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Hemel Hempstead Sustainable Transport Study

Dacorum Borough Council

Supporting the Local Plan to 2041 and Hemel Garden Communities

Local Plan Public Consultation - 2024

Quality information

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Introduction

1. Introduction

1.1 About Hemel Hempstead

1.1 The town of Hemel Hempstead is located in the south-west of Dacorum Borough, bordering St Albans and City District Council and lies on the western side of Hertfordshire.

1.2 Hemel Hempstead is the largest settlement in Dacorum and the second largest in Hertfordshire with a population of around 96,000. Lying in the Gade Valley, at the edge of the Chiltern Hills, it expanded rapidly as a designated New Town from the 1950s, initially to accommodate some of the population overspill from London.

1.3 Hemel Hempstead has been developed as a largely self-contained town with strong neighbourhoods supported by local centres, open spaces, and local jobs that support around 60% of its residents.

1.4 The Town Centre is located in the south western part of Hemel Hempstead, and comprises a main shopping high street and two shopping centres which house a mix of national chains and independent retailers.

1.5 The key areas and suburbs of Hemel Hempstead include the Old Town which is located a short distance north of the town centre and is flanked on one side by Gadebridge Park. The Old Town is clustered around an historic high street with mainly independent retailers.

1.6 Apsley is located on the south-western side of the town and is another older part of Hemel Hempstead and includes its own local high street, as well as being home to most of the town's large format retail parks and a large supermarket.

1.7 Maylands Business Park is a predominantly commercial area located on the eastern side of the town, close to the M1 motorway. It is home to more than 650 businesses employing over 20,000 people[1].

1.8 Neighbourhoods encircling the town centre include Boxmoor, Adeyfield and Bennetts End.

1.9 As the town has continued to grow over the years, new estates and suburbs have been developed which are located further away from the town centre, including Chaulden, Warners End and Gadebridge to the west, and Grovehill and Woodhall Farm to the north.

1.10 Just over 1km to the east of the Town Centre is Jarman Park which is a large retail and leisure destination including multiplex cinema, skating rink, climbing and skatepark, and indoor ski slope.

1.11 The town has some densely populated areas close to the centre and within walking distance of amenities and transport links, and some less densely populated areas predominantly towards the edge of the town with fewer transport links, such as Cupid Green and Woodhall Farm. However, a significant proportion of existing homes are located less than 3km from the town centre, and the vast majority within 5km of the major employment area Maylands Business Park.

1.12 Yet the town has a clear distinction between the neighbourhoods where people live and the relatively concentrated places where they work. Hemel Hempstead is a strong self-sustaining economy with over 60% of residents living and working in the town and a relatively low proportion of residents working in London and other areas.

1.13 In terms of centre-to-centre distance from other large settlements, St Albans lies around 10km to the east, Watford 11km to the south and Luton 15km to the north. Smaller settlements lie closer by, including Kings Langley (4km), Bovingdon (5km), Berkhamsted (6.5km), Redbourn (7.5km), Chesham (11km) and Harpenden (11km). Hemel Hempstead is approximately 36km from the centre of London.

[1] https://www.herts-ig.co.uk/commercial-space/hemel-hempstead/maylands-business-park/

1.14 Small villages, hamlets and semi-rural neighbourhoods lie close to the edge of Hemel Hempstead but are physically separated by countryside, including Felden, Bourne End, Potten End, Piccotts End and Pimlico.

1.15 The Grand Union Canal routes through Hemel Hempstead, connecting London, Birmingham and the East Midlands.

1.16 As the location for a significant development (Hemel Garden Communities), Hemel Hempstead was awarded Garden Town status in 2019.

1.2 Local transport network

1.17 Hemel Hempstead has two rail stations on the West Coast Main Line, Hemel Hempstead and Apsley, in relatively close proximity to each other (<2.5km), offering regular services via London Northwestern Railway towards Watford and London Euston to the south and Tring, Leighton Buzzard and Milton Keynes to the north.

1.18 As the railway passes along the western edge of the town, both stations are somewhat disconnected from the town centre and large parts of the town, creating a key severance issue for sustainable and active travel access to rail. Hemel Hempstead station is located approximately 2km southwest of the town centre, representing a 25-minute walk or 8-minute cycle. Apsley station is located around 2.4km from the town centre in the southern corner of Hemel Hempstead, representing a 33-minute walk or 8-minute cycle. There are currently no on-carriageway facilities for cyclists for either trip.

1.19 There are around twenty-three bus routes which run through and within Hemel Hempstead, with many operated by Arriva, Red Rose Travel, Red Eagle Buses. There is an infrequent long-distance coach operated by National Express both connecting to Heathrow Airport. National Express route 707 also connects to Birmingham, Coventry, Northampton, and Luton/Luton Airport prior to Heathrow (many more coaches bypass Hemel Hempstead on the M1 motorway).

1.20 HertsLynx (a 3 year pilot scheme) also provides connections to Hemel Hempstead from the surrounding rural area on an on-demand basis.

1.21 All of Hemel Hempstead's housing estates are served by buses with the main thoroughfares for inter-urban bus routes including the A414, A4251 and B4505.

1.22 The M1 and A41 run in a north-south direction either side of the town with the A414 bisecting the town on an east-west orientation connecting the M1 to the east at Junction 8 (and continuing onwards via Junction 7 towards St Albans and Hatfield) and the A41 to the west.

1.23 The A4251 runs parallel to the A41 and is a local route connecting Hemel Hempstead with Berkhamsted and Tring to the north, and Kings Langley to the south. It runs past both railway stations and through the Apsley area of the town.

1.24 The M25 is located around 3km to the south of Hemel Hempstead, accessed via both the M1 and A41.

1.25 Other key town roads include:

- A4146 Leighton Buzzard Road which runs north-south into the Town Centre and connects mainly villages in Hertfordshire and extending to Leighton Buzzard (outside of the town it is designated the B440).
- Link Road / B487 Redbourn Road/Hemel Hempstead Road which runs across the northern part of the town linking with Redbourn and Harpenden.
- A4147 Redbourn Road / Maylands Avenue / Leverstock Green Way / Hemel Hempstead Road which runs north-south through the Maylands and Leverstock Green areas of the town and onwards towards St Albans.

- B487 Queensway which connects the A4146 at the northern end of the town centre to the Maylands area.

1.26 Several major road routes converge in the Town Centre at the Plough ('Magic') Roundabout which comprises six interconnected mini roundabout junctions.

1.27 There is no main bus station in the town, but instead several large clusters of stops and local interchanges, one located at the northern end of the Town Centre on Bridge Street and the Marlowes, another adjacent to the Riverside Shopping Centre and one at Hemel Hempstead station.

1.28 The Nickey Line, which is a former railway corridor linking Hemel Hempstead, Redbourn and Harpenden now serves as a largely off-road route for walking and cycling. It forms part of the National Cycle Network and comprises a segment of route 57 which connects Oxfordshire and Hertfordshire.

1.29 **Chapter 3** sets out further detail on the existing transport network and services.

1.3 About this transport study

1.30 The Hemel Hempstead Transport Study considers planned development – both economic and housing – as part of Dacorum's Local Plan to 2041.

1.31 The study forms part of the Local Plan's evidence base and builds upon the town's current needs and development layout to propose a series of active and sustainable travel interventions designed to provide connectivity and relieve pressure on the town's transport network, delivering on ambitious targets for sustainable travel mode share by 2050.

1.32 The study also considers planned growth as part of the overarching Hemel Garden Communities which straddles the boundary with neighbouring St Albans City and District and has a longer plan horizon of 2050.

1.33 The Hemel Hempstead Transport Study covers an area encompassing both the existing settlement of Hemel Hempstead and new strategic development sites within Dacorum's and St Albans' boundaries which form part of the Hemel Garden Communities. The sustainable transport solutions proposed will provide opportunities for travel for people within Hemel Hempstead, as well as to neighbouring areas such as Redbourn, Harpenden, St Albans, Kings Langley and Berkhamsted. The broad study area is shown in **Figure 1**.

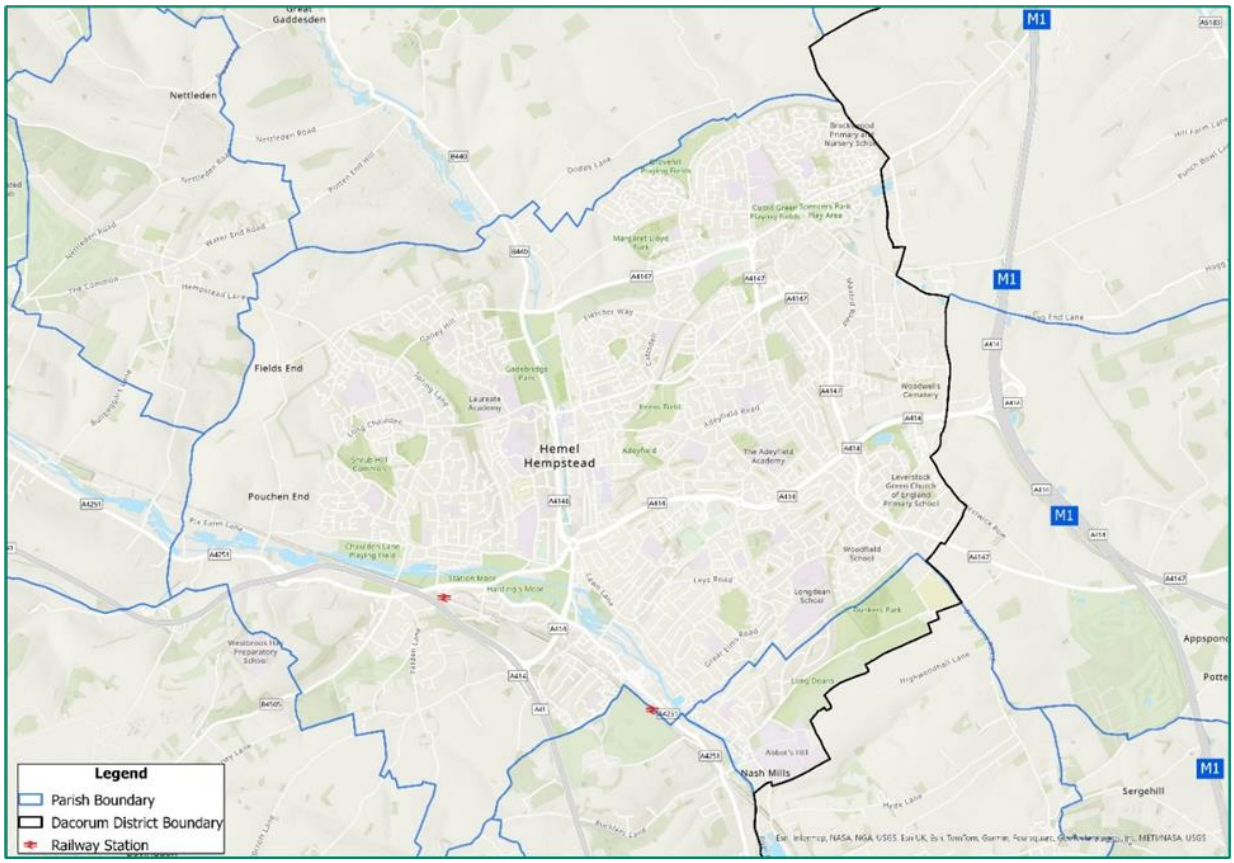


Figure 1 - Broad Study Area

1.4 The transport vision for Hemel Hempstead

1.34 Much of the planned approach to growth and change in Hemel Hempstead will be guided by the Hemel Garden Communities (HGC) programme which seeks to transform and grow the town.

1.35 The programme provides a delivery strategy for Hemel Hempstead and the proposed locations for development across two administrative areas, Dacorum Borough Council (DBC) and St Albans City and District Council (SADC), which together make up HGC.

1.36 The Hemel Gardens Communities 2050 Transport Vision and Strategy (TV&S) contains targets for at least 40% of all trips from or to Hemel Hempstead, and 60% of all trips from or to Hemel Garden Communities neighbourhoods, to be undertake by sustainable modes of travel. These targets are illustrated in **Figure 2**.

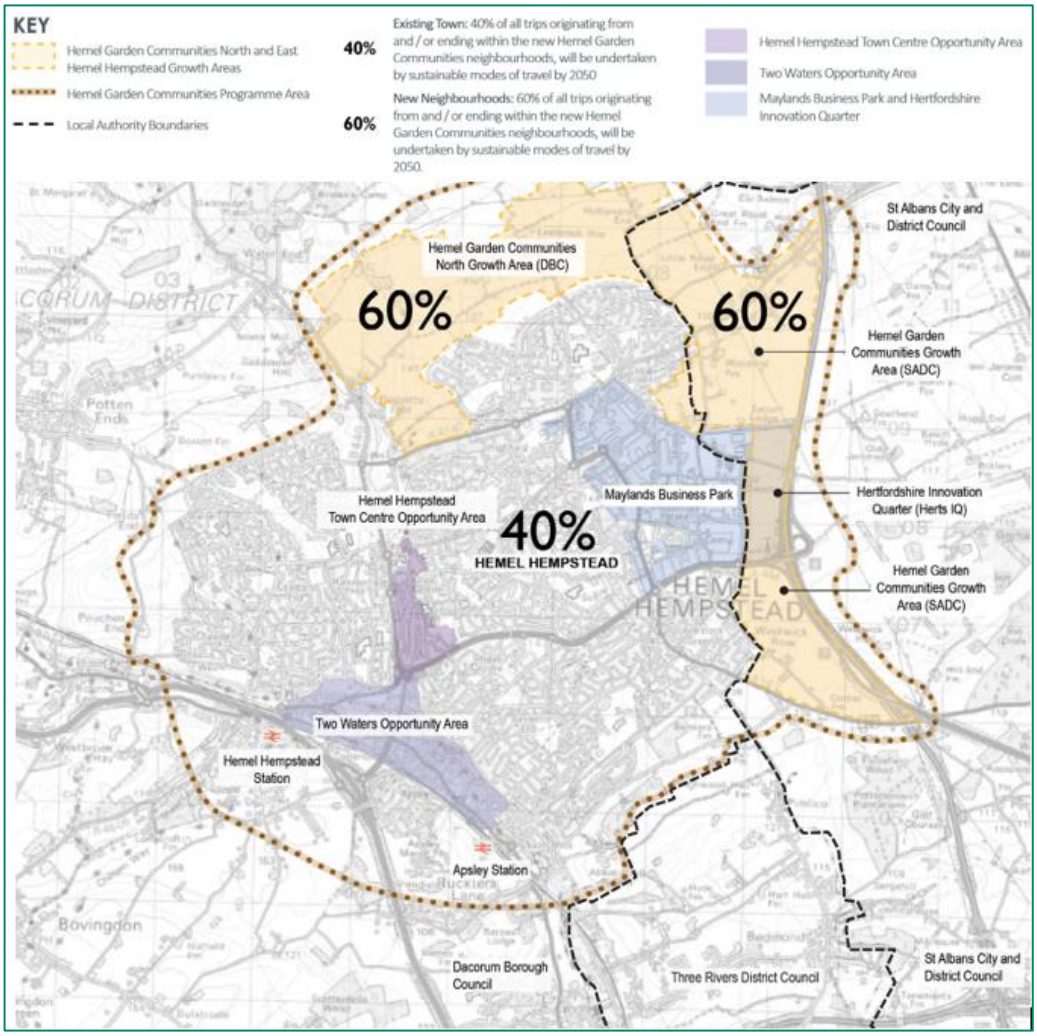


Figure 2 - Transport vision for Hemel Garden Communities

Source: HGC Transport Vision & Strategy

1.37 Improved active and sustainable travel networks in Hemel Hempstead can provide viable alternatives to the private car and deliver healthy and vibrant neighbourhoods. Currently, over half of journeys within Hemel Hempstead are under 5km, if not under 3km. Yet, these short journeys are predominantly made by car instead of active and sustainable modes such as walking, cycling and using public transport.

1.38 Low frequencies and perceived poor reliability of local bus services (which can be affected by traffic congestion) means that it is not a primary choice for most people. The vision for Hemel Hempstead is for a connected active and public transport network, facilitated by a system of mobility hubs, to make it easier to move by foot, cycle and bus to key destinations. This study will detail interventions aligned with this vision, linked to planned developments.

1.39 Maximising use of existing transport corridors for all modes can provide additional capacity for movement and relieve stress from the network. The proposed network should provide safe, accessible routes by prioritising walking, cycling and passenger transport movement ahead of car use. Cars will still be able to use the roads in Hemel Hempstead, but they might not be the most direct or convenient option for shorter journeys.

1.40 For Hemel Hempstead to meet its growth aspirations, there is a need to embrace and maximise opportunities for new modes of transport, technologies and innovations. There are several areas of innovation that transport investment is likely to focus on, as defined in the HGC Transport Vision and Strategy, including:

- **Future Mobility Trends** – including emerging micro-mobility options such as e-bikes

- **Mobility Hubs** – places which allow for interchange between different forms of transport
- **Hertfordshire Essex Rapid Transit (HERT)** – a new east-west passenger transport system connecting Hemel Hempstead with St Albans and beyond to Harlow, along the A414 transport corridor

1.5 Planned housing and employment

1.41 Dacorum Borough Council's Local Plan to 2041 sets out the Council's long term planning framework for the borough. Its role is to establish the overall pattern of development and outlines how the Council will address local and strategic development needs including housing, employment, leisure, and retail provision. It covers the physical aspects of location and land use but also addresses other factors that make places attractive, sustainable and successful, such as social and economic matters.

1.42 By the end of the plan period Dacorum Borough Council plans to have introduced 10,501 dwellings (including windfall sites and commitments) and approximately 1,259 jobs in Hemel Hempstead, alongside supporting infrastructure such as schools and community facilities. Taking into account the whole of Hemel Garden Communities, including HGC-related growth proposed within the neighbouring St Albans City and District area, a total of around 19,500 homes are proposed up to 2050.

1.43 If the ambitious targets for walking, cycling and public transport use are to be met, facilities for these modes within the planned developments will be as critical as the infrastructure provided between the developments and the rest of the town.

1.6 Document structure

1.44 This document identifies sustainable and deliverable improvements to the local transport network and services that both help to facilitate the planned new homes and jobs, but also address more cumulative impacts that may occur as more people travel within and beyond Hemel Hempstead.

1.45 The rest of the document is structured as follow:

- **Chapter 2** - Methodology
- **Chapter 3** - Evidence summary
- **Chapter 4** - Proposed Local Plan growth
- **Chapter 5** - Transport Vision and Strategy
- **Chapter 6** – Travel interactions and key challenges
- **Chapter 7** - Proposed interventions
- **Chapter 8** – Estimated costs, phasing, delivery and funding
- **Chapter 9** - Conclusions

Chapter 2
Methodology

2. Methodology

2.1 Overview

2.1 This study follows the process set out in the diagram below. This process gathers together available evidence, building on existing studies and work undertaken to establish the overarching transport challenges, vision and strategy for growth in Hemel Hempstead.

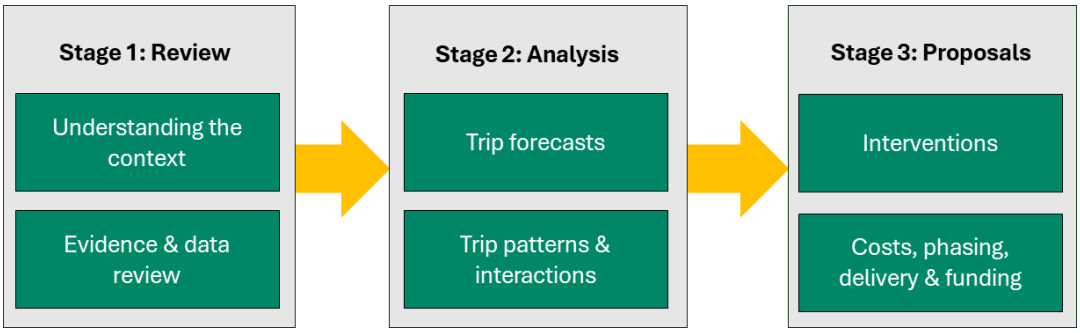


Figure 3 - Study methodology overview

2.2 Stage 1: Review

2.2 Significant work has been undertaken already to understand and assess the transport conditions and opportunities in Hemel Hempstead. The following documents, studies and events (shown in **Figure 4**) have all played an important role in the build up to this Transport Study:

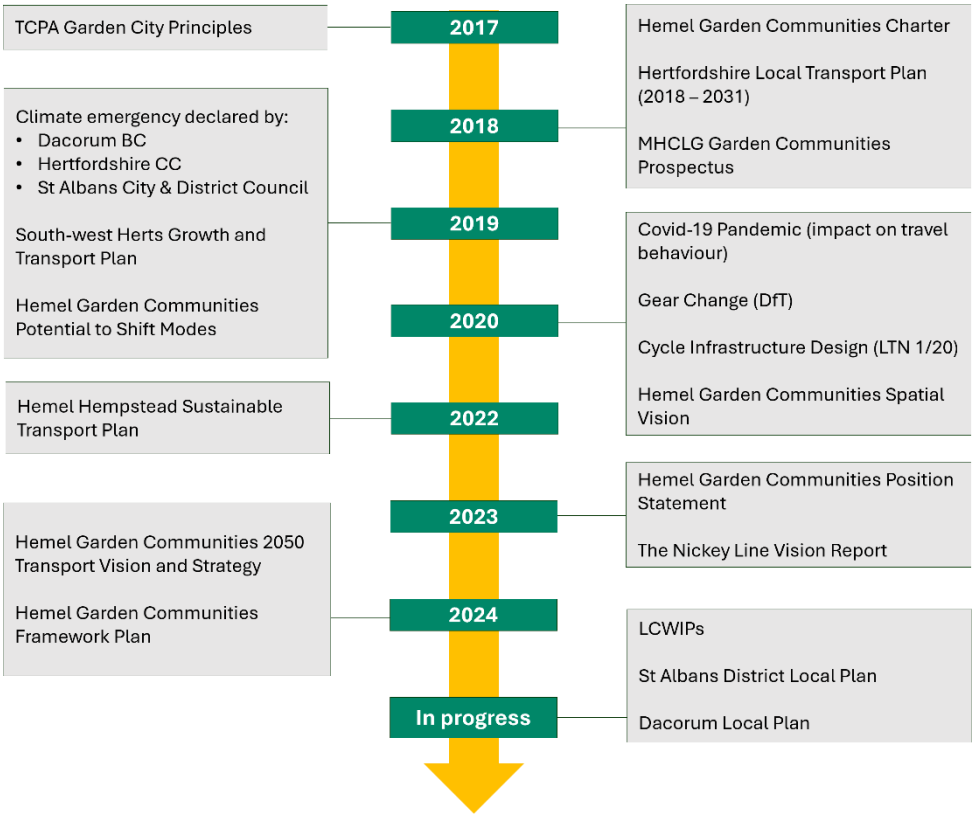


Figure 4 - Other documents relevant to this transport study

2.3 In conjunction with reviewing previous studies, additional data and evidence has been used to inform the development of this study, much of which is discussed in **Chapter 3**.

Dacorum Local Cycling and Walking Infrastructure Plan

2.4 At the time of writing, a Local Cycling and Walking Infrastructure Plan (LCWIP) is in development which covers the whole of Dacorum borough. The approach to developing the Transport Study has been designed so that it can complement and sit alongside the findings and proposals that are expected to emerge from the LCWIP.

2.3 Stage 2: Analysis

2.5 A key focus of the study is to understand how people will move from the proposed Local Plan development sites to local trip attractors and other destinations outside of Hemel Hempstead.

2.6 The diagram below shows the six steps followed to identify trip patterns for each proposed site, establish potential movements and transport mode options and assess the significance of each, to determine the scale of transport interventions required. The proposed growth is detailed in **Chapter 4**.

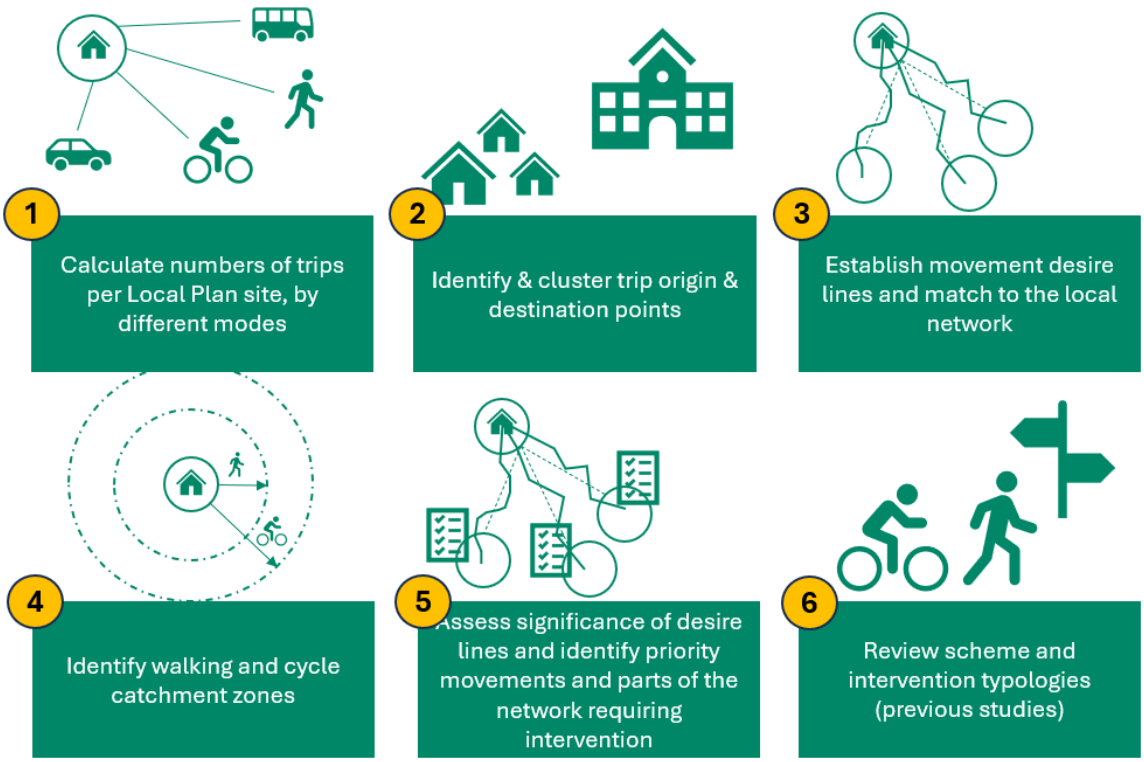


Figure 5 - HHTS trip, route and mode assessment process

Trip forecasts

2.7 The method has applied trip rates (derived from TRICS which is a system of trip generation analysis) to gauge the numbers of trips which could be generated by each site including by mode. Mode split can also be informed by TRICS and can also take into account the proportions of sustainable travel trips as summed in previous Hemel Garden Communities evidence work, but taking into account whether this could be achieved in all of the town's development sites.

2.8 This approach is not as detailed as that typically applied for a Transport Assessment that would be produced for a planning application. Furthermore, for simplicity the same trip generation assumptions have been applied across most sites but the method does take into consideration broad location of sites, e.g. whether a development site is centrally located within the town, or on the outskirts of the town, as this does have an effect on trip rates and mode share.

Trip patterns & interactions

2.9 Key trip attractors across Hemel Hempstead as well as arterial routes leading out of Hemel Hempstead towards destinations elsewhere have been identified. Trip attractors include Hemel Hempstead town centre; the town's two railway stations; local neighbourhood centres; other suburban high streets and significant parades of shops; retail parks; supermarkets; leisure centres; schools and colleges; significant employment clusters; the town's hospital; and other major medical clusters.

2.10 Trip attractors have been grouped into clusters where they are very closely spaced to each other.

2.11 Consideration has been given to Dacorum's emerging LCWIP which at the time of writing is in preparation. Closely spaced trip attractors will be grouped into clusters on the basis the same or similar routes (streets, Public Rights of Way and other walking and/or cycling routes) would be used to reach them.

2.12 Desire lines between each Local Plan development site and trip attractor cluster have been identified using GIS software. These desire lines represent the shortest distance path between sites and trip attractor clusters regardless of the mode used.

2.13 Desire lines between Local Plan sites and key trip attractor clusters have been compared and matched to the nearest parts of the Key Network, Local Network and Greenways which have been defined through the Hemel Garden Communities Sustainable Transport Plan and carried through to the 2050 Transport Vision and Strategy which is summarised in **Chapter 5**.

2.14 This step has considered different modal priorities including whether the most suitable route for people walking, wheeling, and cycling will be different to those driving a car or taking the bus. In some cases, more than one route between a site and trip attractor cluster has been considered, if for example each route offers different modal priorities.

2.15 Facilitating walking and cycling trips is a key priority. Establishing walking and cycling zones around each development shows which clusters of attractors can be easily reached by active modes, and what kind of active mode facilities to prioritise for each route.

2.16 The findings from Stage 2 are included in **Chapter 6.**

2.4 Stage 3: Proposals

2.17 The third main stage of the study comprises identification of interventions required to address the trip patterns and gaps in infrastructure and network facilities identified in Stages 1 and 2.

2.18 Interventions should be aligned to the overarching Key and Local Network principles described earlier and typologies of schemes which align with the two network principles. The intention is that interventions presented in this study complement an additional set of interventions identified in the Dacorum LCWIP.

2.19 Interventions are specified in sufficient detail to meet the requirements of the Local Plan process including high-level costings. The proposed interventions have also been attributed to Local Plan sites in a manner that is intended to meet S106 planning obligation tests that are necessary to make development acceptable in planning terms, these being:

- necessary to make the development acceptable in planning terms;
- directly related to the development; and
- fairly and reasonably related in scale and kind to the development.

2.20 Information on the phasing of interventions is also provided, to help inform the Local Plan.

2.21 The interventions are described in **Chapter 7**, and the costings and phasing of delivery is described in **Chapter 8**.

Chapter 3
Evidence Summary

3. Evidence summary

3.1 Introduction

3.1 To understand the transport challenges and opportunities in Hemel Hempstead, the current and future local context and conditions have been reviewed. The following topics have been considered:

- Socio-economic context;
- Transport and land use;
- Commuting patterns;
- Travel to education;
- Place and movement;
- Environment; and
- Planned developments.

3.2 Socio-economic context

3.2 Hemel Hempstead has a population of around 96,000 (Census 2021 estimates[2]) and is the second largest settlement in Hertfordshire after Watford.

3.3 Analysis of Census data indicates that Hemel Hempstead is experiencing rapid growth, with its population growing from 87,000 in 2011 to 96,000 in 2021, marking a 10% increase over this ten-year period. This growth outpaces the national average for England between 2011 and 2021, which stands at 6.5%.

3.4 Hemel Hempstead's demographic consists of 64% of people who are of working age (16 to 64), which is higher than the proportion across Hertfordshire of 60.2% and across Dacorum of 62.4%. Hemel Hempstead therefore benefits from a growing population, low unemployment, and projected job growth.

3.5 However, it also faces socio-economic challenges. Neighbourhoods including Highfield, Adeyfield, Woodhall Farm, and Grovehill, experience high levels of deprivation and worse public health outcomes than England or Hertfordshire overall. Obesity prevalence in adults in Dacorum stands at 22.9%. Addressing the link between deprivation and poor health by enhancing residents' health and wellbeing, particularly through increased walking and cycling, could reduce inequalities.

3.6 These challenges are central to developing this Transport Study, which has a particular focus on active travel and accessible transport for all. There is a strong connection between physical inactivity, active travel opportunities, and the urban environment, influencing travel choices and behaviours.

3.3 Transport and land use

3.7 Hemel Hempstead has some areas of relative densification and some areas that are more poorly connected, as is the case with most towns of this size. It has few homes currently located more than 3km from the town centre, and most within 5km of Maylands Business Park. Yet the town has a clear distinction between the many neighbourhoods where people live and the relatively concentrated places where they work which generates movements across different parts of the town.

[2] https://www.citypopulation.de/en/uk/eastofengland/hertfordshire/E63004449__hemel_hempstead/

3.8 Hemel Hempstead has a mix of residential and commercial spaces. From suburban neighbourhoods to some commercial districts, the town has a variety of living and working environments. Marlowes, the main high street, serves as the town's central hub for shopping and entertainment, complementing the residential areas.

3.9 On the east and north-eastern side of Hemel Hempstead are industrial zones and employment centres in the Maylands area. The industrial estates host warehouses and factories, providing jobs for both the local community and for people who live in other settlements including Luton. This existing concentration of industry contributes to the town's economic potential. Maylands Business Park forms part of the Hertfordshire Enviro-Tech Enterprise Zone.

3.10 The town centre is not geographically central, located in the western part of the town. Most retail facilities are predominantly situated within the town centre or in Apsley. However, leisure facilities while present in the central area of the town, are not solely concentrated there. Instead, they are spread out across various neighbourhoods throughout Hemel Hempstead. Educational facilities including primary and secondary schools are also located throughout the town, catering to the needs of its residents. West Herts College is located on the northern edge of the town centre.

3.11 There are a significant number of bus stops and interchanges throughout the town, with varying levels of service provision.

3.12 Hemel Hempstead is concentrated around the A414, which provides the main road connection in and through the town. It runs through the town connecting the A41 dual carriageway to the west, and the M1 to the east. The A41 provides access to Watford, Aylesbury and other nearby towns. The M1 provides important longer distance north-south connectivity, linking London to the Midlands and beyond to Leeds. The M1 is managed and operated by National Highways.

3.13 Much of the A414 is of a dual carriageway specification, with speed limits varying for national speed limit at the eastern-most end at the M1, down to 30mph, particularly in the town centre area. Whilst the road provides a lot of capacity for traffic, and providing a direct connection not only to the major M1 and A41 road corridors but also to the main employment area around Maylands, significantly it creates a great deal of severance for people walking, wheeling and cycling.

3.14 There are a mix of crossing facilities which are spaced apart, including at-grade uncontrolled and signal-controlled crossings, footbridges and subways.

3.15 Despite the provision of two lanes in each direction, several of the dual carriageway sections of the A414 also experience high levels of traffic congestion around key junctions including with Green Lane and Maylands Avenue.

3.16 Other key routes include the A4251, which prior to the construction of the A41 bypass, was a main through-route but still serves a very important function today, connecting Hemel Hempstead and Apsley to nearby towns and areas such as Berkhamsted, Tring and Kings Langley.

3.17 Finally, the A4146/B440 connects Hemel Hempstead to Leighton Buzzard to the north; the B487 connects to Redbourn and Harpenden; and the A4146 connects Hemel Hempstead with St Albans.

3.4 Public transport – rail

3.18 Hemel Hempstead railway station, located around 1.5km from the town centre, serves as a major transportation hub. Apsley railway station can also be used to access the town centre of Hemel Hempstead but mainly serves the southern part of the town.

3.19 Both Hemel Hempstead and Apsley are served by the West Coast Main Line which provides both semi-fast and stopping train services to Berkhamsted, Tring, Leighton Buzzard and

Milton Keynes to the north, and Watford and London Euston to the south. London Northwestern Railway is the primary operator serving both stations.

3.20 **Table 1** provides further information on parking at the train stations in Hemel Hempstead and Apsley and **Table 2** provides information on travel time to the stations.

Table 1 - Parking at train stations

Train station	No. of car parking spaces	Car park daily cost	No. cycle storage spaces
Hemel Hempstead	492	Daily peak time ticket (drive in until 10am) - £9.10 Daily after 10am, Saturday, Sunday & Bank Holidays - £5.10	200
Apsley	21	Daily ticket - £9.10	12

Source: National Rail

Table 2 - Approximate travel time to the train stations

Train station	Walk travel time from town centre	Cycle travel time from town centre	Bus frequency
Hemel Hempstead	20 minutes	7 minutes	Every 10 minutes
Apsley	30 minutes	11 minutes	Every 15 minutes

Source: Google Maps and bustimes.org

3.21 During peak hours there are very frequent trains towards London Euston (every 5-20 minutes – almost a 'turn up and go' service at certain times) with the journey taking around 30 minutes; to Tring (every 10-20mins) with the journey taking around 10 minutes; and to Milton Keynes Central (every 30mins) with the journey taking around 30 minutes.

3.22 The figure overleaf shows the total number of entries and exits for Hemel Hempstead and Apsley stations between 2019 and 2023. Both station experienced marked decreases in annual entries and exits due to the impact of COVID-19. At Hemel Hempstead station, at its lowest point it dropped to around 350,000 entries and exits from a peak of around 2 million. Both stations' footfalls have been gradually increasing since. Recent data from 2022/2023 shows around 1.3 million entries and exits at Hemel Hempstead, although this is still substantially less than pre-pandemic levels.

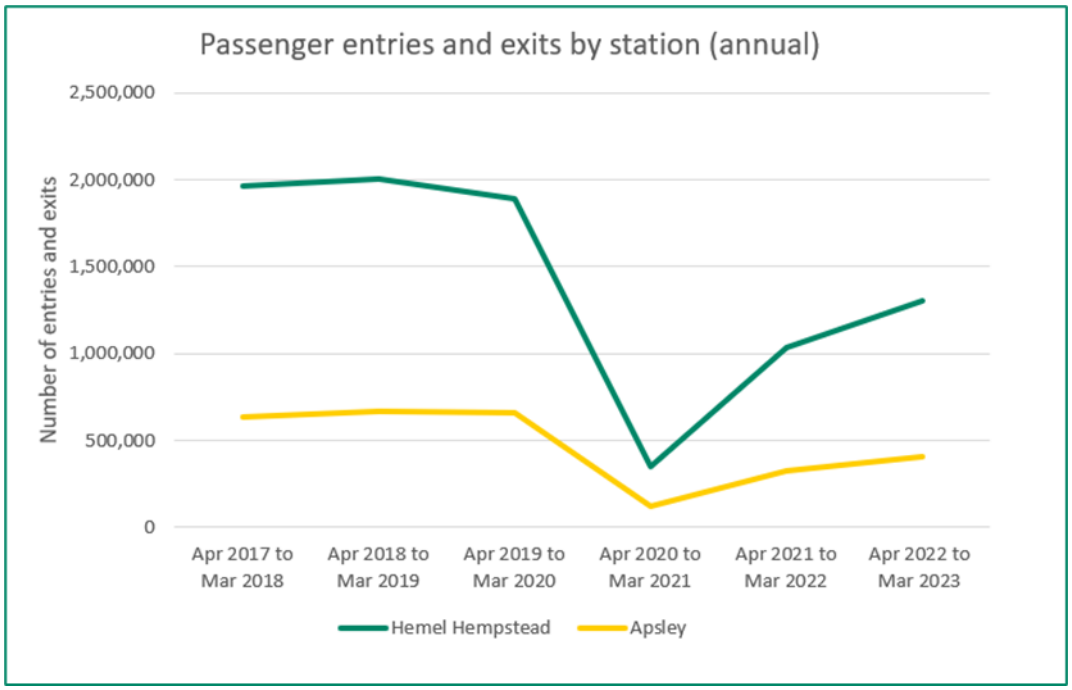


Figure 6 - Entries and exits by station.

Source: Office of Rail and Road

3.5 Public transport – Bus

3.23 **Figure 7** shows bus routes in Hemel Hempstead and surrounding areas including Kings Langley. The main bus terminating areas are Hemel Hempstead railway station, Marlowes (which is in the northern part of the Town Centre), and Riverside Shopping Centre (which is at the southern end of the Town Centre).

Figure 7 - Bus routes in Hemel Hempstead and Kings Langley.

Source: Intalink

3.24 All of Hemel Hempstead's housing estates are served by buses with the main thoroughfares for inter-urban bus routes including the A414 St Albans Road, A4251 London Road and B487 Queensway.

3.25 Other settlements which are connected via bus include High Wycombe, Aylesbury, Watford, Luton, Maple Cross, Berkhamsted, Welwyn Garden City and St Albans.

3.26 There is one long-distance coach service operated by National Express connecting to Heathrow Airport, Birmingham, Coventry, Northampton, and Luton Airport.

3.27 **Table 3** shows the frequency of bus services in Hemel Hempstead.

