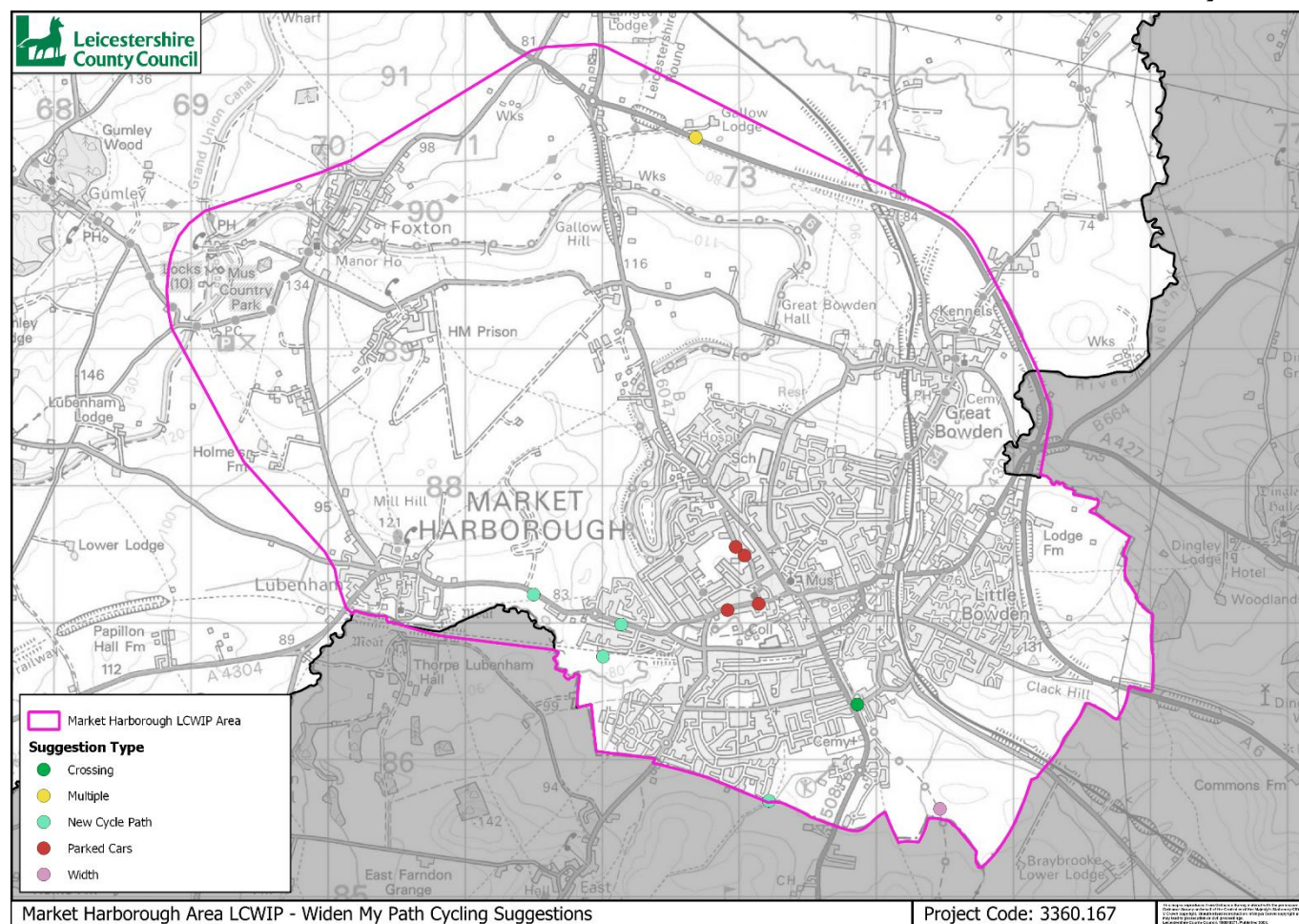


Figure 19. Widen My Path Cycling Suggestion (as at Mar 2023)

Pedestrian and Cyclist Collision Data

2.7.6. Table 7 summarises the collision records for pedestrians and cyclists in the study area for 2017 - 2022. Although data is available for the full year of 2020, this has not been included in the analysis due to the unknown impacts of the Covid-19 pandemic.

Table 7. Pedestrian and Cyclist Collision Data (2017-22)

Severity	Cyclist Collisions					Pedestrian Collisions				
	2017	2018	2019	2021	2022	2017	2018	2019	2021	2022
Slight	1	3	1	2	2	-	1	2	1	-
Serious	3	2	-	0	1	1	1	1	-	-
Fatal	-	-	-	-	-	-	-	-	-	-
Total	4	5	1	2	3	1	2	3	1	-

2.7.7. The data shows that there were no fatal cyclist or pedestrian collisions over the 5-years. There was slight and serious cyclist and pedestrian collisions across most years, however there were no pedestrian collisions in 2022. Improvements to cycling and walking infrastructure could alleviate the number of collisions by minimising the conflict between active mode users and vehicles.

2.7.8. Figure 20 shows the spatial distribution of the cyclist and pedestrian collisions summarised in Table 7.

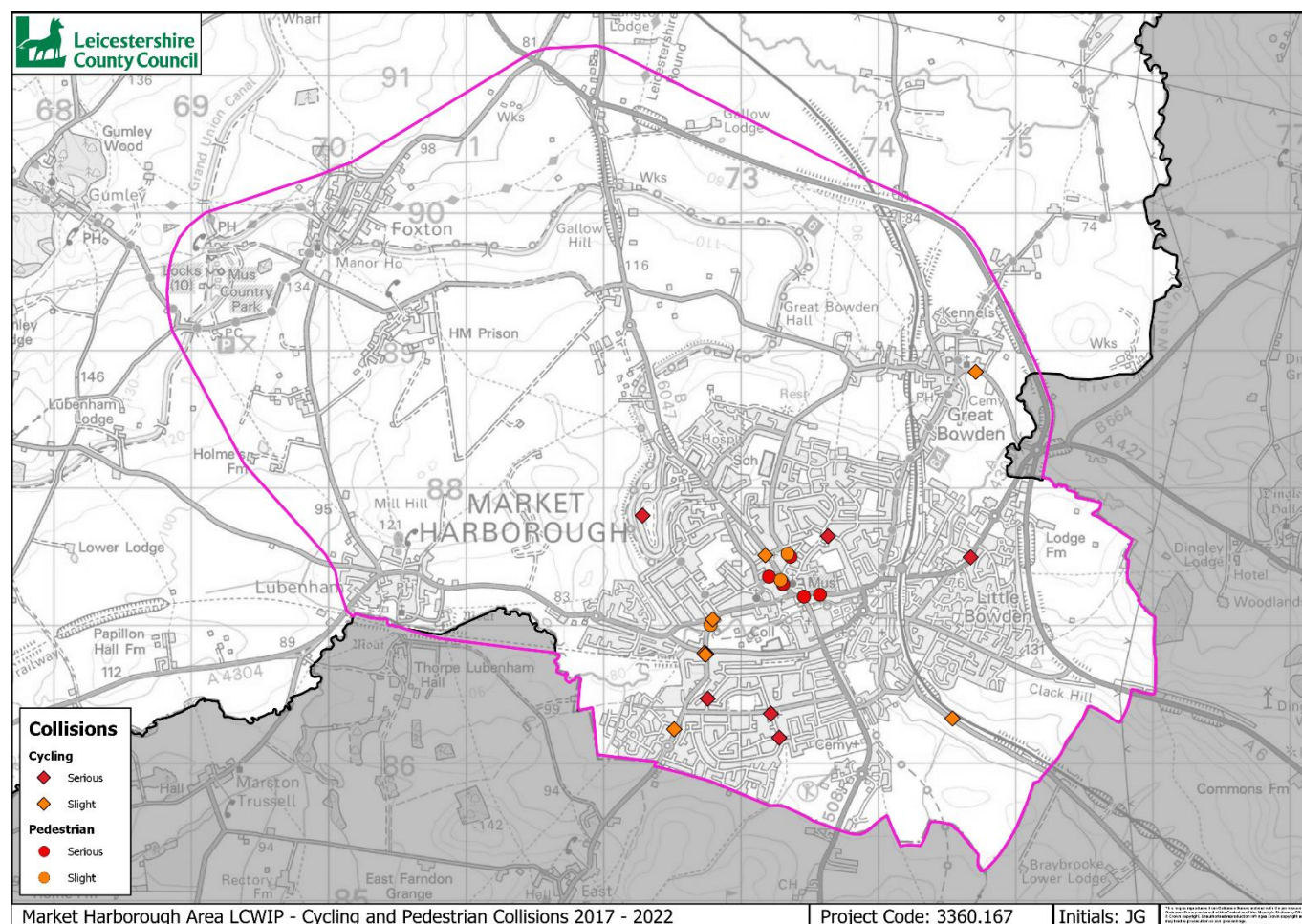


Figure 20. Cycling and Pedestrian Collisions 2017 - 2022

2.7.9. The map shows that many collisions are clustered around Market Harborough town centre. The collisions will be considered when identifying key routes for cycling and walking, especially when they occur on routes close to schools.

Propensity to Cycle Tool (PCT)

2.7.10. The [PCT](#)¹⁰ is an online resource, funded by the DfT, that is available to assist with the strategic planning of cycling networks. It includes 2011 Census (Journey to Work) data which is the most up-to-date source of publicly available Origin-Destination (OD) data for cycling. The [LCWIP Technical Guidance](#) advises that PCT Journey to Work data can assist with the preparation of LCWIPs at several different stages, including:

- Planning the cycling network
- Defining potential demand for cycling

¹⁰ Lovelace et al. (2017) and/or Goodman et al. (2019)