Table 3 - Bus service frequency (as of June 2024)

Bus Service	Frequency (weekday)	Frequency (Saturday)	Frequency (Sunday)
1	Hourly between 06:30 and 19:30	Hourly between 08:00 and 19:30	Once daily
1A	Hourly between 08:00 and 17:00	No service	Hourly between 08:00 and 17:00
2	Every 20 mins to 30 mins between 5:45 and 22:45	Every 20 mins to 30 mins between 07:00 and 22:45	Hourly between 08:30 and 09:30 and between 15:30 and 22:30. Half hourly between 09:30 and 15:30
3	Hourly between 07:40 and 19:40	Hourly between 08:40 and 19:40	Hourly between 09:30 and 19:30
4	Hourly between 06:10 and 20:30	Hourly between 07:30 and 19:30	Hourly between 08:30 and 19:30
X5	Half hourly between 05:45 and 19:15. Hourly 20:00 to 23:00	Half hourly between 07:15 and 19:10. Hourly 20:00 to 23:00	No service
20	Every 20-25 minutes between 05:00 and 18:15. Hourly between 18:15 22:15)	Half hourly between 06:15 and 14:45. Hourly between 14:45 and 22:15.	Hourly between 07:00 and 09:00 and between 16:00 and 21:00. Half hourly between 09:00 and 16:00
29, 30, 31	Daily for each bus Every 2 hours between 10.20 and 14.30	No service	No service
46	Hourly between 6.45 and 19:00	Hourly between 6.45 and 19:00	No service
51	Once daily in each direction (Tuesdays and Thursdays only)	No service	No service
207	Once daily in each direction (Friday only)	No service	No service
302	Half hourly between 05:30 and 18:15. Buses run until 23.15 between Hemel Hempstead and St Albans	Half hourly between 07:00 and 19:45. Buses run until 23.15 between Hemel Hempstead and St Albans	Hourly between 08:30 and 23:15
320	Twice daily in each direction (school days only)	No service	No service

Bus Service	Frequency (weekday)	Frequency (Saturday)	Frequency (Sunday)
322	Every 20-30 minutes between 05:30 and 22:00	Half hourly between 07:30 and 22:00	Hourly between 07:45 and 6:45
352	Every 2 hours between 07:15 and 17:30	Every 2 hours between 07:15 and 17:30	No service
501	Houry between 10:30 and 18:30 (Monday only)	No service	Houry between 10:00 and 18:00
721	Every 20-30 minutes between 07:00 and 18:45	No service	No service
H10	Hourly between 09:45 and 14:45 then at 17:15	Hourly between 08:40 and 16:40	No service
H11	Hourly between 09:30 and 13:30	No service	No service
H19	Once daily in each direction (Tuesday and Thursday)	No service	No service
ML1	Thrice daily in each direction	No service	No service

Source: bustimes.org (May 2024)

HertsLynx

3.28 HertsLynx[3] was launched in September 2021 initially operating in East Hertfordshire. In December 2023, Hertfordshire County Council extended the service to include parts of Dacorum. It is designed to infill gaps in the existing public transport provision and provide better connectivity from rural areas into the main urban areas. The service aims to increase access for residents to employment, education, healthcare, and leisure activities by improving links to and from low density, rural areas.

3.29 The service operates 07:00 – 19:00 on Monday to Friday and between 10:00 and 16:00 on weekends and bank holidays. Virtual bus stops are used as pick up and drop off locations with no timetable or any set routes. Booking is available through the HertsLynx app, booking website and by phone.

3.30 The HertsLynx service in Dacorum has an anti-competition feature built into the digital routing and booking system. This means that if a requested journey could be completed on existing public transport, a journey on HertsLynx will not be available. Instead, the app will show the alternative routes available on normal bus services.

3.31 **Figure 8** shows the virtual bus stops in the area in and around Hemel Hempstead.

[3] HertsLynx - https://www.intalink.org.uk/hertslynx-dacorum

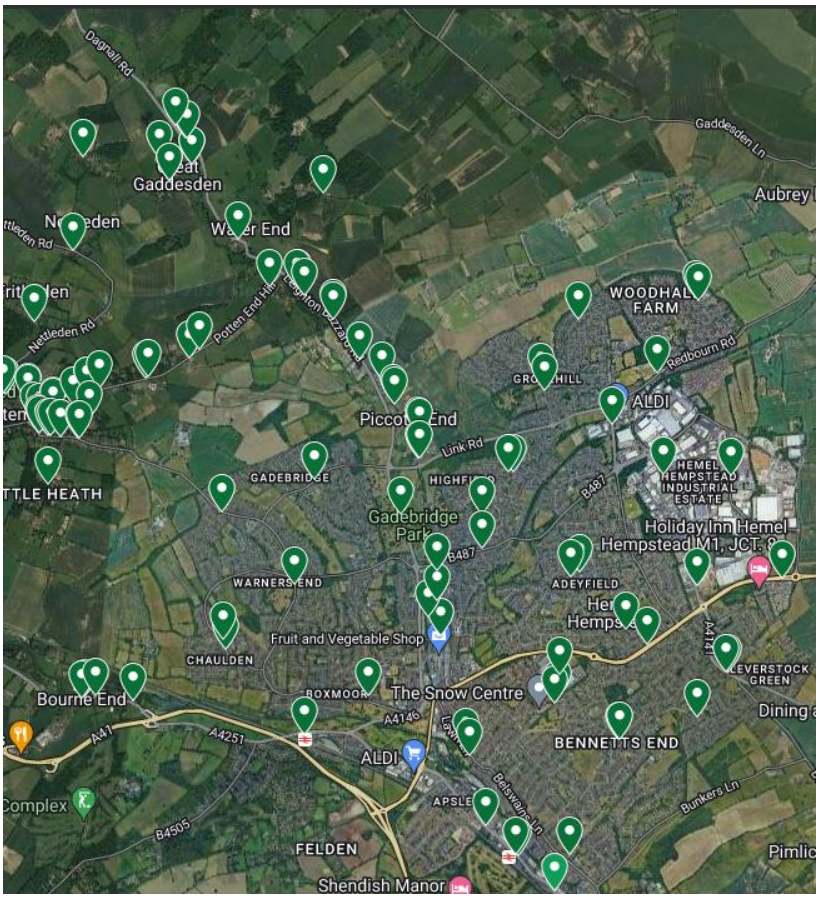


Figure 8 - HertsLynx Dacorum 'virtual' bus stops.

Source: Intalink

3.6 Active modes

3.32 Active travel facilities and infrastructure (for walking, wheeling, cycling and scooting) are fairly sporadic within Hemel Hempstead with poor continuous active travel connections in many parts of the town.

3.33 However, two connections which do act as continuous connections include the Nickey Line acting as an east (from Harpenden and Redbourn) to west (Hemel Hempstead town centre) connection. There is also the Grand Union Canal towpath which is a northwest-southwest connection running through the town.

3.34 Severance is also an issue along the A414, A4251 and A4147, with less frequent crossing points. On parts of the A414, which is formed of dual carriageway between the town centre and M1, underpasses and footbridges are provided. Along some stretches, the distance between these crossing points will lead to increased walking and cycling distances.

3.35 There is generally a significant lack of dedicated, on street cycling infrastructure across the town, however sections of off-street routes have been implemented in more recent years to improve connectivity.

3.36 As a new town, many areas of the town provide relatively wide footways and grass verges which enhance the quality of the pedestrian network. In some neighbourhoods, particularly those developed around the 1950s-1970s such as Grovehill, a network of underpasses enable pedestrians to bypass traffic in some locations, although because of their design and layout they may not be attractive to all users throughout the day.

3.37 Cars parked partially or entirely on the verge and footways appears to be prevalent across many parts of the town, which on the one hand keeps roads clear for the movement of traffic but causes significant disruption to people walking and wheeling along the footway.

3.38 A large proportion of Marlowes, the main shopping street in the town centre is pedestrianised.

3.39 In the context of active travel trips, it is notable that the steep topography in many parts of Hemel Hempstead is likely to influence choice of modes, including journeys heading towards the Town Centre and railway stations from the north, south, east and west of the town. It is likely to influence mode choice and the routes people prefer to take to get to their destinations. The gradient on routes such as Adeyfield, Warners End Road, Fletcher Way, Queensway, A414 St Albans Road and Leys Road could be prohibitive for older or younger people or those with mobility impairments.

Public Rights of Way

3.40 **Figure 9** shows the existing network of Public Rights of Way (PROWs) in Hemel Hempstead. The PROW network is far denser in the north with areas south of the A414 and west of the A4146 having comparatively fewer PROW connections. There are several PROWs over the Grand Union Canal and River Gade.

3.41 In addition to PROWs, there are many examples of alleyways and routes through parks.

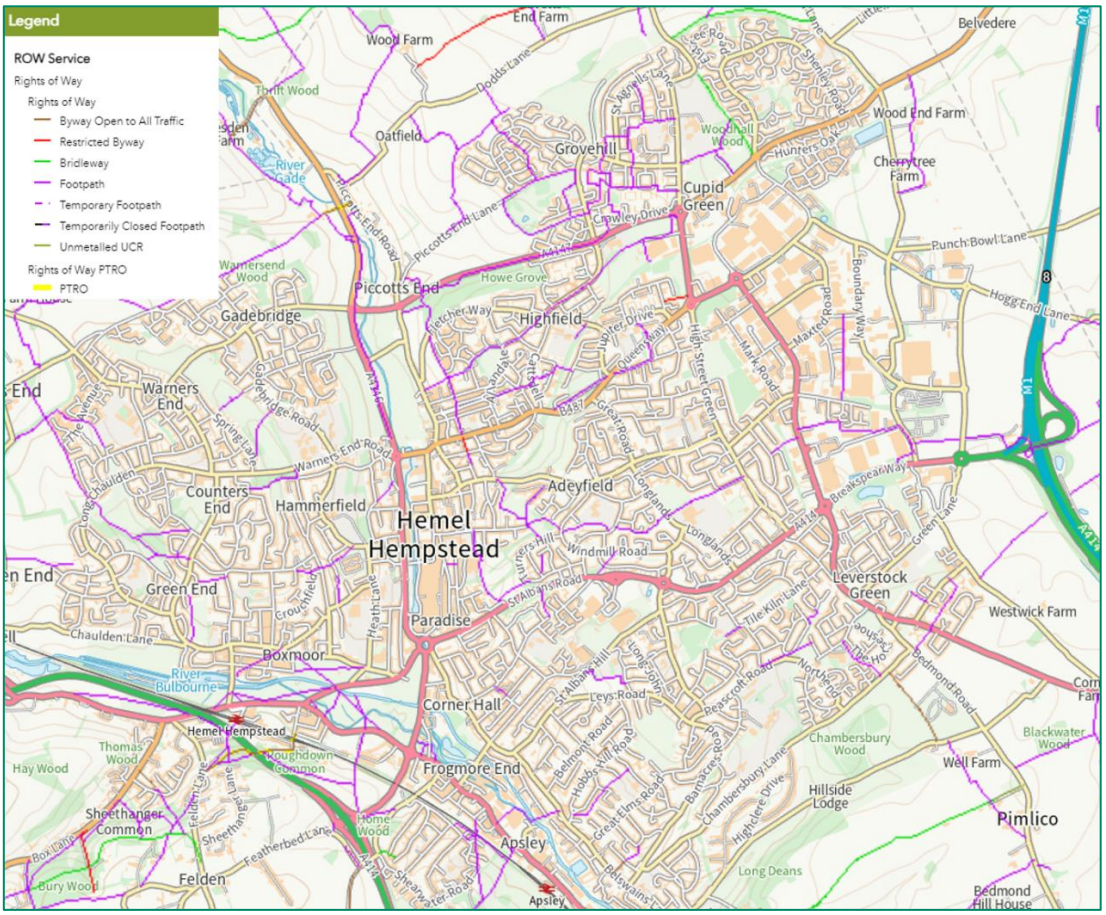


Figure 9 - Public Rights of Way (PROWs)

Source: Hertfordshire Maps and Geographic Information

Waterways

3.42 The River Gade and Grand Union Canal run through Hemel Hempstead with the confluence of these waterways located at Two Waters Road adjacent to Hemel Hempstead Town Cricket Club. The River Bulbourne also runs parallel to the Grand Union Canal through the town. The Grand Union Canal connects north to Berkhamsted and south to Kings Langley and Watford. The River Gade runs through the town centre in a north-south direction with the Grand Union Canal running along the western edge of the town. The Grand Union has a

towpath alongside which is suitable for walking and has several access points, some of which are step free.

Nickey Line

3.43 The Nickey Line is a 7 mile (12km) long walking and cycling route which follows the path of an old railway line linking Hemel Hempstead, Redbourn and Harpenden. It begins on Midland Road/Adeyfield Road to the east of the town centre in an area which is predominantly residential, interspersed with areas of parkland and small retail units. The route then progresses eastwards out of the town into Maylands Business Park, before continuing east adjacent to newer housing estates at Hunters Oak and Cherry Tree. There is a section in the northern part of Maylands where it crosses Redbourn Road at-grade, and runs alongside Eastman Way which serves as access to a series of commercial properties.

3.44 From this point, having reached the eastern edge of Hemel Hempstead, the route travels across a large area of farmland and beneath the M1, before skirting a residential area along the southern boundary of Redbourn towards Harpenden.

3.45 **Figure 10** displays the Nickey Line in relation to land uses and the surrounding area.

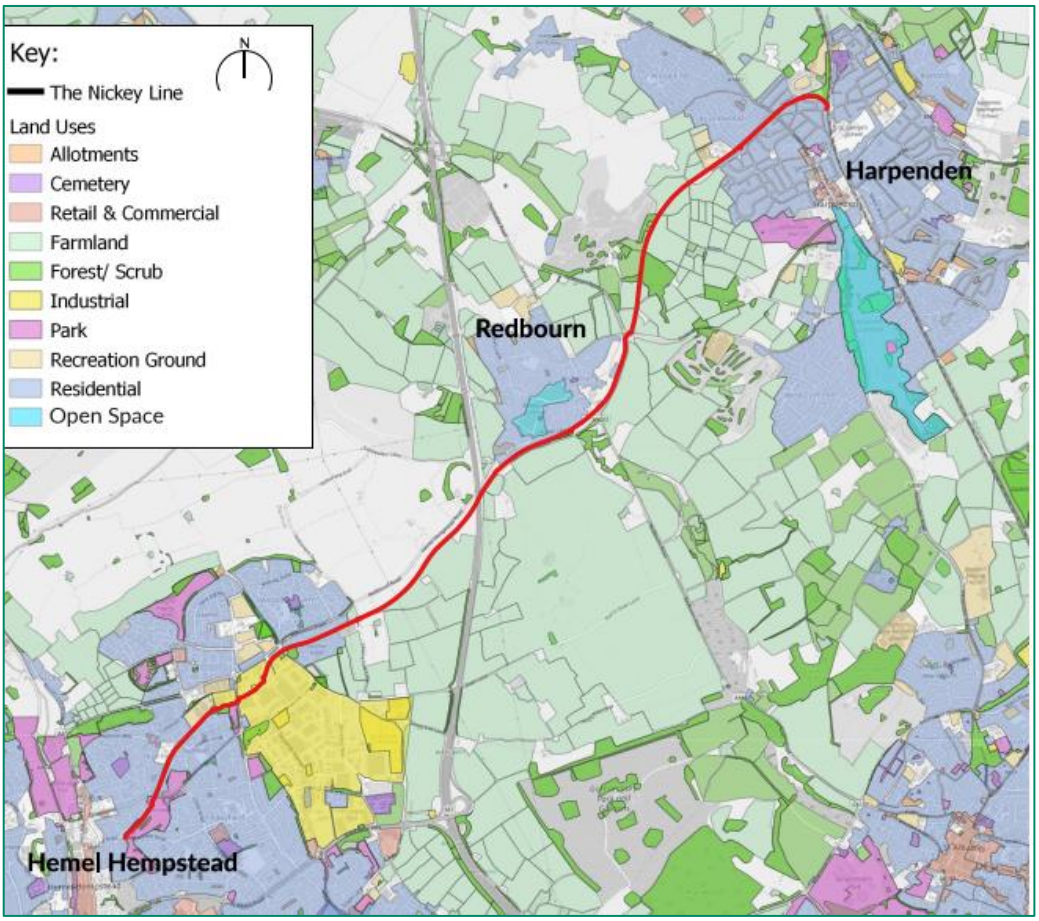


Figure 10 - Nickey Line and Land Use

Source: Nickey Line Vision Report

3.7 Car Parks

3.46 There are thirteen car parks within Hemel Hempstead which are owned and managed by or on behalf of Dacorum Borough Council as detailed in **Table 4**. Riverside Shopping Centre car park is privately owned and managed but also open to the public.

Table 4 - Hemel Hempstead car parks

Car Park	No. of spaces	Price (2 hours)	Length of stay
Gadebridge Lane	181	Free	Any stay
High Street	80	£0.70	Any stay
The Gables	20	£0.70	Any stay
Queensway	145	£1.10	Any stay
Alexandra Road	19	£1.10	Any stay
Water Gardens Lower Deck (North)	308	£1.40	Any stay
Water Gardens Upper Deck (North)	309	£1.40	Any stay
Water Gardens (South)	92	£1.60	Short stay
Moor End	76	£2.70 (up to 4 hours)	Long stay
Park Road	73	£0.90	Any stay
Durrants Hill	67	£0.40	Any stay
Cowper Road	18	£0.60	Short stay
Wood Lane End	21	£0.40	Any stay
Riverside Shopping Centre	350	£2.00	Any stay

Source: Dacorum Car Parks and Riverside Hemel Hempstead

3.8 Modal accessibility

Cycling accessibility

3.47 **Figure 11** shows network cycling trips within an 8km buffer in Dacorum. This model incorporates the latest origin and destination data and applies it to a custom network. This provides further indication of potential demand for cycle and walk trips beyond the commute and the school run, and also considers potential demand from housing built since 2011 and housing planned in the future.

3.48 The model's network consists of all the roads and paths which are assumed to be walkable and cyclable in Hertfordshire and its surrounding areas. This gives an indication of where in the network there may be suppressed demand for walking and cycling trips, and/or potential future demand. The model's purpose is to identify potential demand, which includes suppressed demand due to lack of facilities.

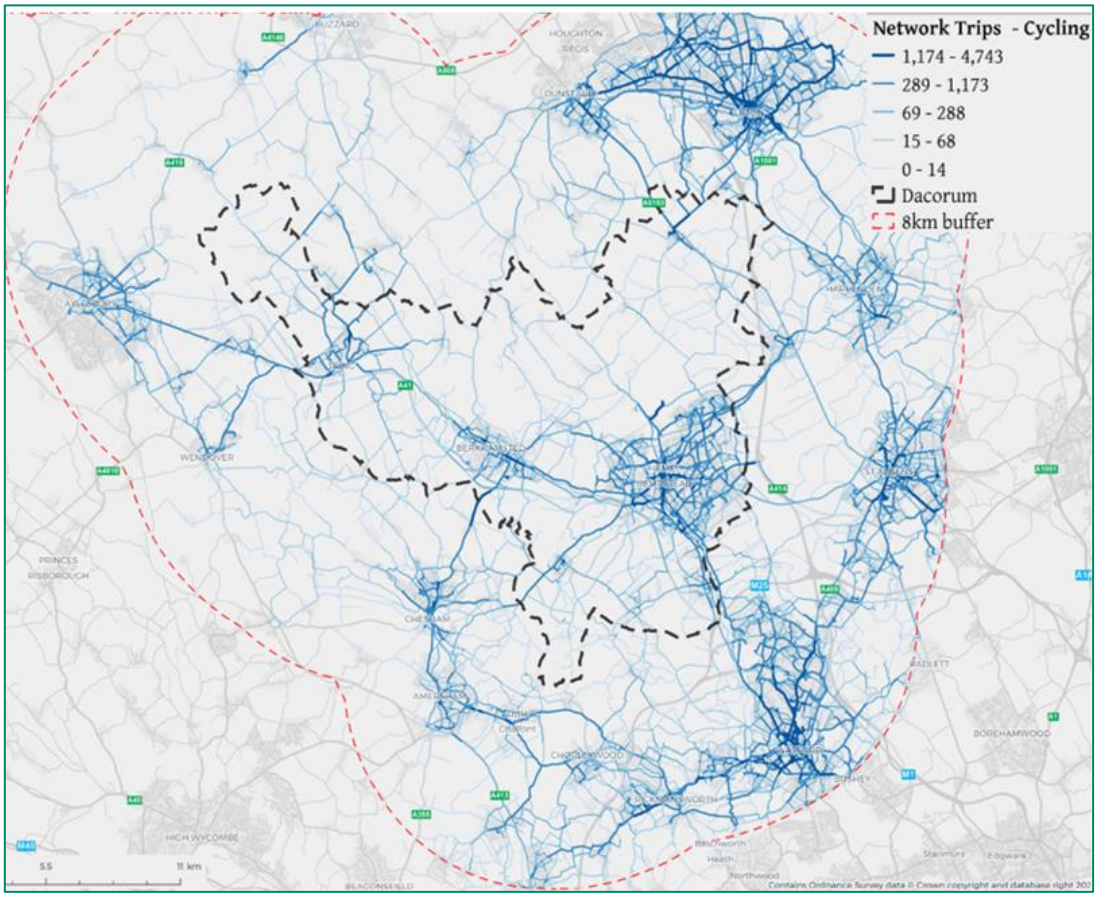


Figure 11 - Network cycling trips in Dacorum including 8km buffer

Source: Dacorum LCWIP (2023)

3.9 Commuting and other trip patterns

3.49 This section describes existing travel patterns in Hemel Hempstead based on a range of different data sources. This includes travel to education, commuting and other journey purposes.

3.50 The section also includes some discussion and forecasting of future trip patterns based on Hertfordshire County Council's COMET transport model.

Travel to education

3.51 The location of schools in Hemel Hempstead can be seen in **Figure 12**.

3.52 There are 54 education sites in Hemel Hempstead which are split into the following types of education institutions:

- Education Support Centre: 6
- Nursery: 1
- Primary School (some of these include nurseries within the school): 34
- Secondary School: 13

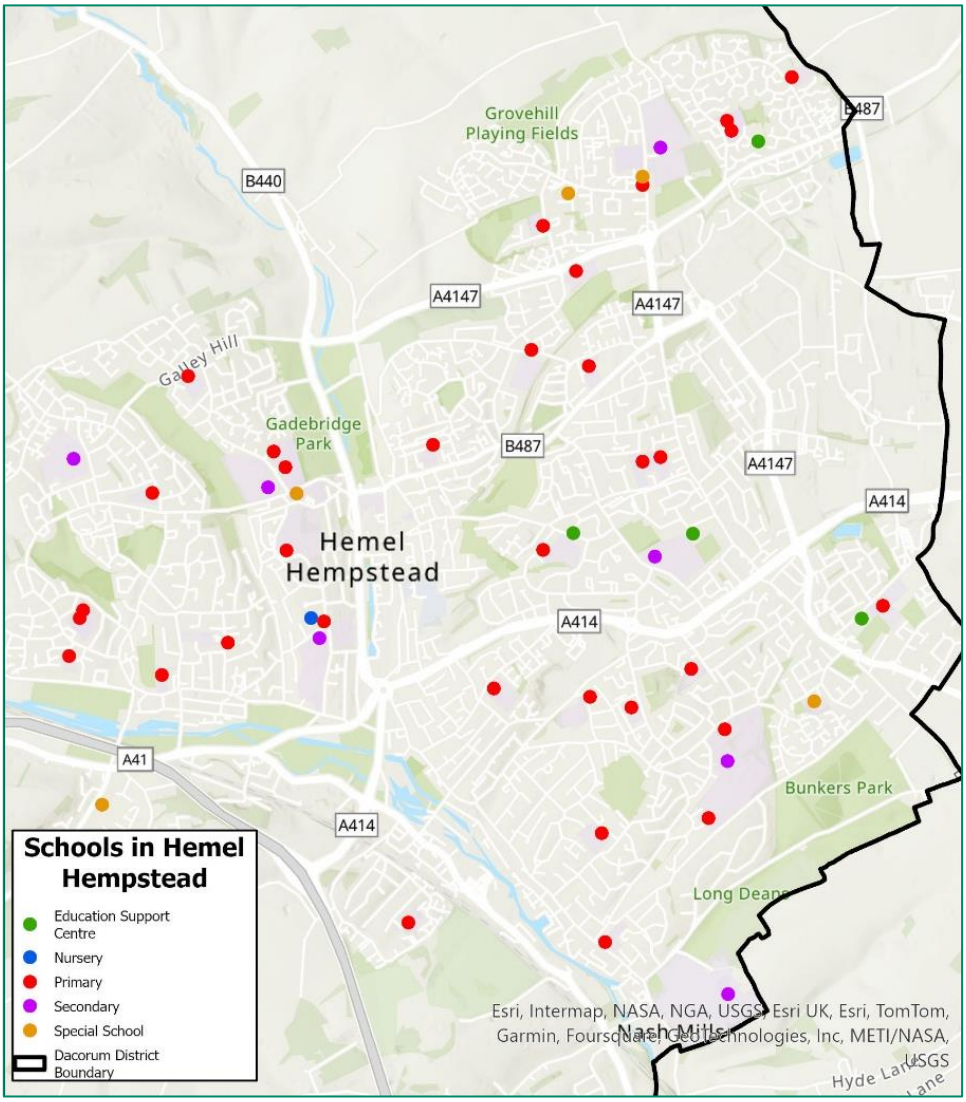


Figure 12 - Schools in Hemel Hempstead

Source: Get information about schools

3.53 HCC's County Travel Survey (2022)[4] has been undertaken to provide detailed travel pattern information on journeys made by the residents of Hertfordshire. Main mode split to get to a place of education is shown in **Table 5**.

Table 5 - Main mode split for trips to education.

Method of travel to place of education	% split in Hertfordshire	% split in Dacorum
Walk	42%	30%
Car/Van Driver	37.8%	27%
Bus	9.5%	8%
Cycle	3.3%	2%
Train	2.6%	-
Car/Van Driver	2.2%	-
Scooter	1.2%	3%

Source: Hertfordshire County Travel Survey (2022)

[4] Hertfordshire County Travel Survey 2022

Travel to work

3.54 **Table 6** shows the mode split for journeys in Hertfordshire from the HCC County Travel Survey (2022). It shows that the majority of journeys are made by car. There are also relatively high numbers of people who walk to work, suggesting these are local trips within the towns.

3.55 Potentially due to the major employment locations such as Watford, Milton Keynes and particularly central London which are accessible by train, a significant number of people in Hertfordshire choose that mode of transport. 16.4% of people in Hertfordshire commute to work by train.

Table 6 - Main mode split for trips to work.

Method of travel to place of education	% split in Hertfordshire
Walk	12.4%
Car/Van Driver	58.8%
Bus	2.7%
Cycle	1.9%
Train	16.4%
Car/Van Driver	4.6%
Scooter	0.2%

Source: Hertfordshire County Travel Survey (2022)

Trip analysis and congestion

3.56 Even without growth in housing and employment, Hemel Hempstead already faces a range of transport issues including traffic congestion on key roads which also affects other modes including buses. This is partly due to the town's strategic location with the M25 to the south, M1 to the east, A4251 to the west and A414 running through the town.

3.57 Congestion is focused along the A414 at several junctions as there is poor east west connectivity through the town. This has a knock-on effect on other junctions north and south of the A414. Key areas of existing congestion include:

- A414 between M1 Junction 8 and Phoenix Gateway Roundabout;
- A414/A4147 roundabout;
- A414 Breakspear Way between junctions;
- A414/A4146 Plough (Magic) Roundabout;
- Leighton Buzzard Road between the Plough Roundabout and Link Road / Galley Hill / Leighton Buzzard Road roundabout;
- Two Waters Way / A4251 junction; and
- A4151 between Hemel Hempstead station and B4505.

3.58 Government statistics (2021) show that the transport sector produces around 26% of Greenhouse Gases and that road transport (passenger cars in particular) are the most significant source of emissions in this sector. The Government's 2022 National Road Traffic Projections show that mode shift to more sustainable modes of travel is vital to ensure traffic congestion is kept within manageable levels. There is therefore a significant case, both environmental and economic, for ensuring congestion issues are reduced rather than exacerbated by planned growth in Hemel Hempstead.

3.59 The TomTom data presented in **Figure 13** and **Figure 14** reveal the routes that people are currently taking to access key destinations. It is notable that:

- Many trips within Hemel Hempstead (and, in particular, accessing Maylands Business Park) and St Albans / Hatfield / Welwyn Garden City, are likely to rely on the A414 corridor to the east of HGC, a key area of existing congestion.
- The same is true of the greater number of 'within Hemel' trips, with cross-town movements likely to rely on using, or crossing, some sections of the A414 – particularly those originating/ending in Leverstock Green, Bennetts End, Nash Mills and Apsley.
- Some areas of Hemel Hempstead, and also Berkhamsted, Tring and Aylesbury, rely on the A41 corridor for access to the M25 and for journeys to Watford, Heathrow and other destinations in North and West London that are otherwise challenging to access by public transport, or which primarily involve the movement of goods rather than people.

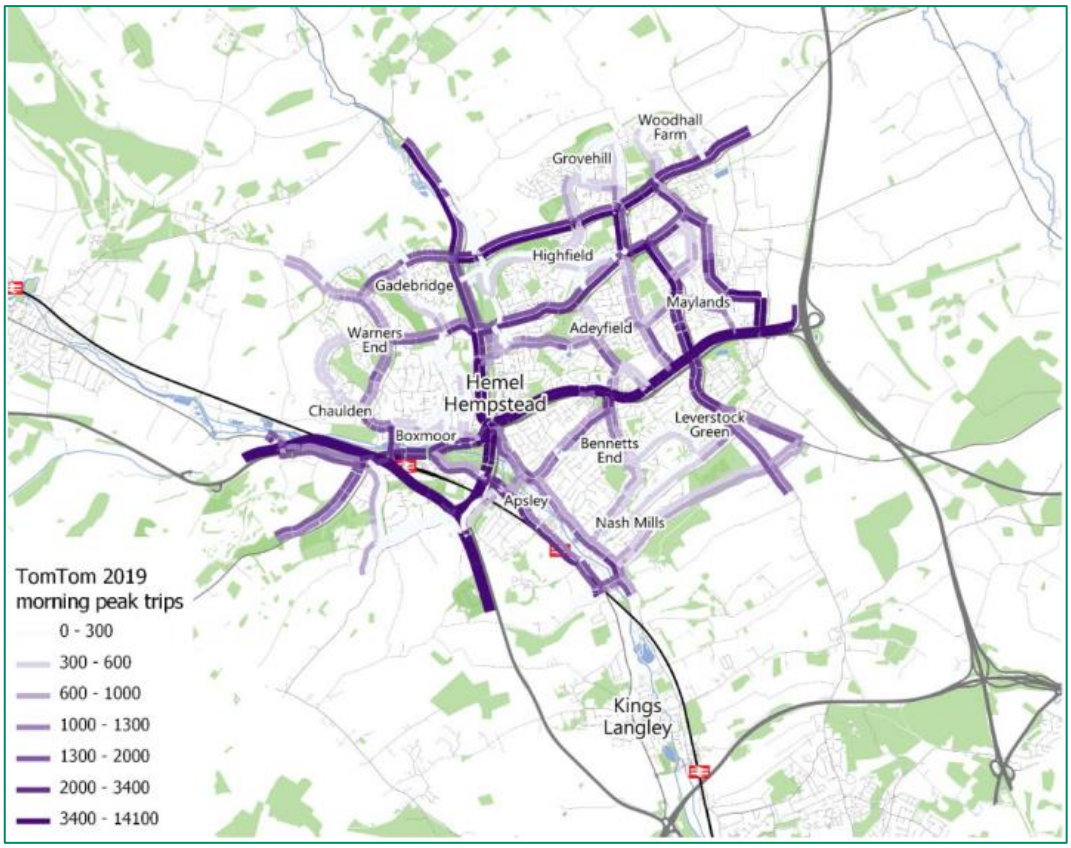


Figure 13 - Morning peak trips

Source: TomTom, 2021

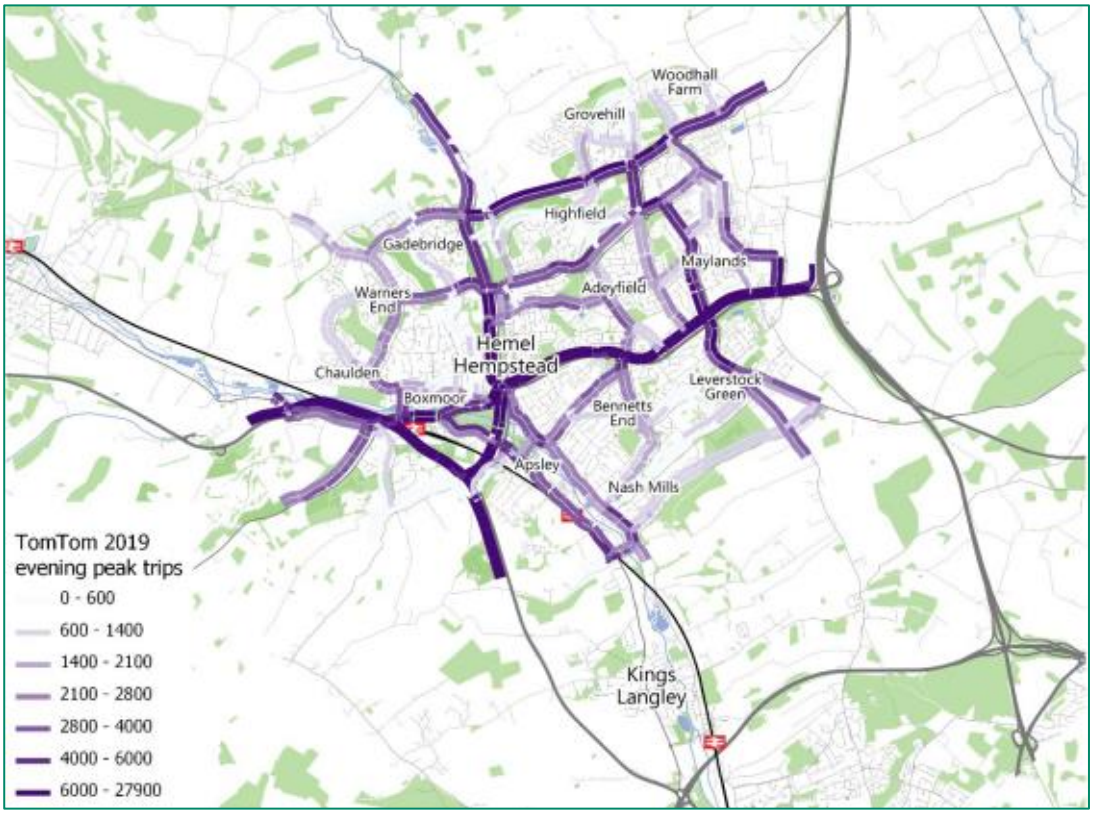


Figure 14 - Evening peak trips

Source: TomTom, 2021

3.60 With additional pressure placed upon the main roads, there is an increasing risk that quieter, more residential roads will be used as rat runs to make trips crossing the town (as opposed to being used to access local neighbourhoods). In the context of serving east-west movements that should be focused on the A414, this could displace trips onto routes through Adeyfield and Bennetts End for example.

3.61 Further datasets do exist from the Census and existing transport models, but these focus on commuting trips (~16% of journeys for all purposes), or on journeys that take place during what were traditionally the busiest AM and PM 'peak' travel periods prior to the COVID-19 pandemic. Although not ideal, what can be surmised from this information is that:

- Between 66% and 88% of all journeys to work in Hemel Hempstead were made in cars/vans (in 2011).
- A significant portion of journeys are made on foot – most likely somewhere between 10% and 25%.
- Local bus trips account for around 5% of all commuter trips.
- Rail trips account for around 4% of all inward/outbound journeys to/from Hemel.
- Around 1-2% of all trips are made by bike.

3.62 Nationally, in 2022, the average number of trips for commuting purposes went up. Commuting remains one of the most common reasons for traveling (after shopping), with a 19% increase compared to 2021 but still 15% less compared to 2019. This might be because more people are working from home or hybrid working during this period (NTS, 2022[5]).

3.63 In Hertfordshire, there has been a big increase in people working from home at least once a week, from 22% in 2018 to 54% in 2022 (Herts Travel Survey, 2022[6]). Even though car travel is still the most popular way to get to work in Hertfordshire, with 67.5% of people using

[5] National Travel Survey 2022: Trips by purpose, age and sex - GOV.UK (www.gov.uk)
[6] Hertfordshire County Travel Survey 2022

a car or van, either as a driver or passenger, cars are also the top choice for other types of trips like business (81.9%), accompanying someone (75.8%), and shopping (68.7%) trips.

Existing vehicle movements

3.64 Assessing local movement patterns and trends now and in the future involves assessing a wide range of data, including the annual Traffic and Transport Data Report produced by HCC, the Hemel Hempstead and St Albans Transport Evidence Packs, 2011 Census data, survey data and model outputs. This evidence has informed identification of future Key and Local Networks in the HGC Transport Vision and Strategy which is discussed in Chapter 6 of this report.

3.65 Movement and accessibility trends in Hemel Hempstead, and how they are forecast to change into the future, can be informed through origin-destination movement patterns derived from HCC's strategic transport model (COMET). The model is continuously updated to include for new allocation sites, committed developments and transport schemes. A bespoke model run covering the Dacorum Local Plan, incorporating key interventions discussed later in this report, is at the time of writing in preparation.

3.66 The model uses a range of data sources to build a detailed picture of travel movements across the transport network. One of the data sources is mobile phone network data. The following figure shows the areas where trips starting in Hemel Hempstead are travelling to in the AM peak period between 07:00 and 10:00, with darker shades of orange and red indicating more trips and areas shaded yellow and lighter orange indicating fewer trips.

3.67 This broadly indicates that there are concentrations of trips to Watford and St Albans and the immediate surrounding area. There is also a notable concentration of trips to Greater London which are shown in the bottom right-hand side of the map view. Trips to these destinations are likely to use a range of modes, with train the most likely mode used to access central London and a mixture of car, bus and train to other locations. The figure also indicates that there are a lot of trips which begin and end within Hemel Hempstead, with a higher concentration of trips travelling to the town centre area.

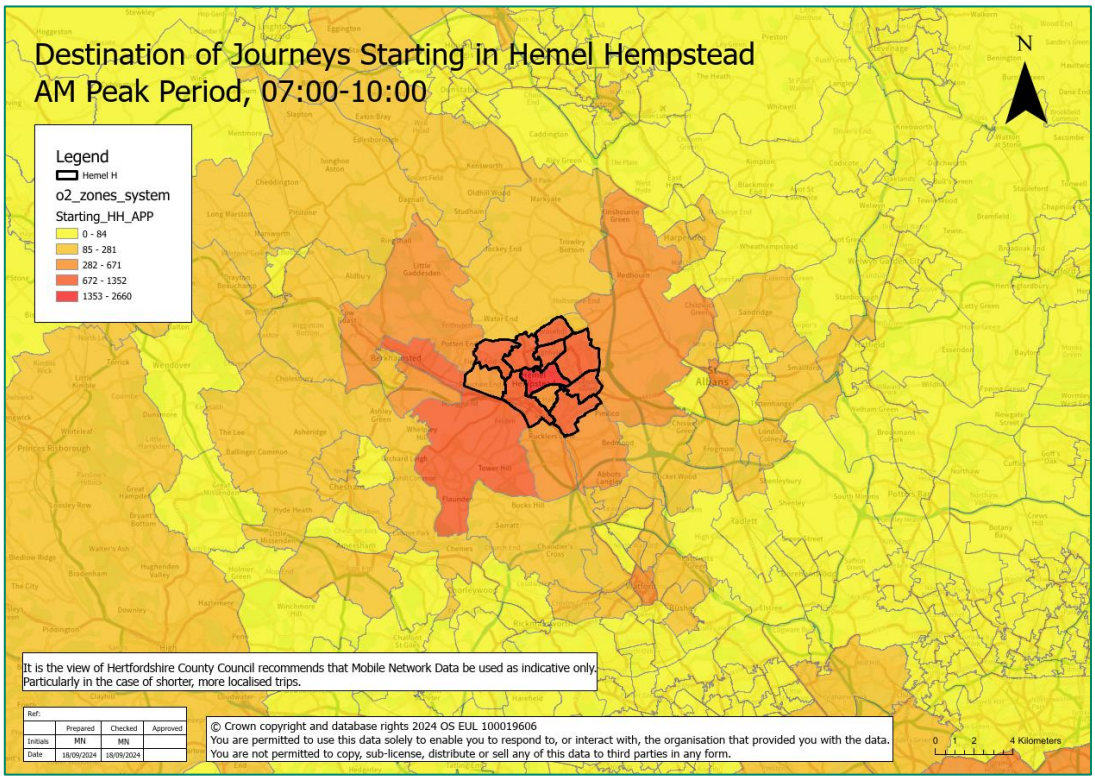


Figure 15 – Destination of Journeys Starting in Hemel Hempstead – AM peak

3.68 The following figure shows the origins of journeys ending in Hemel Hempstead in the AM peak period. This will include people who are travelling to Hemel Hempstead for work. This shows a slightly different pattern to the previous map, with fewer notable concentrations of trips other than from the surrounding area including places such as Redbourn, Markyate and Bovingdon.