- Assisting with scheme prioritisation

2.7.11. Figure 21 shows the cycling ODs (>5 trips) at LSOA level which have been derived from the PCT commuting data.

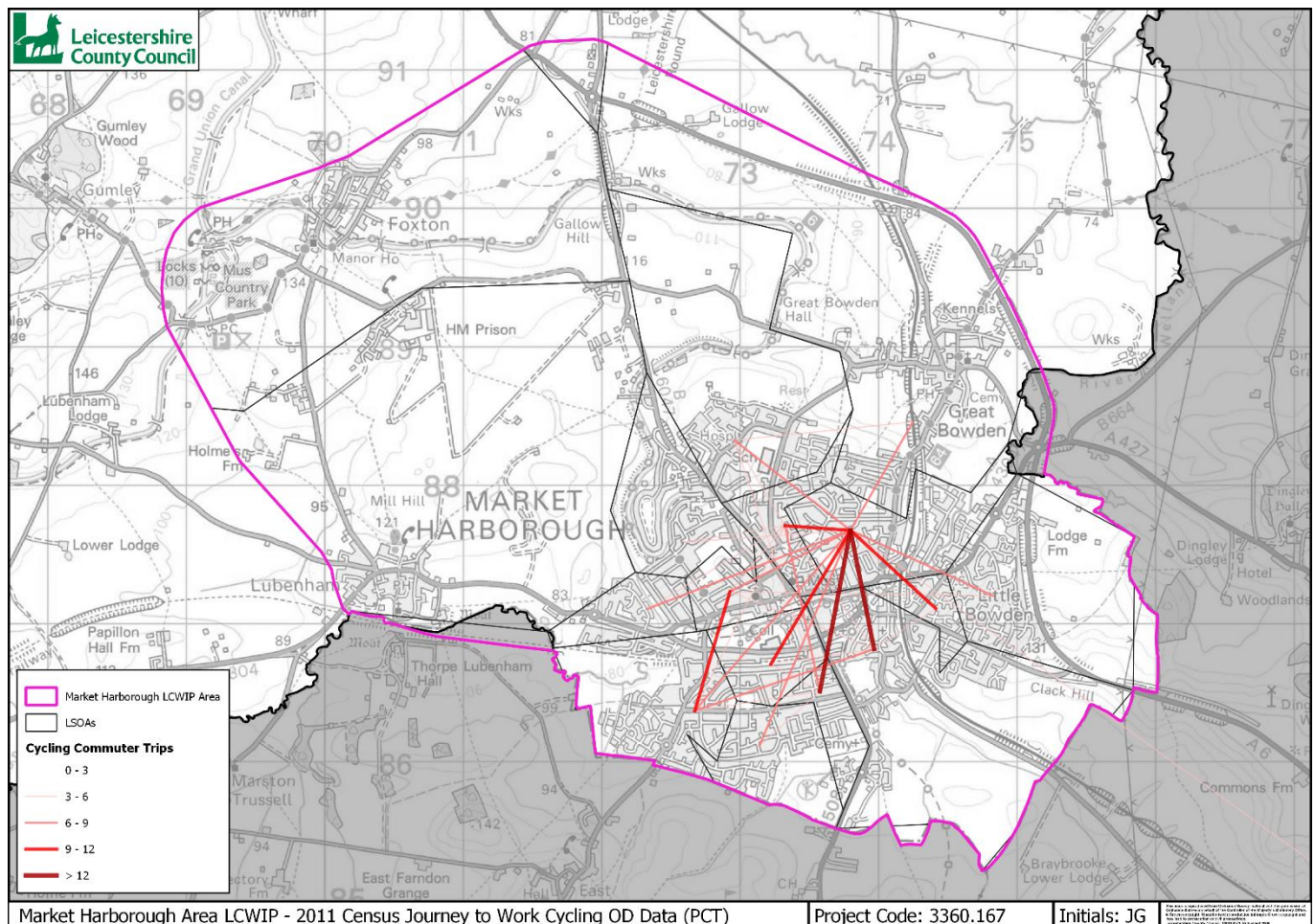


Figure 21. 2011 Census Cycling Journey to Work Origin-Destinations (PCT)

2.7.12. As well as 2011 baseline data, the PCT also includes versions of the future that are represented through the various scenarios of change, including the DfT draft Cycling Delivery Plan target to double cycling in a decade and the more ambitious 'Go Dutch' scenario where Dutch cycling levels are reached in England.

2.7.13. It should be noted that only journey to work data is considered in the PCT tool. Therefore, a limitation of the tool is that other journey purposes are excluded, such as school trips, recreation, and tourism. The PCT outputs are therefore only a starting point for understanding cycling demand.

2.8. Road Transport Network

2.8.1. In order to encourage modal shift towards walking and cycling, it is important to consider both current and prospective future road transport conditions in the area. Several layers have been extracted from Leicestershire's Pan Regional Transport Model (PRTM) to see the forecast road conditions in 2021 and 2036.

2.8.2. The blue bandwidths displayed on Figure 22 show the number of modelled highway trips to/from the LCWIP area under 10km in 2021, for the AM (08:00-09:00) and PM (17:00-18:00) peak hours combined; thinner lines show less trips and thicker lines show more trips. This gives an indication of both the potential for mode shift away from car journeys and the key corridors that could be targeted for active mode trips.

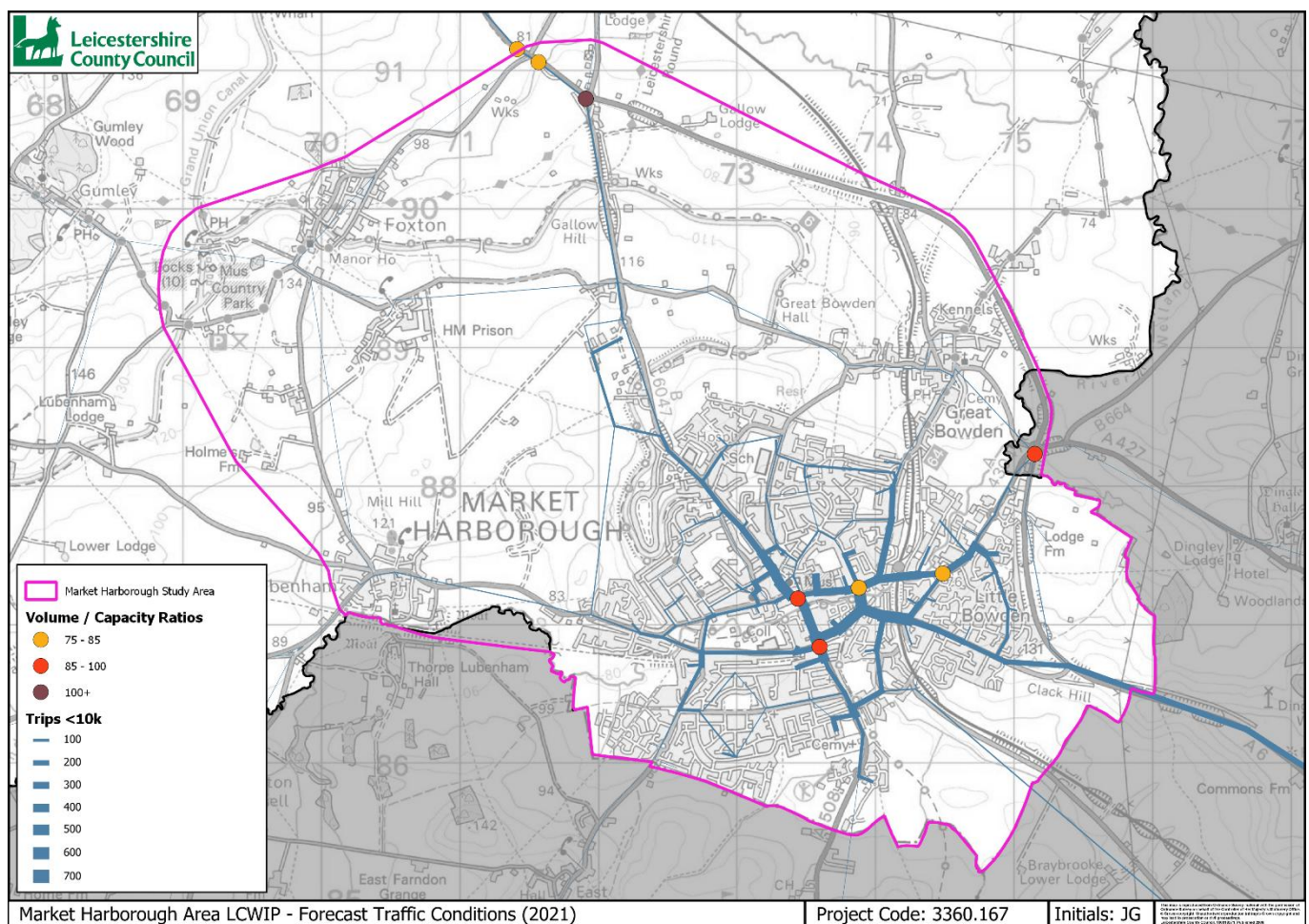


Figure 22. Forecast Traffic Conditions (2021)

2.8.3. The map also shows the volume over capacity (VoC) ratios for junctions, which is a measure of congestion. The junctions have been divided into 4 bands: 0-75% (not shown on the map), 75-85%, 85-100%, and >100%. A junction is considered to be operating under stress if its VoC ratio exceeds 85%. A VoC ratio of 100% represents a theoretical capacity limit so these junctions are likely to experience an increased occurrence of queueing and congestion.

2.8.4. Many of the near-capacity and over-capacity junctions are on routes that experience a high number of short distance trips. It is hoped that by improving active mode alternatives, a modal shift away from car trips at these junctions will mitigate congestion in the future.

2.8.5. Figure 23 shows modelled road traffic conditions for 2036, including trips under 10km and VoC ratios for junctions. There is a large amount of short distance trips around Springfield Retail Park and on arterial routes into the town centre, such as the A4304 (High Street, The Square, St. Mary's Road and Rockingham Road), Kettering Road and the A508 (Northampton Road and Springfield Street).

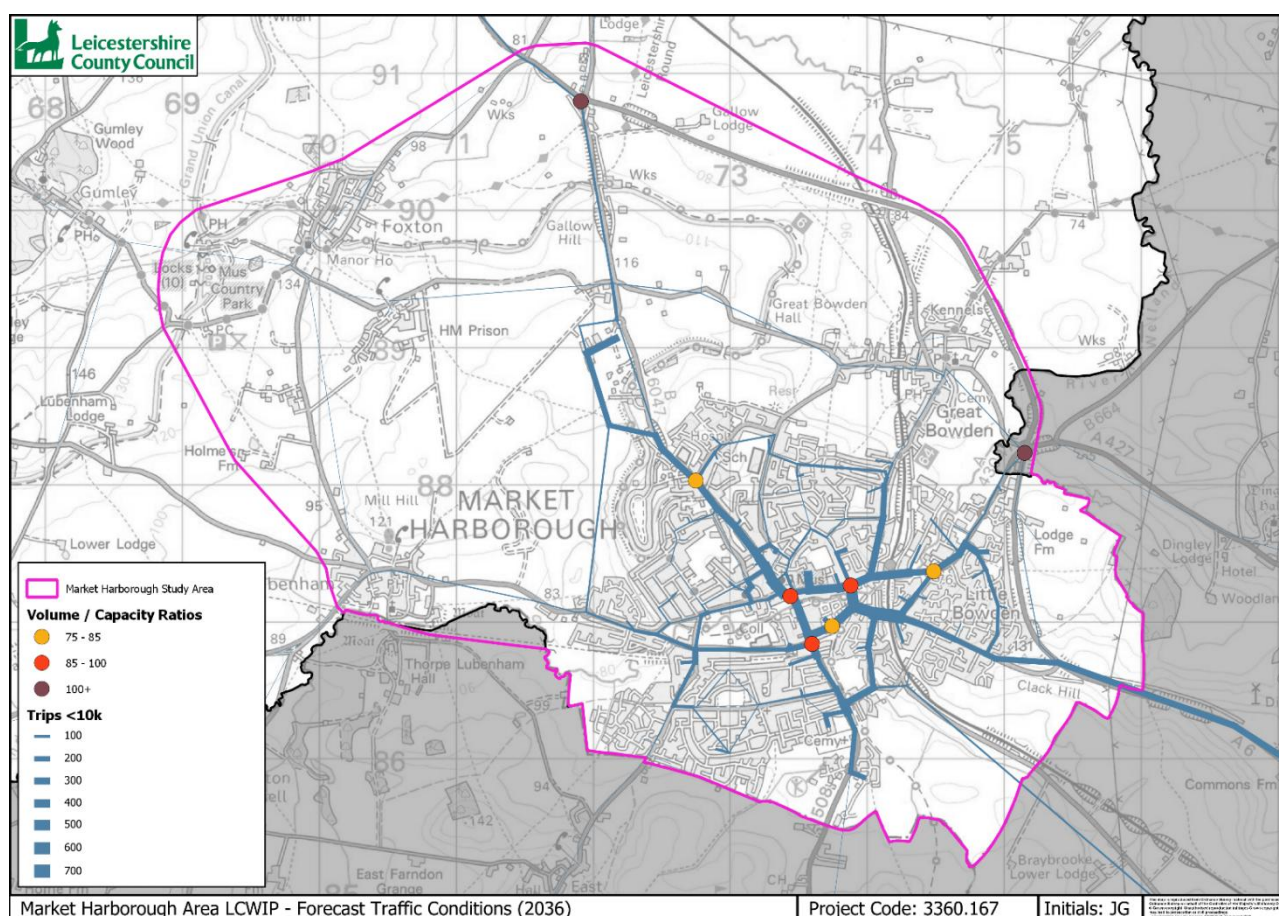


Figure 23. Forecast Traffic Conditions (2036)

2.8.6. Table 8 shows a comparison of junctions with VoC ratios exceeding 75% between 2021 and 2036.

Table 8. Number of Junctions with a VoC Ratio >75% (2021 vs 2036)

Volume to Capacity	2021		2036	
	AM	PM	AM	PM
75 – 85%	3	0	2	1
85 – 100 %	3	2	3	2
> 100%	1	2	2	2
Total	7	4	7	5

3. Cycle Network Map Development

3.1. Overview

3.1.1. The third stage of the LCWIP process is to map a future cycle network which identifies where investment should be targeted.

3.2. Methodology

3.2.1. The following methodology for developing a cycle network map has been derived from the LCWIP technical guidance:

1. Identifying Key Origins and Destinations
2. Clustering of Origins and Destinations
3. Identifying Desire Lines between Origins and Destinations
4. Identifying Routes Serving the Desire Lines
5. Identifying a Route Hierarchy
6. Producing Draft Cycle Network Map

3.2.2. The following sections explain each of these steps in greater detail.

3.3. Identifying Key Origins and Destinations

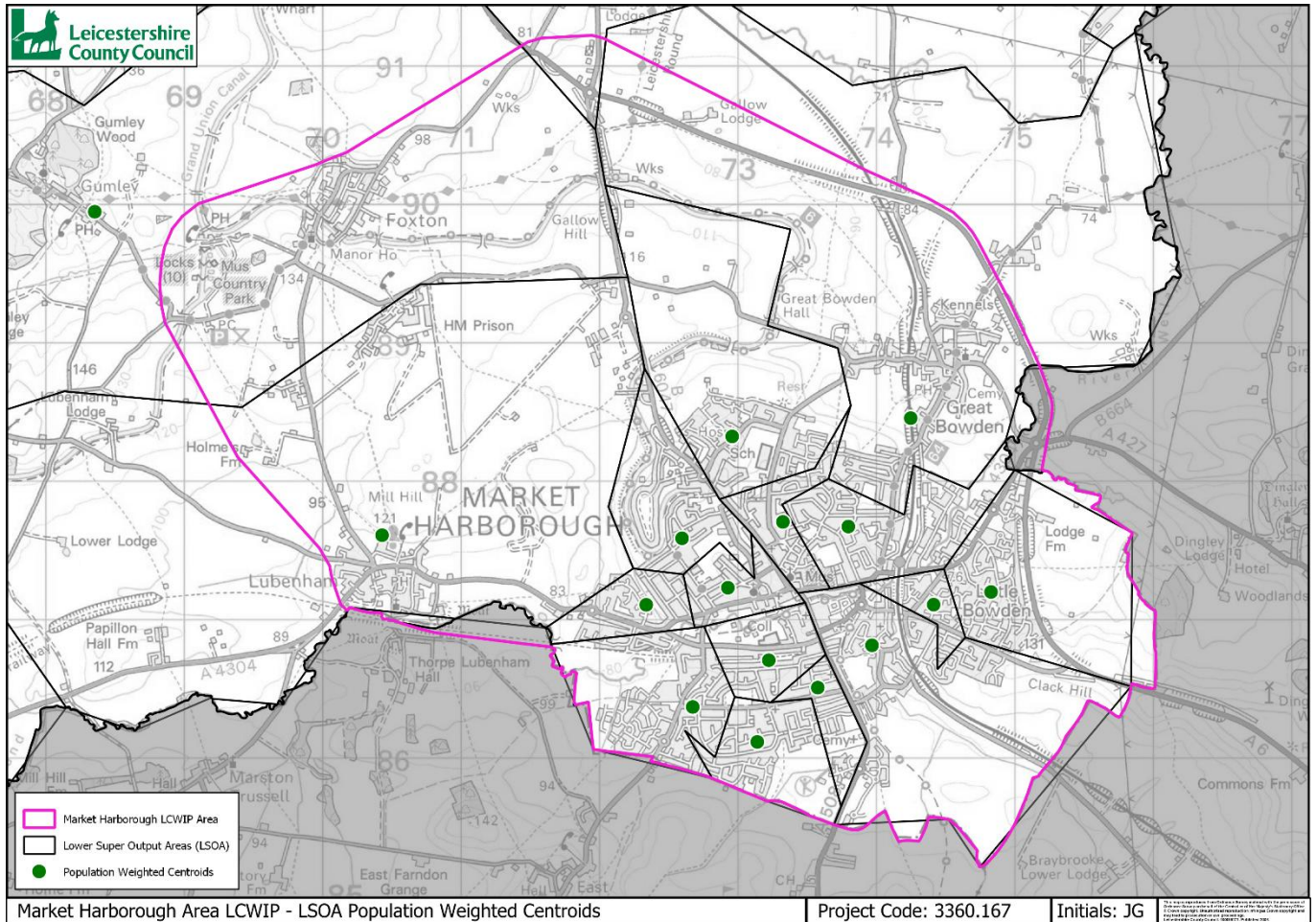
3.3.1. The first step to identifying demand for a network is mapping the key origin and destination points across the study area.

Origins

3.3.2. Cycling trips usually start at residential settlements, therefore data from the Office for National Statistics (ONS) has been used to identify key residential origin points for the study area.

3.3.3. A file containing [population weighted centroids](#) for lower layer super output areas as at December 2021 has been downloaded and mapped, see Figure 24. The centroids represent the centre of the population within each output area indicating where there is the greatest potential for trips.

3.3.4. As the data only considers residential properties that were present when the census took place, new development sites built since 2011 and those planned for the future will be mapped separately.



Source: Office for National Statistics licensed under the Open Government Licence v.3.0

Figure 24. Population Weighted Centroids as of December 2011 (Census 2011)

Destinations

3.3.5. Common journey destinations have been identified to determine where people are likely to travel to on a regular basis. These key destinations include:

- healthcare establishments - including GPs and Hospitals,
- large employment sites,
- large supermarkets,
- pharmacies,
- primary education establishments
- secondary educational establishments – including colleges,
- transport interchanges – including bus and rail stations,
- libraries; and
- leisure sites – including sports stadiums, entertainments venues, visitor attractions, leisure centres, cultural institutions, and parks, etc.

3.3.6. Figure 25 shows the spatial distribution of the key destinations listed above, as well as committed employment developments with over 50 jobs. There are some clusters of destinations in the town centre, Springfield Retail Park, and Welland Business Park.

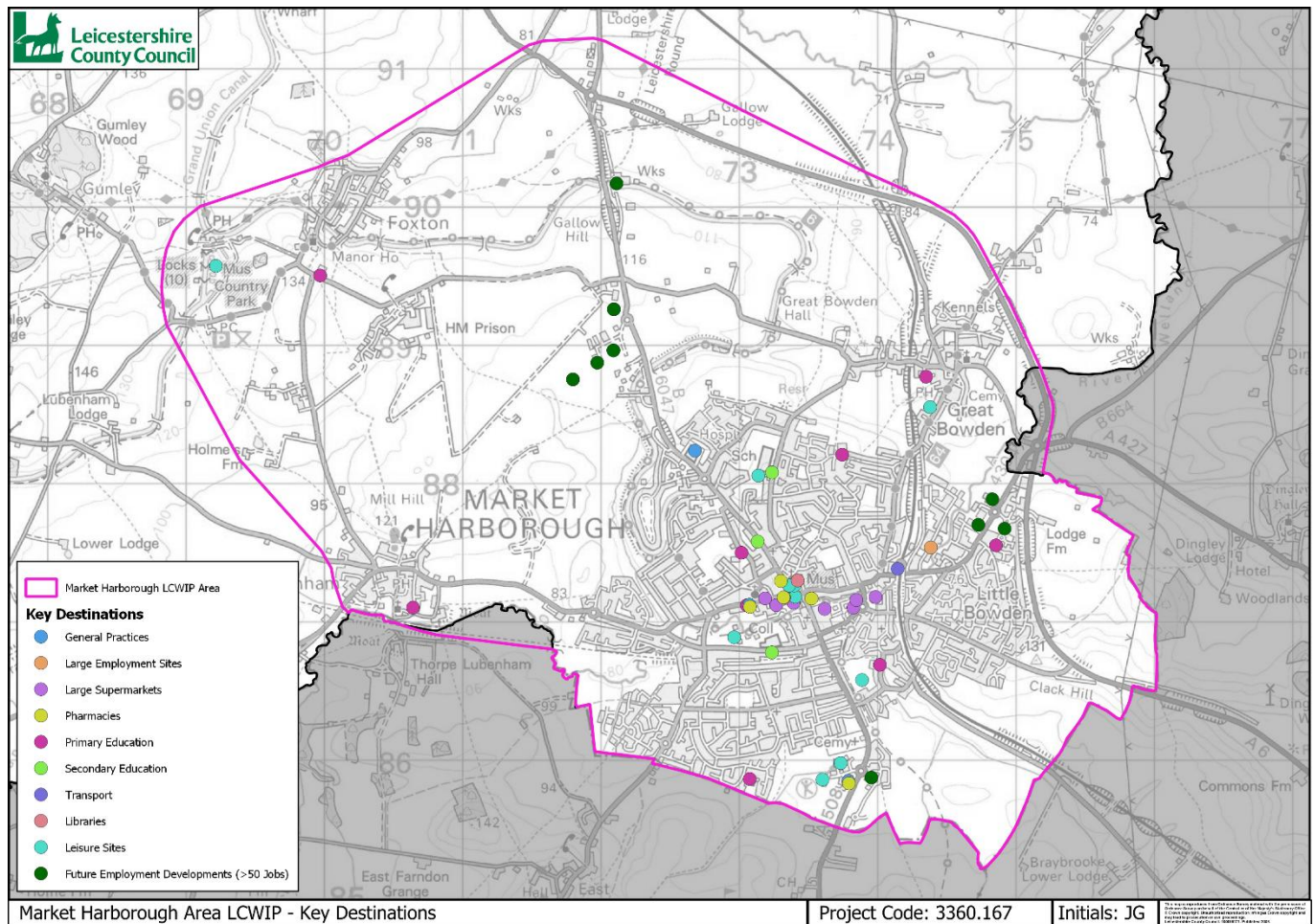


Figure 25. Key Journey Destinations

Key Future Developments

3.3.7. It is important that key future developments are considered when producing the draft cycling network as they may become significant origin or destination points. Depending on the size, location, and influence of the planned developments, it may be necessary to link them to the existing cycling network.

3.3.8. Figure 26 shows the committed housing (>100 dwellings) and employment (>50 jobs) developments in the study area, as well as the key local plan growth areas up to 2036. The largest growth area is the Airfield Farm SDA that sits to the north-west of the town. There are also several key developments on the peripheries of Market Harborough, Little Bowden and Great Bowden.