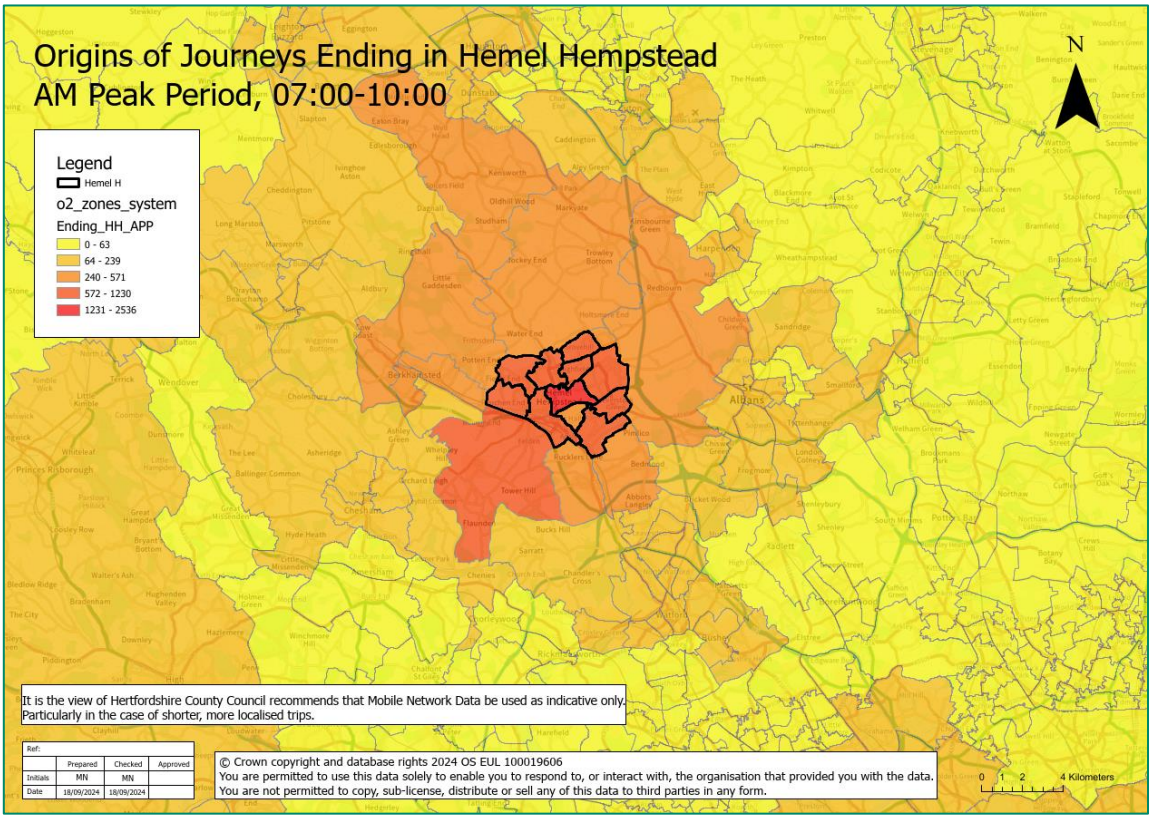


Figure 16 – Origins of journeys ending in Hemel Hempstead – AM peak

3.10 Place and movement

3.69 Hertfordshire has developed the Place & Movement Planning and Design Guidance (P&MPDG) to complement the objectives outlined in the Local Transport Plan (LTP4). It aims to assist project developers in adhering to sustainable design principles and meeting highway specifications during crucial planning stages.

3.70 Following the P&MPDG is important for fostering economic growth and nurturing lively communities in Hertfordshire, all while safeguarding the environment and addressing climate change. Ensuring that the built environment is safe, harmonious with its surroundings, and promotes the health and well-being of its inhabitants is essential.

3.71 As part of the Hertfordshire Place and Movement Assessment, a set of nine road types have been defined. These road types sit within a matrix which qualitatively assesses Place and Movement from low significance to high significance:

- **Place** relates to those functions that are specific to and happen in particular places, including residential and retail. Roads have an impact economically as well as on quality of life, with place-making an increasingly important element in local policy making. Roads are also the foreground to the built environment, and the most successful streets are those that respect and refer to it.
- **Movement** relates to the moving functions across different modes. In the context of the Hertfordshire Place and Movement Assessment, this is orientated around vehicle movements. Roads perform a wide range of movement functions from roads carrying very high volumes and mixes of vehicular traffic as well as people, to more urban

streets which only have a local movement function and could give greater priority to the needs of pedestrians and cyclists.

3.72 The Place and Movement Assessment for Hemel Hempstead is shown in the figure below.

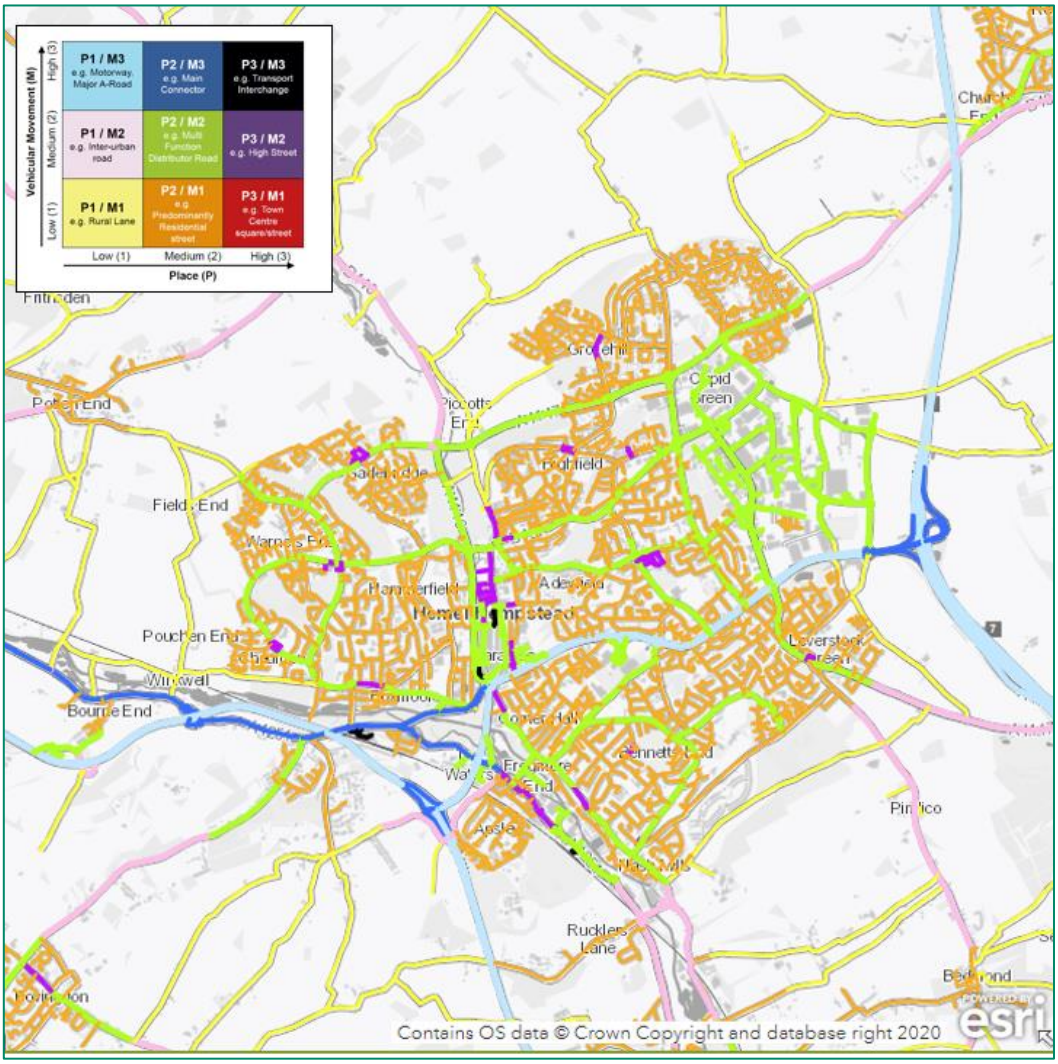


Figure 17 - Hemel Hempstead Place and Movement Assessment

Source: Webmaps – Highways traffic (Hertfordshire County Council)

3.73 Hemel Hempstead mainly consists of roads classified as P2/M1 (predominantly residential streets).

3.74 Hemel Hempstead train station, Apsley train station, Riverside bus stops and Marlowes road are identified as P3/M3, highlighting their roles as transport interchanges for public transport services.

3.75 The M1 motorway and the A41 are classified as P1/M3 (Motorways or major A-Roads). A414 St Albans Road which connects the two is also classified as P1/M3. This classification highlights that these roads connect major settlements and carry more strategic traffic at higher speeds, with limited frontage access and fewer or no facilities for pedestrians and cyclists. The A414 is particularly notable as it crosses through Hemel Hempstead.

3.76 The A4251 has a number of place and movement functions along its length. On the outskirts of the town, the A4251 is a P2/M3 (Main Connector) which has a much higher movement function, prioritising motor vehicles over pedestrians and cyclists, and facilitating access to the neighbouring towns such as Berkhamsted.

3.77 At the junction of the A4251 and Cross Featherbed Lane at the north western end of Apsley, the A4251 becomes a P3/M2 (High Street), reflecting the presence of some shops and restaurants and therefore a much higher place function which emphasises that there are movements of people occurring by a variety of travel modes, conducting different types of journeys and/or spending time in the local area (visiting shops and other businesses) alongside the same stretch of road. Further towards Apsley train station the A4251 is a P2/M2 (Multi-Function Distributor Road) which recognises the higher place function given the mixes of urban land uses on either side of the road.

3.78 There are many routes with P2/M2 (e.g. Multi-Function Distributor Road) status across Hemel Hempstead. These routes have 'medium' place status and 'medium' movement status. This category can include distributor routes which facilitate local as well as through movements but are also in many cases flanked by housing. Examples include more residential roads like B487 Queensway, Adeyfield Road and St Albans Hill, and those predominantly serving commercial premises, including retail and industrial estates, including Maylands Avenue and the industrial estates nearby.

3.79 There are a few routes classified as P3/M3 (Transport Interchange). These include Marlowes in the Town Centre with predominantly shops, food retailers and other commercial properties, as well as suburban high streets or substantial shopping parades.

3.80 There are several P1/M2 (inter-urban roads) and P1/M1 (rural lanes) surrounding Hemel Hempstead, providing local road connectivity to surrounding villages but where the place functions are inevitably reduced.

3.81 Example inter-urban roads include the B440 Leighton Buzzard Road and A4147 Hemel Hempstead Road.

3.82 Example rural lanes which route close to the town include Westwick Row, Bunkers Lane, Piccotts End Lane and Pouchen End Lane. These are generally narrow, provide little or no facilities for pedestrians and are not suitable for high volumes of traffic.

3.11 Road safety

3.83 Hemel Hempstead has relatively high pedestrian and cycle collision levels compared to the rest of Dacorum, where between 2017 and 2021, five fatalities involved either a pedestrian or cyclist, as well as sixty serious collisions (DfT 2017 - 2021).

3.84 In the 2022 County Travel Survey, 25% of respondents in Dacorum highlighted provision of cycle infrastructure and cycle safety as one of the key transport issues in the district. Similarly, 31% of Dacorum respondents highlighted personal safety as a key concern.

3.12 Environment

3.85 **Figure 18** shows the topography of Hemel Hempstead area as well as Green Flag parks and areas of Suitable Alternative Natural Greenspace (SANG). The town is centred around the confluence of the River Gade and the River Bulbourne. The two rivers meet at 'Two Waters'. The Grand Union Canal runs through the Bulbourne Valley, creating a more industrialised zone through Apsley. As a result of the two river valleys and the dry valleys, the settlement is quite undulating with a number of significant views into and out of Hemel Hempstead, shaped by the topography and key landmark buildings.

3.86 The town centre and rail station sit at the bottom of a 'valley' shape with relatively steep inclines either side, up to the more residential areas of the town. This shape creates an area of relatively high flood risk, and may additionally make active travel more challenging for some residents.

3.87 For transport, this means that trips heading towards the town centre from most directions (except from Apsley and along Leighton Buzzard Road) would generally require routeing down a fairly steep hill.

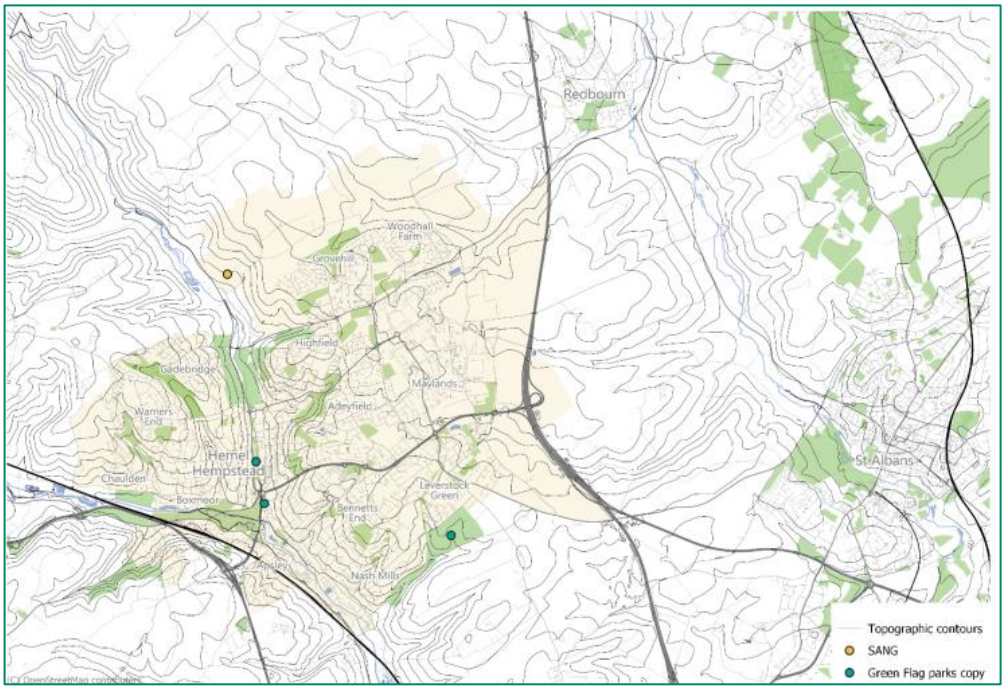


Figure 18 - Topography of Hemel Hempstead

Source: Hemel Hempstead Sustainable Transport Plan

3.88 **Figure 19** shows the areas in Hemel Hempstead susceptible to flooding as well as rivers/waterways.

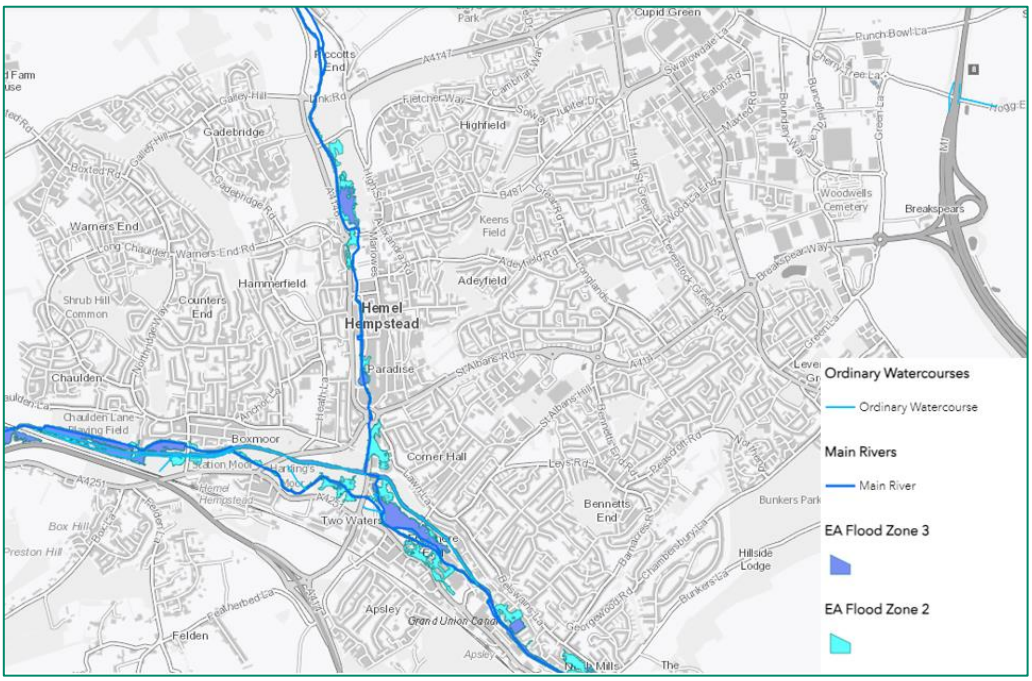


Figure 19 - Flood zones in and around Hemel Hempstead

Source: Hertfordshire Maps and Geographic Information

3.89 Higher risk areas are around the waterways. Areas of flood risk include the confluence of the Grand Union Canal and River Gade south to Frogmore End as well as to the immediate south of the Plough Roundabout, southern end of the town centre and Gadebridge Park, Nash Mills. The Grand Union Canal separates the station from the town centre and causes mild severance.

Chapter 4
Proposed Local Plan Growth

4. Proposed Local Plan Growth

4.1 Introduction

4.1 The emerging Local Plan will provide a strategy for delivering new homes, services and jobs to 2041. As the largest settlement in the borough, the plan for Hemel Hempstead needs to provide a combination of access to homes, infrastructure and jobs, alongside access to amenities such as hospitals, schools, shops and the countryside.

4.2 This chapter sets out the broad assumptions in relation to planned growth.

4.2 Summary of proposed growth in Hemel Hempstead

4.3 Across Hemel Hempstead within the Dacorum area, 10,501 new homes are expected to be delivered up to 2041. The table below outlines the total housing and employment allocations across Hemel Hempstead up to 2041. **Figure 20** (overleaf) which uses previous site references shows the total proposed growth across Hemel Hempstead including the part of the Hemel Garden Communities (HGC) development that falls within the Dacorum boundary.

Table 7 - Total housing and employment sites across Hemel Hempstead

Development type	Up to 2025/26	2026/27-2030/31	2031/32-2035/36	Up to 2040/41
Housing (dwellings)	412 dwellings	3,767 dwellings	3,023 dwellings	3,712 dwellings

Source: Dacorum Borough Council

4.4 Approximately 1,259 additional jobs are expected to be generated as a result of the planned developments within the town.

4.5 In addition, beyond the end of the plan period, a further 3,500 dwellings are planned within the North Hemel Hempstead development site – this is discussed further later in this chapter.

4.6 It is expected this growth will support wider transformation of the town, delivering key benefits to sectors such as transport, education and healthcare. Key components of development[7] include:

- New schools, including four new primary schools and two new secondary schools;
- New retail provision, including district/ local centres, hotels, amenities, food and drink establishments and supermarkets;
- A new/ revised hospital hub;
- Public open space improvements, including approximately 1ha located on the higher ground adjacent to The Bounce and Townsend and a new country park of district-wide importance;
- Strategic transport corridors which connect existing and future communities;
- Retention of existing spaces, such as ancient woodlands and listed buildings;
- Implementation of, and high-quality improvements to, public realms, specifically including the area adjacent to Grand Union Canal;
- Land allocated to a household waste recycling centre;
- Regeneration of existing spaces such as the train station and car park; and
- Implementation of a multi-model transport interchange in Maylands and Mobility Hubs across Hemel Hempstead.

[7] Dacorum Borough Council Local Plan (2024-2040) Revised Strategy for Growth (Appendix A)

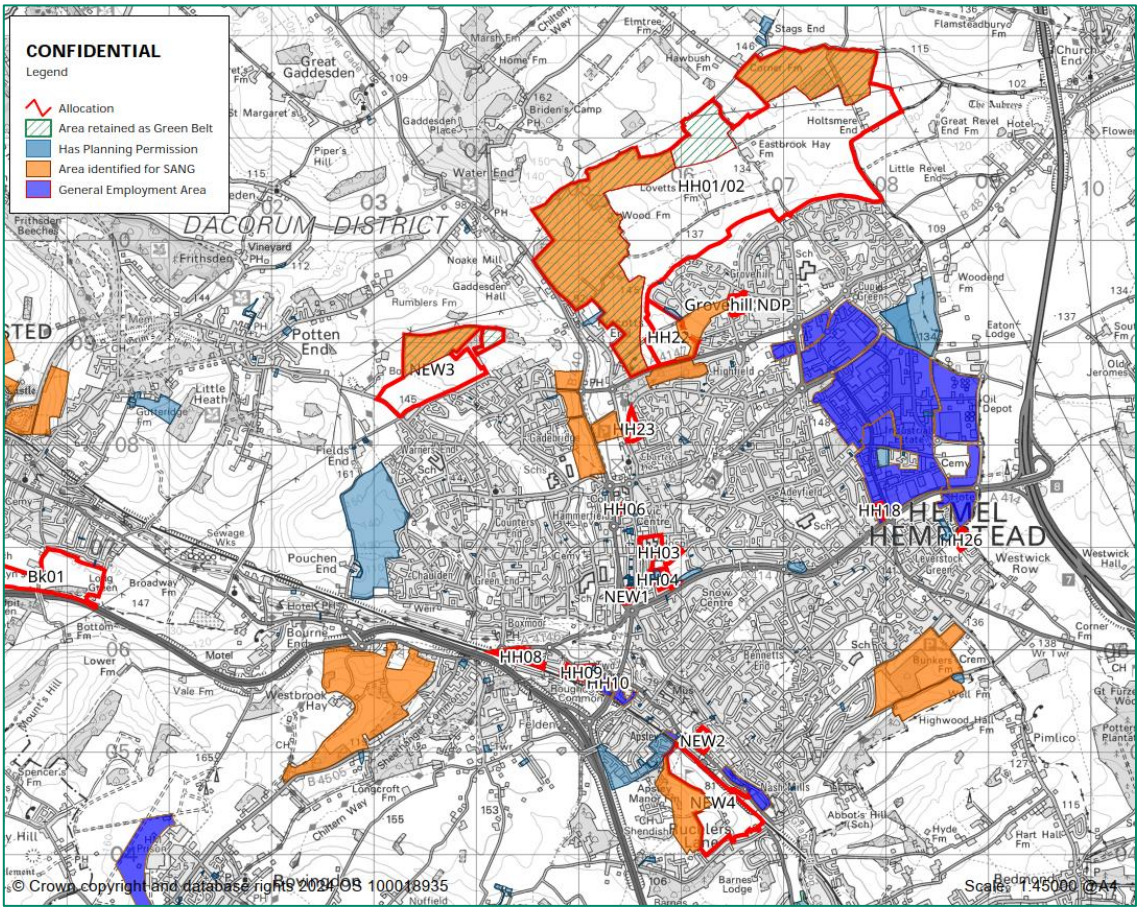


Figure 20 - Development Sites in Hemel Hempstead (within Dacorum)

Source: Dacorum Borough Council

4.7 **Table 8** details the total proposed housing and employment allocations up to 2041 at each of the development sites across Hemel Hempstead. Windfall developments are not included in subsequent analysis of transport requirements for growth.

Table 8 - Total housing and employment sites across Hemel Hempstead up to 2041

Previous site reference for figures	Site reference 2024	Name	Total dwellings	Total estimated new jobs
HH01/HH02 (2023)	Hm01	North Hemel	1,500	473
HH06 (2023, 2020)	Hm02	Civic Zone, Marlowes	200	
HH03 / HH05 (2023, 2020)	Hm03 / Hm05	Hemel Hempstead Hospital / Market Square	450	40
HH04 (2023, 2020)	Hm04	Paradise	350	40
NEW1 (2023)	Hm06	Riverside	300	
HH09 (2023, 2020)	Hm09	National Grid and 339-353 London Road	480	
HH10 (2023, 2020)	Hm07	Symbio Site, Whiteleaf Road	100	
HH08 (2023, 2020)	Hm08	Hemel Hempstead Station Gateway	390	80
NEW2 (2023)	Hm10	Apsley Mills Retail Park	500	
NEW3	Hm13	Shendish Manor and Fairfields	500	288
NEW4	Hm11	Polehanger Lane	750	
GNP Allocation (2023)	GNP Allocation	Grovehill Local Centre (Henry Wells Square)	200	
HH18 (2023, 2020)	Hm12	Plots 2/3 Kier Park, Maylands Avenue	234	
HH22 (2023, 2020)	Hm14	Marchmont Farm	350	
HH23 (2023, 2020)	Hm15	Old Town	90	
HH26 (2023, 2020)	Hm16	Site to the south of Green Lane	80	
-	-	Hemel Hempstead Windfall	2,385	
-	-	Hemel Hempstead Commitments (2024)	1,642	

Source: Dacorum Borough Council (July 2024)

4.8 A discussion of the key development sites is provided in the following sections which for ease of reference are split into three main areas: Hemel Hempstead Town Centre area; Two Waters area; and Hemel Garden Communities (which includes development in St Albans City and District).

4.3 Hemel Hempstead town centre area

4.9 The locations of the proposed housing allocations within the town centre area can be seen in more detail in **Figure 21** which uses previous site references. It is anticipated that most of the sites in this area will take advantage of the stronger public transport links and the closer proximity to shops, leisure, employment and other key services in the Town Centre. These sites should therefore offer the strongest potential for a large proportion of trips being made by sustainable modes of travel.

4.10 The site allocations include the following key developments and land use requirements[8]:

- (Hm03 / Hm05. Map reference - HH03 / HH05) Hemel Hempstead Hospital / Market Square
  - Around 450 homes (subject to masterplanning);
  - A new primary school;
  - Public open space; and
  - A new/ revised hospital hub.
- (Hm04. Map reference - HH04) Paradise
  - Around 350 homes (subject to masterplanning);
  - Employment generating uses (including offices) at ground floor level, where viable;
  - Replacement DENS food bank; and

[8] Dacorum Borough Council Local Plan (2024-2040) Revised Strategy for Growth

    - Public open space.
- (Hm02. Map reference - HH06) Civic Zone, Marlowes
    - Around 200 homes; and
    - Public open space.
- (Hm14. Map reference - HH22) Marchmont Farm
    - Around 350 homes (subject to masterplanning);
    - A Roma and Traveller site for 5 pitches; and
    - Public open space.
- (Hm15. Map reference – HH23) Old Town
    - Around 90 homes (subject to masterplanning); and
    - Around 1 hectare of public open space, located mainly on the higher ground adjacent to The Bounce and Townsend.
- (Hm06. Map reference – NEW1) Riverside
    - Around 300 homes subject to masterplanning;
    - New hotel and amenities;
    - New retail provision at ground floor level;
    - Re-cladding of existing hotel/occupied retail on the site; and
    - Expansion of the car park.

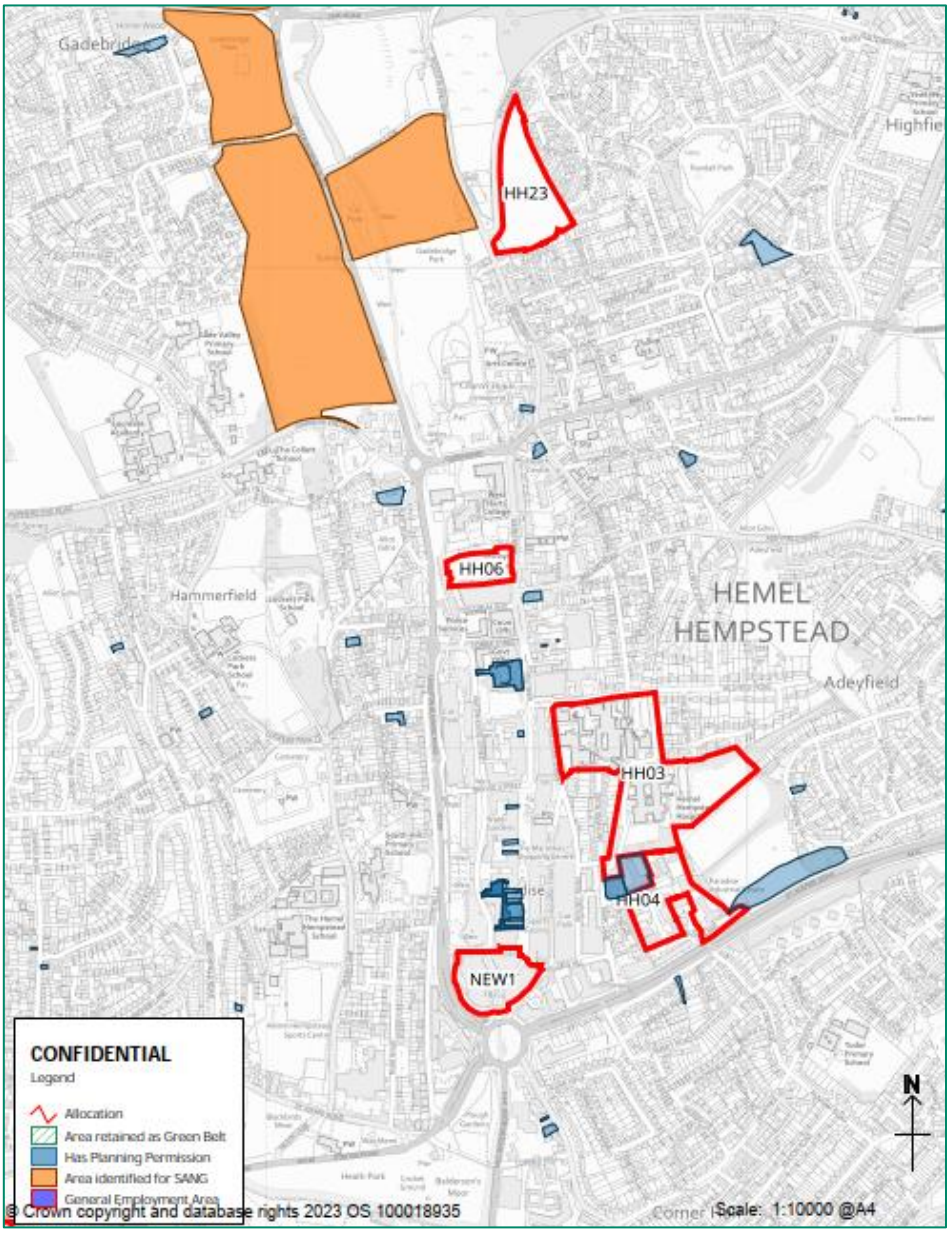


Figure 21 - Proposed developments in Hemel Hempstead town centre

Source: Dacorum Borough Council Revised Strategy for Growth (2024-2040)

4.4 Two Waters area

4.11 The locations of the proposed housing allocations within the Two Waters area, which includes Apsley, can be seen in more detail in **Figure 22** which uses previous site references. Like those in the Town Centre area, it is expected that most of the sites in this area will take advantage of very strong public transport links and the closer proximity to shops, leisure, employment and other key services in Apsley and the Town Centre. The allocations include the following key developments and land use requirements:

- (Hm08. Map reference - HH08) Hemel Hempstead Station Gateway
  - Regeneration of the existing train station and car park;
  - Other uses that are ancillary to the main use of the site as a strategic transport hub, including but not limited to retail, food and drink establishments, offices and a hotel;
  - Multi-modal transport interchange;
  - Around 390 dwellings (subject to masterplanning); and
  - New public realm.
- (Hm09. Map reference - HH09) National Grid and 339-353 London Road
  - Around 480 dwellings (subject to masterplanning);
  - Public open space.
- (Hm07. Map reference - HH10) Symbio Site, Whiteleaf Road
  - Around 100 dwellings (subject to masterplanning); and
  - Public open space.
- (Hm10. Map reference- NEW2) Apsley Mills Retail Park
  - Around 500 homes (subject to masterplanning); and
  - High quality public realm improvements adjacent to Grand Union Canal.

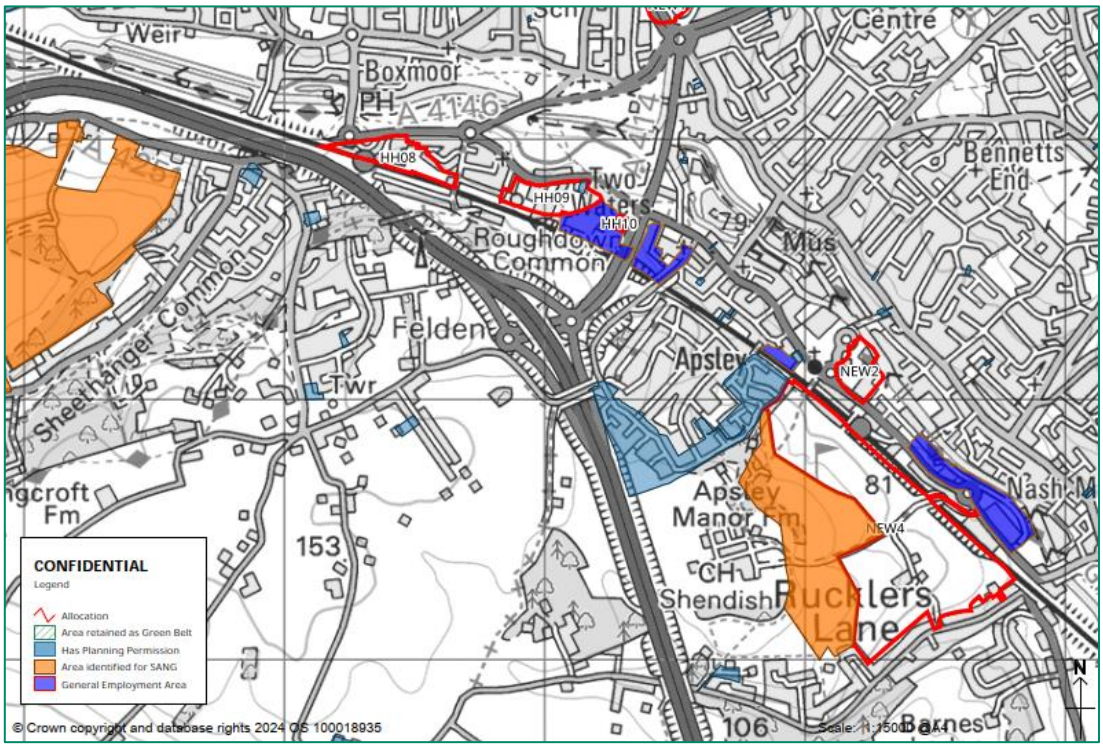


Figure 22 - Proposed Developments in Two Waters

Source: Dacorum Borough Council Revised Strategy for Growth (2024-2040)

4.5 Hemel Garden Communities

4.12 Hemel Garden Communities 2050 is a joint programme involving Dacorum Borough Council and St Albans City and District Council. Given its size, much of the planned approach to growth in Hemel Hempstead will be guided by the HGC programme.

4.13 The proposed Hemel Garden Community (HGC) development is shown in the figure below and is located to the north and east of Hemel Hempstead.

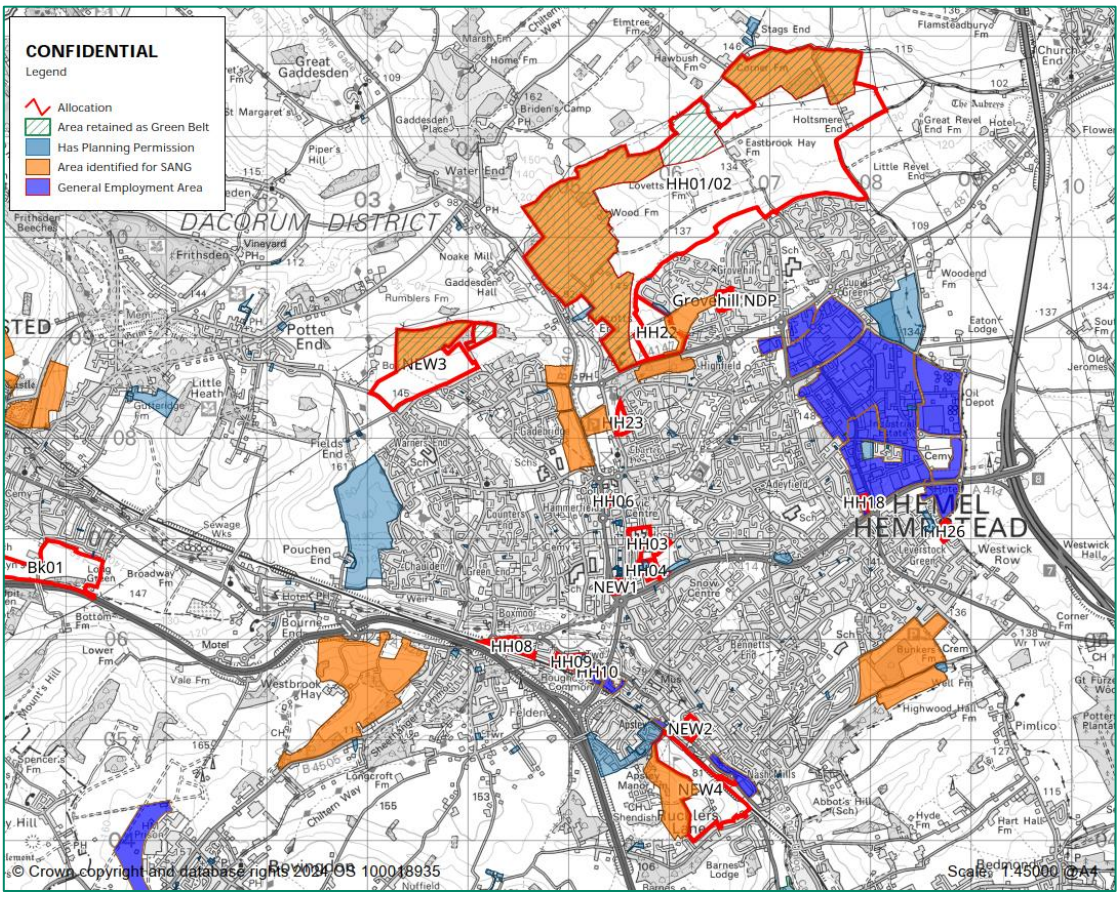


Figure 23 – Proposed Local Plan growth within Dacorum Borough

4.14 The allocation within Dacorum is site Hm01 (map reference - HH01/HH02) North Hemel Hempstead, and within St Albans it is H1 which is also part of North Hemel Hempstead, and H2, H3 and H4 which are all referred to as East Hemel Hempstead.

4.15 Within Dacorum, for site Hm01 the land use requirements include:

- Around 1,500 homes (including provision for older people) (subject to masterplanning);
- A new country park of district-wide importance, accessed through a new green infrastructure network that links existing and future communities;
- Delivery of a strategic corridor route between Leighton Buzzard Road and Redbourn Road (via land in St Albans City and District Council);
- A range of new retail and community facilities in the Hemel North Growth Area involving a new district or local centre with a medium or large supermarket and also smaller scale local or neighbourhood centres to serve day-to-day needs;
- Four new primary schools;
- Two new secondary schools;

- Safeguarded land for a council depot and household waste recycling centre;
- Retention of ancient woodland within the site; and
- Retention of existing listed buildings within the site.

4.16 Within the St Albans City and District Council area, the HGC development is expected to deliver at least 4,300 homes by 2041 and in the order of 6,000 new jobs through the implementation of the Hertfordshire Innovation Quarter.

4.17 A further 3,500 homes are proposed in HH01/HH02 within Dacorum's area and around 1,200 homes are proposed across North and East Hemel Hempstead sites within St Albans' area between 2041 and 2050[9].

4.18 In total, across North and East Hemel Hempstead sites up to 2050, around 11,000 homes and 10,000 jobs are proposed.

4.19 Across the St Albans District and Dacorum Borough Council, the HGC transformation is expected to introduce:

- Extended business park, including the Hertfordshire Innovation Quarter;
- Extension of the Nickey Line;
- Delivery of the Green Loop;
- Network of mobility hubs; and
- Regeneration of the town centre in Hemel Hempstead as well as new growth areas including housing, open space, schools, community facilities and infrastructure[10].

[9] St Albans Local Plan Part A – from formal Regulation 19 Publication - https://www.stalbans.gov.uk/evidence-base
[10] Hemel Garden Communities. HGC Position Statement October 2023

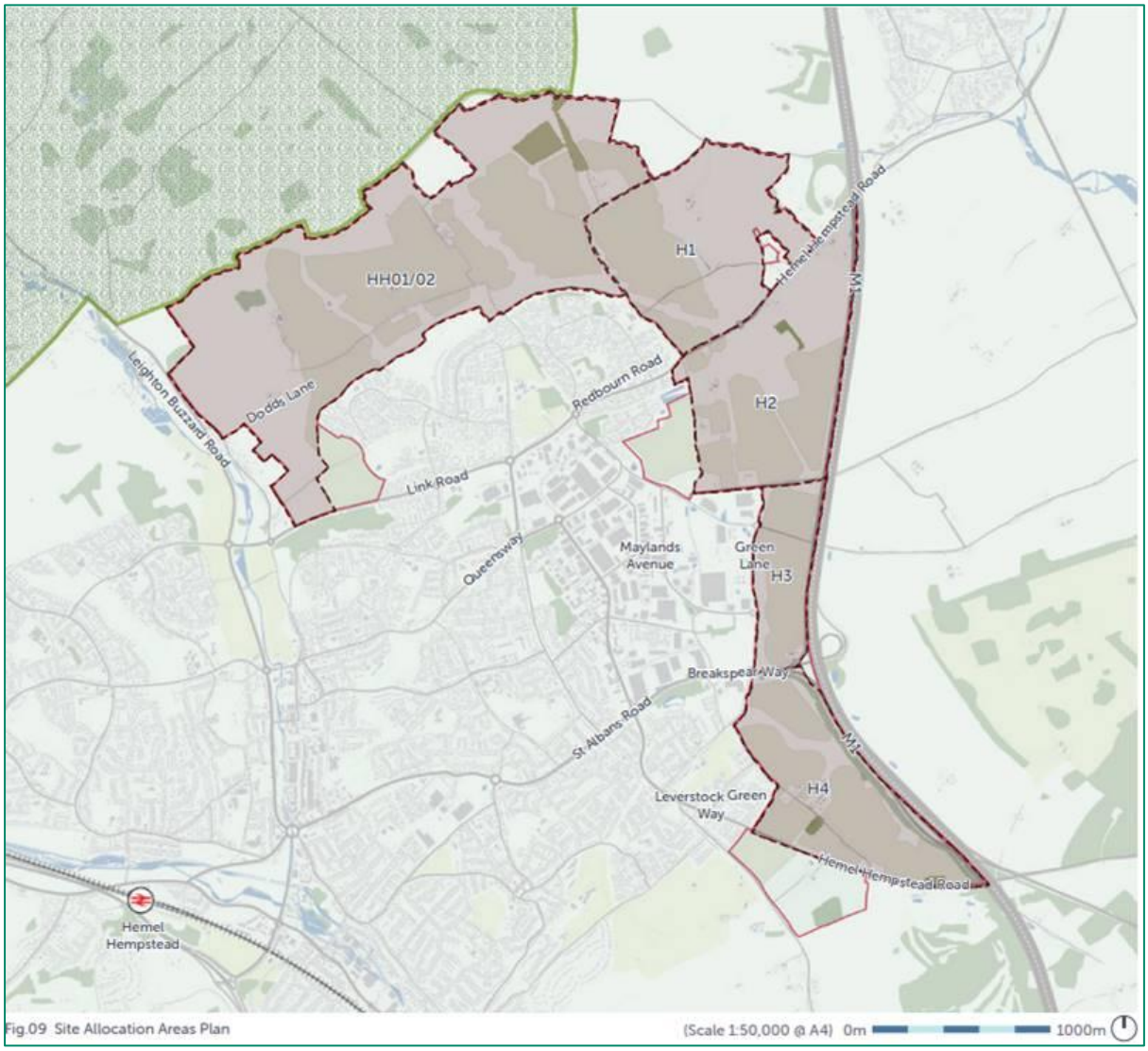


Figure 24 - Hemel Garden Communities programme area map

Source: Hemel Garden Communities

4.6 Hemel Hempstead Allocations – Permissioned Sites

4.20 A number of sites across Hemel Hempstead are already permissioned. This section makes reference to these sites for completeness, though they are unlikely to require further provision or mitigation in terms of transport measures, now that they are permissioned.

4.21 The proposed allocations which have been permissioned following the publication of the draft Local Plan- 'Emerging Strategy for Growth', can be seen in **Table 9** overleaf.

Table 9 - Permissioned housing and employment allocations across Hemel Hempstead

Site Reference	Name	Emerging Strategy for Growth Allocation
HH19	Wood Lane End	• Around 160 dwellings. • Public open space.
HH20	Breakspear Way/ Green Lane/ Boundary Way (Employment)	• Employment development for offices, industrial and storage or distribution use - providing around 48,000 sq. metres gross internal floorspace of offices, 24,000 sq. metres of industrial space or a mix of the two. • The site is located in the Hertfordshire Innovation Quarter Enterprise Zone and development should consist of uses consistent with the aims of the enterprise zone. • Land on the corner of the site fronting Breakspear Way/Green Lane should be developed for offices, unless market evidence shows that there is no commercial interest in such development.
HH21	West Hemel	• Around 1,150 dwellings, subject to masterplanning. • A community hub. • A new primary school (3ha). • A Roma and Traveller site for 7 pitches. • Public open space. • Extension of Shrubhill Common Nature Reserve.
HH24	Turners Hill	• Around 60 dwellings, subject to masterplanning. • Public open space.
HH25	St Margarets	• Around 50 dwellings, subject to masterplanning. • Public open space.
HH27	Jarman Park	• Retail led development, including a possible food store. • Food and drink uses, leisure uses and a hotel also acceptable on part of the site.
HH28	Bunkers Park	• Cemetery, crematorium and associated infrastructure. • Public open space.

Source: Dacorum Borough Council Revised Strategy for Growth (2024-2040)

Chapter 5
Transport Vision and Strategy

5. Transport Vision and Strategy

5.1 This chapter references the Hemel Garden Communities 2050 Transport Vision and Strategy. This document acts as the framework for identifying interventions to address key challenges and facilitate planned growth right across Hemel Hempstead. As the information contained in this chapter is only a summary, reference should be made to the Transport Vision and Strategy document for more detail and supporting evidence.

5.1 Hemel Garden Communities

5.2 The Hemel Garden Communities Programme is an ambitious proposal which will transform and grow Hemel Hempstead and create attractive, sustainable new neighbourhoods to its north and east by 2050.

5.3 The HGC 2050 Transport Vision and Strategy has been prepared on behalf of a partnership that comprises Dacorum Borough Council (DBC), St Albans City and District Council (SADC) and Hertfordshire County Council (HCC), Hertfordshire Local Enterprise Partnership (Herts LEP), and the Hertfordshire Innovation Quarter (Herts IQ) as part of the HGC Programme (referred as 'the Partners') and wider stakeholders.

5.4 The TV&S covers the whole HGC programme area comprising the town of Hemel Hempstead, within the borough of Dacorum, as well as proposed growth areas straddling both Dacorum and St Albans District to the north and east of the town.

5.5 The Transport Vision & Strategy is part of the evidence base supporting Dacorum Borough Council and St Albans City and District Local Plans; Hertfordshire County Council's Growth and Transport Plan, and the wider HGC Programme.

5.6 The TV&S sets out an approach to grow the town 'in a highly sustainable way' that supports the emerging Local Plans for both Dacorum Borough Council and St Albans City and District Council. Achieving travel demand reduction and modal shift is also central to Hertfordshire County Council's Local Transport Plan 4 (LTP4), where Policy 1 establishes the Transport User Hierarchy, shown in the following figure, that has subsequently formed the backdrop to the development of this transport study.

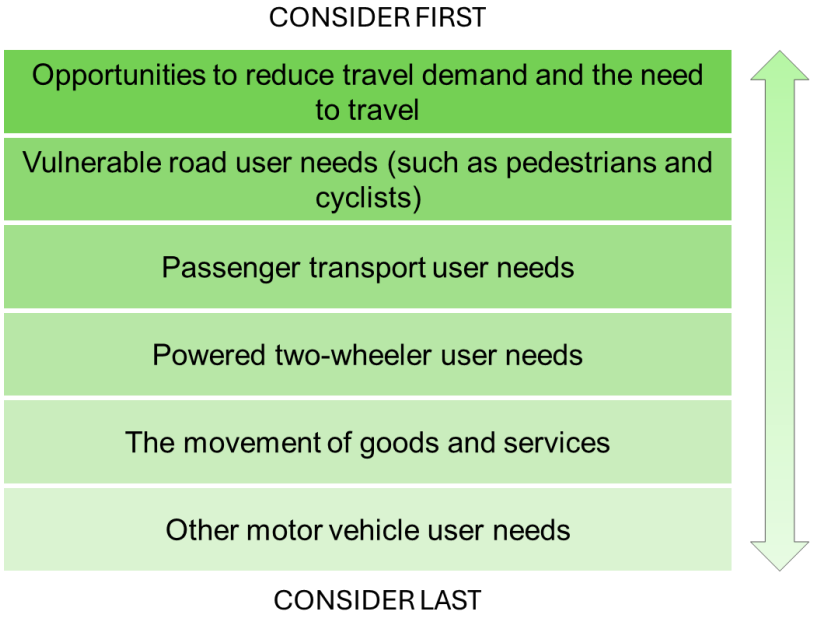


Figure 25 - The Transport User Hierarchy based on Hertfordshire County Council's Local Transport Plan 4

5.7 The Transport Vision & Strategy is informed and sits within a wider framework of documents at national, regional, and local scale. The Transport Vision & Strategy is part of the evidence base supporting the Dacorum Borough Council and St Albans City and District Local Plans and the HGC Programme.

5.8 Strategic priorities are set out in documents, including the Hertfordshire Growth and Transport Plans, Hertfordshire County Council's Local Transport Plan 4 (2018-2031) and the emerging Local Plans. This TV&S addresses local journey priorities and is informed by the strategic documents that sit above it.

5.9 As part of the HGC Programme, in 2021, HGC published an overarching spatial approach for the HGC Programme Area. The Spatial Vision promotes healthy lifestyles and responds to the climate crisis – and sets out the ambition that the Programme Area will be home to inclusive, integrated neighbourhoods connected by a green movement network.

5.10 The Hemel Garden Communities' Framework Plan is a spatial framework for the HGC Programme Area, with a detailed focus on the North and East of Hemel Hempstead Growth Areas. The TV&S and future Implementation Plan will be integrated with the Framework Plan, alongside wider town focussed workstreams, to develop a single holistic framework for transformation.

5.11 Hertfordshire County Council's Local Transport Plan 4 (2018-2031), the HGC Spatial Vision, and the HGC Framework Plan are supported by the Town and Country Planning Association (TCPA) transport guidance and help set the vision for the TV&S.

What is the vision?

5.12 The transport vision for Hemel Garden Communities is expressed as follows:

By 2050, Hemel Hempstead will be a place where walking, cycling and public transport are the natural choice for local journeys, for residents and visitors alike. A place where at least 40% of all person trips from/to/within Hemel Hempstead, and 60% of all person trips from/to/within new Hemel Garden Communities neighbourhoods, will be undertaken by sustainable modes of travel. An innovative place, fit for the future, where high-quality transport networks prioritise local journeys and support decarbonisation. Well-connected neighbourhoods and employment areas will strengthen the local economy and promote sustainable growth and investment.

HGC Transport Vision

5.13 The Transport Vision is intentionally aspirational and will be subject to initial testing to give confidence that it is achievable. The process used in this report involves reviewing existing transport patterns in the light of anticipated growth, to develop an understanding of what it will take to bridge the gap between present existing transport patterns and those the Vision seeks.

What is the strategy?

5.14 To achieve the aspirational mode shift goals for 2050 and the wider Transport Vision, the Transport Strategy is made up of three Strategic Themes with clear output focussed Desired Outcomes intended to help steer decision-making around funding programmes to achieve each of the Strategic Themes.

5.15 Achieving the Desired Outcomes will require systematic and integrated application and delivery of transformative infrastructure interventions and wider supporting measures, which together will influence and sustain behavioural change.

Theme 1: A well connected place that puts people first

5.16 Both existing and new neighbourhoods will prioritise local journeys, facilitated by people-focused streets and traffic-free routes. This will ensure it is quicker and more convenient to walk, cycle and scoot than use the car for the vast majority of local journeys.

5.17 The streets will be laid out to put people first, with traffic and deliveries carefully managed so that streets are inviting places for community life. Access by cars, delivery vehicles and taxis will be possible to every home and business, but they will no longer dominate. It will purposefully plan for a different future, where reduced private ownership and shared modes are efficient, safe, and cheaper. While access will be possible to every house by car, the design of the streets will mean that cars will be understood as guests in the streetscape.

5.18 Desired Outcomes under Theme 1 are:

- New neighbourhoods made up of co-located land use types, delivered at a scale of density that reduces the need to travel, whilst prioritising movements made by active and sustainable transport modes;
- More people walking, cycling, and using emerging micro-mobility options more regularly, and for greater total distances, when making every day journeys minimising the need for motorised travel;
- Improved transport networks that put people first to improve safety, air quality and the health of people who live, work, and visit Hemel Hempstead through providing more sustainable travel choices and reducing transport related air pollution;
- Enhanced sense of place by reducing car dominance and creating more active, social, and greener streets that encourage more social interaction and localised commercial and economic activity; and
- People focussed streets and travel links designed to cater for different users' needs, including people with mobility impairments, to maximise inclusivity.

Theme 2: A place that enables sustainable travel

5.19 Where new residents and businesses are coming to Hemel Hempstead it will be vital that they find walking, cycling and public transport attractive to use from Day One. This requires early investment in the high-quality services and supporting infrastructure needed to make sustainable mode choice inviting.

5.20 Existing residents and businesses will benefit from good provision of walking, cycling and public transport services. Residents and businesses will need to be engaged and informed on new transport measures and supporting initiatives that will become options for their journeys and help form sustainable and healthy travel habits.

5.21 In both cases, travel planning will be a key tool deployed to promote behaviour change. It will also be an important component of planning the construction of the new developments, particularly new businesses, and schools to minimise any disruption this work will cause.

5.22 Desired Outcomes under Theme 2 are:

- Stakeholders proactively identifying and removing barriers for people making journeys by sustainable modes;
- The emergence of a cultural change in how people view and interact with the active travel and sustainable transport network(s);
- Greater awareness amongst residents and visitors of Hemel Hempstead in the role they can play in promoting sustainable growth through their individual travel choices;
- The adoption of new and / or increasing existing 'wanted' behaviours amongst residents and visitors resulting in people walking and / or cycling more regularly for greater distances;
- Developments that maximise the scope and attractiveness of walking, cycling and micro-mobility options to new and existing key destinations in Hemel Hempstead and surrounding towns by minimising journey distances, severance, through optimising interactions with motorised traffic and creating attractive and safe routes;

- Developments that maximise the scope and attractiveness of local bus services to new and existing key destinations in Hemel Hempstead and surrounding towns by reducing journey times, simplifying fare and timetable complexity, and improving service reliability; and
- The delivery of Demand Responsive Transit (DRT) to broader range of accessible destinations.

Theme 3: A network fit for the future

5.23 For Hemel Hempstead to meet its growth aspirations, there is a clear need to embrace change and maximise the value of new mobility services, technologies, and systems. Hemel Hempstead needs to ensure its transport networks are integrated, resilient, and adaptable so that beneficial new opportunities can be grasped as they arise. The transport network needs to not only meet the existing accessibility needs of its businesses and local residents today but the needs of those that will live, work, learn, and visit the area, for generations to come.

5.24 Desired Outcomes under Theme 3 are:

- Attractive well-connected new places that act as drivers for growth and investment, including revitalising the town centre, local centres and expanded business park;
- Being ready to embrace emerging technologies and have the capability to meet future transport needs;
- Enhanced interchange facilities that enable more convenient changing between different modes of transport when making local journeys by improving the quality of facilities and co-location of services;
- Improved passenger transport networks including through an accessible, reliable, and affordable east-west transit system (HERT) which connects people easily to where they live, work and visit;
- The establishment of high-quality shared mobility services (such as bike and car share schemes) and well-planned developments that maximise the scope and attractiveness of such travel options by increasing their visibility and presence within the town;
- Hemel Hempstead's business parks and industrial estates will be well-connected to the transport network via a variety of different travel modes to maximise access and promote growth;
- A future ready transport network that helps accelerate the decarbonisation of all motorised modes of travel by delivering the appropriate infrastructure to enable this change (e.g. EV charging points, public hire services, promoting low carbon alternatives such as e-Cargo bikes where appropriate) helping Hemel Hempstead meet its climate emergency obligations;
- On- and off-street car parking designed flexibly with future non-car uses in mind; and
- co-ordinated approach to rationalising and consolidating freight movements and deliveries to homes, communities and businesses in the local area using the most appropriate routes and modes, maximising opportunities to promote greener, more sustainable options where possible.

Key and Local Networks

5.25 Hemel Hempstead's infrastructure requirements are defined in terms of the Key Network and the Local Network.

5.26 The Key Network reflects the main desire lines for travel and therefore represents those routes with the anticipated highest future volume movements around Hemel Hempstead. The analysis undertaken to support the TV&S identifies corridors that should be considered for inclusion within the Key Network.

5.27 The Key Network routes represent direct corridors between residential areas and the primary local destinations of the Town Centre, Maylands Business Park, and Hemel Hempstead Station. The A414 corridor is also recognised as a critical movement route that extends beyond the immediate boundary of Hemel Hempstead providing key interurban connections outside Hemel Hempstead via the M1 and A41.

5.28 The Local Network comprises three supporting networks. The Local Active Travel Network will be comprehensive and fully connected, removing impediments to walking, cycling and micro-mobility use. This network will link all neighbourhoods and important destinations, making it the most direct mode choice for most short local journeys; this will include creating or improving short connections to create permeable neighbourhoods.

5.29 The Local Passenger Transport Network will build on the Key Network by identifying in local routes where passenger transport can be prioritised over general traffic, helping maintain fast and reliable journey times. It will accommodate both local bus services and connect to the Hertfordshire Essex Rapid Transit (HERT), through new mobility hubs to enable passenger transport travel beyond the immediate Hemel Hempstead area, for example to key destinations such as St Albans City.

5.30 A fundamental element of the Local Network is the provision of continuous, traffic-free, or low-traffic routes designed to support active travel, referred to as the Green Network. These routes are typically more suited to leisure users, making use of green and blue infrastructure corridors (such as the Nickey Line and Grand Union Canal), but also the HGC Green Loop which is made up of a combination of Greenways and Quietways including quiet country lanes where traffic is very low and could be further limited or managed so they become largely traffic-free spaces.

5.31 The Key and Local Networks are shown in the following map.

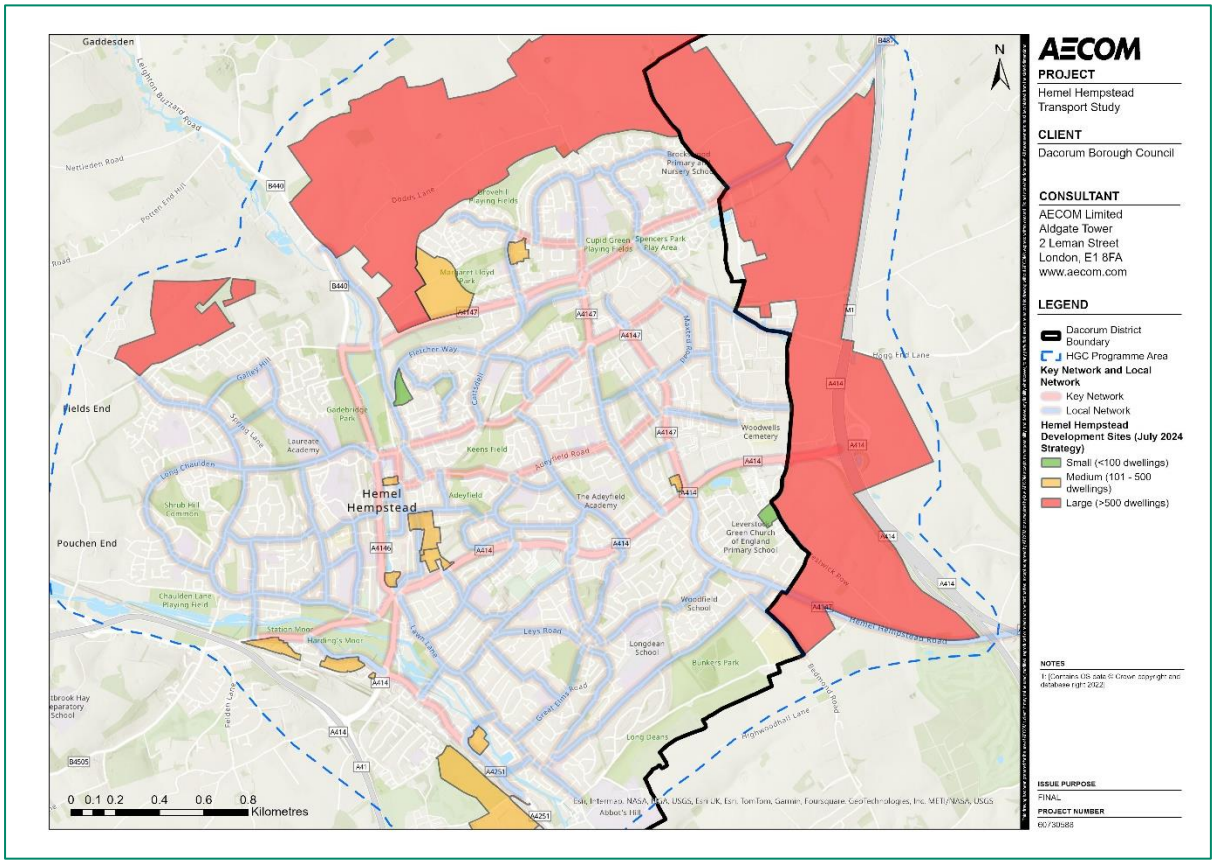


Figure 26 – Map showing the Key and Local Networks as defined in the HGC Transport Vision and Strategy

Sustainable Transport Corridor

5.32 In addition to the Key Network and Local Network, a Sustainable Transport Corridor (STC) is a proposed movement corridor which will run through the future extent of the Hemel Garden Communities (HGC) Development Area of North and East Hemel, prioritising active travel and public transport provision.

5.33 The STC route can be considered as two distinct sections. The northern section is from Leighton Buzzard Road (or Link Road) to B487 Redbourn Road, and the eastern section is from B487 Redbourn Road to A414 Breakspear Way (and then on to A4147 Hemel Hempstead Rd). The STC, will be further developed through the emerging HGC Framework Masterplan.

Hertfordshire Essex Rapid Transit (HERT)

5.34 The Hertfordshire Essex Rapid Transit (HERT) is a proposal for a new, sustainable passenger transport network. Rapid transit systems are more convenient and reliable than a traditional bus, stopping at strategic locations and given priority along roads and at junctions. The HERT will form an east-west transport corridor that runs from Watford and Hemel Hempstead in the west to Harlow (Essex) in the east.

5.35 The key settlements that will be served by the HERT are connected by the A414 east-west transport corridor, the A405 North Orbital Road and Abbey Rail Line between St Albans and Watford. These transport corridors provide vital local, regional and strategic connections and will significantly benefit both the immediate HGC area and wider regional network.

5.36 As discussed in Chapter 7, this study has identified a series of interventions which would serve as building blocks towards the eventual full delivery of the HERT through Hemel Hempstead. These building blocks including bus priority infrastructure which could come forward in the short to medium term to support existing bus services in advance of HERT services coming into operation at a later date.

Project Breakspear

5.37 Project Breakspear is a significant project looking at improving access to the HGC growth area(s), Maylands Business Park and Hertfordshire Innovation Quarter, in order to support the growth coming forward in this area. It consists of a number of elements including upgrades to the existing Breakspear Way / Green Lane Roundabout (Phoenix Gateway) to support the growth coming forward in this area.

5.38 To reinforce HCC's LTP4 Policy 1 (User Hierarchy), Project Breakspear will prioritise active and sustainable modes of travel. This will consist of a number of elements including:

- the replacement of the existing Breakspear Way / Green Lane Roundabout (Phoenix Gateway) with traffic signals,
- improving connectivity between the northern and southern parts of the development by providing a new high-quality walking and cycle bridge over the A414, a mobility hub, and
- a proposed spine road and sustainable transport corridor as part of the Land East of Hemel Hempstead, and Herts IQ developments.

5.39 One of the key goals of Project Breakspear is to mitigate the perceived severance created by the A414 corridor. This will be achieved through enhancements in crossings and active travel infrastructure, aiming to enhance neighbourhood connectivity on both sides of the corridor and make sustainable modes of transportation more appealing. Furthermore, these improvements will be designed to accommodate future advancements in technology, including micromobility and smaller autonomous vehicles, to facilitate both logistics and the movement of people.

5.40 Once the development area is developed, a later stage may require modifications to M1 Junction 8. A range of potential improvement schemes have been identified previously including construction of a new bridge over the M1 and a link road feeding into the eastern side of M1 Junction 8.

Committed Schemes

5.41 The following interventions are either in an advance stage of design development or in the process of being implemented at the time of writing. These interventions are not captured in the interventions list described later in this report but will contribute towards achieving the aims of the Transport Vision and Strategy.

- New signal-controlled pedestrian and cycle Toucan crossing adjacent to the entrance to Jarman Park on the A414 and improved connections on either side of the road to better link into the wider network.

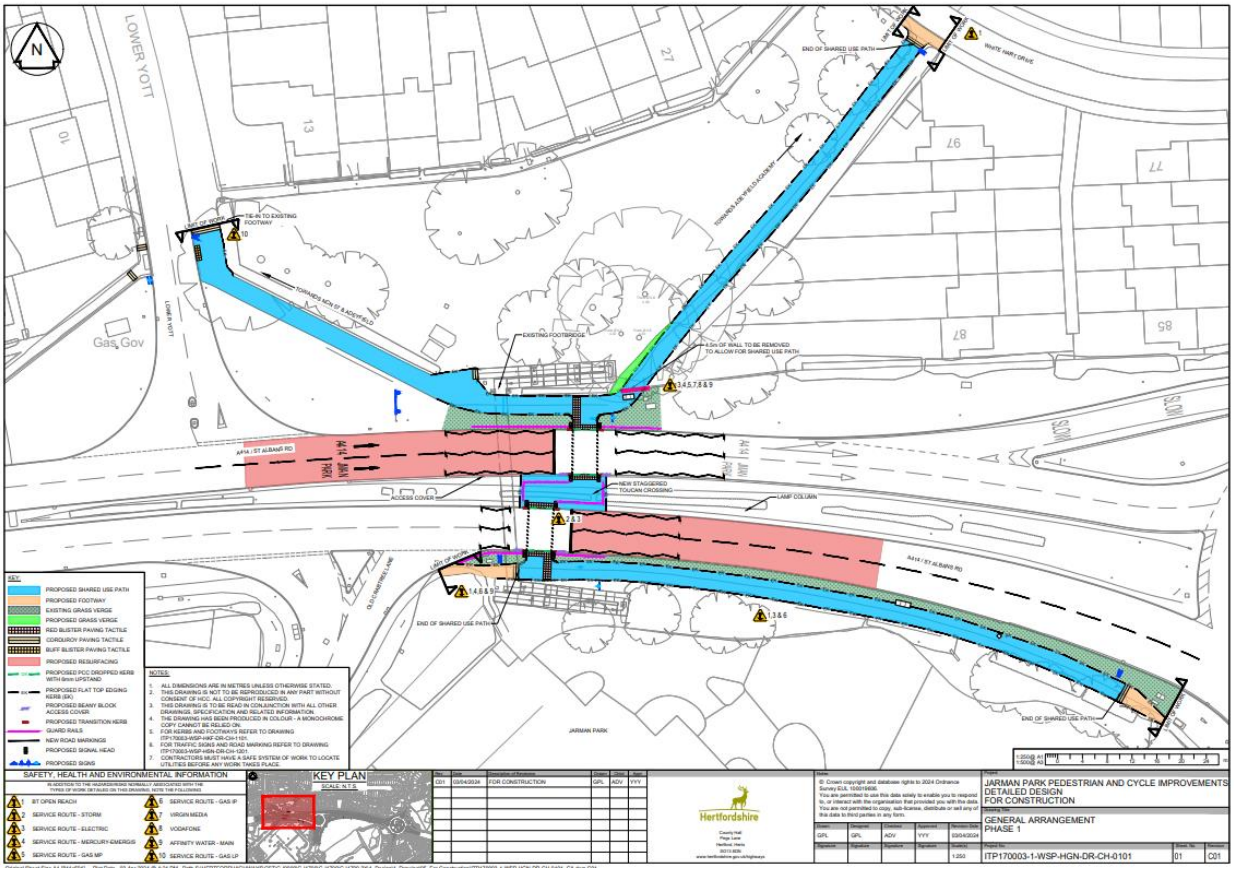


Figure 27 – Jarman Park Toucan Crossing scheme drawing (HCC)

- HCC is progressing with Buncefield Lane Quietway and Boundary Way roundabout schemes in Hemel Hempstead. Together, the schemes will better connect people between their workplace and homes in and around Leverstock Green, Maylands and Woodhall Farm.
- The new quietway will provide a safe and attractive walking, wheeling and cycling route through the heart of Maylands along Buncefield Lane. A 'Dutch-Style' roundabout at Boundary Way to make it safer for those walking and cycling.
- The improvements will include a dedicated space for people cycling around the entire junction, separated from the carriageway as well as pedestrian crossings and widened footways.

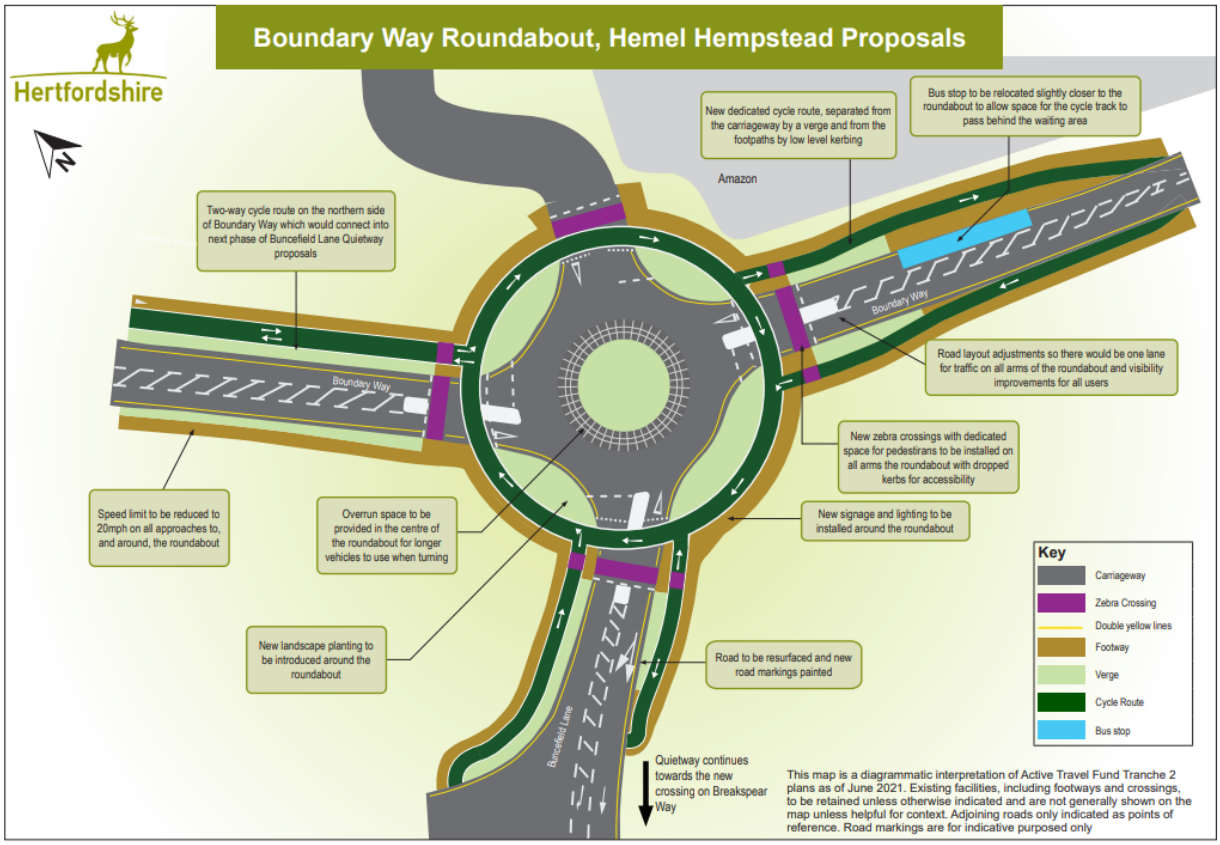


Figure 28 – Boundary Way Roundabout scheme drawing (HCC)

Chapter 6
Travel Interactions and Key Challenges

6. Travel Interactions and Key Challenges

6.1 Trip Attractors

6.1 In order to identify key routes which people would use to travel across Hemel Hempstead, in particular to/from the proposed Local Plan sites, the locations of a wide range of trip attractors have been identified. In addition to the main trip attractors of the town centre and railway stations, trip attractors comprise:

- Nurseries, schools and colleges
- GP Surgeries, health centres and the town's hospital
- Local parades of shops, retail parks and standalone large format retail units
- Leisure destinations including Jarman Park, the Ski Centre and leisure centres
- Employment areas

6.2 **Figure 29** below shows the main trip attractors captured in the study. This indicates that there is a wide spread of trip attractors across Hemel Hempstead which could therefore potentially generate a complex pattern of trips by different modes of transport.

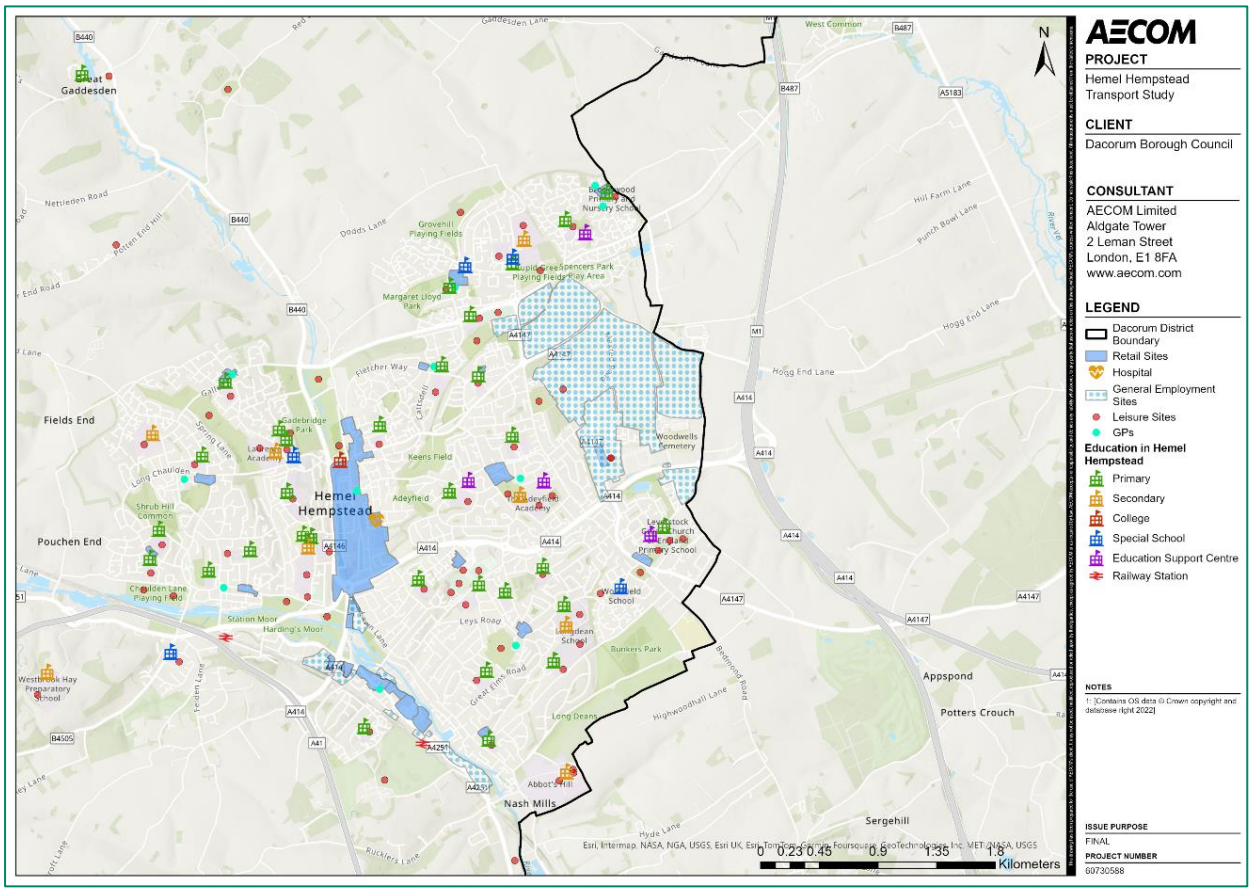


Figure 29 - Key Trip Attractors

6.3 Where a series of trip attractors are located close to each other, they have been grouped into trip attractor clusters. The purpose of clustering trip attractors is to simplify the process of identifying routes people would use to travel to the trip attractors. In some cases, a single trip could be made to several trip attractors in one cluster, for example visiting a GP surgery

and the nearby parade of shops. Twenty-eight trip attractor clusters have been defined across the town which are listed in **Table 10**.

6.4 These clusters have then been assigned to one of three categories to indicate their level of significance, taking into consideration the number of individual trip attractors contained within, and the volume of trips they may attract in combination. For example, a cluster is categorised as primary if there are 1 or more significant trip attractors e.g. college, rail station, hospital, more than 3 schools (to represent an education cluster) and more than 4 different trip attractors (representing a sort of local centre). The trip attractor clusters and their categorisation into Primary, Secondary and Tertiary clusters is presented in **Figure 30** below.