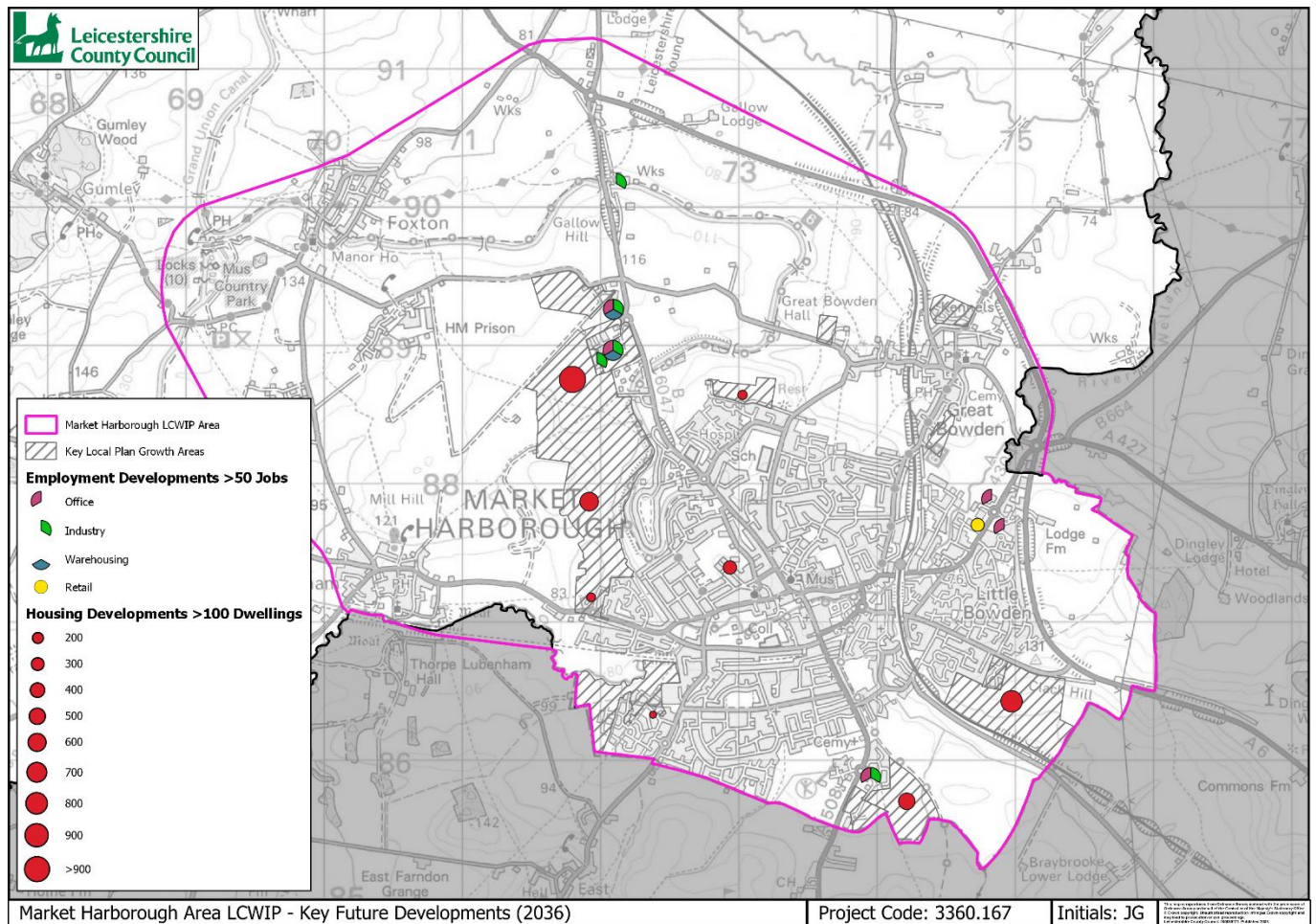
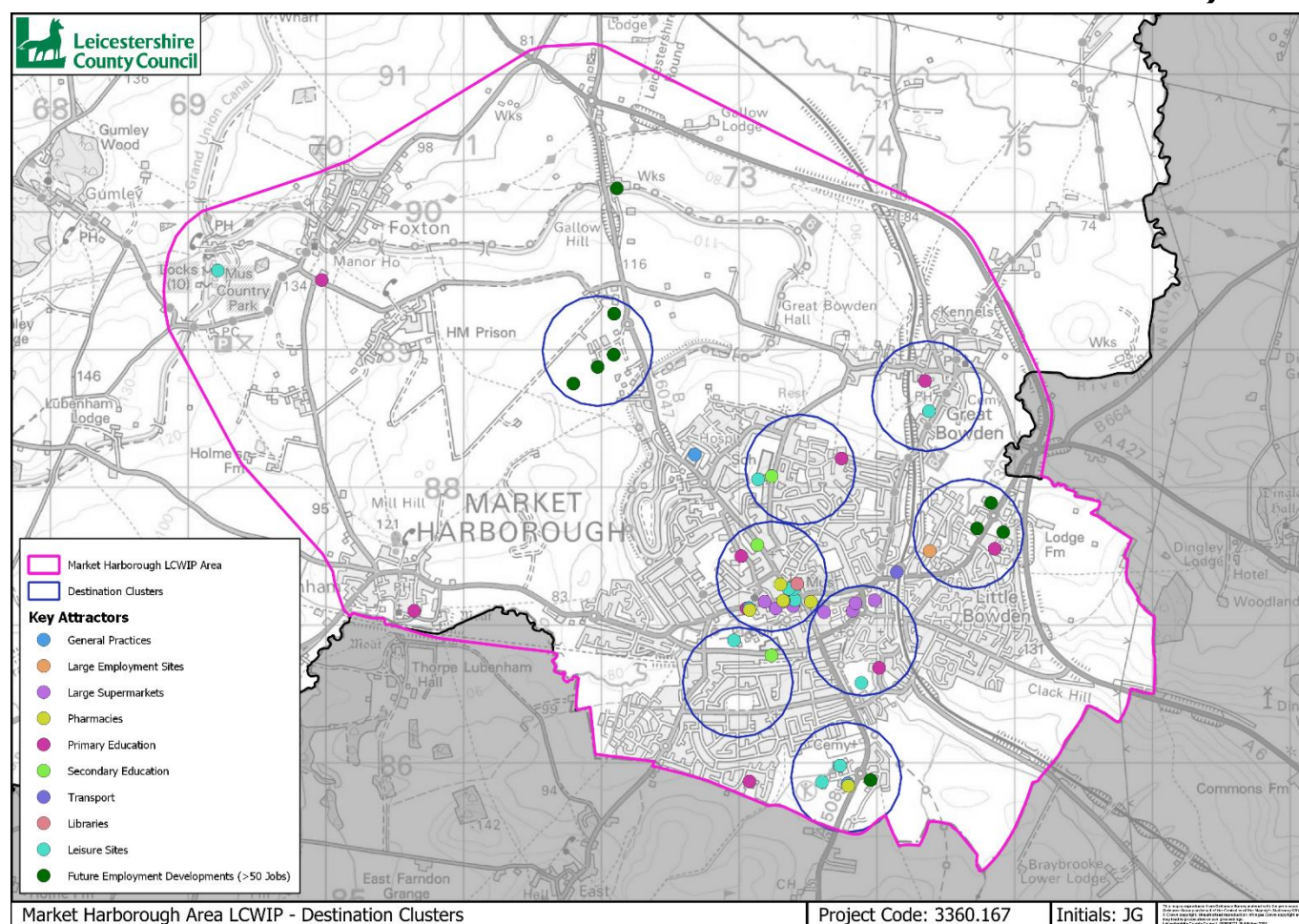


Figure 26. Key Future Developments

3.4. Clustering of Origins and Destinations

- 3.4.1. It is recommended that trip origins and destinations that are nearby to each other should be clustered together to simplify the analysis. The origins have already been clustered together as per the population weighted centroids in Figure 24.
- 3.4.2. To define the destination clusters, an exercise has been undertaken in GIS to create buffers around destinations that are within 400m of each other, representing a 5-minute walking distance. This is the recommended density for a joined-up urban cycle network as users should not have to travel further than 400m to get between routes of a similar quality.
- 3.4.3. The buffers have been drawn to include as many destinations as possible within a 400m radius but are positioned to avoid overlap where possible. In addition, destinations that are separated by a barrier, like a major road or railway line, have not been included in the same cluster as they are unlikely to be served by the same cycle route. Figure 27 shows the clusters of key destinations.

**Figure 27. Key Destination Clusters**

3.4.4. To determine which of the destination clusters are more desirable, they have been given a weighting based on the number and type of destinations present. The weightings range from 1-10 depending on the number of cyclists the destination is likely to attract, see Table 9. Employment sites, transport interchanges and secondary schools have been given a greater weighting.

Table 9. Destination Desirability Weighting

Destination Type	Weighting
Existing Large Employment Site	5 – more desirable
Future Large Employment Site	5
Transport Hub	5
Secondary School / College	5
Primary School	3
Large Supermarket	3
Leisure Site	3
General Practice	1
Pharmacy	1
Library	1 – less desirable

3.5. Identifying Desire Lines between Origins and Destinations

3.5.1. Direct desire lines have been drawn between each of the origin and destination points in the study area. These lines show the most direct route between OD pairs but are only indicative and do not follow specific routes on the network.

3.5.2. To identify which lines are most likely to be used by cyclists, the origin clusters have been assigned cycling demand based on the number of commuting trips from that LSOA in the 2011 Census (PCT). This demand has been combined with the weightings given to the destination clusters to give an overall desirability score.

3.5.3. Figure 28 shows the top 25% desire lines; the thicker, darker lines are likely to be more desirable to cyclists and the thinner, lighter lines are likely to be less desirable.

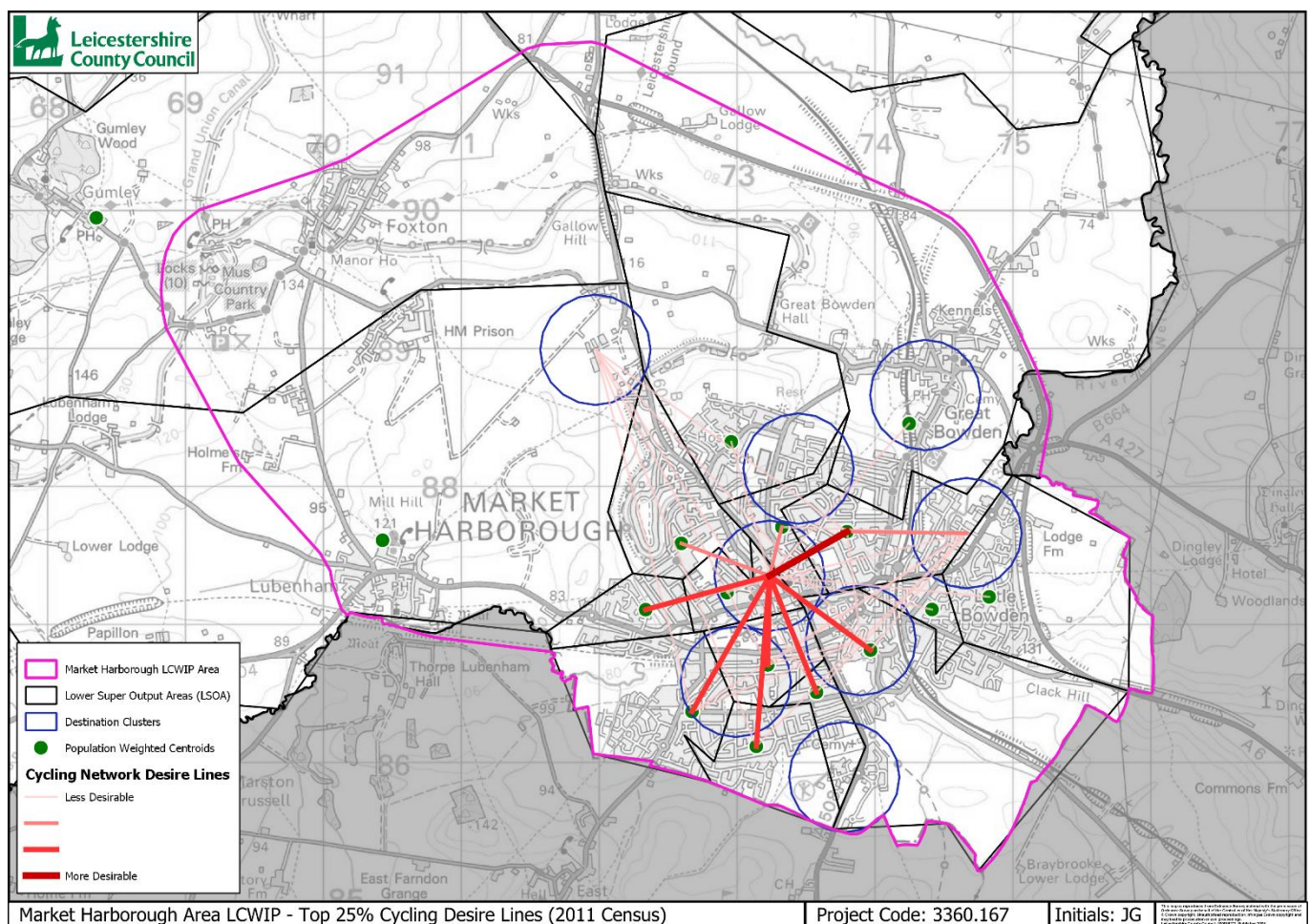


Figure 28. Top 25% Desire Lines between Origins and Destinations

3.6. Identifying Routes Serving the Desire Lines

3.6.1. The desire lines indicate where people are most likely to cycle to / from in the study area but do not attribute trips to specific links on the network. There are often multiple routes that can be taken between two points, so online resources were used to assist with route selection along desire lines, specifically Google Maps and Strava Metro.