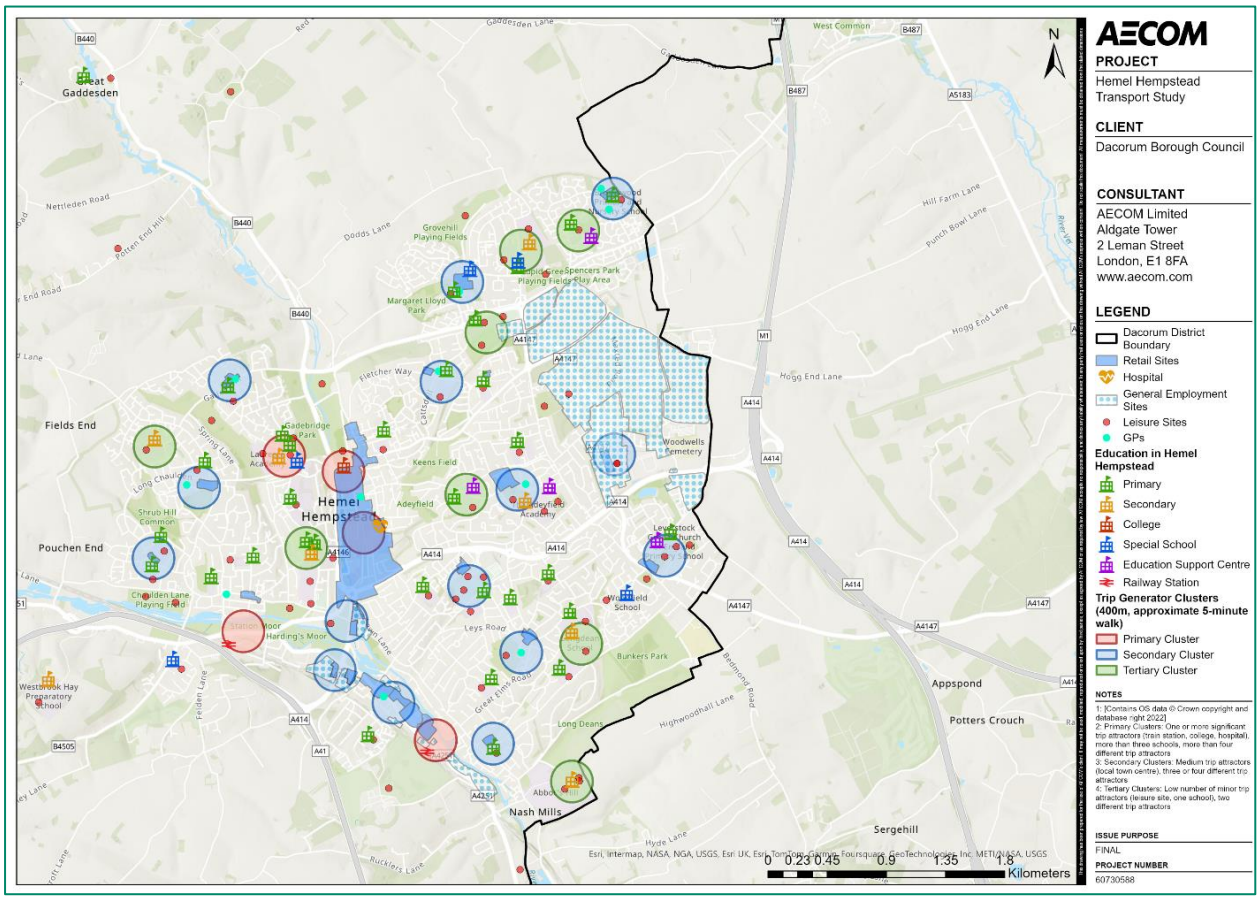


Figure 30 - Trip Attractor Clusters

Table 10 – Trip Attractor Clusters and significance categorisation

Cluster	Trip Attractors include	Category
1	Abbott's Hill School; Long Deans	Tertiary
2	Christ Church Hemel; Soccer Shooters football club; Longdean School; Chambersbury Primary School	Tertiary
3	The Hemel Hempstead School; Dacorum Music School; Southill Primary School	Tertiary
4	The Astley Cooper School; Haywood Grove SEMH Primary School; St Thomas' Indian Orthodox Church	Tertiary
5	Hammond Academy; Bees Knees Day Nursery and Pre-School	Tertiary
6	John F Kennedy Catholic School; St Mary's Catholic Church	Tertiary
7	Broadfield Academy	Tertiary

8	Woodhall Farm Community Centre; Holtsmere End Junior School; Woodhall Farm Pre-School	Tertiary
9	The Adeyfield School; Adeyfield Community Centre; The Queen's Square	Secondary
10	The Snow Centre; Dacorum Athletics Track; Climbing and Skatepark; Tesco Extra supermarket; Cinema	Secondary
11	Maylands Avenue shops including Hosking Court and Aldi; Nuffield Health gym; drive-thrus	Secondary
12	Leverstock Green Village Centre; Leverstock Green CofE Primary School; Woodfield School for Special Needs	Secondary
13	Large format retail including Halfords; Aldi; McDonald's drive-thru; industrial units	Secondary
14	Local Shops and retail parks including Dunelm, Wickes; Sainsbury's and Currys	Secondary
15	Chaulden Infants' and Nursery School; Chaulden Junior School; St Goerge's United Reform Church; Jocketts Park; Chaulden Community Centre; Chaulden local shopping parade	Secondary
16	Grovehill Community Centre; Henry Wells Square shopping centre; Aycliffe Drive Primary School; Margaret Lloyd Park	Secondary
17	Gadebridge Community Centre; Galley Hill Primary School and Nursery; Rossgate local shopping centre	Secondary
18	Lawn Lane local shops; B&Q DIY store; car dealership; other commercial premises around Corner Hall; Hemel Leisure Centre	Secondary
19	Woodhall Farm Medical Centre; Brockswood Primary School; Sainsbury's supermarket	Secondary
20	Warners End Community Centre; Stoneycroft local shopping centre; Micklem Primary School	Secondary
21	Bennetts Gate shopping parade; Bennetts End Community Centre; Bennetts End Youth Centre; Belswains Playing Field; Coronation Fields	Secondary
22	Bellgate Shopping Parade, Highfield; Highfield Community Centre; Tesco Express; Yewtree Primary School	Secondary
23	The Denes neighbourhood centre including Tesco Express; Nash Mills C of E Primary School	Secondary
24	Hemel Hempstead Railway Station	Primary
25	Hemel Hempstead Town Centre including Riverside Shopping Centre; The Forum; Hemel Hempstead Hospital; ASDA supermarket; Jellicoe Water Gardens	Primary
26	West Herts College; Hemel Hempstead Old Town; Walled Gardens; Bowls Club; St Mary's Church	Primary
27	Laureate Academy; The Collett School; Cavendish Sixth Form Centre; Gade Valley Primary School; Spring Fields; Gravel Hill Allotments	Primary
28	Apsley Railway Station	Primary

6.2 Travel Interactions – desire line routes

6.5 How people interact between different locations across Hemel Hempstead is expressed in terms of desire lines. These desire lines have been defined between all of the proposed Local Plan sites and the primary trip attractor clusters – this is shown in **Figure 31** below.

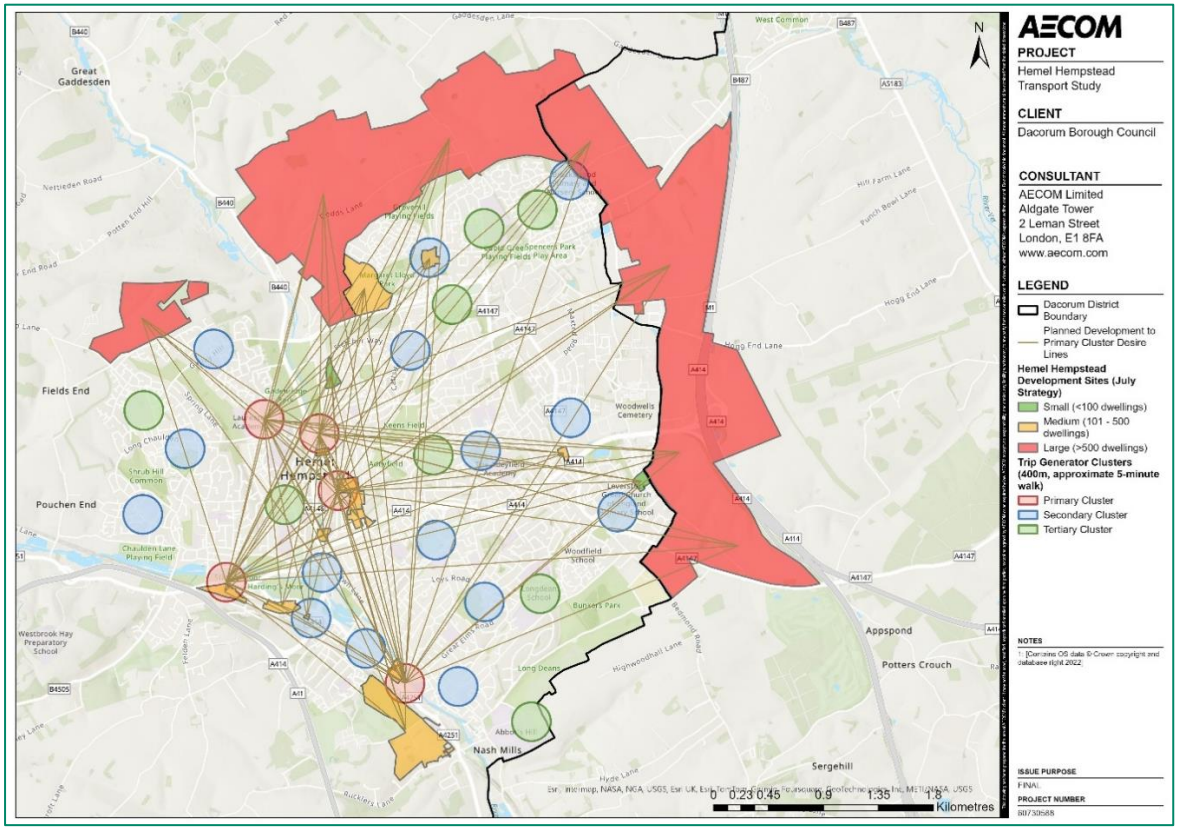


Figure 31 - Desire Lines between Planned Developments and Primary Clusters

6.6 This further demonstrates the potential complex pattern of trips which could be occurring across Hemel Hempstead. This does not indicate that there will be trips occurring along every desire line, and some may be more popular than others, for example trip attractor clusters which are located closer to development sites, and desire lines which route through secondary and tertiary trip attractor clusters.

6.7 The desire lines defined above do not represent realistic routes, therefore there has been an exercise to match (or snap) desire lines to realistic routes available on the town's transport network. **Figure 32** overleaf presents the shortest route between developments and primary clusters. In the most part, these routes were on the road network.

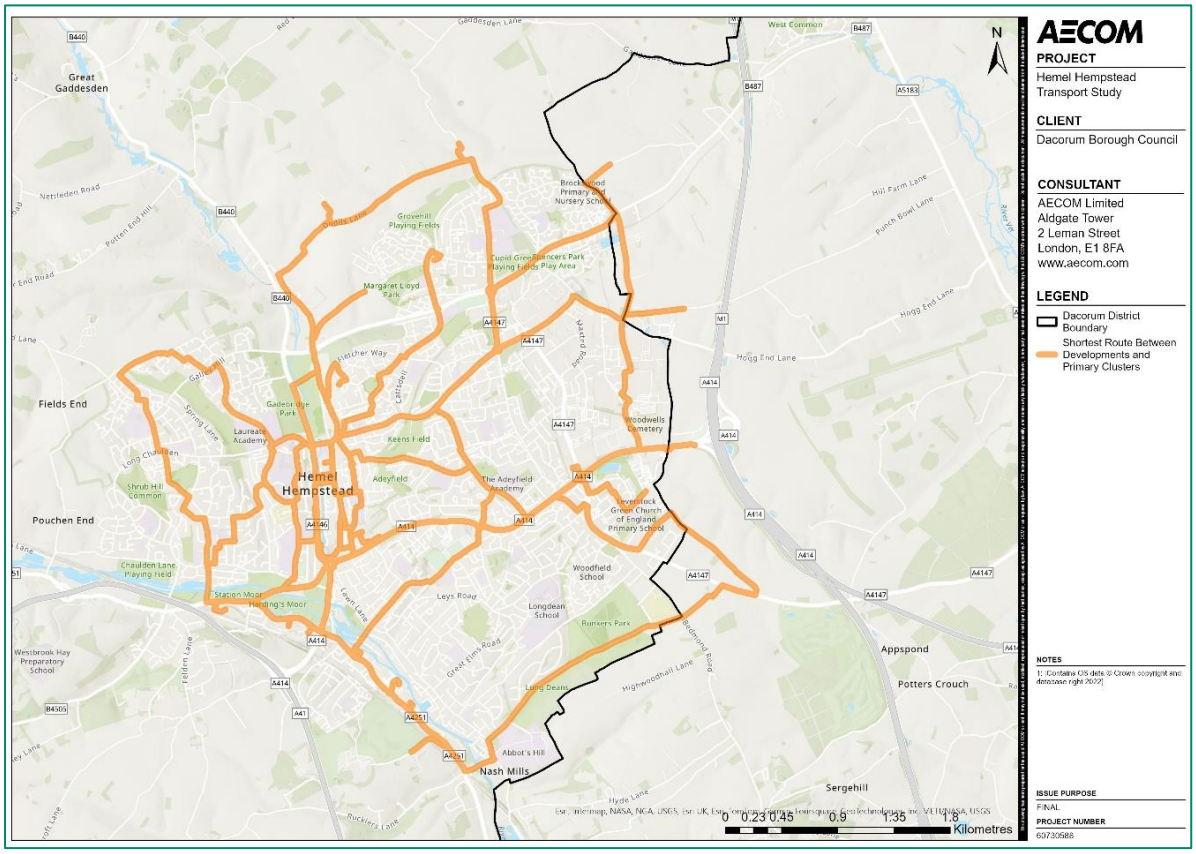


Figure 32 - Shortest Route Between Planned Developments and Primary Clusters

6.3 Trip generation

6.8 An estimate has been made of the number of trips that could be generated for each of the proposed development sites. These estimates are broad and do not take into account the specific characteristics of each development site including internal layout, land uses and provision of transport including bus services which may influence the number of trips and mode share.

6.9 Sets of trip rates derived from the TRICS database, have been used which broadly differentiate between the scale and location of developments, taking into account that a site in more peripheral locations is more likely to generate a higher proportion of car trips than a site in a town centre location. This will not take into consideration the type of provision for sustainable transport which is envisaged within the large edge-of-town developments including North and East Hemel Hempstead.

6.10 The trip generation estimates provide a broad indication of the number of trips by mode which could occur with the mode share targets in place which are highlighted earlier in this report, and without achieving targets, i.e. if developments adopted similar characteristics to developments of the past which have been surveyed in TRICS.

6.4 Route Auditing – identifying constraints and opportunities

6.11 An audit of the routes has been carried out to identify the existing constraints and potential opportunities for improvements that will make them easier and more attractive to use by people travelling by sustainable modes of transport.

6.12 Running alongside the development of this Transport Study, a Local Cycling and Walking Infrastructure Plan (LCWIP) for Dacorum is in development. A series of prioritised routes for

more detailed assessment have been identified as part of the LCWIP, and some of these routes match parts of the desire line routes identified in the previous figure.

6.13 The LCWIP prioritised route network is shown in **Figure 33** below.

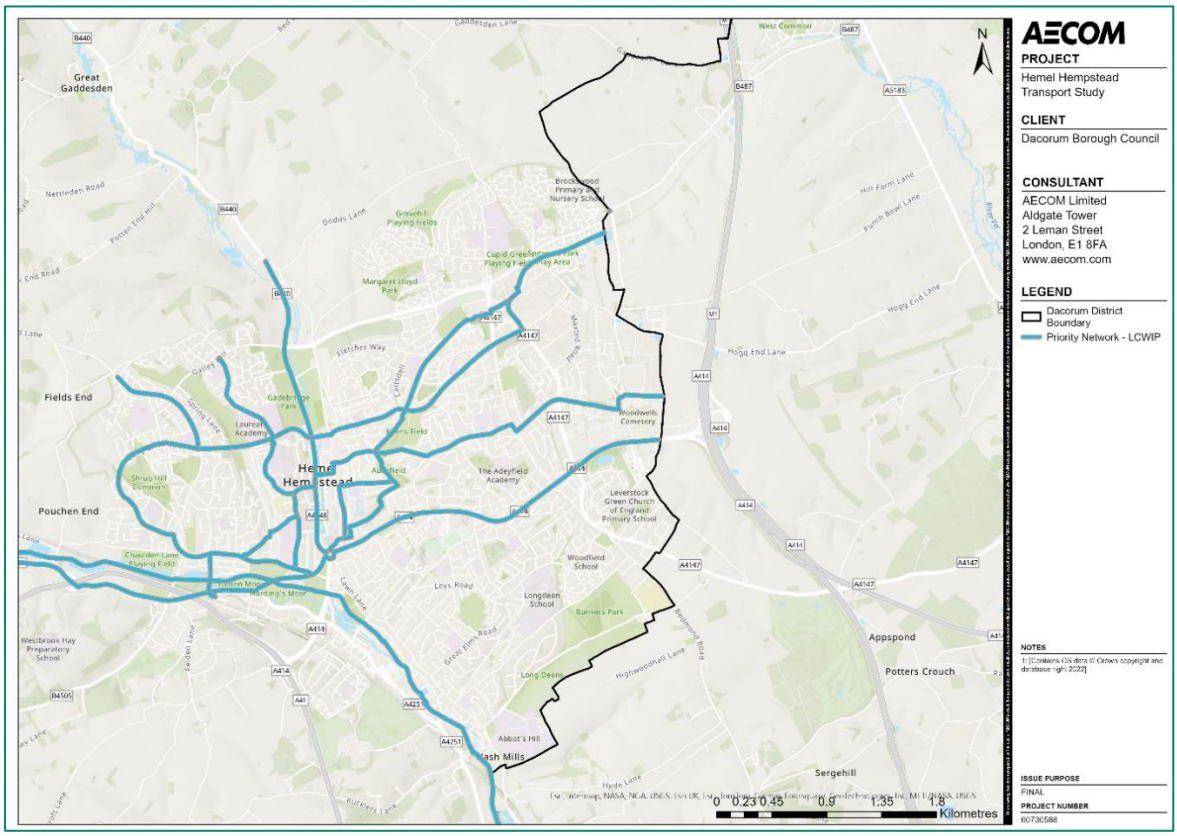


Figure 33 - LCWIP Prioritised Network

6.14 Therefore, the sections of the routes covered by the LCWIP which align with the desire lines have not been assessed as part of this Transport Study as this evidence will be presented in the LCWIP report to be published in 2025.

6.15 The remaining routes have been subject to a high-level audit for this study, and the routes have been divided into segments. The purpose of dividing longer routes into shorter segments is so that the distinct characteristics and settings of routes along their lengths can be accounted for. A set of thirty-six route segments have been defined as **Figure 34** overleaf demonstrates.

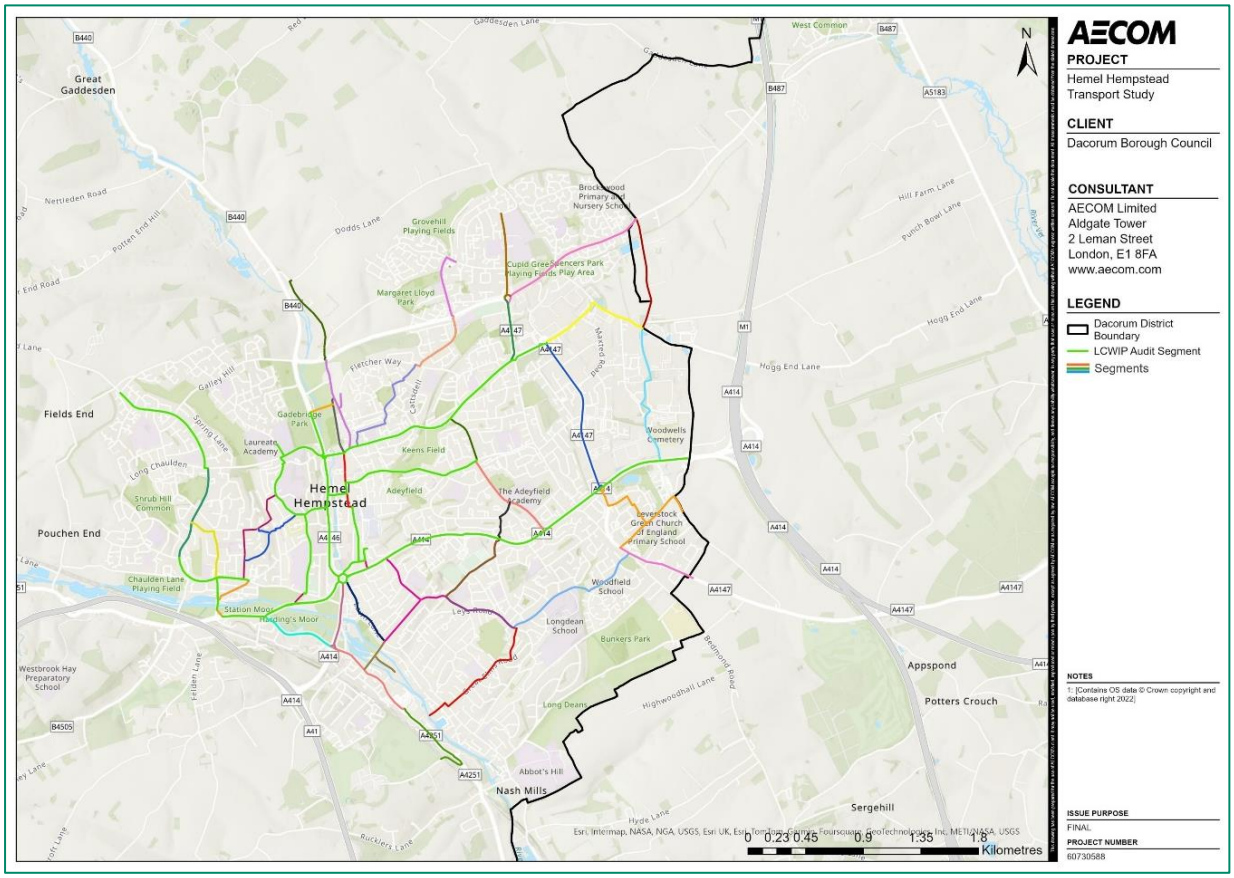


Figure 34 - All Segments Including LCWIP Audit Segment

6.16 The table below lists the segments and the roads they comprise.

Segment	Composition of segment route
Segment 1	**A combination of routes to be audited through the Dacorum LCWIP**. Comprises the A414 Breakspear Way/St Albans Road, Station Road, Leighton Buzzard Road, Marlowes, Adeyfield Road, Queensway, Heath Lane, Lockers Park Lane
Segment 2	Fishery Passage, Kingsland Road, Horsecroft Road, St John's Road
Segment 3	Cowper Road, Woodland Avenue, Glenview Gardens
Segment 4	Crouchfield, PRoW Hemel Hempstead 088
Segment 5	A4251 London Road (between A4146 Station Road and A414 Two Waters Way
Segment 6	A4251 London Road between A414 Two Water Way and Apsley Mills retail park
Segment 7	A4251 London Road between Apsley Mills retail park and edge of Hemel Hempstead
Segment 8	Great Elms Road
Segment 9	Peascroft, Northend, Malmes Croft
Segment 10	A4147 Leverstock Green Way
Segment 11	Green Lane, Micklefield Road, Tewin Road, Woolmer Drive
Segment 12	Buncefield Lane
Segment 13	Cherry Tree Lane

Segment 14	B487 Redbourn Road
Segment 15	Maylands Avenue
Segment 16	Longlands
Segment 17	Great Road
Segment 18	Aycliffe Drive, Washington Avenue
Segment 19	Cambrian Way
Segment 20	Allandale, George Street, Figtree Hill
Segment 21	Gadebridge Park north-south routes
Segment 22	Gadebridge Park east-west routes
Segment 23	High Street (Old Town), Piccotts End Road south of Link Road
Segment 24	Piccotts End Road north of Link Road, Piccotts End Lane
Segment 25	Marlowes north of Combe Street
Segment 26	A414 Two Waters Way
Segment 27	Lawn Lane
Segment 28	Durrants Hill Road
Segment 29	Deaconsfield Road, Runham Road, Wheelers Lane
Segment 30	Leys Road, Barnacres Road
Segment 31	St Albans Hill east of Leys Road, Bennetts End Road
Segment 32	White Hart Road, Windmill Road
Segment 33	Redbourn Road between Link Road and Swallowdale Lane
Segment 34	Swallowdale Lane and Three Cherry Trees Lane (east of Swallowdale Lane)
Segment 35	St Agnells Lane
Segment 36	Northridge Way
Segment 37	Green End Road

6.5 Key Challenges

6.17 The route segment audits are contained in **Appendix A**.

6.18 Common infrastructure issues were identified through audits of routes across the town, which include:

- A lack of safe, segregated routes for cyclists.
- Poor crossing facilities especially along desire line routes.
- Footway parking – cars parked partially or entirely on the footway, especially taking advantage of wide verges and footways in parts of the town and therefore reducing widths for people to walk (and cycle) safely.
- Lack of footways or narrow footways sometimes caused by encroaching vegetation.
- Lack of dropped kerbs and tactile paving and occasionally wide junctions creating difficulties for people to cross junctions.

- Limited bus priority infrastructure including on busy, congested roads.
- Wide, heavily trafficked roads including sections of dual carriageway (notably the A414) causing severance to pedestrians and cyclists.
- Grade separated routes for pedestrians and cyclists evident in different parts of the town (e.g. along the A414 and in the Grovehill area), intended to keep pedestrians out of harm's way of traffic, but some subways and footbridges may be undesirable to use especially at night and cycling is not permitted along many of them.

6.19 These infrastructure issues should be considered in the context of a range of town characteristics which will have an influence on travel patterns and behaviours:

- car is a dominant mode of choice;
- that the local bus network, whilst covering large parts of the town, comprises some low frequency and circuitous bus service routes;
- that the town's hilly topography is likely to deter some people from making journeys on foot or by bike;
- that key attractors are spread out across the town but significant trip attractors and trip attractor clusters such as the town centre and in particular the town's two railway stations, are located on the southern and western side of the town, requiring long journeys particularly from the northern and eastern parts of the town; and
- that the major employment cluster at Maylands is on the eastern side of the town, away from the town centre and railway station.

6.20 Without coordinated intervention the challenges faced today are likely to be exacerbated in the near future as the demand for transport increases given the projected growth in population and proposed new development within Hemel Hempstead. This has the potential to further increase congestion and ultimately overwhelm the transport network, with associated economic, social and environmental disbenefits for Hemel Hempstead.

6.21 Despite the challenges, Local Plan housing and employment growth poses solutions and opportunities. The planned developments and associated investment give Hemel Hempstead a once in a generation opportunity to strive for a better, more considered, approach to spatial planning. This includes the opportunity to deliver new transport infrastructure and systems needed for a more sustainable future, for both current and future generations.

Chapter 7
Proposed Interventions

7. Proposed Interventions

7.1 This chapter sets out the proposed interventions in Hemel Hempstead.

7.2 The process of identifying interventions has been informed by:

- the review of Evidence (described in **Chapter 3**) which has identified the context for where, how and why trips are made;
- the scale and locations of proposed housing and employment growth (described in **Chapter 4**);
- the overarching vision, strategy and objectives which have been defined for the Hemel Garden Communities (described in **Chapter 5**);
- the audit and identification of challenges and opportunities along the desire line routes (interactions) (described in **Chapter 6**); and
- previous studies which have put forward proposals to improve the local transport network, including the South West Hertfordshire Growth and Transport Plan and A414 Corridor Study.

7.3 Consideration has also been made of the considerable work and evidence compiled in conjunction with the large development sites proposed to the north and east of the town, including major infrastructure proposals around Breakspear Lane and M1 Junction 8.

7.4 Lastly, account has been taken of HCC's proposed HERT mass rapid transit system, and whilst this is a larger scale, longer term proposal, it is expected to come forward in phases and therefore some infrastructure will be required to help facilitate the HERT within Hemel Hempstead.

7.5 As part of reviewing the outputs of the route audits, consideration has been given to whether key challenges need to be addressed (i.e. it would help meet the objectives) and, if so, whether or not it would be feasible to do so (i.e. there may be instances where it is physically constrained and problematic to make an effective change).

7.1 Types of interventions

7.6 The Hemel Garden Communities Transport Vision and Strategy describes a series of typologies of interventions that would be appropriate on the Key and Local Networks. A more detailed description of these typologies is included in the Transport Vision and Strategy, however a brief summary is presented in **Figure 35Figure 36.**

Priority	Description	Example
Active Travel - fully segregated, providing the highest level of provision for these modes 	▪ Ensure the differing needs of cyclists and pedestrians are met through separated routes where space allows; ▪ Highest quality segregated cycle and walking routes with cycle parking and bike-hire facilities close by; ▪ Dedicated space as a priority for cyclists on a continuous basis - including through junctions; ▪ Well-lit, safe, welcoming, and wide footpaths for pedestrians; ▪ Safe and convenient crossing facilities for pedestrians and cyclists, including priority for pedestrians with immediate/minimal stop time to allow for continuous journeys; ▪ Clear route planning signage and directions including time/distance to local key destinations and communities for cyclists and pedestrians; and ▪ Passive surveillance to ensure pedestrian & cyclist safety	
Passenger Transport - comprehensive bus priority measures focused on maintaining fast and reliable journeys for buses 	▪ High degree of priority for buses, focused on achieving shorter and more reliable journey times than general traffic. This will be achieved through: • Bus lanes / dedicated busways wherever space is sufficient. Expected to be targeted at locations where traffic is queueing - typically on approaches to junctions; • Priority at signalised junctions; and • Modal filters to prioritise access for bus services. ▪ Clear, well-lit, safe spaces at interchange points (Mobility hubs) that support interchange with other sustainable modes for local trips; ▪ Real time information along routes, wherever possible; ▪ Sheltered places to sit/rest and wait for bus services to arrive; ▪ Wayfinding maps and signage for people arriving by bus; ▪ Scope to deter through access for car trips and prioritise access for bus services; and ▪ Scope to include active travel in running lane where general traffic volumes are low (e.g., provided through access restrictions such as bus gates)	

Priority	Description	Example
Active Travel - fully segregated, providing the highest level of provision for these modes 	▪ Ensure the differing needs of cyclists and pedestrians are met through separated routes where space allows; ▪ Highest quality segregated cycle and walking routes with cycle parking and bike-hire facilities close by; ▪ Dedicated space as a priority for cyclists on a continuous basis - including through junctions; ▪ Well-lit, safe, welcoming, and wide footpaths for pedestrians; ▪ Safe and convenient crossing facilities for pedestrians and cyclists, including priority for pedestrians with immediate/minimal stop time to allow for continuous journeys; ▪ Clear route planning signage and directions including time/distance to local key destinations and communities for cyclists and pedestrians; and ▪ Passive surveillance to ensure pedestrian & cyclist safety	
Passenger Transport - comprehensive bus priority measures focused on maintaining fast and reliable journeys for buses 	▪ High degree of priority for buses, focused on achieving shorter and more reliable journey times than general traffic. This will be achieved through: • Bus lanes / dedicated busways wherever space is sufficient. Expected to be targeted at locations where traffic is queueing - typically on approaches to junctions; • Priority at signalised junctions; and • Modal filters to prioritise access for bus services. ▪ Clear, well-lit, safe spaces at interchange points (Mobility hubs) that support interchange with other sustainable modes for local trips; ▪ Real time information along routes, wherever possible; ▪ Sheltered places to sit/rest and wait for bus services to arrive; ▪ Wayfinding maps and signage for people arriving by bus; ▪ Scope to deter through access for car trips and prioritise access for bus services; and ▪ Scope to include active travel in running lane where general traffic volumes are low (e.g., provided through access restrictions such as bus gates)	

Figure 35 – Key Network Intervention Typologies

Typology	Description	Example
Local Active Travel - light segregation, including measures such as wands 	▪ Provide light levels of segregation for active travel users where space allows, designed to increase the feelings of safety for users, particularly those who may be less likely to cycle, such as younger or older people; ▪ Measures can include wands, stepped kerbs, planters, etc; ▪ Supported through cycle parking and bike-hire facilities close by; ▪ Cycle lanes to be kept clear of parked cars and loading at all times; ▪ Well-lit, safe, welcoming and wide footpaths for pedestrians; ▪ Safe and convenient crossing facilities for pedestrians and cyclists, including priority for pedestrians and cyclists with immediate/minimal stop time to allow for continuous journeys; ▪ Clear route planning signage and directions including time/distance to local key destinations and communities for cyclists and pedestrians; and ▪ Passive surveillance to ensure pedestrian & cyclist safety.	
Residential Cycle Streets - utilising street design to encourage active modes 	▪ Primarily targeting residential areas with low traffic volumes and speeds; ▪ Low traffic speeds (20mph); ▪ Well-lit, safe, welcoming footpaths for pedestrians, clear of parked cars; ▪ Range of measures to encourage active travel (cycling): • Advisory cycle lanes; • Cyclist priority indicated through road markings; and • Removal of centre lines (designed to reduce traffic speeds) ▪ Maintain and enhance residential place character through reduction in car volumes and speeds.	

Typology	Description	Example
Local Passenger Transport - enabling reliable passenger transport journey times. 	▪ Priority for buses over general traffic where space allows. (which may be in limited locations due to nature of network, but should still be delivered where feasible): • Bus lanes / dedicated busways on approach to junctions where space is sufficient, and queues are likely; • Priority at signalised junctions; • Bus-only movements at junctions; and • In-lane stops to minimise dwell time. ▪ Clear, well-lit, safe spaces and high-quality public realm at bus interchanges that support interchange with walking for local trips; ▪ Real time information along routes, wherever possible; ▪ Sheltered places to sit/rest and wait for bus services to arrive; ▪ Wayfinding maps and signage for people arriving by bus; ▪ Integrated with active travel to avoid delays to either mode, such as the use of bus stop islands; ▪ Where active travel is sharing the carriageway, the lane should be at least 4m wide to enable buses to pass cyclists with sufficient room. If this space is not available lanes should be no wider than 3.1m to discourage unsafe overtaking. (Lane widths between 3.2m and 3.9m should always be avoided); and ▪ Running lanes to be kept clear of parked cars and loading during peak hours.	

Typology	Description	Example
Green Network - quiet lanes with very low vehicle levels, and low vehicle speeds, and traffic free, including closed roads, canal towpaths and converted railway lines 	▪ This includes Quietways which are lightly trafficked low speed roads; along with Greenways which refer to fully (or almost fully) off-road and traffic free routes; ▪ The character of each route will vary, and should be sympathetic to the place which it is running through, likely meaning routes will not have lighting or paved surfaces in places, so as not to disrupt the natural environment; ▪ Minimal physical interventions on existing country lanes, likely to only require bollards to limit traffic, with occasional seating (areas to dwell); ▪ Use of local and recycled materials to acknowledge the character of Hemel and the surrounding area; ▪ Clear route planning signage and directions including time/distance to local key destinations and communities for cyclists and pedestrians; ▪ Mixed use between all active modes; and ▪ To include places to dwell/rest such as benches, and where appropriate, space for pop-up business, public art, and interactive historic/nature trails that foster a sense of place and celebrate the local environment and culture;	 The Nickey Line, 2023

Figure 36 – Local Network Intervention Typologies

7.2 Proposed Interventions

7.7 A list of 214 interventions have been identified through this study. The list comprises:

- 145 interventions identified through the audits of the thirty-six route segments
- 69 interventions which have been identified across the town, including larger more complex interventions

7.8 A full list of interventions identified in this study are presented in **Appendix B**.

7.9 Interventions are listed in the following sets of tables by mode category. The tables provide details for each intervention: a unique ID; name; a brief description of what the intervention is expected to comprise; whether an intervention is located on the designated Local or Key Networks as defined in the Transport Vision and Strategy, or another part of the transport network; and whether the intervention is located within Dacorum Borough, neighbouring St Albans City and District, or sits on the district boundary.

7.10 A map showing the locations of all the proposed interventions put forward in this study is shown below. A large-scale version of this map is contained in **Appendix D**.

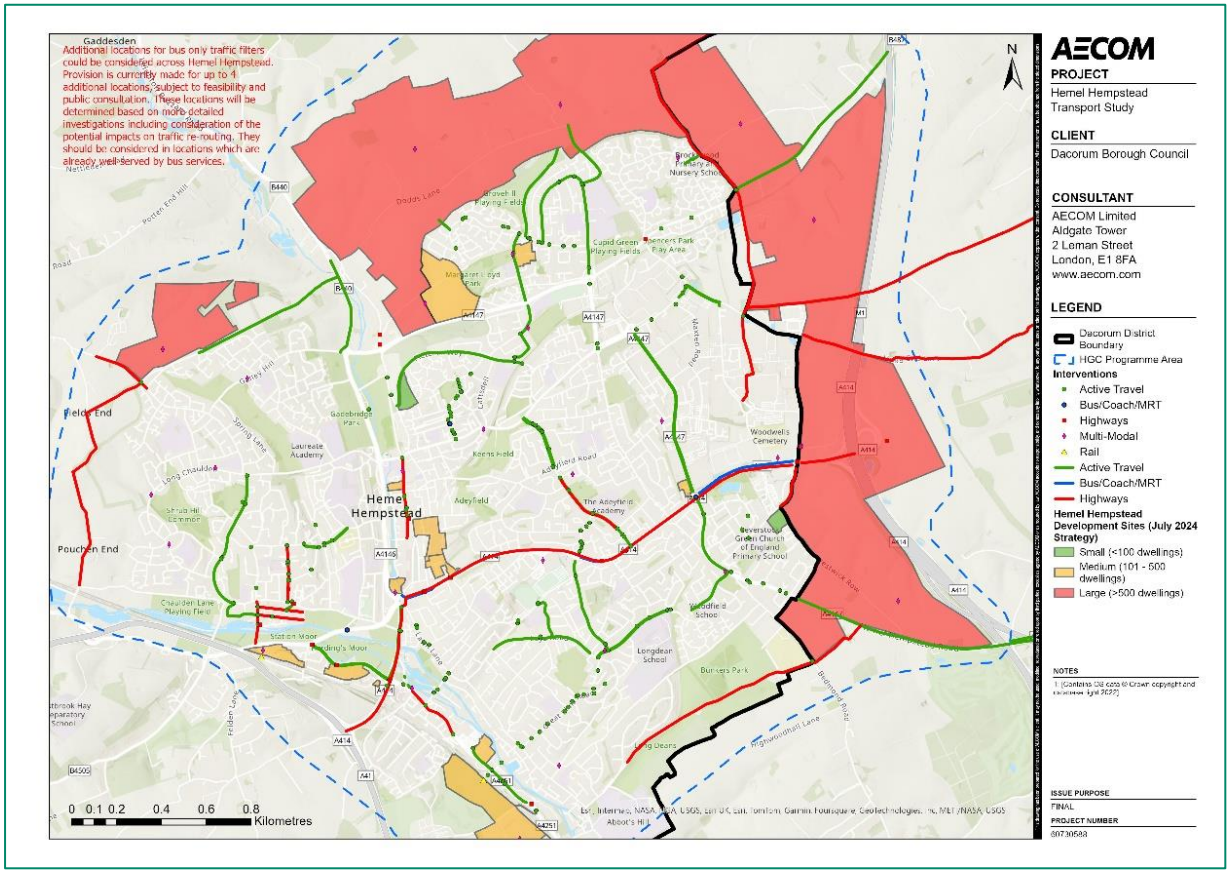


Figure 37 – Map showing all of the proposed interventions identified in the study

Multi-Modal

7.11 The following interventions have been identified under the Multi-Modal category.

Table 11 – Multi-Modal Interventions

ID	Name	Description	Network	Local Authority
LS-1	Cambrian Way Local Mobility Hub	Local Mobility Hub located near to the junction with Wensleydale, close to Nickey Line, and served by Bus Route 2	Local Network	Dacorum Borough Council
LS-2	Keens Field Mobility Hub	Local Mobility Hub located at Queensway-St Paul's Rd (close to Nickey Line) OR Cattsdell-Thumpers junction area. Served by Bus Routes 2, 3 and 4	Local Network	Dacorum Borough Council
LS-3	Grovehill Local Mobility Hub	Local Mobility Hub located at Aycliffe Drive (Grovehill) opp. Henry Wells Sq. Served by Bus Route 2	Local Network	Dacorum Borough Council
LS-4	Woodhall Farm Local Mobility Hub	Local Mobility Hub located on Shenley Road, Woodhall Fm near Sainsbury's. Served by Bus Route 2	Local Network	Dacorum Borough Council
LS-5	Adeyfield Local Mobility Hub	Local Mobility Hub located at The Queen's Square, Adeyfield local centre. Served by Bus Routes 1 and 302	Local Network	Dacorum Borough Council
LS-6	Maylands South Local Mobility Hub	At or near future HERT interchange at junction of A414 Breakspear Way/Maylands Avenue	Key Network	Dacorum Borough Council
LS-7	Jarman Park Local Mobility Hub	Local Mobility Hub located at Jarman Park near to vehicle access or adjacent to marked bus stop. Not currently served by any local bus service but could be served by the HERT in the future	Key Network	Dacorum Borough Council
LS-8	Bennetts End Local Mobility Hub	Local Mobility Hub located at Peascroft Road/Bennetts End Road, close to the local shopping parade. Served by Bus Routes 1 and 2	Local Network	Dacorum Borough Council
LS-9	Leverstock Green Local Mobility Hub	Local Mobility Hub located on Leverstock Green Way, close to the local shopping parade. Served by Bus Routes 20, 302 and 721	Local Network	Dacorum Borough Council
LS-10	Warners End Local Mobility Hub	Local Mobility Hub at Warners End Road/Long Chaulden, close to the local shopping parade. Served by Bus Routes 3, 4 and ML1.	Local Network	Dacorum Borough Council
LS-11	Galley Hill Local Mobility Hub	Local Mobility Hub located in Galley Hill opposite the Baptist Church. Served by Bus Routes 3 and 4.	Local Network	Dacorum Borough Council
LS-12	Chaulden Local Mobility Hub	Local Mobility Hub located close to the Honeycross Rd junction. Served by Bus Routes 3 and ML1	Local Network	Dacorum Borough Council
LS-13	Maylands Central Local Mobility Hub	Local Mobility Hub located at Wood Lane End car park (requites removal of parking spaces). Served by Bus Routes 302, 320 and ML1.	Local Network	Dacorum Borough Council

LS-14	Maylands Multi Modal Interchange (Metro Mobility Hub)	Integrated metro mobility hub with facilities to encourage and facilitate modes of transport other than the private car; this will connect the site to key destinations including Hemel Hempstead Train Station and the Maylands Business Park. Mobility hub to provide a bus and coach interchange near Maylands with access to the A414/M1. Served by existing or new express coach services along the M1 (e.g. Greenline and National Express) and local express buses to neighbouring towns including a potential cross-county express bus service (HERT). Opportunity for associated cycle and pedestrian improvements. This forms part of Phase 2 of the package of transport measures for M1 J8 enhancements - Prioritisation of active and sustainable modes of travel.	Key Network	Could be located within Dacorum or St Albans areas
LS-22	North Hemel Hempstead Local Mobility Hub - west	Local Mobility Hub located within the proposed North Hemel Hempstead development site HH01/HH02 around the proposed mixed-use area MU1 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	Dacorum Borough Council
LS-23	North Hemel Hempstead Local Mobility Hub - central	Local Mobility Hub located within the proposed North Hemel Hempstead development site HH01/HH02 around the proposed mixed-use area MU2 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	Dacorum Borough Council
LS-24	North Hemel Hempstead Local Mobility Hub east	Local Mobility Hub located within the proposed North Hemel Hempstead development site HH01/HH02 on the eastern side near to the A4146 Redbourn Road and around the proposed mixed-use area MU3 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	St Albans City and District Council
LS-25	East Hemel Hempstead Local Mobility Hub	Metro Mobility Hub located within the proposed East Hemel Hempstead development site in the northern part of the development, south of the A4146 Redbourn Road and around the proposed mixed-use area MU4 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	St Albans City and District Council
LS-26	East Hemel Hempstead Local Mobility Hub	Metro Mobility Hub located within the proposed East Hemel Hempstead development site in the southern part of the	Development Road Network	St Albans City and District Council

		development, north of the A4147 Hemel Hempstead Road and around the proposed mixed-use area MU6 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities		
LS-27	Marchmont Farm Local Mobility Hub	Local Mobility Hub located within the proposed Marchmont Farm development site HH22 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	Dacorum Borough Council
LS-28	Polehanger Lane Local Mobility Hub	Local Mobility Hub located within the proposed Polehanger Lane development site NEW4 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	Dacorum Borough Council
LS-29	Shendish Manor and Fairfields Local Mobility Hub	Local Mobility Hub located within the proposed Shendish Manor and Fairfields development site NEW3 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	Dacorum Borough Council
LS-30	Hemel Hempstead Station Forecourt Enhancements (Metro Mobility Hub)	Revised layout to the station forecourt to provide a more attractive and accessible environment for walking, wheeling and cycling, improved taxi rank, improved bus interchange facilities in line with the Metro Mobility Hub standards. This will be the terminating/turn-around point for the proposed HERT MRT system.	Close to Key Network	Dacorum Borough Council
LS-56	The Denes Centre Local Mobility Hub	Local Mobility Hub located adjacent to the Denes local shopping parade. Served nearby by Bus Route 2	Other	Dacorum Borough Council
LS-57	Two Waters (London Road) Local Mobility Hub	Local Mobility Hub located on London Road in Two Waters Opportunity Area, opposite McDonalds drive-thru and close to the A414 junction. Served nearby by Bus Route 322	Key Network	Dacorum Borough Council
LS-68	Marlowes - West Herts College Local Mobility Hub	Local Mobility Hub outside the college, and served by Bus Routes 2, 4 and 46.	Key Network	Dacorum Borough Council
LS-69	West of Hemel Local Mobility Hub	Local Mobility Hub within the proposed development or on the adjacent Long Chaulden, currently served by Bus Routes 3, 4 and ML1	Local Network	Dacorum Borough Council

7.12 Indicative locations for mobility hubs have been identified across Hemel Hempstead which will be subject to more detailed investigations and feasibility studies. The opportunity for implementing mobility hubs will depend on the composition and scale of facilities provided and more detailed consideration of local demand. They are expected to comprise enhanced bus stop facilities including shelters; cycle parking and e-bike hire docking stations/marked parking areas; and potentially e-car hire.