Google Maps

3.6.2. [Google Maps](#) is an online service that provides satellite imagery, aerial photography, street maps, interactive street view, and route planning for different modes of travel. It provides a recommended route between one or more locations based on the fastest time, considering the current road conditions, and is a good starting point for route selection. Using the street view tool, it is possible to observe the condition of each route, namely their quality, gradient, and classification, etc.

Strava Metro Data

3.6.3. Strava is a social networking app that allows people to track their human-powered activities such as walking, running, and cycling. The app records information like distance, elevation gain, time, and route, etc. This data has been made available to local government authorities to help them identify opportunities for investment.

3.6.4. Not everyone tracks their activities on Strava. However, the platform has shown that Strava Metro data is representative of the overall population. Several academic studies have analysed the relationship between Metro data and data recorded by counters and found robust correlations between the two¹¹.

3.6.5. The [Strava Metro](#) heatmap tool displays the level of cycling activity on routes for a given period. This has been used to inform route selection as it highlights which paths people currently avoid or favour in the study area.

3.7. Identifying a Route Hierarchy

3.7.1. The following hierarchy from the LCWIP Technical Guidance has been used to categorise cycling routes:

- **Primary:** High flows of cyclists are forecast along desire lines that link large residential areas to trip attractors such as a town or city centre.
- **Secondary:** Medium flows of cyclists are forecast along desire lines that link to trip attractors such as schools, colleges, and employment sites.
- **Local:** Lower flows of cyclists are forecast along desire lines that cater for local cycle trips, often providing links to primary or secondary desire lines.

3.7.2. For routes that will serve a key future development, but are not required for the existing cycling network, there is an additional 3 categories named Future Primary (Indicative), Future Secondary (Indicative) and Future Local (Indicative). As many of these sites are yet to go through the planning process and do not have agreed masterplans, these routes should be treated as indicative only.

¹¹ <https://medium.com/strava-metro/cdc-finds-strava-metro-data-correlates-strongly-with-census-active-commuting-data-8ab1be0fe130>

3.8. Producing Draft Cycle Network Map

3.8.1. The data from the previous steps has been brought together to produce a draft cycle network, shown in Figure 29. The creation of the cycling network map is an iterative process, and a final map has been produced following engagement with several key stakeholders.

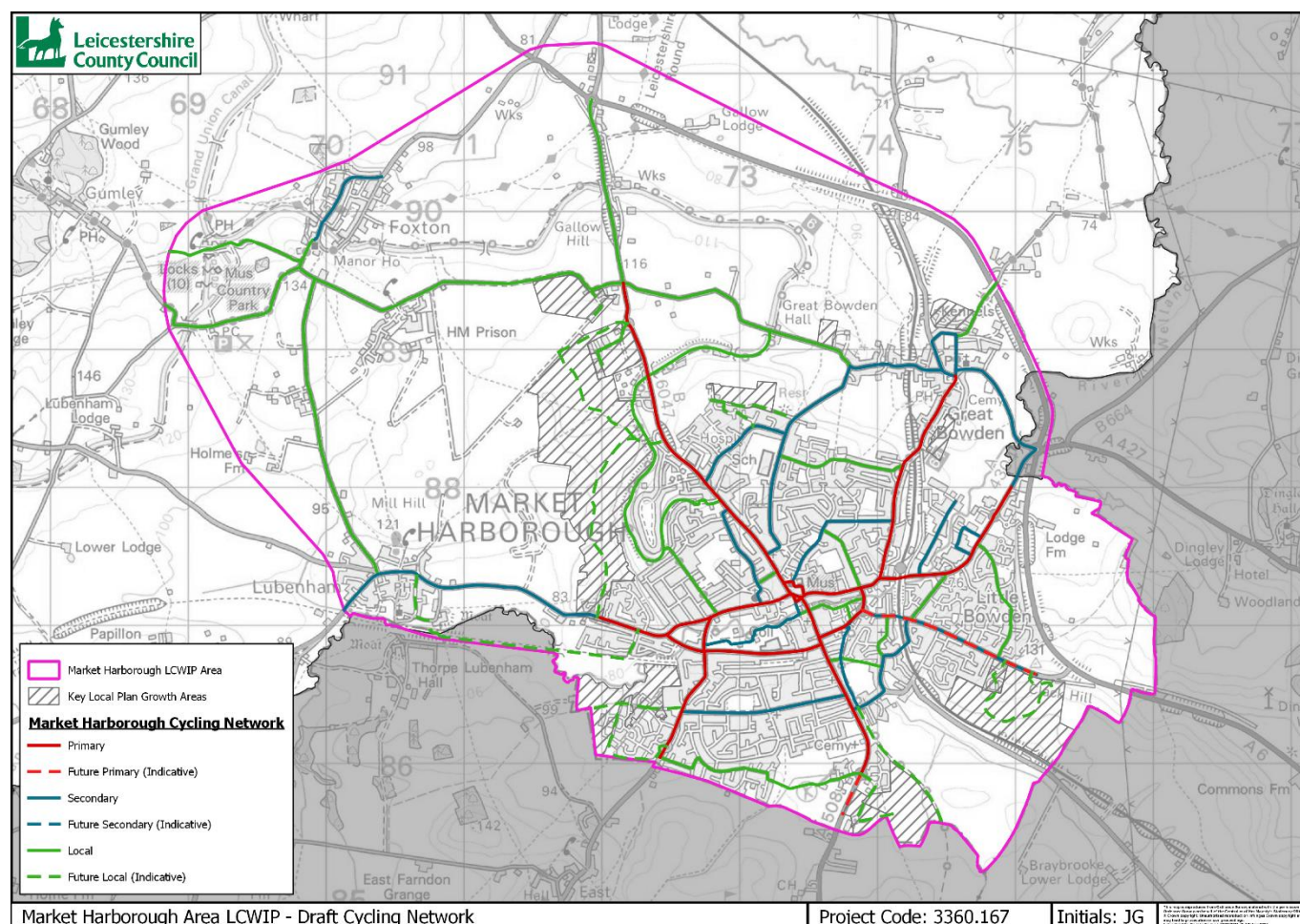


Figure 29. Draft Cycling Network Map

4. Walking Network Map Development

4.1. Overview

4.1.1. The fourth stage of the LCWIP process is to map a future walking network which identifies where investment should be targeted.

4.2. Methodology

4.2.1. The following method for developing a walking network map mirrors the recommended steps in the LCWIP technical guidance:

1. Mapping Walking Trip Generators
2. Identifying Core Walking Zones
3. Identifying Key Walking Routes
4. Identifying a Route Hierarchy
5. Producing Draft Walking Network Map
6. Route Validation (Stakeholder Engagement)

4.2.2. The following sections explain each of these steps in greater detail.

4.3. Mapping Walking Trip Generators

4.3.1. The key journey destinations have previously been plotted to create the cycling network map (Figure 25). This layer has been utilised again to determine the walking trip generators; while people are likely to travel further on a bike, the trip generators remain the same for both modes of travel.

4.3.2. As the study area is reasonably large, only the most significant trip generators have been included for walking. These key trip generators are where several destinations are located close together and are likely to attract a large number of pedestrian trips, specifically:

- Market Harborough Town Centre
- Great Bowden Village Centre
- Lubenham Village Centre
- Market Harborough Railway Station
- St Luke's Hospital
- Springfield Retail Park
- Sovereign Park Industrial Estate
- Welland Business Park / Riverside Industrial Estate / Euro Business Park / Three Manors Business Park / The Point Business Park

4.3.3. Figure 30 shows the spatial distribution of the walking trip generators listed above.

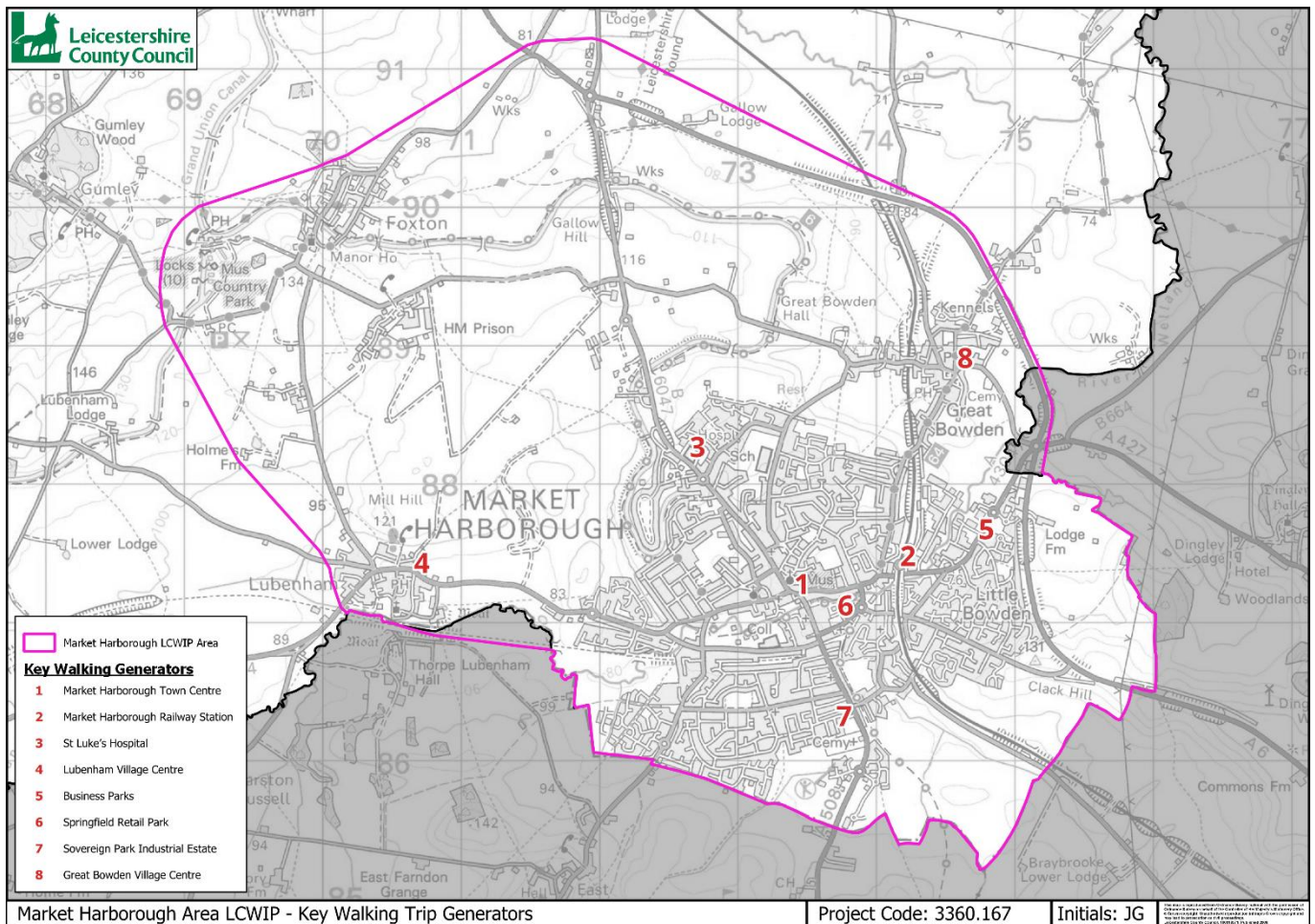


Figure 30. Key Walking Trip Generators

4.4. Identifying Core Walking Zones

- 4.4.1. Following on from identifying the key trip generators, the next step was to map core walking zones (CWZ). CWZs consist of several key trip generators in close proximity where there is potential for high footfall.
- 4.4.2. Figure 31 shows 400m CWZs from each of the key trip generators, which has been mapped via the shortest route along the road network in GIS. 400m represents approximately a 5-minute walking distance and is recommended in the LCWIP technical guidance as the minimum extents of a CWZ.
- 4.4.3. In addition, a 2km buffer has also been mapped to help identify the key routes that serve the CWZs. 2km is the maximum distance that people are likely to travel when walking.

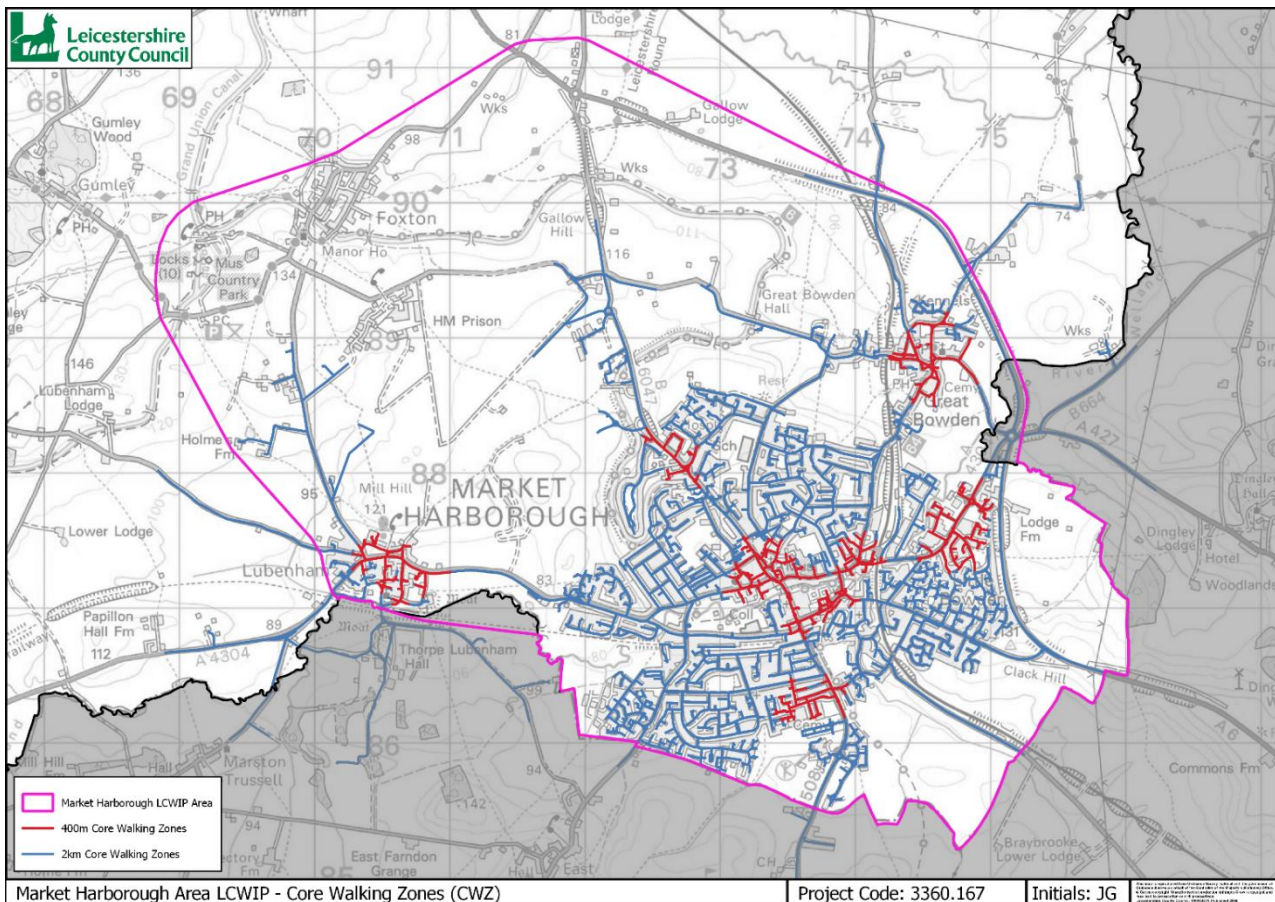


Figure 31. Core Walking Zones (CWZ)

4.5. Identifying Key Walking Routes

4.5.1. As with cycling, there is often more than one route between an origin and destination, so Google Maps and Strava Metro were used to assist with route selection in the 400m and 2km zones.

4.6. Identifying a Route Hierarchy

4.6.1. The LCWIP Technical Guidance advises that the highest category footways from the Footway Maintenance Classification¹² can be used to define key walking routes. This classification is shown in Table 10.

4.6.2. Categories 1(a), 1, 2 and 3 have been used as the hierarchy for classifying walking routes; local access footways are not on the map as every footway would need to be included making the map unreadable. As with the cycling hierarchy, there will be an additional 3 categories for routes that are likely to serve key future developments named Future Primary (Indicative), Future Secondary (Indicative) and Future Links (Indicative).

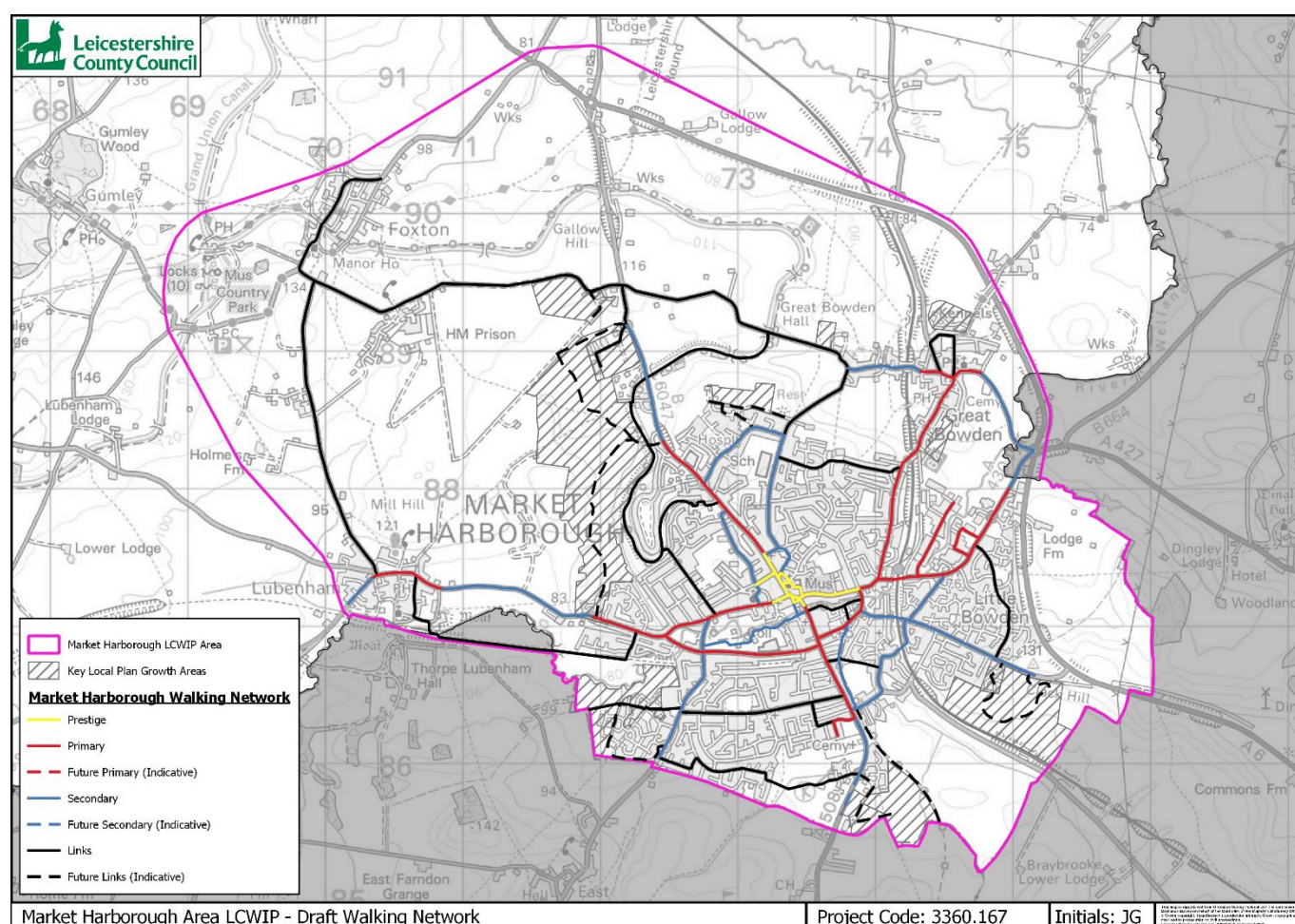
¹² Well-maintained Highways: Code of Practice for Highway Maintenance Management 2005 Edition, updated September 2013, Roads Liaison Group – London: TSO

Table 10. Footway Hierarchy

Category	Name	Description
1(a)	Prestige walking zones	Very busy areas of towns and cities, with high public space and street scene contribution.
1	Primary walking routes	Busy urban shopping and business areas, and main pedestrian routes.
2	Secondary walking routes	Medium usage routes through local areas feeding into primary routes, local shopping centres, etc.
3	Link footways	Linking local access footways through urban areas and busy rural footways.
4	Local access footways	Footways associated with low usage, short estate roads to the main roads and cul-de-sacs.

4.7. Produce Draft Walking Network

4.7.1. The data from the previous steps has been brought together to produce a draft walking network, shown in Figure 32. The creation of the walking network map is an iterative process, and a final map has been produced following engagement with several key stakeholders.

**Figure 32. Draft Walking Network Map**

5. Stakeholder Engagement

5.1. Overview

5.1.1. The validation of the draft network maps was informed by engagement with stakeholders, including councillors, local planning authorities and the public. Engagement responses were considered to help inform the final priority network routes.

5.1.2. It should be noted that many of the suggested routes have not been added to the network maps as they are not considered to be part of the core network that serve desire lines. However, these routes will likely still be used for walking and cycling and may be improved in the future.

Internal Stakeholder Engagement

5.1.3. Local councillors were given the opportunity to provide feedback on the network plans as they are aware of what is important to constituents in their areas. LCC officers across various specialisms gave feedback on the network plans to ensure internal schemes and wider work was considered.

External Stakeholder Engagement

5.1.4. A public consultation was held for 4-weeks which allowed people to submit their views on the draft networks. Consultees were encouraged to say which of the routes they supported and / or opposed, and to highlight any other links that should be included on the maps.

Local Planning Authority Workshop

5.1.5. A workshop was held with Harborough District Council (HDC) to discuss the draft network maps and any local priorities.

5.2. Changes to the Network Plans

5.2.1. Tables 11 and 12 list the amendments to the draft network maps that have been agreed in conjunction with stakeholders. The references include the letter 'C' or 'W' to indicate whether the comments refer to cycling or walking, and a number.