7.13 Consideration will be needed to ensure there is sufficient access available to the hubs particularly for people travelling on foot and by bike. Locations have been identified based on current bus service provision which may also change during the plan period.

7.14 A map showing the locations of multi-modal interventions put forward in this study is shown below. A large-scale version of this map is contained in **Appendix D**.

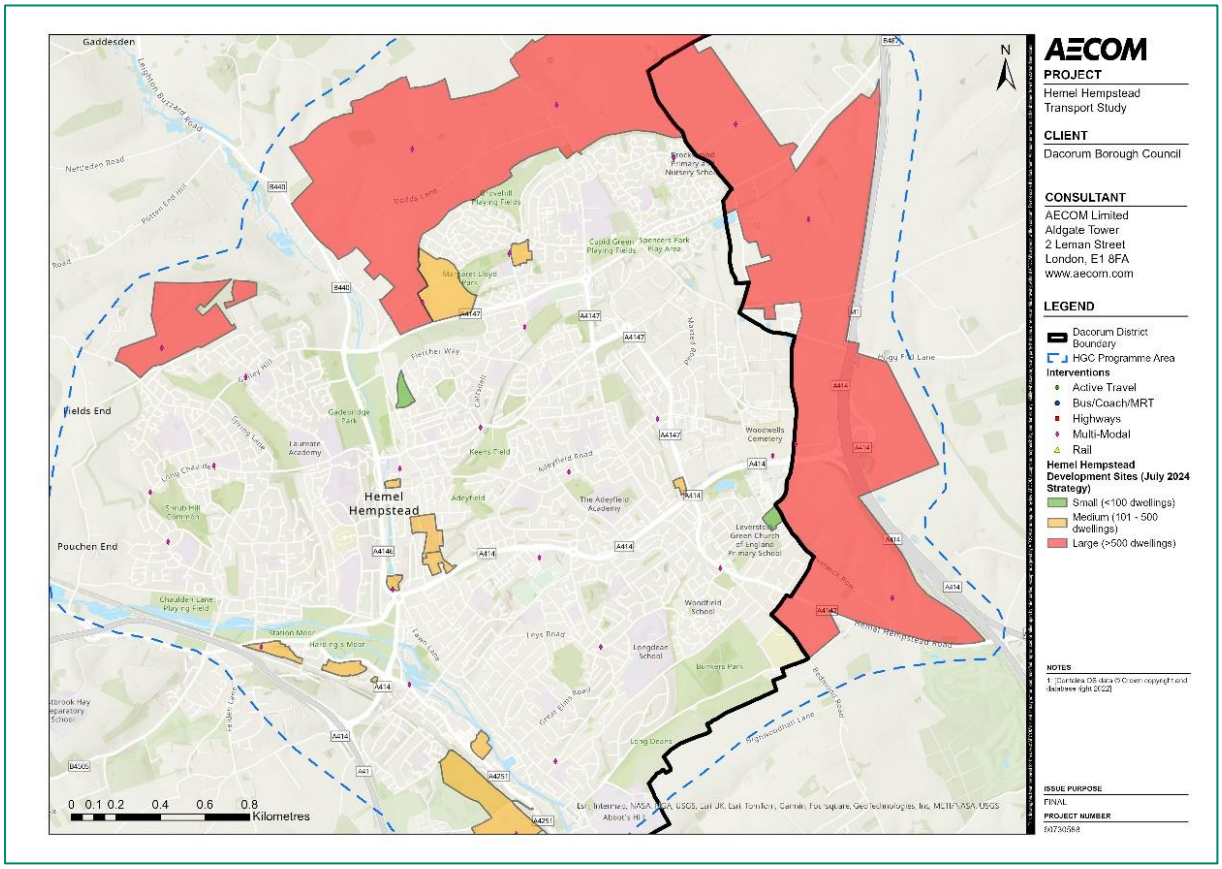


Figure 38 – Map showing the indicative locations of multi-modal interventions put forward in the study

Bus and Coach including the HERT

7.15 The following interventions have been identified under the Bus/Coach/MRT category, some of which are directly or indirectly related to the proposed HERT as indicated in the table below.

Table 12 – Bus/Coach/MRT Interventions

ID	Name	Description	Network	Authority Area
LS-16	Plough Roundabout Link Break - bus priority	Investigate the potential for introducing bus priority at the Plough Roundabout, particularly in the vicinity of the bus interchange which could also be served by the HERT in the future.	Key Network	Dacorum Borough Council
LS-17	A414 St Albans Road (town centre approach) bus priority	Bus priority lane on the A414 westbound approaching the Plough Roundabout including bus gate signals to enable buses to move from the nearside to the offside lane. To accommodate the bus lane, there	Key Network	Dacorum Borough Council

ID	Name	Description	Network	Authority Area
		is likely to be a need to reduce general traffic space by a lane in either the eastbound or westbound direction.		
LS-19	Bus Only Traffic Filter - Station Road	A Bus Only traffic filter (in both directions) on A4146 Station Road, east of St John's Road, to prevent through traffic. Could be in operation throughout the day, or at peak times only. It would benefit Bus Routes 1, 2, 4, 20, 302, 352, 501, ML1 and X5. Additional locations for bus only traffic filters across Hemel Hempstead are not confirmed at this time and would be subject to feasibility and assessment of the traffic re-routeing effects.	Key Network	Dacorum Borough Council
LS-20	Bus Only Traffic Filters - wider Hemel Hempstead	Additional locations for bus only traffic filters could be considered across Hemel Hempstead. Provision is currently made for up to 4 additional locations, subject to feasibility and public consultation. These locations will be determined based on more detailed investigations including consideration of the potential impacts on traffic re-routing. They should be considered in locations which are already well served by bus services.	Key Network	Dacorum Borough Council
LS-62	St Albans-Hemel Hempstead Bus Connectivity	Review bus service connections between St Albans and Hemel Hempstead from the perspective of identifying opportunities for increasing service frequencies and/or reducing journey times e.g. introducing new services with limited stops or re-routeing services along the A414 to simulate what could eventually form the future HERT corridor. Existing services in the corridor include Bus Route 721.	Key Network	Cross-boundary
LS-63	Northern Hemel Hempstead-Watford Town Centre, Croxley and Rickmansworth Connectivity	Review bus service connections between North Hemel Hempstead, Watford, Croxley and Rickmansworth from the perspective of identifying opportunities for increasing service frequencies and/or reducing journey times e.g. introducing new services with limited stops or re-routeing services along the A41, A4251, Bedmond Road and/or the M1. Existing services in the corridor include Bus Routes 20 and 322.	Key Network	Cross-boundary
LS-65	Luton-Hemel Hempstead Bus Connectivity	Review bus and coach service connections between Luton and Hemel Hempstead from the perspective of identifying opportunities for increasing service frequencies and/or reducing journey times e.g. introducing new services with limited stops or re-routeing services to improve connectivity. Existing services between the two towns are Bus Routes 46 and 721.	Key Network	Cross-boundary

ID	Name	Description	Network	Authority Area
LS-70	A414 Maylands Avenue - Green Lane bus priority lanes	Maylands Avenue to Green Lane - eastbound and westbound bus lanes (approx.335m in length) with signal-controlled bus gate at the terminating end. Would necessitate removal of a general traffic lane in at least one direction as there is insufficient space for bus lanes within the verge area on both sides of the road.	Key Network	Dacorum Borough Council
LS-71	A414 Maylands Avenue Roundabout Signalisation	Partial signalisation of Maylands Avenue roundabout - northern and eastern arms and opposing circulatories. Removal of left-turn bypass lane from north to east. Provide two-lane exit onto A414 eastbound with widened central reserve to create more stacking space on southbound circulatory. Introduce a new at-grade crossing facility to the east of the roundabout, to replace or complement the existing footbridge.	Key Network	Dacorum Borough Council
LS-72	A414 Rant Meadow to Bennetts End Road bus priority lane	Westbound only bus lane between Rant Meadow and Bennetts End Road roundabout with signal-controlled bus gate. May require some reallocation of road space.	Key Network	Dacorum Borough Council
LS-73	Upgraded Town Centre Riverside Bus Interchange	Upgrade to the Riverside Bus Interchange to align with Metro Mobility Hub standards including better facilities for waiting passengers. Assume the overall capacity of the interchange will not be influenced by the adjacent Riverside development	Local Network	Dacorum Borough Council
SG20-4	Allandale bus stop upgrades	(SG20-4) Upgrade bus stops adjacent to George Street junction to incorporate raised Kassel kerbs	Local Network	Dacorum Borough Council

7.16 LS-20 indicates the potential for additional bus modal filters located across Hemel Hempstead. These would be additional to the modal filter proposed on Station Road as part of LS-19. As described above, these would essentially prevent general traffic except buses and potentially taxis and cycles, from travelling along a section of road. They would be cleared signed and indicated by road markings and potential physical measures such as kerbed build-outs. They would also be monitored and enforced by CCTV cameras. They can be an effective measure to influence travel behaviour by preventing through traffic and helping provide much faster, more efficient bus journeys. They can be enforced on a permanent basis or at certain times of the day such as during busy peak periods. The locations of modal filters, other than Station Road, are not specified in this study until further investigations are undertaken.

7.17 Bus services are subject to change and reflect market conditions as many services operate on a commercial basis. Three broad connections between Hemel Hempstead and other towns are identified above. In addition, the proposed Local Plan developments are expected to warrant a change to the current bus network. This may require entirely new services or revisions to existing services including change of routes, route extensions and frequencies. It is recommended that consideration is given to a bus network study to assess future needs.

7.18 A map showing the locations of bus/coach/MRT interventions put forward in this study is shown overleaf. A large-scale version of this map is contained in **Appendix D**.

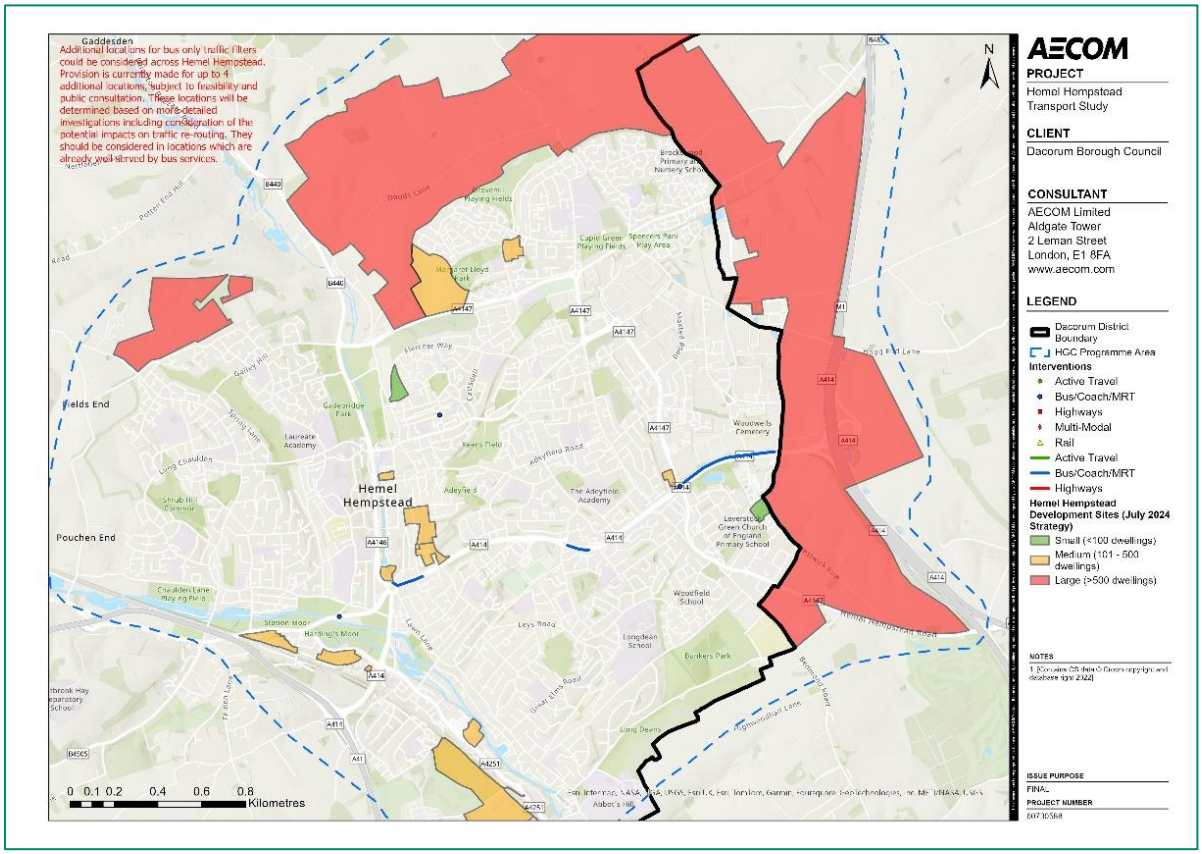


Figure 39 - Map showing the indicative locations of bus/coach/MRT interventions put forward in the study

7.19 The HERT is in an early stage of development, with an indicative route and potential stops currently being developed by Hertfordshire County Council. The building blocks which could be introduced within the Local Plan period in order to facilitate HERT in the longer term which have been identified through this study, may be subject to change depending on how the HERT evolves. A key area of uncertainty is what HERT could comprise in its end state and what this means for transport infrastructure in Hemel Hempstead. Additional infrastructure provision may be required over and above the interim building blocks identified in this study which could, for example, require a more substantial reconfiguration of the A414 dual carriageway and junctions to provide a greater level of priority to the HERT.

7.20 Many of the interim building blocks of infrastructure would be of benefit to existing bus service provision, although bus service routes may change over the plan period from what is currently available.

7.21 Some of the building blocks however are dependent on HERT services being introduced, or interim services such as re-routing an existing bus service between Hemel Hempstead and St Albans to mimic what HERT will eventually provide in terms of service routeing and frequency. This includes bus lanes on the A414 between Maylands Avenue and Green Lane, and the proposed Maylands Multi Modal Interchange within the East Hemel Hempstead development, although the latter could be served by other local bus services and potentially some long-distance coach services making a short detour off the M1.

Active Travel

7.22 The following interventions have been identified under the Active Travel category.

7.23 In addition to the active travel interventions proposed in the transport study, the Dacorum Local Cycling and Walking Infrastructure Plan (LCWIP) is in development. The LCWIP has assessed a series of routes including ones which are additional to the routes audited for this transport study. Approximately 107 interventions are located on desires line routes identified

as being important in this study. These interventions have been incorporated separately in the Infrastructure Delivery Plan but are not listed in this report.

Table 13 – Active Travel Interventions

ID	Name	Description	Network	Local Authority
LS-50	Boxted Road Green Loop Crossing Point	Pedestrian and cycle crossing on Boxted Road adjacent to the junction with Fields End Lane (proposed Quietway) and Berkhamsted Road (which is not open to traffic at its western end and is also proposed as a Quietway).	Local Network	Dacorum Borough Council
LS-51	Polehanger Lane-Leighton Buzzard Road Green Loop	Upgrade to existing PRoW (Footpath) Hemel Hempstead (013) linking Polehanger Lane and Leighton Buzzard Road to form part of the proposed Green Loop.	Green Loop	Dacorum Borough Council
LS-53	Redbourn Road Green Loop Crossing Point	Pedestrian and cycle crossing on B487 Redbourn Road adjacent to the junction between Cherry Tree Lane and Holtsmere End Lane to connect sections of the proposed Green Loop running through the East Hemel Hempstead development on either side.	Key Network	St Albans City and District Council
LS-54	A4147 Hemel Hempstead Road Gateway Corridor	Alterations to the A4147 Hemel Hempstead Road between the existing settlement boundary and the junction with Beechtree Lane and Appspond Lane (between M1 and A414), comprising: 1) speed limit changes 30mph along most of the length, with a buffer 40mph section at the eastern most end up to Beechtree Lane and Appsond Lane; 2) provision of upgraded shared use pedestrian and cycle route along the full length (northern side of the road); 3 crossings including 1 signal-controlled pedestrian/cycle crossing (for access to proposed secondary school on southern side) and a crossing to link with the Blackwater Lane Green Loop; raised M1 bridge parapet (northern side) to facilitate cycling. Upgrades may be influenced by where proposed vehicle accesses will be created into the East Hemel Hempstead development site and school entrance.	Local Network	St Albans City and District Council
LS-55	Bunkers Lane-Blackwater Lane Quietway Crossing Point	Pedestrian and cycle crossing on Bedmond Road adjacent to the junction with Bunkers Lane (proposed Quietway) and Blackwater Lane (proposed Quietway).	Other	St Albans City and District Council
LS-58	E-Bike Hire Scheme with E-Bike docking hubs (where not co-located at Mobility Hubs) - Hemel Hempstead Inner	Information sourced from Transport Initiatives LLP's June 2024 report. Could comprise 26-34 docking hubs; Hemel Hempstead Outer - 13-17 docking hubs ((Two Waters OA - 9 hubs; Kings Langley 8 hubs; Maylands Business Park 7 docking hubs; North HH 10 hubs; East HH 15 docking hubs). Assume simple docking	Multiple	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
		equipment and/or a marked area on the highway.		
LS-59	Apsley Station Forecourt & Cycle Provision	Enlarge pedestrian footway in front of station ticket hall, double the number of cycle stands (currently 12), removal of some parking spaces to provide space for enlarged footway and additional cycle stands, planting and landscaping.	Key Network	Dacorum Borough Council
LS-61	B487 Hemel Hempstead Road Gateway Corridor	Alterations to the B487 Hemel Hempstead Road between the existing settlement boundary and the M1 bridge, comprising: 1) speed limit changes 30mph along the frontage of the proposed East Hemel Hempstead development, with a buffer 40mph section at the eastern; 2) provision of new cycle and pedestrian route on at least one side of the road to link with existing footway provision west of Cherry Tree Lane; 3) at least 1 controlled pedestrian/cycle crossing (to connect sections of the East Hemel Hempstead development on either side; 4) alteration to the B487-Cherry Tree Lane-Holtsmere Lane junction in line with the Quietway treatments proposed to the two lanes (including signage and kerbed build outs to discourage through traffic); 5) upgraded bus stops. It is anticipated there will be one junction serving access to the proposed East Hemel Hempstead development on either side of the road.	Key Network	St Albans City and District Council
LS-64	B440 Leighton Buzzard Road Gateway Corridor (Piccotts End to Link Road/Galley Hill	Alterations to the B440 Leighton Buzzard Road in conjunction with the North Hemel Hempstead proposed development (which could potentially provide a vehicle access onto this road). Measures include reducing the current 50mph section to 40mph (matching the 40mph section to the north); reducing the current 60mph section leading out of Hemel Hempstead to 40mph; installing a signal-controlled Toucan crossing adjacent to Public Footpath 'Hemel Hempstead 013'); provision LTN standard cycle and footway (replacing the existing narrow footway) on the western side of the road (approx. 680m): provision of signal-controlled crossing on Galley Hill at southern end of corridor, east of the B440-A4147 roundabout.	Key Network	Dacorum Borough Council
LS-75	Footbridge overhaul or additional/replacement bridge near Apsley Marina	(LS-75) Overhaul of the existing, modern footbridge to reduce maintenance or provision of a replacement or additional bridge over the canal which can also accommodate cyclists.	Other	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
LS-76	A4147 Hemel Hempstead-St Albans cycle route	An off-road shared use footway and cycleway between Appspond Lane/Beechtree Lane and King Harry Lane, expected to run along the northern side of the road.	Other	St Albans City and District Council
SG2-1	Kingsland Road-Horsecroft Road crossing	(SG2-1) Add uncontrolled or marked priority cycling and pedestrian crossing where the PRoW crosses Kingsland Road and Horsecroft Road. Likely to require reduction in marked parking bays. Consider kerbed build out with dropped kerb and tactile paving.	Other	Dacorum Borough Council
SG2-4	Pedestrian route enhancements on Fishery Passage	(SG2-4) Increase pedestrian capacity (widen footways and/or reallocate carriageway) on Fishery Passage close to the junction with Horsecroft Road. Consider parking control measures to prevent parking on pavement including bollards if not an obstruction to pedestrians. Add tactile paving at northern end of short footway running into Fishery Passage	Other	Dacorum Borough Council
SG2-5	Wayfinding signage on Horsecroft Road and Kingsland Road	(SG2-5) Introduce wayfinding signs at key junction points (Horsecroft Road, Kingsland Road, River Park) indicating distance and travel time on foot to the station.	Other	Dacorum Borough Council
SG2-6	Cycle parking stands at bus stop on Fishery Road	(SG2-6) Add cycle parking stands adjacent to bus stop on Fishery Road (southbound)	Local Network	Dacorum Borough Council
SG3-1	Crossing improvements around Cowper Road	(SG3-1) Add tactile paving and dropped kerbs at Cowper Road/St John's Road, Crouchfield, Grosvenor Terrace, The Poplars, Cowper Road/Gravel Hill Terrace	Other	Dacorum Borough Council
SG3-2	Crossing improvements around along Gravel Hill Terrace	(SG3-2) Tighten kerb radii at junction of Gravel Hill Terrace and Woodland Close. Introduce informal crossings with dropped kerbs with tactile paving at Woodland Close and Cardy Road junctions onto Gravel Hill Terrace	Local Network	Dacorum Borough Council
SG3-5	Cycle hanger storage on Cowper Road	(SG3-5) Provide cycle storage facility - hanger (x2) for residents on Cowper Rd. To be located within the highway, removing some car parking space.	Other	Dacorum Borough Council
SG4-1	Junction crossing improvements on Cowper Road	(SG4-1) Add tactile paving; add dropped kerbs; improve signage and wayfinding	Other	Dacorum Borough Council
SG4-2	Beechfield Road-Cornfields alleyway crossing	(SG4-2) Add new uncontrolled cycling and pedestrian crossing at Beechfield Road and alleyway through to The Cornfields	Other	Dacorum Borough Council
SG4-3	Junction crossing improvements on Crouchfield	(SG4-3) Tighten kerb radii and reduce crossing widths at the junctions of Crouchfield/Beechfield Road, and Crouchfield/Nestlecroft. Also introduce raised speed table uncontrolled pedestrian crossings at each junction.	Other	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
SG4-4	Footway widening approaching The Cornfields	(SG4-4) Widen the footway on the approach to The Cornfields (eastern side). Introduce a need handrail around the edge. Introduce dropped kerbs and tactile paving on either side of the road (avoiding manhole covers)	Other	Dacorum Borough Council
SG4-5	Footpath width vegetation cut-back	(SG4-5) Manage vegetation along footpaths to maximise width and increase visibility	Other	Dacorum Borough Council
SG4-6	Pedestrian route street lighting enhancements	(SG4-6) Investigate introducing additional street lighting along pedestrian routes	Other	Dacorum Borough Council
SG4-7	Glenview Gardens cycle hanger storage	(SG4-7) Add cycle storage facilities for residents along Glenview Gardens	Local Network	Dacorum Borough Council
SG5-1	A4251 London Road cycle route	(SG5-1) New on-road advisory cycle lanes (both directions) between the A4146 and A414 junctions where there is sufficient carriageway width. Provision of a section of off-road route at the eastern end (northern side of the road) on the approach to the A4251-A414 signalised junction.	Local Network	Dacorum Borough Council
SG5-2	A4251 London Road footway widths	(SG5-2) Increase pedestrian footway width by cutting back encroaching vegetation and improving maintenance of footway including renewed surfacing	Local Network	Dacorum Borough Council
SG6-1	Two Waters Road-London Road pedestrian-cycle link	(SG6-1) Widen Public footpath cutting the corner of Two Waters Road and London Road to accommodate cyclists and pedestrians (leading to the proposed Mobility Hub at the southern end). At the northern end, provide kerbed build-out with dropped kerbs to designate end of the cycle path and advise cyclists to join the carriageway). Removing of c.2-3 car lengths of kerbside parking.	Key Network	Dacorum Borough Council
SG6-2	Two Waters Road-London Road junction improvement	(SG6-2) Tighten kerb radii/ reduce crossing width at Two Waters Road junction and introduce a speed table at or close to mouth of the junction.	Key Network	Dacorum Borough Council
SG6-3	Durrants Hill Road-London Road junction improvement	(SG6-3) Tighten kerb radii/ reduce crossing width at Durrants Hill Rd and introduce a speed table at or close to mouth of the junction.	Key Network	Dacorum Borough Council
SG6-4	Kents Avenue-London Road junction improvement	(SG6-4) Tighten kerb radii/ reduce crossing width at Kents Avenue junction and introduce a speed table at or close to mouth of the junction.	Key Network	Dacorum Borough Council
SG6-5	Retail Park access pedestrian crossing improvement	(SG6-5) Add marked pedestrian crossing at the retail park access roundabout arm leading to Sainsbury's	Key Network	Dacorum Borough Council
SG7-3	London Road access to Apsley Station controlled pedestrian crossing	(SG7-3) Introduce signal-controlled crossing at the location of the existing uncontrolled crossing with refuge island close to the station access road. Removal of central	Key Network	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
		hatched area, increase width of footway on the southern end between the crossing and station access (approx. 20m). Crossing on bus-compliant raised speed table. Removal of c.4 c4-6 car lengths of kerbside parking bays)		
SG7-4	London Road access to Doolittle Meadows controlled pedestrian crossing	(SG7-4) Introduce signal-controlled crossing at the location of the existing uncontrolled crossing west of the A4251/Doolittle Meadows Roundabout, on bus-compliant raised speed table	Key Network	Dacorum Borough Council
SG7-5	Traffic calming approach Doolittle Meadows	(SG7-5) Add speed cushions on the approaches to A4251/Doolittle Meadows roundabout	Key Network	Dacorum Borough Council
SG7-6	London Road Apsley pedestrian capacity enhancement	(SG7-6) Increase pedestrian capacity (Widen footways and/or reallocate carriageway space)	Key Network	Dacorum Borough Council
SG7-7	London Road Apsley Wayfinding signage	(SG7-7) Introduce way-finding signage indicating pedestrian routes between London Road and canal	Key Network	Dacorum Borough Council
SG8-1	Great Elms Road side arm crossing improvements	(SG8-1) Add tactile paving; add dropped kerbs; improve signage and wayfinding at junctions between Great Elms Road with (a) Belswains Lane, (b) Ash Grove, (c) Oakdene Road.	Local Network	Dacorum Borough Council
SG8-2	Great Elms Road to Mulready Walk controlled crossing	(SG8-2) Provide signal-controlled pedestrian crossing facility on Belswains Lane between Great Elms Rd and Mulready Walk. Consider kerb-build out on northern side, removing narrow central hatched area within carriageway	Local Network	Dacorum Borough Council
SG8-3	Great Elms Road side arm crossing and kerb radii treatments	(SG8-3) Tighten kerb radii and reduce crossing widths junctions between Great Elms Rd and (a) Kings Ave, (b) Oak St, (c) Barnfield, (d) Sanders Rd, (e) Deansway, (f) Horselers, (g) Candlefield Rd. Introduce tactile paving and provide contrasting surface treatment to denote crossings.	Local Network	Dacorum Borough Council
SG8-4	Great Elms Road & Candlefield Road traffic calming	(SG8-4) Provide traffic calming features along Great Elms Rd and Candlefield Rd - speed cushions	Local Network	Dacorum Borough Council
SG8-5	Great Elms Road pavement parking prevention	(SG8-5) Introduce bollards to discourage or prevent pavement parking	Local Network	Dacorum Borough Council
SG8-6	Great Elms Road - Coronation Fields crossing	(SG8-6) Introduce un-controlled crossing with tactile paving on raised speed table adjacent to Coronation Fields, linking the footpaths leading away from Great Elms Road on either side	Local Network	Dacorum Borough Council
SG8-7	Great Elms Road and Candlefield Road Cycle Hangers	(SG8-7) Add cycle hanger storage facilities (x3) for residents	Local Network	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
SG9-1	Peascroft Road cycle route and side-arm junction Copenhagen crossings	(SG9-1) New off-carriageway shared footway cycleway between Bennetts End Road and existing cycle route which links Northend and Malmes Court, incorporating Copenhagen Crossings (3x) on Kiln Ground, St Michaels Avenue and Kilncroft	Local Network	Dacorum Borough Council
SG9-2	Peascroft Road-Bennetts End Road Junction cycle crossing improvements	(SG9-2) Improve cycling crossing facilities using road markings at Bennetts End Rd/ Peascroft Rd mini-roundabout	Local Network	Dacorum Borough Council
SG9-3	Peascroft Road mini roundabout traffic calming	(SG9-3) Provide speed cushions on two approaches to Bennetts End Rd/ Peascroft Rd mini-roundabout. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Local Network	Dacorum Borough Council
SG9-4	Peascroft Road area 20mph speed limit	(SG9-4) Investigate introducing 20mph limits/zones at Peascroft Rd (residential area with schools) and Malmes Croft. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Local Network	Dacorum Borough Council
SG9-5	Peascroft Road pavement parking restrictions	(SG9-5) Physical parking control measures such as bollards, double yellow lines to prevent cars parking on footway	Local Network	Dacorum Borough Council
SG9-6	Peascroft Road/Northend cycle stands	(SG9-6) Add cycle stands (x4) along the route, opposite the green space near Kilncroft and Longfield	Local Network	Dacorum Borough Council
SG9-7	Malmes Croft off-carriageway cycle route	(SG9-7) New off-carriageway shared footway cycleway at eastern end of Malmes Croft, between Windermere Close and Leverstock Green Way	Local Network	Dacorum Borough Council
SG10-1	Leverstock Green Way Village Centre to A414 Cycle Route	(SG10-1) New off-carriageway shared use cycle and footway on the southern/western side of the road between Malmes Croft and A414 signal-controlled crossing (west of Maylands Avenue junction). Include reduced kerb radii at Green Dell Way to reduce crossing width with tactile paving and contrasting surface treatment to indicate uncontrolled crossing location. Also include short section south of Malmes Croft to the signal-controlled crossing and upgrade crossing to a Toucan crossing	Local Network	Dacorum Borough Council
SG10-2	New controlled crossing between St Davids Close and Greenachres	(SG10-2) Provide a new controlled crossing between St Davids Close and Greenachres to serve access to the inbound bus stop from housing on the eastern side of road. In conjunction, widen footways on both sides of the road, either side of the crossing, and incorporate tactile paving and dropped kerbs and include short footway extension on southern side of St Davids Close arm	Local Network	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
SG10-3	Leverstock Green Way side arm junction treatments	(SG10-3) Tighten kerb radii where feasible to reduce crossing width and install tactile paving with dropped kerbs at side arms with a) Curtis Road, b) Church Road, c) Pancake Lane and d) Bartel Close	Local Network	Dacorum Borough Council
SG10-4	Additional cycle parking at Leverstock Green Village Centre	(SG10-4) Add cycle parking (c. 6x cycle stands) adjacent to the controlled crossing outside the Leverstock Green Village Centre shopping parade	Local Network	Dacorum Borough Council
SG11-1	Mickleford Road junction crossing improvements	(SH11-1) Add tactile paving at Micklefield Road (junctions with Green Lane and Poynders Hill)	Other	Dacorum Borough Council
SG11-2	A4147 Toucan Crossing and cycle link into Woolmer Drive	(SG11-2) Provide signal-controlled Toucan crossing on A4147, in addition to a shared use cycle and footway on the eastern side of the Toucan crossing, leading round into Woolmer Drive as far as the bus stop (c.70m) where provision should be made for cyclists to safely enter/exit the carriageway.	Local Network	Dacorum Borough Council
SG11-3	20mph zone covering roads including Woolmer Drive, Green Lane, Mickleford Road and Datchworth Turn	(SG11-3) 20mph zone covering all roads leading off the A4147 and as far south as Green Lane up to and including junction with Kingcup Avenue (3 external entry points). Assume provision of additional traffic calming features to help ensure compliance with speed limit, c. x20 pairs of speed cushions. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Other	Dacorum Borough Council
SG11-4	Cycle Hanger storage on Mickleford Road and Datchworth Turn	(SG11-4) Add cycle hanger storage facilities for residents, including on Datchworth Turn and Micklefield Road (x2 hangers)	Other	Dacorum Borough Council
SG14-1	Redbourn Road side junction crossing improvements	(SG14-1) Improve pedestrian crossing facilities at a) The Melings and b) Half Moon Meadow junctions with Redbourn Road, reducing the kerb radii on the eastern side of both junctions (removing the short slip road sections) adding tactile paving on both sides of Redbourn Rd aligned with current uncontrolled crossings.	Key Network	Dacorum Borough Council
SG15-1	Maylands Avenue Shared Use Cycle Corridor	(SG15-1) Provision of a high quality, off-road cycle route along the full length between the A414 Breakspear Way and A4147 Swallowdale Lane (eastern side of the road). Expected to comprise widening of the existing shared-use path to meet standards including replacing areas of grass verge and localised reduction in carriageway space (e.g. removal of additional lanes at some junctions (access to Aldi/Nuffield Health/McDonalds; junction with Wood Lane End). Assume cyclist priority on some side arms (Eaton Road; Maxted Road; x3 accesses to Hosking	Key Network	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
		Court). Also, provision of a Toucan crossing at location of existing uncontrolled crossing with refuge islands just north of the Travelodge vehicle access). Include upgrade to the existing shared use route between the A414 at-grade signal crossing to the proposed Toucan crossing on Maylands Avenue. Also provide additional signal-controlled crossing points on Maylands Avenue in the vicinity of Dixons Turn and Eaton Road		
SG15-2	Maylands Avenue Wayfinding Signage	(SG15-2) Additional wayfinding signage showing directions and distances to key destinations including mobility hubs	Key Network	Dacorum Borough Council
SG16-1	Longlands side arm pedestrian crossing improvements	(SG16-1) Implement dropped kerbs and tactile paving at side-arm junctions with Ellen Close; Hobletts Road; Springfield Road; Little Road; and Ellingham Road	Local Network	Dacorum Borough Council
SG16-2	Longlands Additional Zebra Crossings	(SG16-2) Two additional Zebra crossings on extended speed table, between Broadfield Road and Sawyer's Way, and between Vauxhall Road and Field Road (replacing existing uncontrolled crossing)	Local Network	Dacorum Borough Council
SG16-4	Longlands Shared Use Cycle Path	(SG16-4) Create an off-road shared use path on the eastern side of the road, between The Queen's Square (including a 50m section on this side road to provide access to the Local Mobility Hub - separate proposal) and the A414 St Albans Road.	Local Network	Dacorum Borough Council
SG16-5	Continuous Pavement crossings at Fields Road and Vauxhall Road	(SG16-5) Install Copenhagen crossings at the side arm junctions of Field Road, Vauxhall Road	Local Network	Dacorum Borough Council
SG16-6	Longlands Wayfinding Signage	(SG16-6) Implement wayfinding at start/end of segment and close to The Queen's Square	Local Network	Dacorum Borough Council
SG17-1	Great Road cycle route	(SG17-1) Provide an off-road shared use cycle path between the junction with Queensway and south of the junction with Hobletts Road.	Local Network	Dacorum Borough Council
SG17-2	Great Road additional zebra crossing	(SG17-2) Install a new Zebra crossing on extended raised speed table between Hobletts Road and Springfield Road	Local Network	Dacorum Borough Council
SG17-4	Great Road Wayfinding Signage	(SG17-4) Add wayfinding/ signage indicating direction and distance/time towards The Queens Square and Nickey Line	Local Network	Dacorum Borough Council
SG18-1	Washington Avenue side-arm junction pedestrian crossing improvements	(SG18-1) Implement tactile paving on Washington Avenue at Dunlin Avenue; Ninian Road; Claymore; Argyll Road; Robin Hood Meadow; Turnpike Green; Stevenage Rise, St Agnells Lane; Craigavon Road; Basildon Square; Waveney.	Local Network / Key Network	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
SG18-2	Washington Avenue/Aycliffe Road roundabout crossings	(SG18-2) Implement zebra crossings on Washington Ave/Aycliffe Dr roundabout arms. Place the entire junction on a raised speed table	Local Network	Dacorum Borough Council
SG18-3	Aycliffe Drive zebra crossing	(SG18-3) Implement zebra crossing into/ out of Margaret Lloyd Playground (in location of existing splitter island)	Local Network	Dacorum Borough Council
SG18-4	Washington Avenue four additional zebra crossings	(SG18-4) Install four zebra crossings on raised speed tables on Washington Avenue. Retain existing subway or consider fencing off.	Local Network	Dacorum Borough Council
SG18-5	Aycliffe Drive cycle lane upgrade and splitter island removal	(SG18-5) Upgrade advisory cycle lane to segregated cycle lane to improve safety. Remove splitter island features along the current route and widen marked lanes where feasible.	Local Network	Dacorum Borough Council
SG19-1	Cambrian Way cycle route	(SG19-1) Segregated cycle route or shared use path along Cambrian Way between Link Road and Malvern Way. Widen the footways leading up to the western side of the Link Road roundabout to facilitate shared use, and widen the uncontrolled crossing points across Link Road. Enlarge the size of the roundabout western arm splitter island by reducing the Link Road approach to a single lane (reducing crossing distance)	Local Network	Dacorum Borough Council
SG19-2	Malvern Way residential cycle street (link to Nickey Line)	(SG19-2) Designate Malvern Way and southern section of Chilterns as a Residential Cycle Street with on-street advisory lanes	Local Network	Dacorum Borough Council
SG19-3	Fletcher Way bridge and Nickey Line access	(SG19-3) Improved ramp access to Nickey Line at Fletcher Way - resurfacing and trim back vegetation. Widen the footway on the northern side of Fletcher Way (removing hatched area in the centre, to accommodate a widening footway/cycleway. Raise height of bridge parapet so that it is suitable for cyclists	Local Network	Dacorum Borough Council
SG19-4	Cambrian Way to Nickey Line Wayfinding Signage	(SG19-4) Add wayfinding signage to guide cyclists and pedestrians between Cambrian Way and the Nickey Line	Local Network	Dacorum Borough Council
SG20-1	Allandale-George Street-Figtree Hill side arm pedestrian crossing improvements	(SG20-1) Implement dropped kerbs and tactile paving along entire segment - Allandale junctions with Slippers Hill; Garland Close, George Street, St Mary's Road; Grover Close, Chapel Street, Honey Pot Close, Randalls Ride; Taverners. - George Street junctions with Heather Way and Figtree Hill. - Figtree junction with B487 Queensway	Local Network	Dacorum Borough Council
SG20-2	Allandale new uncontrolled crossing south of Smithfield	(SG20-2) Implement uncontrolled crossing with dropped kerbs and tactile paving approximately 20m south of the Allandale-Smithfield mini roundabout	Local Network	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
SG20-3	Allandale localised footway widening	(SG20-3) Footway widening - removal of grass verge between St Mary's Road and George Street	Local Network	Dacorum Borough Council
SG20-5	Allandale Traffic Calming	(SG20-5) Implement traffic calming (speed tables or cushions) on four sections of Allandale - a) between Smithfield and Taverners; b) between Taverners and Randalls Ride; c) between Chapel Close and Grover Close; and d) between Garland Close and Slippers Hill	Local Network	Dacorum Borough Council
SG20-6	Allandale Wayfinding Signage	(SG20-6) Improve wayfinding along segment	Local Network	Dacorum Borough Council
SG21-1	Queensway-Marlowes Roundabout speed reduction measures	(SG21-1) Reduce the kerb radii all approaches, notably on the Marlowes and Queensway approach arms to provide a single lane. This will increase deflection and reduce speeds through the junction. Provide give-way markings on the cycleway approach to increase the prominence of the cycleway approach	Key Network	Dacorum Borough Council
SG22-1	Gadebridge Park cycle stands	(SG22-1) Implement cycle stands adjacent to the car park	Other	Dacorum Borough Council
SG23-1	Piccotts End Road uncontrolled crossing	(SG23-1) Provide an uncontrolled crossing at the northern end of the western footway, where it terminates (south of Gadebridge Lane)	Local Network	Dacorum Borough Council
SG23-2	Piccotts End Road Gadebridge Park active mode access improvement	(SG23-2) Provide a kerbed build out adjacent to the gated entrance into Gadebridge Park (incorporating vehicle crossover for maintenance access).	Local Network	Dacorum Borough Council
SG23-3	Piccotts End Road Wayfinding Signage	(SG23-3) Implement wayfinding signage at access to Gadebridge Park	Local Network	Dacorum Borough Council
SG25-3	Marlows carriageway reconfiguration - Hillfield Road-Combe Street	(SG25-3) a) Remove the landscaped central reservation on Marlowes between Hillfield Road and Combe Street. b) Reduce the northbound carriageway to a single lane and widen the footway on western side. c) Install an additional controlled crossing adjacent to the Wetherspoon public house, on a raised speed table.	Key Network	Dacorum Borough Council
SG25-4	Marlows carriageway reconfiguration - Combe Street-Midland Road	(SG25-4) a) Remove landscaped central reservation on Marlowes between Combe Street and Midland Road and widen the footway on eastern side. Reduce the southbound carriageway to a single lane. b) Install an additional controlled crossing adjacent to the library, on a raised speed table.	Key Network	Dacorum Borough Council
SG25-5	Marlowes cycle stands	(SG25-5) Add cycle stands outside shopping parades (note - separate proposal for a Mobility Hub outside the college)	Key Network	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
SG25-6	Midland Road pedestrian crossing	(SG25-6) Install controlled zebra crossing on a raised speed table on Midlands Road on the eastern side of the Marlowes roundabout	Key Network	Dacorum Borough Council
SG26-1	Two Waters Way Cycle Link	(SG26-1) Provide segregated cycle lane along Two Waters Way by removing hatching in the middle of road (removal of right turn filters, single lane in both direction). To be located on the western side between the Plough Roundabout and River Bulbourne and on the eastern side to London Road. The northern section, north of Corner Hall, would need to be provided as a shared use facility off-road as there is insufficient space within the carriageway. In the vicinity of the River Bulbourne provide a Toucan crossing. At the northern end, provide a widened bridge over the River Gade and shared use route across to Station Road.	Key Network	Dacorum Borough Council
SG26-2	A414 Hemel Gateway 30mph signage	(SG26-2) More prominent 30mph signage on the A414 approaching the signalised junction with London Road	Key Network	Dacorum Borough Council
SG26-3	Corner Hall cycle parking	(SG26-3) Add cycle parking stands on Corner Hall (west of the river)	Key Network	Dacorum Borough Council
SG26-4	Corner Hall pedestrian crossing improvements	(SG26-4) Add tactile paving at Corner Hall	Key Network	Dacorum Borough Council
SG26-5	Two Waters Way Wayfinding Signage	(SG26-5) Improve signage and wayfinding	Key Network	Dacorum Borough Council
SG27-1	Lawn Lane-Crabtree Lane pedestrian crossing improvement	(SG27-1) Junction between Lawn Lane and Crabtree Lane. Remove guardrail, increase refuge island width and reduce side arm approach to a single lane. Build out width of footway on southern side and incorporate dropped kerbs with tactile paving	Local Network	Dacorum Borough Council
SG27-2	Lawn Lane new signalised crossing near Crabtree Lane	(SG27-2) Additional signal-controlled pedestrian crossing north of the junction with Crabtree Lane on a raised speed table	Local Network	Dacorum Borough Council
SG27-3	Lawn Lane new signalised crossing near Corner Hall	(SG27-3) Additional signal-controlled pedestrian crossing north of junction with Corner Hall on a raised speed table	Local Network	Dacorum Borough Council
SG27-4	Corner Hall Stopping Up and widened footway	(SG27-4) Closure of the Corner Hall one-way section at the junction with Lawn Lane - provision of a continuous footway. Remove hatching and right turn filter to accommodate widened footway on western side	Local Network	Dacorum Borough Council
SG28-1	Durrants Hill Road-Ebberns Road pedestrian crossing improvements	(SG28-1) Improve pedestrian crossing facilities at the side arm junction with Ebberns Road including dropped kerbs and tactile paving	Local Network	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
SG28-2	Durrents Hill additional pedestrian crossing	(SG28-2) Provide an uncontrolled crossing adjacent to the entrance into the park, north of the junction with Ebberns Road. Provide localised widening of the footway on the eastern side of the road, removing space for kerb-side parking	Local Network	Dacorum Borough Council
SG28-3	Durrants Hill Road Wayfinding Signage	(SG28-3) Provide wayfinding signage	Local Network	Dacorum Borough Council
SG28-4	Durrants Hill Road cycle parking	(SG28-4) Install cycle parking adjacent to the public toilets	Local Network	Dacorum Borough Council
SG29-1	A414 new crossing near to Wood Crescent/Wood Lane junctions	(SG29-1) New parallel signal-controlled pedestrian/cycle crossing near to the Wood Crescent and Wood Lane junctions on the A414	Local Network	Dacorum Borough Council
SG29-2	Wood Crescent-Runham Road-Deaconsfield Road Wayfinding Signage	(SG29-2) Introduce wayfinding at key junction decision points	Local Network	Dacorum Borough Council
SG30-1	Leys Road cycle route	(SG30-1) Introduce offroad shared use cycle and footway utilising existing wide footway on the western/northern side of the road between the junction with St Albans Hill and Bennetts Gate shopping parade. Removal of some grass verge to create sufficient width and use of bollards or markings to discourage pavement parking. Include Copenhagen crossings on Lime Walk, Long John, Howe Road and Kimps Way	Local Network	Dacorum Borough Council
SG30-2	Leys Road-Peascroft junction reconfiguration and parallel crossing	(SG30-2) Provide a parallel pedestrian cycle zebra crossing on the Peascroft arm of the Leys Road mini roundabout. Convert Mini roundabout priority T-junction layout.	Local Network	Dacorum Borough Council
SG30-3	Lime Walk park desire line shared use path	(SG30-3) Formalise the desire lane path crossing Lime Walk park between Leys Road and St Albans Hill to provide a shared use path. Install widened uncontrolled crossing with tactile paving onto St Albans Hill. Provide steps, handrail and wheeling channel at the western end of the path leading down onto St Albans Hill, and signs indicating for cyclists to dismount on approach to the steps. Provide a short shared-use path linking St Albans Hill and Wheelers Road to link into the improved crossing	Local Network	Dacorum Borough Council
SG30-4	Lime Walk park Wayfinding Signage	(SG30-4) Introduce Wayfinding signage at both ends of Lime Walk park path	Local Network	Dacorum Borough Council
SG30-5	Lime Walk park cycle parking	(SG30-5) Introduce cycle parking at the south-eastern corner of Lime Walk park	Local Network	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
SG31-1	St Albans Hill Zebra Crossing by Dacorum Athletics Track	(SG31-1) New zebra crossing on St Albans Hill adjacent Dacorum Athletics Track. Placed on raised speed table leading to playground to follow the desire line.	Local Network	Dacorum Borough Council
SG31-2	St Albans Hill - Bennetts End Road pedestrian crossing improvement	(SG31-2) Tighten kerb radii/ reduce crossing width and improve pedestrian and cycling crossing with widened refuge islands	Local Network	Dacorum Borough Council
SG31-3	Bennetts End Road cycle route	(SG31-3) New off-road shared use cycle and footway along the eastern side of Bennetts End Road between the A414 and Peascroft Road. Incorporating Copenhagen crossings on side arm junctions with Gammon Close, Belsize Road, Acorn Road, Rant Meadow and Goldcroft. Also convert the existing zebra crossing adjacent to the Bennetts Gate shopping parade to a parallel zebra crossing.	Local Network	Dacorum Borough Council
SG31-4	Bennetts End Road Wayfinding signage	(SG31-4) Introduce wayfinding and signage	Local Network	Dacorum Borough Council
SG31-5	Cycle parking at Snow Centre	(SG31-5) Introduce cycle parking at the Snow Centre along St Albans Hill	Local Network	Dacorum Borough Council
SG32-1	Pedestrian crossing improvements on side arms along White Hart Road and Windmill Road	(SG32-1) Tactile paving at side arm junctions - Eastwick Row, White Hart Drive, Windmill Road, Abel Close and Homefield Road	Local Network	Dacorum Borough Council
SG32-2	White Hart Road signal-controlled crossing north of A414	(SG32-3) Signal controlled crossing on White Hart Road north of the A414 roundabout. Include localised widening of the footway on the western side	Local Network	Dacorum Borough Council
SG32-3	White Hart Road-Windmill Road Wayfinding signage	(SG32-3) Improve signage and wayfinding	Local Network	Dacorum Borough Council
SG33-1	Redbourn Road-Swallowdale Lane Roundabout reconfiguration including improved crossings	(SG33-1) Reconfiguration of the Redbourn Road-Swallowdale Lane-High Street Green-Queensway roundabout - removing the left turn filters and building out the verges to reducing crossing distances. Installing Toucan crossings on the eastern and southern arms of the junction.	Key Network	Dacorum Borough Council
SG33-2	Additional Wayfinding Signage on Redbourn Road	(SG33-2) Implement wayfinding at start/end of segment	Key Network	Dacorum Borough Council
SG34-1	Toucan Crossings on Swallowdale Lane	(SG34-1) Install Toucan crossings on Swallowdale Road between a) Eastman Way and Maxted Road, and b) between Maxted Road and Three Cherry Trees Lane	Local Network	Dacorum Borough Council
SG34-2	Signalised crossing on Three Cherry Trees Lane	(SG34-2) Install a pelican crossing on Three Cherry Trees Lane south of the Caravan Park entrance. Also provide localised widening to the footway along the eastern	Local Network	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
		side of Three Cherry Trees Lane between the proposed crossing to just south of Admiral Avenue		
SG34-3	Shared use Cycleway on Swallowdale Lane	(SG34-3) Implement a shared use cycleway and footway on the northern side of Swallowdale Lane between Eastman Way and just west of Three Cherry Trees Lane.	Local Network	Dacorum Borough Council
SG34-4	Cycleway on Three Cherry Trees Lane - Swallowdale Lane to Boundary Way	(SG34-4) Widen the existing footway on the southern side of Three Cherry Trees Lane to enable shared use between Boundary Way and Swallowdale Lane	Local Network	Dacorum Borough Council
SG34-5	Maxted Road pedestrian crossing improvements	(SG35-5) Provide tactile paving at the junction with Maxted Road	Local Network	Dacorum Borough Council
SG34-6	Swallowdale Lane and Three Cherry Trees Lane Wayfinding signage	(SG34-6) Install wayfinding at start and end of segment and at junction of Swallowdale Lane and Three Cherry Trees Lane.	Local Network	Dacorum Borough Council
SG35-1	Cycleway along St Agnells Lane	(SG35-1) Implement an offroad shared use cycleway along the full length of St Agnells Lane, located on the western side from Washington Avenue and remaining on the same side of the road for the full length, terminating on the eastern side at the junction with Redbourn Road. Include 4x Copenhagen crossings at St Agnells Court, Cupid Green Lane, Essex Mead and Old Maple	Local Network	Dacorum Borough Council
SG35-2	Zebra crossing adjacent to Cupid Green Lane junction	(SG35-2) Install zebra crossing on raised speed table adjacent to Cupid Green Lane	Local Network	Dacorum Borough Council
SG35-3	Cupid Green Lane Quietway	(SG35-3) Convert Cupid Green Lane to a Quiteway to discourage through traffic. To provide an attractive route for walking and cycling from North Hemel Hempstead through Grovehill. Permit vehicle access to the allotments but closed to through traffic north of this point. Where Cupid Green Lane currently links onto Gaddesden Lane on the northern side of the proposed North Hemel Hempstead development, this should also be considered for Quietway treatment to discourage traffic rat-running through the development or conversely traffic routeing out of the development onto Gaddesden Lane.	Local Network	Dacorum Borough Council
SG35-4	Grovehill Playing Fields - connection to North Hemel Hempstead development	Provision of a new shared footway and cyclepath link through Grovehill Playing Fields, linking into the existing path where it currently ends, and connecting into the planned North Hemel Hempstead development.	Local Network	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
SG35-5	Washington Avenue-North Hemel Hempstead footway/cycle link	A new link for pedestrians and cyclists, adjacent to the Education Support Centre on Washington Avenue, to connect into the proposed North Hemel Hempstead development.	Local Network	Dacorum Borough Council
SG35-6	Woodhall Farm-North Hemel Hempstead footway/cycle link	A new route for pedestrians and cyclists to link Shenley Road between the Sainsbury's and Brockwood Primary School. Likely to use a section of existing footway adjacent to the supermarket car park at the western end, however reallocation of land from the school may be required at the eastern end.	Local Network	Dacorum Borough Council
SG36-1	Northridge Way-Cangels Close-Moorland Road Cycle Route	(SG36-1) Implement an offroad shared use cycleway along Northridge Way between the junctions with Warners End Road and Cangels Close. Implement on-street advisory route along Cangels Close and Moorland Road and a parallel zebra crossing just east of the Cangels Close junction.	Local Network	Dacorum Borough Council
SG36-2	Northridge Way-Jocketts Road crossing and cycle route	(SG36-2) Install new parallel zebra crossing on raised speed table on Northridge Way, north of the junction with Jocketts Road. Include an 80m section of shared use cycleway running on Jocketts Road between Northridge Way and Shrubhill Road with dropped kerbs at western end for cyclists to enter/exit the carriageway	Local Network	Dacorum Borough Council
SG36-3	Northridge Way Wayfinding Signage	(SG36-3) Introduce wayfinding northern end of segment, Northridge Park and at junction of Jocketts Road.	Local Network	Dacorum Borough Council
SG36-4	Northridge Way Park cycle parking	(SG36-4) Introduce cycle parking at Northridge Park, close to play park and basketball court.	Local Network	Dacorum Borough Council
SG37-1	Green End Road crossing and traffic calming feature near St Rose's School	(SG37-1) Install new uncontrolled crossing on Green End Road by St Rose's Infant and Nursery School as part of a kerbed build out with single lane give way to oncoming traffic.	Local Network	Dacorum Borough Council
SG37-2	Zebra crossing on Ashtree Way	(SG37-2) Install new zebra crossing by Ashtree Way and Green End Road.	Local Network	Dacorum Borough Council