Table 11. Agreed Changes to the Draft Cycling Network Map

Ref	Request	Resulting Action
C10	Provide better cycling and walking links to Welland Park Academy and Farndon Fields Primary School.	Ritchie Park / Argyle Park / Vaughan Close / Rainsborough Gardens loop to be included as a local link.
C28	Improve walking and cycling paths along the road to Braybrooke. The traffic on this road is often travelling at high speed and this deters cycle / scooter journeys between Braybrooke and Market Harborough.	Braybrook Road / Harborough Road to be included as a future local link up to the future development.
C30	The new Davidsons Bowden Oaks site, Harborough Rd (Braybrook), needs to connect via a cycling and walking route through the existing railway tunnel as per the site planning permission.	The tunnel between Braybrook Road and the future development to be included as a future local link.
C31	The existing HDC managed path along the railway embankment needs a walking and cycling bridge over the River Welland to allow the Davidsons Little Bowden Oaks funded Kettering Road cycle way to connect with the Railway station.	NCN Route 64, between Kettering Road and Rockingham Road, to be included as a local link.
C42	Add double yellow lines on these corners to prevent dangerous parking. Too many instances of turning into oncoming vehicles.	Fairfax Road / Cromwell Crescent loop to be included as a local link.
C43	Add double yellow lines on these corners to prevent dangerous parking. Too many instances of cycling into oncoming vehicles.	Fairfax Road / Cromwell Crescent loop to be included as a local link.
C44	Add double yellow lines opposite this corner to prevent dangerous parking. Too many instances of vehicle turning into oncoming cyclists/vehicles.	Fairfax Road / Cromwell Crescent loop to be included as a local link.
C45	Add double yellow lines opposite this corner to prevent dangerous parking. Too many instances of vehicle turning into oncoming cyclists/vehicles.	Fairfax Road / Cromwell Crescent loop to be included as a local link.
C48	Make the bridge on the NCN64 a usable / better experience for people walking with pushchairs or wheeled cases (to the train station). The bridge surface is poor, in a state of disrepair and this area is usually severely overgrown. The vegetation reduces path below 1m (from about 2.5m). It makes safe walking / cycling difficult.	NCN Route 64, between Kettering Road and Rockingham Road, to be included as a local link.
C54	Cycleway / footway link from Welland Park Road to Millennium Mile is well used and although it is shared by cyclists, walkers, and wheelers, it is perfectly adequate.	To be included as a future local link.
C55	Recommend that the parking lane on Fairfax Road between Rupert Road to Western Avenue to Stuart Road is re-purposed as a 3.0m wide cycleway. Parked cars on the carriageway will create natural traffic calming and reduce speeds.	Fairfax Road / Cromwell Crescent loop to be included as a local link.
C58	The alleyway is of substandard width and is currently prohibited to cycling, but it is a well-used link to town. Resurface the alleyway and remove the prohibition of cycling order - cyclists will continue to use this route, and the prohibition of cycling will never be enforced. Leicester City has erected signs saying "cyclists: thank you for slowing down", and this would be a pragmatic solution - cyclist and pedestrians have to learn to live with each other.	The alleyway between Stuart Road and Abbey Park Road (Footpath A107) to be included as a future local link.
C59	Between Western Avenue and Fairfax Road there is a 3.0m wide parking lane and 2.0m footway. Recommend that the parking lane is re-purposed as a 3.0m wide cycleway. Parked cars on the carriageway will create natural traffic calming and reduce speeds.	Stuart Road to be included as a local link.
C62	Fairfax Road (north of Western Avenue) to be added as a local link so that the new sections added connect well with the rest of the cycling network.	Fairfax Road, between Western Avenue and Stuart Road, to be included as a link.
C63	Rainsborough Gardens (section connecting to Cromwell Crescent) to be added as a local link so that the new sections added connect well with the rest of the cycling network.	The section of Rainsborough Gardens that connects to Cromwell Crescent to be included as a link.

5.2.2. Figure 33 shows the spatial distribution of the cycling map amendments summarised in Table 11.

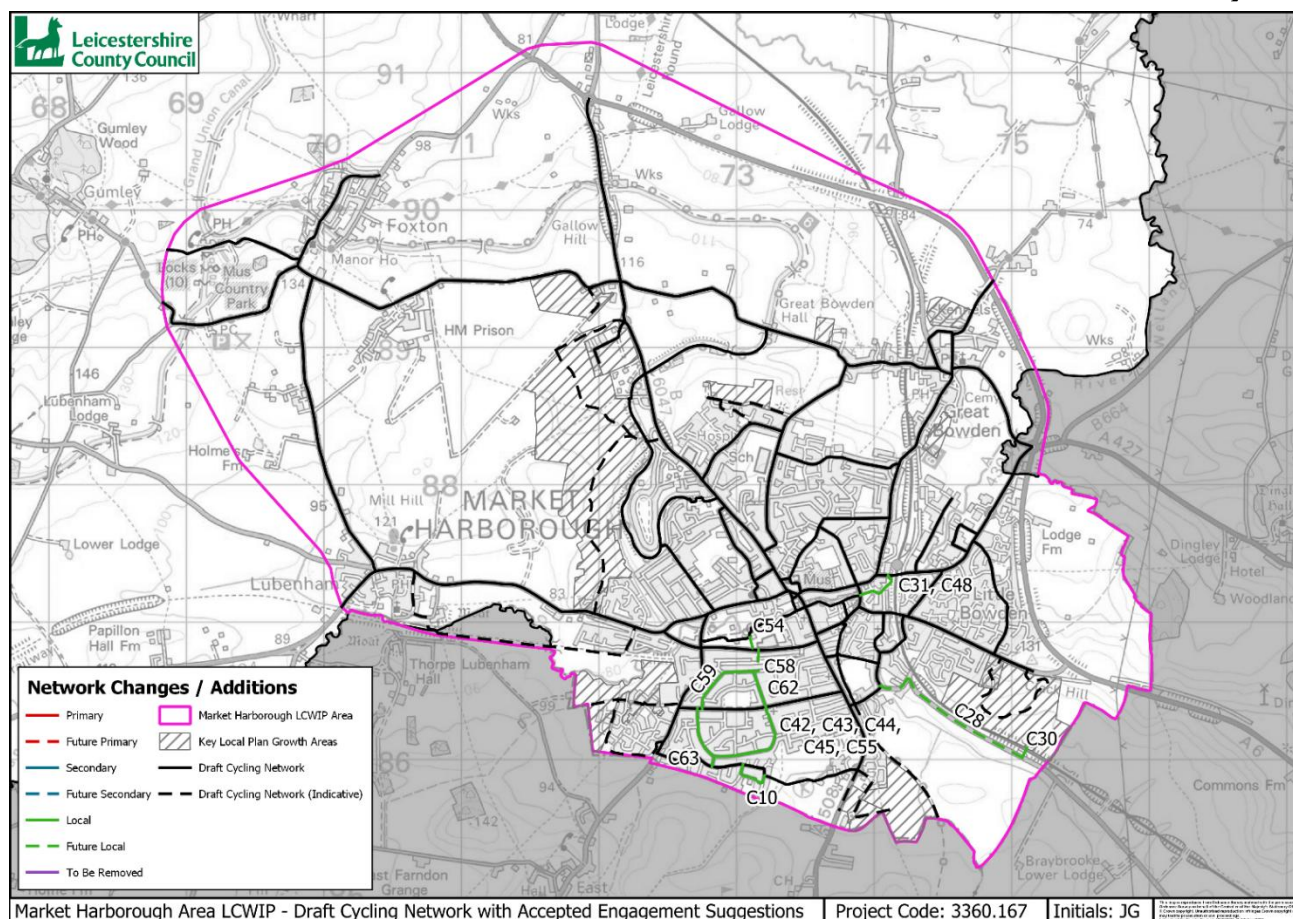


Figure 33. Draft Cycling Network Map with Accepted Engagement Suggestions

Table 12. Agreed Changes to the Draft Walking Network Map

Ref	Request	Resulting Action
W3	Gartree to Wellington Place. Footpath is currently overgrown near showground and back of industrial estate and is often impassable. Needs to be maintained to allow access to Lubenham loop walk. Connects Gartree with Market Harborough and would allow residents to walk instead of driving.	Footpath A25 to be included as a future link.
W10	Better walking route.	Footpath A26, between the future development and Harborough Road, to be included as a link.
W15	Much better route than main road here. Use the existing lane to get to the train station away from traffic. Needs better lightning as current lightning is broken.	Permissive path between Kettering Road and Rockingham Road to be included as a link.
W16	Much better route than main road towards town. No traffic and easy access, bridge already over the river. Better lightning needed as current lightning is broken.	Permissive path between Kettering Road and Rockingham Road to be included as a link.
W21	I am registered blind and walk to the station along this section of footpath behind Lidl. It is narrow and has overgrown vegetation, and the surface of the raised walkway is poor.	Permissive path between Kettering Road and Rockingham Road to be included as a link.
W25	Very poorly surfaced public footpath behind Kimble close running from harvest road.	Footpath A25 to be included as a future link.
W26	Poor surfacing with many trip hazards to public footpath on Wellington Place.	Footpath A25 to be included as a future link.
W31	Footpath A58 is very well used by Farndon Fields residents, Welland Park Academy students, dog walkers etc. Ongoing maintenance will become an increasing issue. Grass is gradually encroaching on the path and reducing the original 3.0m width. The narrow section near the end of Rugby Close gets overgrown, and residents regularly clear this of brambles, nettles etc.	Footpath A58 to be included as a link.

W33	Provide better cycling and walking links to Welland Park Academy and Farndon Fields Primary School.	Ritchie Park / Argyle Park / Vaughan Close / Rainsborough Gardens loop to be included as a link.
W34	Improve walking and cycling paths along the road to Braybrooke. The traffic on this road is often travelling at high speed and this deters cycle/scooter journeys between Braybrooke and Market Harborough.	Braybrook Road / Harborough Road to be included as a future link up to the future development.
W35	The new Davidsons Bowden Oaks site needs to Harborough Rd (Braybrook) connect via a cycling and walking route through the existing railway tunnel as per the site planning permission.	The tunnel between Braybrook Road and the future development to be included as a future link.
W36	Alleyway between Stuart Road and Welland Park Road to be added to the walking network to increase network density in this area.	The alleyway between Stuart Road and Abbey Park Road (Footpath A107) to be included as a link.
W37	Stuart Road to be added to the walking network to increase network density in this area.	Stuart Road to be included as a link.
W38	Fairfax Road / Cromwell Crescent loop to be added to the walking network to increase network density in this area.	Fairfax Road / Cromwell Crescent loop to be included as a link.
W39	Fairfax Road (north of Western Avenue) to be added as a link so that the new sections added connect well with the rest of the walking network.	Fairfax Road, between Western Avenue and Stuart Road, to be included as a link.
W40	The alleyway between Stuart Road and Farndon Road to be added as a link so that the new sections added connect well with the rest of the walking network.	The Alleyway between Stuart Road and Farndon Road to be included as a link.
W41	Rainsborough Gardens (section connecting to Cromwell Crescent) to be added as a link so that the new sections added connect well with the rest of the walking network.	The section of Rainsborough Gardens that connects to Cromwell Crescent to be included as a link.
W42	The alleyway between Rainsborough Gardens and Cromwell Crescent to be added as a link so that the new sections added connect well with the rest of the walking network.	The alleyway between Rainsborough Gardens and Cromwell Crescent to be included as a local link.