7.24 Many of the active travel interventions will require further development and feasibility checks. They have been identified based on desktop observations however more detailed assessment may determine that they are not feasible, or that an alternative approach is needed, e.g. a different type of cycle route segregation, or an alternative location for a new a crossing facility.

7.25 Consideration has been given to achieving a level of route continuity including provision of continuous ‘Copenhagen’ crossings and providing the same type of cycle route provision along a single stretch of road. This would enhance the experience for pedestrians and cyclists. However, different types of provision are proposed in different parts of the town

based on local characteristics and what would be feasible to implement based on the highway space available.

7.26 A map showing the locations of active travel interventions put forward in this study is shown below. A large-scale version of this map is contained in **Appendix D**.

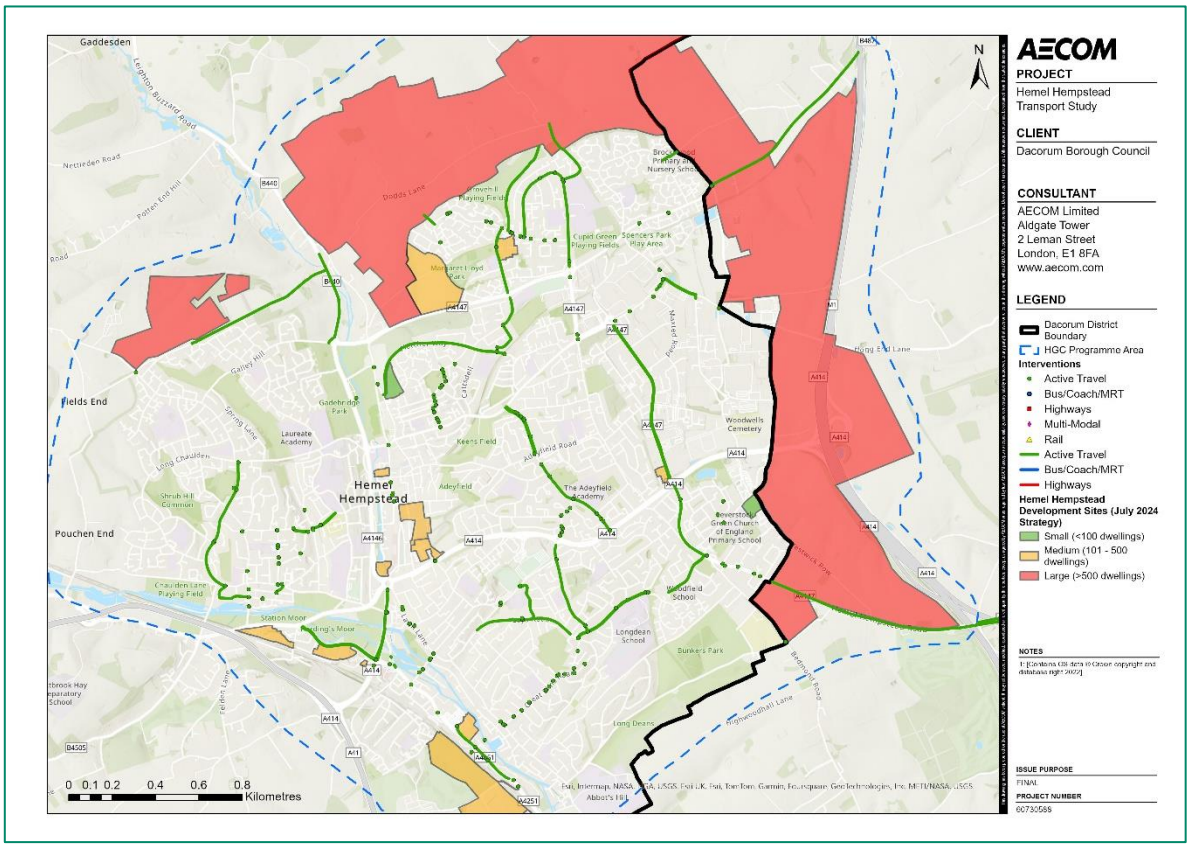


Figure 40 – Map showing the locations of Active Travel interventions (not included LCWIP interventions)

Highways

7.27 The following interventions have been identified under the Highways category.

Table 14 – Highways Interventions

ID	Name	Description	Network	Local Authority
LS-32	M1 Junction 8 enhancement - Phase 3 - M1 Junction 8 - current proposals	Phase 3 of package of transport measures to enhance M1 Junction 8 and surrounding area. To provide additional capacity and connectivity to Maylands and Herts IQ, and relieve congestion on the A414. Land to the east of Junction 8 is safeguarded, in case it is required to come forward for junction improvements (Phase 3 J8 enhancements). Reconfiguration of M1 Junction 8 on the eastern side, including a new roundabout adjoining the southbound on/off-slips and a new connector road over the M1 and connecting into Green Lane north of the A414	M1/Key Network	St Albans City and District Council

ID	Name	Description	Network	Local Authority
LS-33	M1 Junction 8 enhancement - Phase 1 Phoenix Gateway Roundabout re-configuration and signalisation	Phase 1 of package of transport measures to enhance M1 Junction 8 and surrounding area - Replacement of the existing Phoenix Gateway/Green Lane roundabout on the A414 with a signal-controlled crossroads which should help to manage traffic flows through the junction	Key Network	Cross-boundary
LS-34	A414 Breakspear Way walking and cycling bridge for active modes	A high quality, attractive bridge for walking, wheeling and cycling connecting the East Hemel Hempstead site north and south of the A414 between Green Lane and the M1. This forms part of Phase 2 of the package of transport measures for M1 J8 enhancements - Prioritisation of active and sustainable modes of travel.	Key Network	St Albans City and District Council
LS-35	A414 Dual Carriageway gap closure - Lamsey Street	Closure of the central reservation gap to right turning traffic - traffic will be diverted to the next roundabout or an alternative route	Key Network	Dacorum Borough Council
LS-36	A414 Dual Carriageway gap closure - Wood Crescent	Closure of the central reservation gap to right turning traffic - traffic will be diverted to the next roundabout or an alternative route	Key Network	Dacorum Borough Council
LS-37	A414 Dual Carriageway gap closure - St Albans Rd leading into Mariner Way & Sandmere Close	Closure of the central reservation gap to right turning traffic - traffic will be diverted to the next roundabout or an alternative route	Key Network	Dacorum Borough Council
LS-38	A414 Dual Carriageway gap closure - Rant Meadow	Closure of the central reservation gap to right turning traffic - traffic will be diverted to the next roundabout or an alternative route	Key Network	Dacorum Borough Council
LS-42	Cherry Tree Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Cherry Tree Lane between Three Cherry Trees Lane to Redbourn Road. Closure to through traffic.	Green Loop	St Albans City and District Council
LS-43	Punchbowl Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Punchbowl Lane. The section of the lane west of the M1 will be subsumed within East Hemel Hempstead development and may therefore be subject to alteration. Closure to through traffic.	Other (Strategic Active Connections)	St Albans City and District Council
LS-44	Hogg End Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Hog End Lane. The section of the lane west of the M1 will be subsumed within East Hemel Hempstead development and may therefore be subject to alteration. Closure to through traffic.	Other (Strategic Active Connections)	St Albans City and District Council

ID	Name	Description	Network	Local Authority
LS-45	Green Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Green Lane between Breakspear Park office complex access and junction with Westwick Row. The section of Green Lane adjacent to Breakspear Park may be subject to alteration resulting from the East Hemel Hempstead development and changes to the A414 Phoenix Gateway Roundabout. Closure to through traffic.	Other	St Albans City and District Council
LS-46	Bunkers Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Bunkers Lane between Longdean Park and Bedmond Road. Closure to through traffic.	Green Loop	Dacorum Borough Council*
LS-47	Blackwater Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Blackwater Lane. This lane will be subsumed within East Hemel Hempstead development (reserve school development site) and may therefore be subject to change. Closure to through traffic.	Green Loop	St Albans City and District Council
LS-48	Berkhamsted Road Gateway Corridor	Alterations to Berkhamsted Road adjacent to the proposed Poleshanger Lane development which will include a vehicular access onto this road. Comprising a reduction in the speed limit from National Speed limit to 30 or 40mph between the access to Boxted Farm and the existing settlement boundary.	Other	Dacorum Borough Council
LS-49	Fields End Lane/Pouchen End Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Fields End Lane, joining another proposed Quietway at its western end at Pouchen End Lane, and Boxted Road at its eastern end. Closure to through traffic.	Green Loop	Dacorum Borough Council
LS-52	Holtsmere End Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Holtsmere End Lane between a location in the vicinity of PRoW (Footpath) Great Gaddesden 048 and Redbourn 011. This lane will run through or along the perimeter of the proposed East Hemel Hempstead development and therefore may be subject to alteration as part of the development. Where Holtsmere End Lane currently links onto Gaddesden Lane on the north-eastern side of the proposed Nort/East Hemel Hempstead developments, this should also be considered for Quietway treatment to discourage traffic rat-running through the development or conversely traffic routeing out of the development onto Gaddesden Lane.	Green Loop	Cross-boundary
LS-66	Revision to Parking Standard Zones -	Revision to Parking Standard Zones as currently specified in the Parking Standards	Multiple	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
	expanding the scope for car-free new developments	Supplementary Planning Document (2020) - expansion of Zone 1 including merging with Zone 2 to the east of the town centre and into Two Waters/Apsley, area east of the A414. Increase the scope for car-free developments across a wider proportion of the more accessible, better connected parts of the town.		
LS-67	Increased parking enforcement	Increase in parking enforcement by Civil Enforcement Officers, including specifically additional officer patrols for on-street parking.	Multiple	Dacorum Borough Council
SG2-2	20mph speed limit zone including Fishery Road	(SG2-2) Investigate the introduction of a 20mph speed limit zone in this area, including Fishery Road, Kingsland Road and Horsecroft Road. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Local Network	Dacorum Borough Council
SG2-3	Traffic calming on Kingsland Road and Horsecroft Road	(SG2-3) Provide traffic calming features near crossings e.g. Add speed cushions on approaches to both crossings (these may be required as part of a 20mph speed limit zone). *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Other	Dacorum Borough Council
SG3-3	20mph speed limit including on Cowper Road	(SG3-3) Investigate introducing 20mph limits/zones covering Cowper Road. Retained intervention, but added the following note: *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Other	Dacorum Borough Council
SG3-4	Marked parking bays on Cowper Road	(SG3-4) Reduce the occurrence of pavement parking where feasible, such as introduction of marked parking bays on one side of the road	Other	Dacorum Borough Council
SG5-3	A4251 London Road Speed VMS	(SG5-3) Add VMS speed feedback sign	Local Network	Dacorum Borough Council
SG5-4	A4251 London Road-A4146 Station Road Junction Reconfiguration including provision for cyclists and buses	(SG5-4) Major junction improvement - convert to signal-controlled crossroads with cycle priority at A4251/A4146 including advance stop lines or bicycle boxes. Include hurry call detection for buses travelling between London Road (west) and Station Road.	Local Network	Dacorum Borough Council
SG6-6	20mph speed limit on London Road	(SG6-6) Investigate introducing 20mph speed limit between Featherbed Lane and Weymouth Street. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Key Network	Dacorum Borough Council

ID	Name	Description	Network	Local Authority
SG7-2	London Road Dootlittle Meadows crossings and compact roundabout treatment	(SG7-2) Add new cycling crossing and improve pedestrian crossing facilities at A4251/Doolittle Meadows roundabout (create a compact roundabout by reducing the kerb radii on the approaches (mark as single lane)	Key Network	Dacorum Borough Council
SG14-2	Redbourn Road-Three Cherry Trees Junction Enhancement	(SG14-2) Redbourn Road-Three Cherry Trees Lane-Shelby Road Junction Enhancement - signalisation scheme incorporating controlled crossings for pedestrians on all sides	Key Network	Dacorum Borough Council
SG16-3	Longlands Pavement Parking Prevention	(SG16-3) Physical measures e.g. bollards or landscaping features such as rain gardens, to prevent pavement parking on sections of footway along Longlands where it is not already permitted, especially in the vicinity of junctions (Broadfield Road, Sawyer's Way; The Queen's Square, Windmill Road and Vauxhall Road) and focus on sections adjacent to playing fields either side of The Adeyfield School	Local Network	Dacorum Borough Council
SG17-3	Great Road traffic calming features	(SG17-3) Install traffic calming features at the northern end where the road is on a steep incline	Local Network	Dacorum Borough Council
SG24-1	Piccotts End Road Traffic Calming	(SG24-1) Implement additional traffic calming features to manage risk of excessive speeds on the southern section. Two raised speed tables - a) approximately 30m north of the A4147 roundabout and b) 10m north of the Piccotts End Lane junction (also incorporating kerbed build out on eastern side to prevent kerbside parking on the northern side of the junction.	Local Network	Dacorum Borough Council
SG25-1	Marlowes 20mph zone	(SG25-1) Consider 20mph on entire length of the segment	Key Network	Dacorum Borough Council
SG25-2	Hillfield Road-Marlowes junctions reconfiguration	(SG25-2) Convert King Harry Street-Hillfield Road junction to a conventional T-junction. Reduce the Hillfield Road approach to Marlowes to a single lane, widen the footway adjacent to the crossing.	Key Network	Dacorum Borough Council

7.28 Given the focus on facilitating sustainable travel across Hemel Hempstead, there are no proposals to address highway congestion through increasing capacity. Where traffic signalisation is proposed, this would primarily be to provide safer crossings for pedestrians and cyclists, or facilitating bus priority, in which case they are identified under other modal categories.

7.29 HCC has a process and programme for assessing locations for speed limit changes including 20mph speed limits, and subsequently taking them through a process of feasibility, design and public consultation. Some suggestions for additional 20mph speed limits have been put forward, however over the plan period it is likely that additional 20mph speed limits will be required in order to create a safer and more welcoming network for people walking, wheeling and cycling.

7.30 The study has also identified locations for traffic calming. Such measures would normally be identified through a process of determining whether there is an existing speeding issue, however in the instances proposed in this study, it is considered there could potentially be traffic travelling at excessive speeds and that this could place pedestrians and cyclists at greater risk.

7.31 A map showing the locations of highways interventions put forward in this study is shown below. A large-scale version of this map is contained in **Appendix D**.

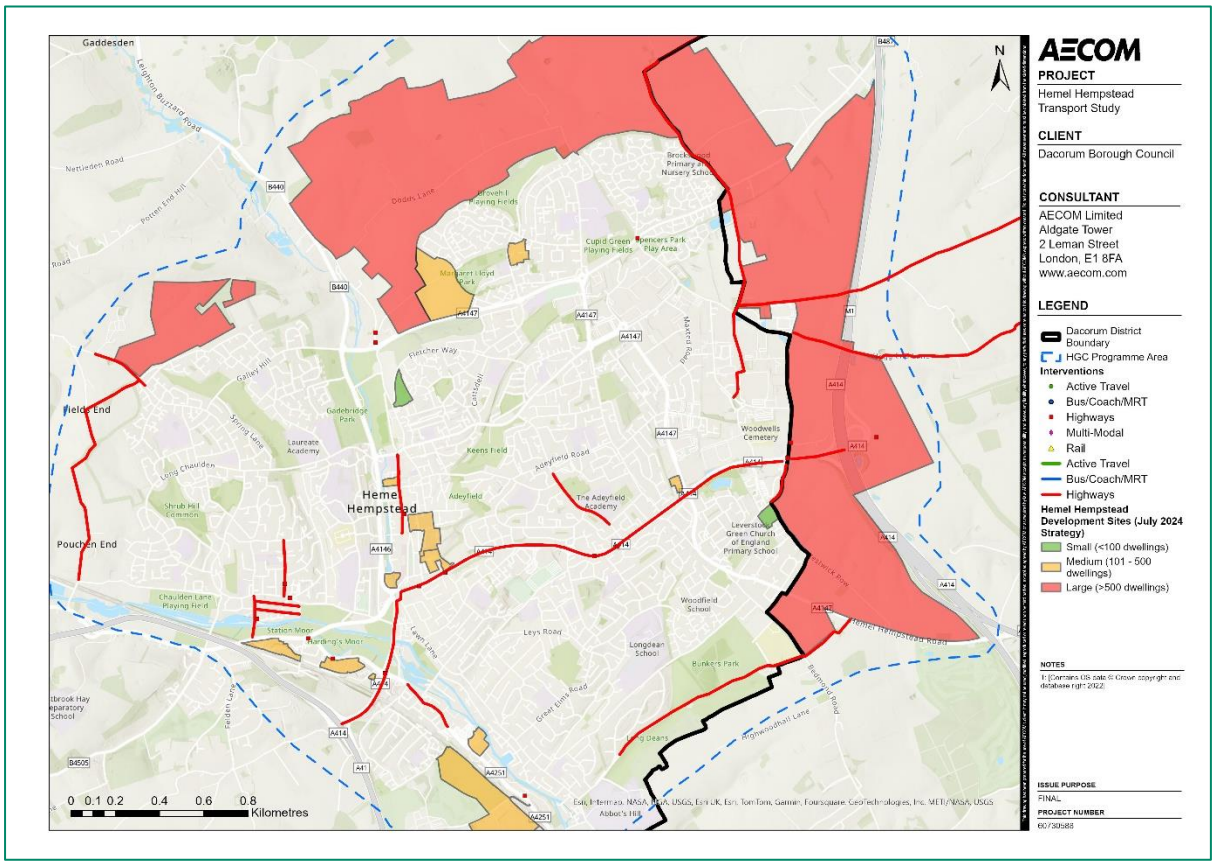


Figure 41 - Map showing the locations of Highways interventions

Rail stations

7.32 The following interventions have been identified under the Rail category.

Table 15 – Rail Interventions

ID	Name	Description	Network	Local Authority
LS-31	Hemel Hempstead Station Upgrade	Upgrade of the station infrastructure including refurbished ticket office, subway and stairwells to platforms	Close to Key Network	Dacorum Borough Council
LS-74	Plaza and Western Access to Apsley Station	A new plaza and western access to Apsley Station. Assumed to comprise a small ticket office at ground level, cycle parking facilities, vehicle drop-off however no car parking will be provided. Alongside this, provision should be made for additional accessibility features including step-free access to all platforms which would necessitate a new footbridge and three lifts.	Other	Dacorum Borough Council

7.33 It should be noted that improvements to both station's forecourts are captured under the Active Travel mode category.

7.34 The study has not identified improvements to rail services which are currently provided by London Northwestern Railway. Changes to rail services including changes to frequencies and stopping patterns are assessed by Network Rail and the train operator.

7.35 There is strong potential that in the long term, proposed development across Hemel Hempstead will increase passenger demand at both of the town's railway stations. The focus of this study has been to identify the potential need to make improvements to routes leading to the stations, station facilities and station forecourts, to make them easier to access from the wider transport network.

7.36 A map showing the locations of rail interventions put forward in this study is shown below. A large-scale version of this map is contained in **Appendix D**.

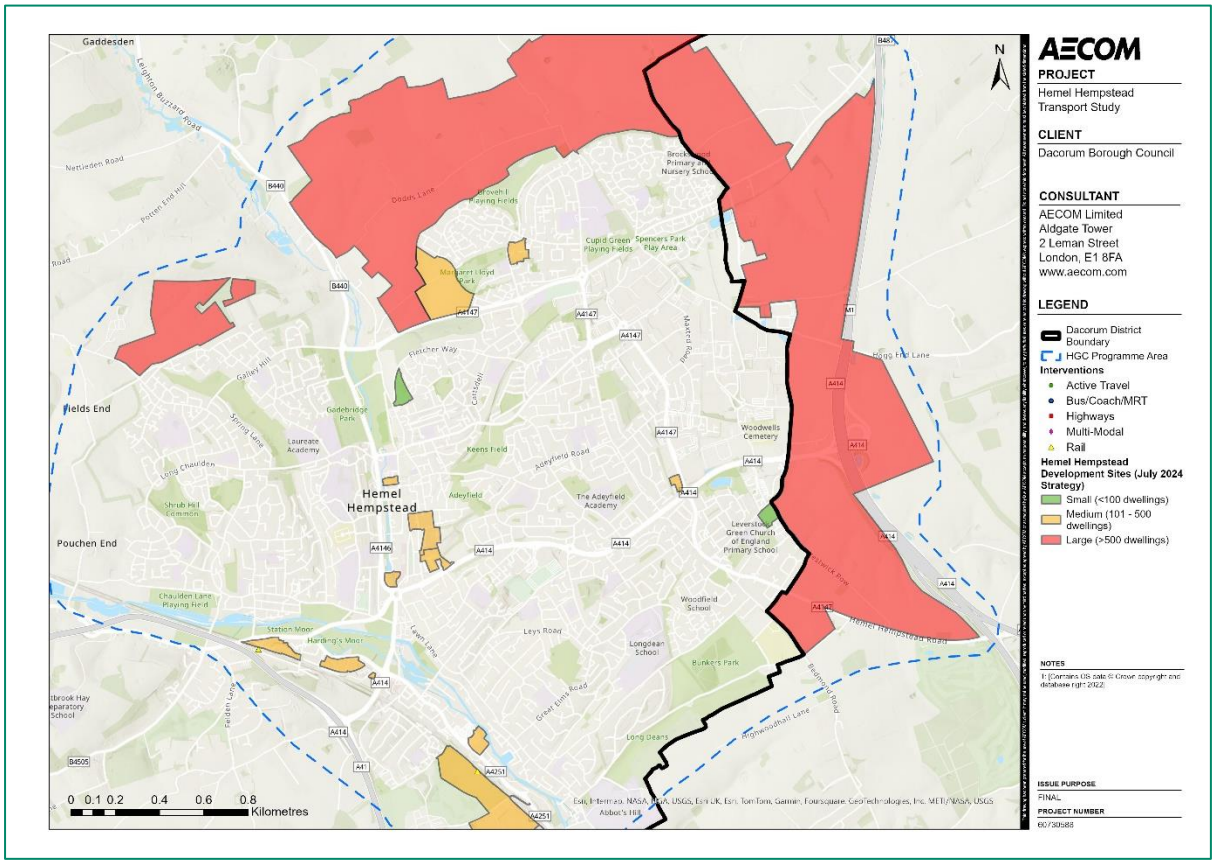


Figure 42 – Map showing the locations of Rail interventions

Chapter 8
Estimated Costs, Phasing, Delivery and Funding

8. Estimated Costs, Phasing, Delivery and Funding

Estimated Costs

8.1 The majority of the interventions proposed in this study have been developed as concepts to a limited level of detail. It is intended that more detailed investigations and development of interventions will take place after adoption of the Local Plan. This includes when development sites come forward as part of planning applications if specific sites are to be required to develop and deliver off-site transport improvements, which will be determined through further discussions between the local authorities and development promotors.

8.2 Interventions have been costed to reflect the level of detail available at this time. Cost estimates have been prepared by traffic engineers with experience of preparing estimates for a wide range of transport infrastructure to inform transport studies and strategies, detailed masterplans, Infrastructure Delivery Plans and planning applications.

8.3 By drawing from a wide range of experience of how much different types of transport interventions may typically cost, a set of estimates have been prepared for the proposed interventions, considering broad dimensions and type/scale of works and apparatus that could be involved. Reference has also been made to the Spon's Civil Engineering and Highways Price Book which includes breakdowns of costs for different elements of interventions.

8.4 The costs are based on December 2023 prices and also include allowance for traffic management (at 25% of the base cost), main contractor preliminaries and overheads and Profit (at 30%), professional fees (i.e. those incurred for developing an intervention to a sufficient level of detail in order to gain approval from the relevant parties for implementation (at 10%) and contingencies (i.e. to account for risks and uncertainties, at 15%). These percentages have been applied consistently on most of the costed interventions but in practice could vary due to the characteristics of the interventions and locality.

8.5 The cost estimates do however exclude the following:

- Inflation from January 2024 onwards
- Value Added Tax (VAT)
- Land Acquisition
- Client's direct costs
- Any adoption fees and commuted sums that would be payable
- Utilities / drainage diversions (as these are unknown)

8.6 Many of the above exclusions could vary significantly and there is insufficient information available at this time to account for them.

8.7 A full breakdown of intervention costs is presented in **Appendix C**. A brief summary of total interventions costs by mode category is presented below.

Table 16 – Summary of total estimated intervention costs by mode category

Mode Category	No. of interventions	Total Estimated Cost
Multi-Modal – mixed modes	27	£11.02m TOTAL £9.03m Dacorum £1.99m St Albans or undetermined
Bus / Coach / HERT – including stops, interchanges and bus priority	12	£4.41m TOTAL Includes 3 uncosted interventions which are cross-boundary
Highways – including measures which have an impact on highway capacity and speeds including traffic calming and quietways	29	£4.52m TOTAL Includes 2 uncosted interventions £2.86m Dacorum £1.65m St Albans/cross-boundary
Highways – M1 J8 Phases 1-3	3	£129.96m TOTAL
Active Travel – including footways, cycle routes and crossings	141	£38.59m TOTAL Includes 1 uncosted intervention £32.74m Dacorum £5.85m St Albans
Rail – specifically related to the town's two stations and forecourts (not related to rail services or track infrastructure)	2	£17.72m TOTAL entirely within Dacorum
Total	**214**	**£206.2m**

8.8 Some interventions have not been costed as more investigations into their composition, feasibility and deliverability will be required. Interventions which have not been costed are:

- Town-wide e-Bike Hire Scheme (LS-58)
- St Albans-Hemel Hempstead Bus Connectivity Improvements (in advance of HERT) (LS-62)
- Northern Hemel Hempstead-Watford-Croxley-Rickmansworth Bus Connectivity Improvements (LS-63)
- Luton-Hemel Hempstead Bus Connectivity Improvements (LS-65)
- Revisions to Parking Standard Zones (and associated infrastructure including lines and signs) (LS-66)
- Increased parking enforcement (LS-67)

Estimated Phasing

8.9 The Transport Vision and Strategy has set out ambitious mode share targets across Hemel Hempstead and to achieve these targets a significant shift in established travel behaviours will be required of existing residents. To facilitate and encourage a shift from the use of the private car to more sustainable modes of transport, better infrastructure will be required and this has been the aim of the intervention optioneering conducted for this transport study.