5.2.3. Figure 34 shows the spatial distribution of the walking map amendments summarised in Table 12.

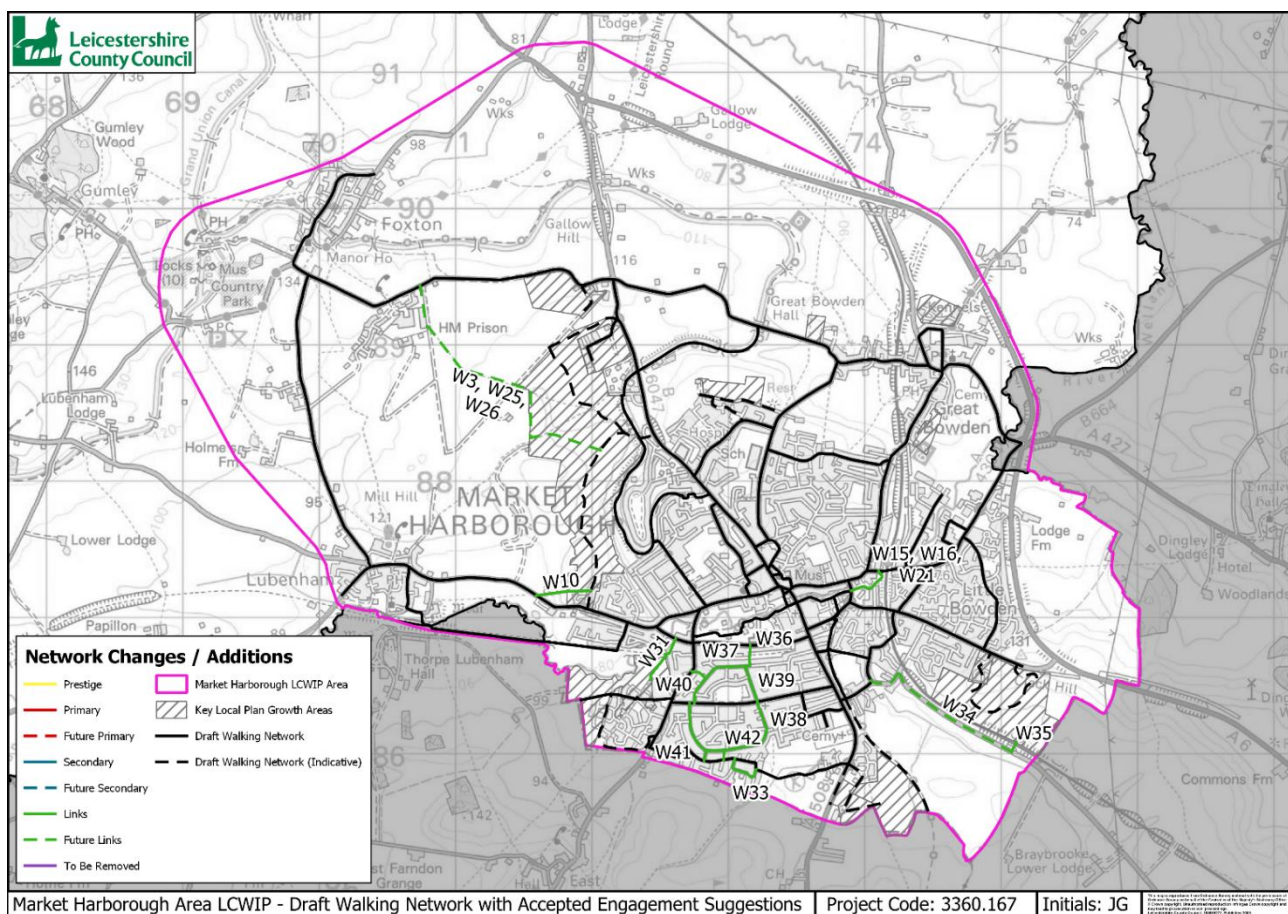


Figure 34. Draft Walking Network Map with Accepted Engagement Suggestions

6. Final Network Plans and Next Steps

6.1. Cycling and Walking Network Plans

6.1.1. Figures 35 and 36 show the final cycling and walking network plans to be taken forward to the next phase of the Market Harborough Area LCWIP, respectively. The plans highlight several priority areas / corridors that have emerged in relation to the Market Harborough LCWIP study area, including:

- Market Harborough Town Centre
- Market Harborough Town Centre to Market Harborough Railway Station
- Springfield Retail Park
- Great Bowden Road linking the Town Centre and Great Bowden.
- Arterial routes to / from the Town Centre – A4304 (High Street, The Square, St. Mary's Road, Rockingham Road, and Lubenham Hill), Kettering Road, A508 (Northampton Road), Farndon Road, Welland Park Road, and Coventry Road.

6.2. Next Steps

6.2.1. The cycling and walking network plans will be utilised by the project team to enable auditing of the existing cycling and walking networks and designing of concept schemes where infrastructure improvements are needed.

6.2.2. The long-term aspiration is to deliver these cycling and walking networks in their entirety as funding becomes available. Once concept schemes have been developed, the next step will involve prioritising the cycling and walking infrastructure improvements into three categories:

- Short term – improvements which can be implemented quickly or are under development
- Medium term – improvements where there is a clear intention to act, but delivery is dependent on further funding availability or other issues
- Long term – more aspirational improvements or those awaiting a defined solution

6.2.3. Scheme prioritisation will be undertaken using a scoring table based on 5 principal areas: effectiveness, attractiveness, policy, economic and deliverability. This will include undertaking an economic appraisal of proposed cycling and walking schemes using the Government's [Active Mode Appraisal Toolkit](#) (AMAT). An economic appraisal will help to identify which improvements are more likely than others to provide high value for money.

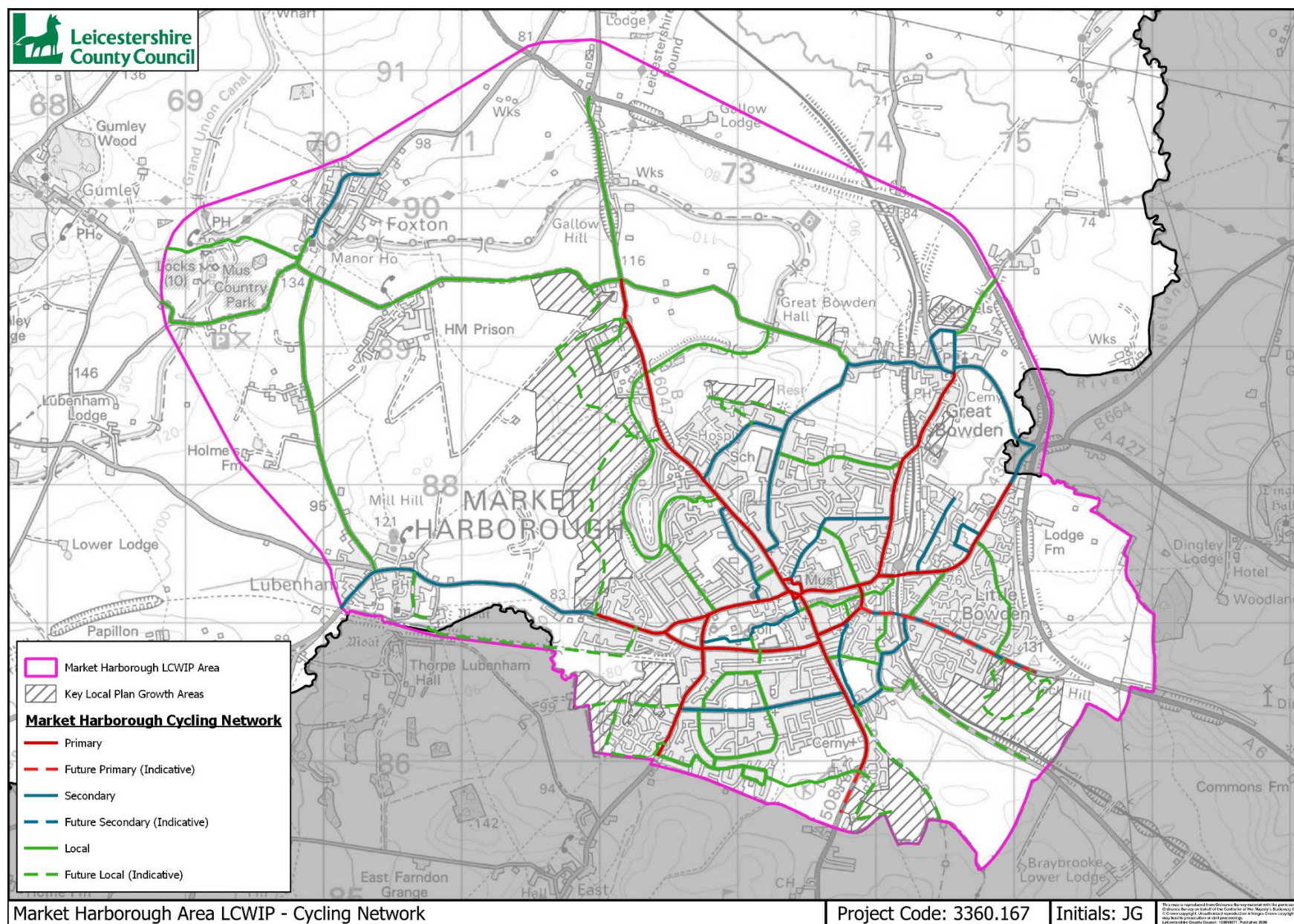


Figure 35. Cycling Network Plan

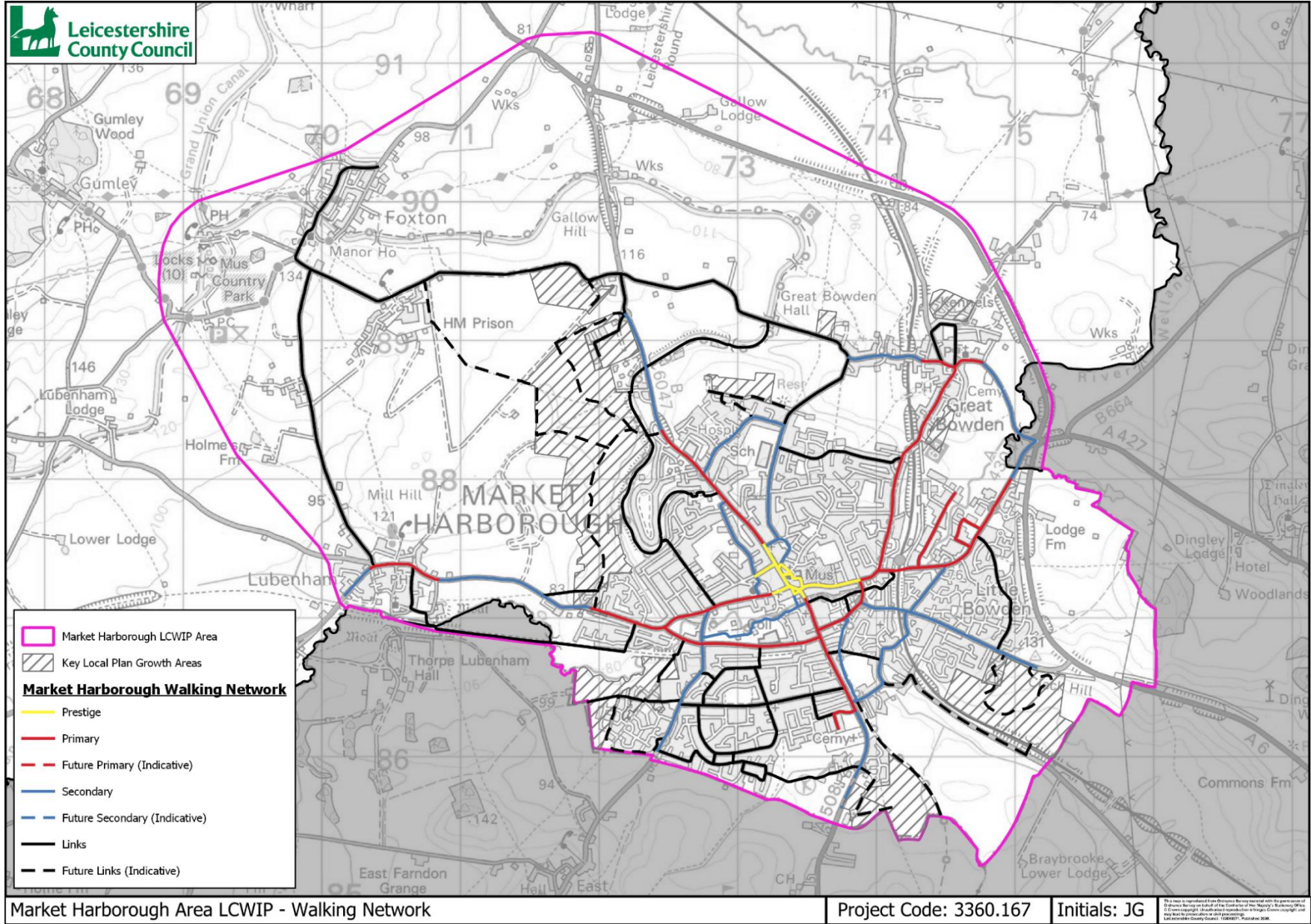


Figure 36. Walking Network Plan

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