8.10 It may be easier to encourage more sustainable travel behaviour for residents of new developments, where there is opportunity to design the developments around the needs of walking, wheeling, cycling and buses.

8.11 As new developments come forward, they will generate trips on the wider transport network, therefore infrastructure improvements will be needed by the time these trips materialise.

8.12 Indicative phasing of infrastructure has been considered for interventions, informed by:

- The build-out phasing of proposed development(s) the interventions are facilitating access and connectivity to; and
- The level of complexity in bringing forward the interventions, recognising that whilst on the one hand it may be desirable to bring forward an intervention as soon as possible in the plan period, it will take a period of time to design, develop and implement.

8.13 **Table 17** provides the total interventions costs by phase.

Table 17 – Summary of total estimated interventions costs by Local Plan phase

Local Plan Phase	No. of interventions	Total Estimated Cost*
Up to 2030/31	134	£22.33m
2031/32 to 2035/36	70	£48.25m
2036/37 to 2040/41	8	£27.5m
Post 2040	2	£108.13m

* Excludes the interventions listed under paragraph 8.8

8.14 An assumption has been made that a large proportion of interventions need to come forward in the early part of the Local Plan period. The reason for this is that to achieve the high level of modal shift to more sustainable transport as described in the Transport Vision and Strategy, it will take a long period of time for these new travel behaviours to become fully embedded. Therefore, it is important that infrastructure that can support sustainable travel such as improved or new cycle routes, is available otherwise people may not be encouraged to change their behaviours.

8.15 It is recognised that it may not be feasible to bring forward such a large number of interventions due to the level of resource and planning that this may require. Of the 134 listed in the table above identified for the period up to 2030/31, 121 are not attributed to a specific development site (discussed further below) therefore there may be additional flexibility for when they are brought forward, i.e. at a later point in the plan period.

Funding – apportionment of intervention costs by proposed development

8.16 An assessment has been undertaken to consider the potential linkages between interventions and proposed Local Plan developments. Whilst many of the interventions have been identified along desire line routes linking Local Plan development sites and trip attractor cluster, there are some interventions which have not.

8.17 A range of scenarios have been considered in determining if an intervention is required to support a development or several developments. Where an intervention fits with either of the following criteria, it has been assumed that the development site in question is likely to fund and deliver the intervention in its entirety:

- An intervention is located within a development site; or
- An intervention is located on or adjacent to the boundary to a development site, for example on the existing highway running past the site.

8.18 If an intervention is located on a desire line route leading away from a development site, and it is considered that it would help provide better access to the site and facilitate connectivity to key trip attractors, the study has recommended that the development site (or sites) would fund and deliver the intervention.

8.19 Consideration has also been given to where interventions may support the delivery of all Local Plan development. In this situation, the interventions tend to be located further away from development sites but are located on routes that could be used by people travelling both to/from new developments as well as the existing population of the town.

8.20 93 interventions have been provisionally attributed to a specific development site or small group of sites.

8.21 121 interventions are considered to help deliver cumulative growth across the town and therefore are not linked to specific development sites. This could also include windfall development coming forward in the future.

8.22 The attribution of interventions to sites is captured in **Appendix C**. A summary of attributed costs by site is provided below. It should be noted this study has not indicated how costs should be apportioned by site where interventions costs are attributed to multiple sites.

Table 18 – Attributed costs by Local Plan Site

Site	No. of interventions attributed	Estimated Cost
East Hemel Hempstead – sole attribution	Interventions solely attributed to this site = **25**	Estimated cost which could be solely attributed to this site = **£31.95m**
East Hemel Hempstead – grouped attribution	Interventions attributed to this site in combination with other sites = **9**	Estimated costs which could be attributed to this site in combination with other sites = **£3.41m**
North Hemel Hempstead – sole attribution	Interventions solely attributed to this site = **17**	Estimated cost which could be solely attributed to this site = **£7.43m**
North Hemel Hempstead – grouped attribution	Interventions attributed to this site in combination with other sites = **6**	Estimated costs which could be attributed to this site in combination with other sites = **£666k**
Civic Zone, Marlowes – sole attribution	Interventions solely attributed to this site = **2**	Estimated cost which could be solely attributed to this site = **£457k**
Civic Zone, Marlowes – grouped attribution	Interventions attributed to this site in combination with other sites = **1**	Estimated costs which could be attributed to this site in combination with other sites = **£45.6k**
Hemel Hempstead Hospital / Market Square – sole attribution	Interventions solely attributed to this site = **0**	Estimated cost which could be solely attributed to this site = **£0**
Hemel Hempstead Hospital / Market Square – grouped attribution	Interventions attributed to this site in combination with other sites = **5**	Estimated costs which could be attributed to this site in combination with other sites = **£909.4k**
Paradise – sole attribution	Interventions solely attributed to this site = **0**	Estimated cost which could be solely attributed to this site = **£0**
Paradise – grouped attribution	Interventions attributed to this site in combination with other sites = **5**	Estimated costs which could be attributed to this site in combination with other sites = **£909.4k**
Riverside – sole attribution	Interventions solely attributed to this site = **0**	Estimated cost which could be solely attributed to this site = **£0**

Site	No. of interventions attributed	Estimated Cost
Riverside – grouped attribution	Interventions attributed to this site in combination with other sites = **5**	Estimated costs which could be attributed to this site in combination with other sites = **£909.4k**
National Grid and 339-353 London Road – sole attribution	Interventions solely attributed to this site = **0**	Estimated cost which could be solely attributed to this site = **£0**
National Grid and 339-353 London Road – grouped attribution	Interventions attributed to this site in combination with other sites = **10**	Estimated costs which could be attributed to this site in combination with other sites = **£1.5m**
Symbio Site, Whiteleaf Road – sole attribution	Interventions solely attributed to this site = **0**	Estimated cost which could be solely attributed to this site = **£0**
Symbio Site, Whiteleaf Road – grouped attribution	Interventions attributed to this site in combination with other sites = **15**	Estimated costs which could be attributed to this site in combination with other sites = **£2.4m**
Hemel Hempstead Station Gateway – sole attribution	Interventions solely attributed to this site = **0**	Estimated cost which could be solely attributed to this site = **£0**
Hemel Hempstead Station Gateway – grouped attribution	Interventions attributed to this site in combination with other sites = **3**	Estimated costs which could be attributed to this site in combination with other sites = **£799k**
Apsley Mills Retail Park – sole attribution	Interventions solely attributed to this site = **6**	Estimated cost which could be solely attributed to this site = **£2.13m**
Apsley Mills Retail Park – grouped attribution	Interventions attributed to this site in combination with other sites = **7**	Estimated costs which could be attributed to this site in combination with other sites = **£344.9k**
Shendish Manor and Fairfields – sole attribution	Interventions solely attributed to this site = **1**	Estimated cost which could be solely attributed to this site = **£370.6k**
Shendish Manor and Fairfields – grouped attribution	Interventions attributed to this site in combination with other sites = **1**	Estimated costs which could be attributed to this site in combination with other sites = **£17.5k**
Polehanger Lane – sole attribution	Interventions solely attributed to this site = **6**	Estimated cost which could be solely attributed to this site = **£1.97m**
Polehanger Lane – grouped attribution	Interventions attributed to this site in combination with other sites = **1**	Estimated costs which could be attributed to this site in

Site	No. of interventions attributed	Estimated Cost
		combination with other sites = **£370.6k**
Grovehill Local Centre (Henry Wells Square) – sole attribution	Interventions solely attributed to this site = **0**	Estimated cost which could be solely attributed to this site = **£0**
Grovehill Local Centre (Henry Wells Square) – grouped attribution	Interventions attributed to this site in combination with other sites = **1**	Estimated costs which could be attributed to this site in combination with other sites = **£370.6k**
Plots 2/3 Kier Park, Maylands Avenue – sole attribution	Interventions solely attributed to this site = **0**	Estimated cost which could be solely attributed to this site = **£0**
Plots 2/3 Kier Park, Maylands Avenue – grouped attribution	Interventions attributed to this site in combination with other sites = **2**	Estimated costs which could be attributed to this site in combination with other sites = **£622.4k**
Marchmont Farm – sole attribution	Interventions solely attributed to this site = **1**	Estimated cost which could be solely attributed to this site = **£370.6k**
Marchmont Farm – grouped attribution	Interventions attributed to this site in combination with other sites = **4**	Estimated costs which could be attributed to this site in combination with other sites = **£131.6k**
Old Town – sole attribution	Interventions solely attributed to this site = **0**	Estimated cost which could be solely attributed to this site = **£0**
Old Town – grouped attribution	Interventions attributed to this site in combination with other sites = **1**	Estimated costs which could be attributed to this site in combination with other sites = **£45.6k**
Site to the south of Green Lane – sole attribution	Interventions solely attributed to this site = **0**	Estimated cost which could be solely attributed to this site = **£0**
Site to the south of Green Lane – grouped attribution	Interventions attributed to this site in combination with other sites = **5**	Estimated costs which could be attributed to this site in combination with other sites = **£1.38m**

8.23 It is recommended that more detailed consideration will be needed at planning application, alongside further, more detailed development of interventions, to determine whether an intervention is required to support a development site or sites.

8.24 The current assumption is that where, through more detailed work, it can be demonstrated with evidence that there is a definitive link between a proposed development and an intervention, then development contributions / developer led delivery will be sought towards implementing the intervention using the following mechanisms:

- A S106 monetary contribution which will be passed to the local authorities to help fund the improvement;
- A S278 agreement whereby the developer/promotor of a site is required to fund and implement an intervention in its entirety;
- Where necessary, contribution from Dacorum Borough Council's Community Investment Levy Funds;
- Potentially other sources of funding may need to be sought to help support the delivery of intervention, certainly where contributions from developers may fall short.

8.25 Where further evidence demonstrates that the scale of a development is such that it is required to mitigate a proportionately larger impact on interventions further away from the site and/or on key destinations, the developer may be required to make an additional contribution and/or deliver offsite interventions further from the site.

Chapter 9
Conclusion

9. Conclusion

9.1 The town of Hemel Hempstead is located in the south-west of Dacorum Borough, bordering St Albans and City District Council and lies on the western side of Hertfordshire.

9.2 Hemel Hempstead is the largest settlement in Dacorum and the second largest in Hertfordshire with a population of around 97,000. Lying in the Gade Valley, at the edge of the Chiltern Hills, it has expanded rapidly as a new town since the 1950s, initially to accommodate some of the population overspill from London. As the location for a significant development (Hemel Garden Communities), Hemel Hempstead was awarded Garden Town status in 2019.

9.3 Hemel Hempstead has been developed as a largely self-contained town with strong neighbourhoods supported by local centres, open spaces, and local jobs that support around 60% of its residents.

9.4 The Hemel Hempstead Transport Study considers planned development – both economic and housing – as part of Dacorum's Local Plan to 2041 and builds upon the town's current needs and development layout to propose a series of active and sustainable travel interventions designed to help relieve pressure on the town's transport network and deliver on ambitious targets for sustainable travel mode share by 2050. The study also considers planned growth as part of the overarching Hemel Garden Communities which straddles the boundary with neighbouring St Albans City and District and has a longer plan horizon of 2050.

9.5 The plan also looks to provide wider travel connection opportunities to St. Albans, Redbourn and Harpenden and contribute to addressing challenging issues such as rising fuel prices, loneliness and isolation, the cost-of-living crisis, air pollution, obesity and deprivation.

9.6 The Transport Study has identified a network of desire line routes which link the proposed Local Plan developments with key trip attractors located across the town. These trip attractors range in scale and type, and can comprise local healthcare facilities, schools and colleges, retail and leisure. Major trip attractor clusters including the town centre as well as the town's two railway stations.

9.7 An audit of the desire line routes has identified a range of issues with the provision of transport infrastructure. Common issues identified including narrow footways; poor crossing facilities; prevalent pavement parking; and a lack of segregated routes for cyclists.

9.8 214 interventions have been identified which are intended to address key issues identified and deliver a high-quality network to facilitate more sustainable travel, whether that is a journey made on foot, by bike or on a bus.

9.9 An additional 107 interventions have been identified in the Dacorum Local Cycling and Walking Infrastructure Plan on key routes linking Local Plan sites and trip attractors which could complement the 214 interventions identified in this study. The LCWIP will be finalised in 2025. These LCWIP interventions are not listed in this study report and are not captured as part of the cost estimates.

9.10 Whilst some of the interventions on their own are quite small in scale, it is envisaged that in combination packages of interventions along routes and cumulatively across the whole of Hemel Hempstead will deliver a considerable step change in sustainable travel provision which will help achieve the ambitious mode share targets set out in the Hemel Garden Communities Transport Vision and Strategy.

9.11 As well as smaller scale interventions and new or improved routes to facilitate cycling from one part of the town to another, the Transport Study also captures major infrastructure changes including a network of Mobility Hubs that will facilitate interchange between different modes of transport; and infrastructure building blocks that will help facilitate the eventual delivery of the HERT but in the interim will benefit existing bus services, including bus priority lanes.

9.12 The study has provided an indicative cost estimate for most of the interventions. These costs will be subject to change as interventions are developed in more detail but should provide a good indication of the scale of developer funding which is likely to be required to deliver infrastructure improvements and facilitate sustainable development. The estimated total of all the costed interventions is £206.2m which covers interventions to be delivered across the plan period and beyond.

9.13 The Transport Study has also provided an indication of which developments could fund and deliver each intervention. In some cases, a single development has been identified where there is considered to be stronger justification that the intervention will be required to support or unlock the development. In other cases, either a group of two or more developments may support the delivery of an intervention, or that cumulative contributions may be required from all proposed developments across the town for an intervention where it is not as directly linked with a particular development but where its delivery is expected to be beneficial to the whole town.

Appendices

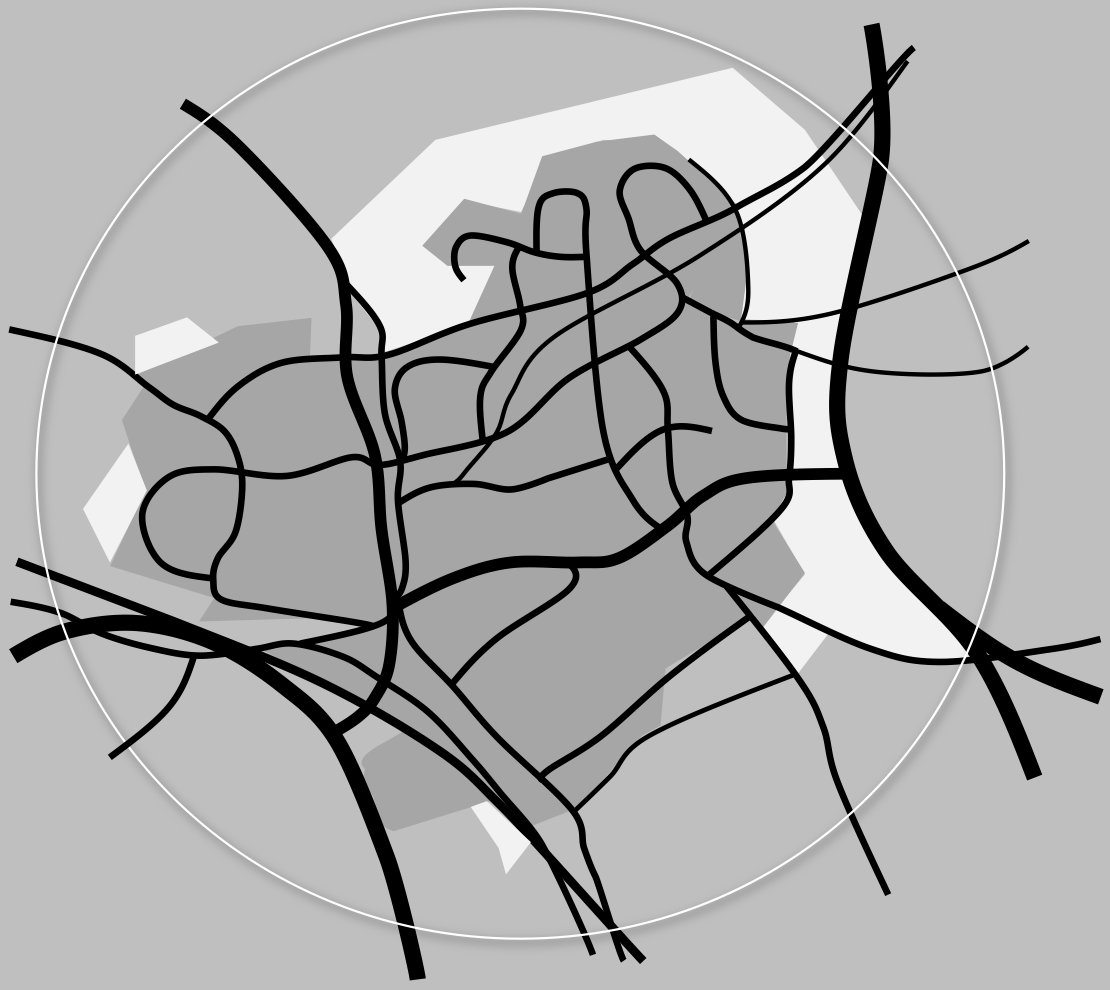
Appendix A – Desire Line Route Segment Audits

Appendix B – Interventions Master List

Appendix C – Interventions Estimated Costings and Phasing

Appendix D – Intervention Maps (enlarged)

Appendix E – Definitions



Appendix A - Challenge Route Audits by Segment

Segment 2

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity		2 (Green)
	Route Coherence	No official crossing at Kingsland Road or Horsecroft Road.	1 (Amber)
Directness	Route efficiency	Cuts through the neighbourhood, so should be an efficient route, as near to 'as the crow flies as possible'.	2 (Green)
	Stops and delays	Need to stop at Kingsland Road and Horsecroft Road to give way to car traffic.	1 (Amber)
	Pedestrian provision	No official crossing at Kingsland Road or Horsecroft Road.	1 (Amber)
Safety	Traffic volume	N/A? - non motorised path.	2 (Green)
	Traffic speed	N/A? - non motorised path, however potential issues with cyclist-pedestrians as path is a bit narrow so cyclist might not want to go at full speed (especially near the turns, even though mirrors are provided).	2 (Green)
	Visibility and risk of collision	N/A - non motorised path, however potential issues with cyclist-pedestrians as path is a bit narrow so cyclist might not want to go at full speed (especially near the turns, even though mirrors are provided).	1 (Amber)
Comfort	Surface quality	Hard to say, route not fully available to view on streetview. I would assume 1 as no information is available.	1 (Amber)
	Effective width	Maybe around 2m width most of the segment, two cyclist could struggle or cyclist trying to overtake pedestrians. Narrow footways, cars parked on footways.	0 (Red)
	Wayfinding	Limited signage.	0 (Red)
Attractiveness	Maintenance	Lamps along the length of the segment, some leaves can be seen on the surface, bin blocking part of the path. Might not me perceived as safe, given how secluded the path is.	1 (Amber)
	Security	Cannot see any cycle parking within close proximity to the segment.	0 (Red)
	Traffic noise and pollution	Secluded, not near direct traffic.	2 (Green)

Segment 3

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Segment has a pavement on both sides of the road. Cyclist most likely to cycle on the road.	2 (Green)
	Route Coherence	Provision of dropped kerbs and tactile paving where needed.	2 (Green)
Directness	Route efficiency	Segment seems to follow the shortest route available, however it is quite hilly. Footways are provided on both sides of the road.	1 (Amber)
	Stops and delays	Stopping only when approaching intersections.	2 (Green)
	Pedestrian provision	No official crossings along the segment, however it doesn't not seem to be a busy road.	1 (Amber)
Safety	Traffic volume	Cyclists use the road, but the traffic is not high.	2 (Green)
	Traffic speed	30mph limit	1 (Amber)
	Visibility and risk of collision	Would not anticipate high motor vehicle flows on that segment, but there is no off-road provision. Potential conflict of cyclists caused by kerbside parking.	1 (Amber)
Comfort	Surface quality	Surface seems to be in good condition.	2 (Green)
	Effective width	Sufficient width however a lot of curb parking, which causes less space to cycle comfortably.	1 (Amber)
	Wayfinding	Non-local cyclists and pedestrians should be able to navigate the routes effortlessly, without the need to refer to maps.	2 (Green)
Attractiveness	Maintenance	Well-lit (lamps along the whole length)	2 (Green)
	Security	There is no cycle parking provision near this segment, however it is not near any significant attractors, hence probably not a lot of demand for cycle parking here.	0 (Red)
	Traffic noise and pollution	Would not anticipate high traffic volumes on this segment.	2 (Green)

Segment 4

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity		2 (Green)
	Route Coherence		1 (Amber)
Directness	Route efficiency	Cuts through the neighbourhood, so should be an efficient route, as near to 'as the crow flies as possible'. Quite hilly.	1 (Amber)
	Stops and delays	Need to stop at Crouchfield, Beechfield Road and The Cornfields to give way to car traffic.	1 (Amber)
	Pedestrian provision	No official crossing but quiet road.	1 (Amber)
Safety	Traffic volume	N/A - non motorised path.	2 (Green)
	Traffic speed	N/A - non motorised path, however potential issues with cyclist-pedestrians as path is a bit narrow so not suitable for cyclists.	2 (Green)
	Visibility and risk of collision	N/A - non motorised path, however potential issues with cyclist-pedestrians as path is a bit narrow so not suitable for cyclists.	1 (Amber)
Comfort	Surface quality	Hard to say, route not fully available to view on streetview.	1 (Amber)
	Effective width	Hard to say but not very wide, two cyclist could struggle or cyclist trying to overtake pedestrians.	0 (Red)
	Wayfinding	Limited signage.	0 (Red)
Attractiveness	Maintenance	Hard to say anything about the lighting or surface from google maps. Might not be perceived as safe, given how secluded the path is.	0 (Red)
	Security	Cannot see any cycle parking within close proximity to the segment.	0 (Red)
	Traffic noise and pollution	Secluded, not near direct traffic.	2 (Green)

Segment 5

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Easy to navigate, however no special cyclists provision so cyclists most likely to use the road.	2 (Green)
	Route Coherence		2 (Green)
Directness	Route efficiency		2 (Green)
	Stops and delays	Straight segment connecting the two points, no other alternative to shorten the route.	2 (Green)
	Pedestrian provision	Footway provision on both sides of the road. Signalised crossing at the end point of the segment at the A4251/A414 junction and a crossing with dropped kerbs and tactile paving near A4251/A4146 roundabout. Narrow footways on both sides in some places.	1 (Amber)
Safety	Traffic volume	Could experience higher traffic volumes and congestion especially at the A4251/A414 junction (looking at typical traffic on Google) but this junction has good crossing provision	2 (Green)
	Traffic speed	30mph speed limit, on the slight turn "SLOW" marking on the road and "KILL YOUR SPEED" sign	1 (Amber)
	Visibility and risk of collision	No special cyclist provisions at junctions or along the segment length.	1 (Amber)
Comfort	Surface quality	No potholes, road markings seem visible. Footway surface could be improved	1 (Amber)
	Effective width	Sufficient footpath width as well as road width on most of the route. Narrow footways on both sides in some places.	1 (Amber)
	Wayfinding		2 (Green)
Attractiveness	Maintenance	Sufficient lighting along the segment	2 (Green)
	Security	There is no cycle parking provision near this segment, however it is not near any significant attractors, hence probably not a lot of demand for cycle parking here. But there is train station nearby and there is cycle provision there.	0 (Red)
	Traffic noise and pollution		2 (Green)

Segment 6

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity		2 (Green)
	Route Coherence	marked or signalised crossings where necessary, adequate provision of dropped kerbs and tactile paving	2 (Green)
Directness	Route efficiency		2 (Green)
	Stops and delays	cycling on the road, no juctions along the segment that would require stopping (apart from beginning and end of the segment)	2 (Green)
	Pedestian provision	sidewalk on both sides of the road, with a secion of a public footpath	1 (Amber)
Safety	Traffic volume	This segment might experiece higher traffic volumes in the peak times	1 (Amber)
	Traffic speed	30mph speed limit, do not think 20mph zone would applicaple on this segment	1 (Amber)
	Visibility and risk of collision	serious and slight incidents reported in the past 5 years involving pedal cycle casualties and pedestrian casualties	1 (Amber)
Comfort	Surface quality		2 (Green)
	Effective width	Road width should be sufficient, footway width at times not that wide	1 (Amber)
	Wayfinding		2 (Green)
Attractiveness	Maintenance		2 (Green)
	Security	Don't think the picture is an official cycle paring spot, but there is a bike lock on it.	1 (Amber)
	Traffic noise and pollution		1 (Amber)

Segment 7

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity		2 (Green)
	Route Coherence	marked or signalised crossings where necessary, adequate provision of dropped kerbs and tactile paving.	2 (Green)
Directness	Route efficiency		2 (Green)
	Stops and delays	cycling on the road, no junctions along the segment that would require stopping (apart from beginning and end of the segment). Two roundabouts on both ends with poor facilities for pedestrians and cyclists.	0 (Red)
	Pedestrian provision	Footway on both sides of the road, with a section of a public footpath. Lack of some crossings.	1 (Amber)
Safety	Traffic volume	This segment might experience higher traffic volumes in the peak times.	1 (Amber)
	Traffic speed	30mph speed limit, do not think 20mph zone would be applicable on this segment.	2 (Green)
	Visibility and risk of collision		1 (Amber)
Comfort	Surface quality		2 (Green)
	Effective width	Road and/or footway width at times not that wide.	1 (Amber)
	Wayfinding		2 (Green)
Attractiveness	Maintenance		2 (Green)
	Security	Cycle parking provision at Apsley station car park.	2 (Green)
	Traffic noise and pollution		1 (Amber)

Segment 8

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Give way at joining Belswains Lane.	2 (Green)
	Route Coherence	Poor provision of coherent signage and markings. Some provision of dropped kerb but no tactile paving.	1 (Amber)
Directness	Route efficiency	Going up (northbound) the segment is uphill for most of it's length however this seems to be the shortest option available.	1 (Amber)
	Stops and delays	Give way at joining Belswains Lane.	1 (Amber)
	Pedestrian provision	Lots of cars parked on footways.	0 (Red)
Safety	Traffic volume		2 (Green)
	Traffic speed		2 (Green)
	Visibility and risk of collision	one pedal cycle incident occurred in 2018 at Mulready Walk/Belswains Lane.	1 (Amber)
Comfort	Surface quality	Could give green, one or two potholes only.	1 (Amber)
	Effective width		1 (Amber)
	Wayfinding		2 (Green)
Attractiveness	Maintenance	Lighting present on whole length, could use better signage.	1 (Amber)
	Security	Cannot see any cycle parking within close proximity to the segment.	0 (Red)
	Traffic noise and pollution	More quiet route, residential.	2 (Green)

Segment 9

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity		2 (Green)
	Route Coherence		2 (Green)
Directness	Route efficiency		1 (Amber)
	Stops and delays		1 (Amber)
	Pedestrian provision		1 (Amber)
Safety	Traffic volume	Peascroft Road might get busier at peak times.	1 (Amber)
	Traffic speed	Speed humps present due to schools in the area.	2 (Green)
	Visibility and risk of collision	no high speed differences and no evidence of incidents on that segment in the past but lots of parked cars on pavements.	0 (Red)
Comfort	Surface quality		2 (Green)
	Effective width	Limited for pedestrians.	1 (Amber)
	Wayfinding		2 (Green)
Attractiveness	Maintenance	Footways could receive better maintenance.	1 (Amber)
	Security	There is no cycle parking provision near this segment, however it is not near any significant attractors, hence probably not a lot of demand for cycle parking here.	0 (Red)
	Traffic noise and pollution		2 (Green)

Segment 10

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Cycling on the road, straight segment.	2 (Green)
	Route Coherence		2 (Green)
Directness	Route efficiency		2 (Green)
	Stops and delays		2 (Green)
	Pedestrian provision		2 (Green)
Safety	Traffic volume	Might get busier at Bedmond Road/A4147 during peak times, but generally no high volumes of traffic.	1 (Amber)
	Traffic speed	30mph speed limit.	1 (Amber)
	Visibility and risk of collision	Potential risk of collision at Bedmond Road/A4147.	0 (Red)
Comfort	Surface quality		1 (Amber)
	Effective width		2 (Green)
	Wayfinding		2 (Green)
Attractiveness	Maintenance		2 (Green)
	Security	No cycle parking along the segment.	0 (Red)
	Traffic noise and pollution		2 (Green)

Segment 11

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Cycle route on a short section of Green Lane, most of the segment has a sidewalk on both sides of the road.	2 (Green)
	Route Coherence	Crossings with dropped kerbs and tactile paving present, could add more tactile paving.	1 (Amber)
Directness	Route efficiency	Footways provided, not hilly. Shortest option available (unless someone wants to get from St Albans Rd/A4147 down A4147 to intersection with Green Lane, then suppose they would just travel on A4147).	2 (Green)
	Stops and delays		2 (Green)
	Pedestrian provision		1 (Amber)
Safety	Traffic volume		2 (Green)
	Traffic speed	Speed humps on Green Lane, 30mph.	2 (Green)
	Visibility and risk of collision	One serious accident with pedal cycle casualty at Green Lane/Micklefield Road and 4 incidents at A4147/Woolmer Drive (in the past 5 years).	2 (Green)
Comfort	Surface quality	A few potholes at Woolmer Drive.	1 (Amber)
	Effective width		2 (Green)
	Wayfinding		2 (Green)
Attractiveness	Maintenance		2 (Green)
	Security	No cycle parking along the segment.	0 (Red)
	Traffic noise and pollution		2 (Green)

Segment 12

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Cycle path and crossing facilities at Boundary Way/Buncefield Lane roundabout.	2 (Green)
	Route Coherence		2 (Green)
Directness	Route efficiency	Shortest option available, not hilly.	2 (Green)
	Stops and delays	Have to stop at Boundary Way/Buncefield Lane roundabout to give way to road traffic to cross the road.	1 (Amber)
	Pedestrian provision	Okay at Buncefield Lane from Breakspear Way to Boundary Way, but no pedestrian provision from Boundary Way to Three Cherry Trees Lane.	0 (Red)
Safety	Traffic volume		2 (Green)
	Traffic speed	30mph.	1 (Amber)
	Visibility and risk of collision		2 (Green)
Comfort	Surface quality	Buncefield Lane from Boundary Way to Three Cherry Trees Lane has poor surface quality.	0 (Red)
	Effective width	Again sufficient width at Buncefield Lane from Breakspear Way to Boundary Way with signs and road markings, but not from Boundary Way to Three Cherry Trees Lane, marked as "Single track road with passing places; Unsuitable for HGVs).	1 (Amber)
	Wayfinding	Okay at Buncefield Lane from Breakspear Way to Boundary Way with signs and road markings, but no signage from Boundary Way to Three Cherry Trees Lane.	1 (Amber)
Attractiveness	Maintenance	Buncefield Lane from Boundary Way to Three Cherry Trees Lane has little to no lighting.	0 (Red)
	Security	There is no cycle parking provision near this segment, however it is not near any significant attractors, hence probably not a lot of demand for cycle parking here.	0 (Red)
	Traffic noise and pollution		2 (Green)

Segment 13

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Straight segment, easy to access two end point intersections.	2 (Green)
	Route Coherence		2 (Green)
Directness	Route efficiency	Shortest option available, not hilly.	2 (Green)
	Stops and delays		2 (Green)
	Pedestrian provision	Very narrow footway (?) on one side of the road, not comfortable or appealing, no footway at all on section of the segment.	0 (Red)
Safety	Traffic volume	Would not anticipate high traffic volume, but Cherry Tree Lane is narrow on the whole length so could risk collisions.	1 (Amber)
	Traffic speed		1 (Amber)
	Visibility and risk of collision	Risk of collision due to road width.	1 (Amber)
Comfort	Surface quality	Poor at times and at risk of flooding.	0 (Red)
	Effective width	Marked as "Single track road with passing places; Unsuitable for HGVs).	0 (Red)
	Wayfinding		0 (Red)
Attractiveness	Maintenance	Not lit, vegetation present.	0 (Red)
	Security	There is no cycle parking provision near this segment, however it is not near any significant attractors, hence probably not a lot of demand for cycle parking here.	0 (Red)
	Traffic noise and pollution		2 (Green)

Segment 14

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Easy to navigate, however no special cyclists provision so cyclists most likely to use the road.	2 (Green)
	Route Coherence	Marked or signalised crossings where necessary, provision of dropped kerbs and tactile paving, some cases of dropped kerbs only but no tactile paving.	2 (Green)
Directness	Route efficiency		2 (Green)
	Stops and delays	Redbourn Road/Three Cherry Trees Lane roundabout has poor pedestrian and cycle facilities.	0 (Red)
	Pedestrian provision	There is footway provision along the segment, however narrow in some places (from Cherry Tree Ln to Shenley Rd).	1 (Amber)
Safety	Traffic volume	Can get congested especially eastbound in the peak times.	1 (Amber)
	Traffic speed	40mph.	1 (Amber)
	Visibility and risk of collision	There is a shared cycle/foot path from Redbourn Rd/Three Cherry Trees Ln roundabout to Redbourn Rd/Link Rd.	1 (Amber)
Comfort	Surface quality	A few potholes along the road.	1 (Amber)
	Effective width	Footpaths narrow at times.	1 (Amber)
	Wayfinding		2 (Green)
Attractiveness	Maintenance		2 (Green)
	Security	There is no cycle parking provision near this segment, however it is not near any significant attractors, hence probably not a lot of demand for cycle parking here.	0 (Red)
	Traffic noise and pollution	Might get busy/congested at peak times.	1 (Amber)

Segment 15

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Cyclists must dismount at the junction with the A414, but are able to access other routes to the north of the segment (the A4147). Left image is of northern connection, right image is of southern connection.	1 (Amber)
	Route Coherence		2 (Green)
Directness	Route efficiency	As the crow flies distance: 1.48km Segment length: 1.61km Deviation factor: 1.1	2 (Green)
	Stops and delays	3 stops along the route (1.61km).	1 (Amber)
	Pedestrian provision	Footway provision is good.	2 (Green)
Safety	Traffic volume	For parts of the segment, there is sufficient distance from traffic, but there are medium traffic levels.	1 (Amber)
	Traffic speed	Traffic is 30mph with speed cameras.	2 (Green)
	Visibility and risk of collision	Segment starts and ends with significant junctions and there are a number of side roads. However, the cycling infrastructure is segregated from traffic via a shared-use path.	1 (Amber)
Comfort	Surface quality	Minor surface defects along entire segment.	1 (Amber)
	Effective width	Footway widths are typically >2m.	2 (Green)
	Wayfinding	There is sufficient wayfinding, it is the route itself which appears to be incoherent. The shared-use path on the western side of the segment is poorly signed and cyclists must dismount.	0 (Red)
Attractiveness	Maintenance	There is sufficient lighting along the route, minimal street clutter and vegetation is managed.	2 (Green)
	Security	There is some cycle parking but it is stands, not secure parking(not enough to meet demand) but route is naturally under surveillance.	1 (Amber)
	Traffic noise and pollution	Traffic and noise pollution is likely to be moderate.	1 (Amber)

Segment 16

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Segment connects directly to three other segments.	2 (Green)
	Route Coherence	Cyclists are provided with a section of advisory cycle lane, but there are not a large amount of dropped kerbs/ tactile paving.	1 (Amber)
Directness	Route efficiency	As the crow flies distance: 0.94km Segment length: 0.99km Deviation factor: 1.1	2 (Green)
	Stops and delays	There are a number of zebra crossings which cyclists would need to give way to.	1 (Amber)
	Pedestrian provision	Crossings are direct.	2 (Green)
Safety	Traffic volume	Traffic volumes expected to be relatively low, and pavements are sufficiently wide to allow distance from traffic.	2 (Green)
	Traffic speed	30mph speed limit.	2 (Green)
	Visibility and risk of collision	Visibility is good since road is wide and flat, but cyclists are not currently segregated from traffic. There is significant parking on pavement which either needs preventing, or road markings need adding to clearly demarcate where parking/ is/ isn't allowed.	1 (Amber)
Comfort	Surface quality	Some areas where surface quality is poor.	1 (Amber)
	Effective width	Pavement width for majority of route is >2m.	2 (Green)
	Wayfinding	Some gaps in wayfinding at the start/ end of segment but there is some wayfinding on the existing advisory cycle lane.	1 (Amber)
Attractiveness	Maintenance	Footways are well maintained however there is significant parking on pavement which adds to street clutter.	1 (Amber)
	Security	No secure cycle parking along route.	1 (Amber)
	Traffic noise and pollution	Levels of traffic noise/ pollution could be improved.	1 (Amber)

Segment 17

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Segment connects to two other segments and is easy to navigate.	2 (Green)
	Route Coherence	Segment is cohesive and continuous.	1 (Amber)
Directness	Route efficiency	Deviation score of 1.1.	2 (Green)
	Stops and delays	Cyclists not required to stop, no significant delay to cyclists.	2 (Green)
	Pedestrian provision	Footways are sufficient, however there is no tactile paving or pedestrian crossings.	0 (Red)
Safety	Traffic volume	Traffic volumes expected to be low.	2 (Green)
	Traffic speed	30mph speed limit.	1 (Amber)
	Visibility and risk of collision	Visibility could be improved, cyclists would be required to use road, road markings are generally legible but not significant junctions along segment.	1 (Amber)
Comfort	Surface quality	Road surface quality is high.	2 (Green)
	Effective width	At the southern end of the segment, the footway width is a little narrow, but at the northern end the footway width is suitable.	1 (Amber)
	Wayfinding	Poor wayfinding along segment.	0 (Red)
Attractiveness	Maintenance	Segment is well lit, wide and residential. No issues noted.	2 (Green)
	Security	No secure cycle parking along segment, but no evidence of vandalism/ disrepair.	1 (Amber)
	Traffic noise and pollution	Traffic noise and pollution is not expected to impact attractiveness.	2 (Green)

Segment 18

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Cyclists able to connect to other segments easily but there is a roundabout at the northern end of the segment without dedicated infrastructure.	1 (Amber)
	Route Coherence	Cyclists are provided with a continuous segregated route.	2 (Green)
Directness	Route efficiency	Deviation factor of 1.3 (however this segment incorporates a junction).	1 (Amber)
	Stops and delays	There is one signalised junction and the roundabout at which cyclists would be delayed.	1 (Amber)
	Pedestrian provision	Footway provision could be improved but crossings are aligned with desire lines.	2 (Green)
Safety	Traffic volume	Traffic volumes expected to be medium as the segment connects Link Rd and Washington Avenue (segment also follows Washington Avenue for a small section of road).	2 (Green)
	Traffic speed	Traffic speeds expected to be low with segregated cycling infrastructure and crossing points.	2 (Green)
	Visibility and risk of collision	Advisory cycle lane provided, but cyclists required to use the road. Segment which follows Washington Avenue does not have dedicated infrastructure.	1 (Amber)
Comfort	Surface quality	Surface quality is generally good along segment but quality declines along Washington Avenue.	1 (Amber)
	Effective width	Effective width of sufficient as dedicated cycle infrastructure is provided.	2 (Green)
	Wayfinding	Segment is well signed and the infrastructure if signposting adequately.	2 (Green)
Attractiveness	Maintenance	Segment is well lit, wide and residential. No issues noted.	2 (Green)
	Security	No secure cycle parking along segment, but no evidence of vandalism/ disrepair.	1 (Amber)
	Traffic noise and pollution	Levels of traffic noise/ pollution could be improved.	1 (Amber)

Segment 19

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Segment connects to just two other segments which can be accessed without needing to dismount. There is a shared-use path to the north of the segment however to the south there isn't dedicated infrastructure.	1 (Amber)
	Route Coherence	Sufficient tactile paving and dropped kerbs. The segment is coherent but there are no segregated cycling facilities or signalised crossings.	1 (Amber)
Directness	Route efficiency	As the crow flies distance: 579m Segment length: 685m Deviation factor: 1.2	1 (Amber)
	Stops and delays	No signalised crossings/ give ways along segment. There is one zebra crossing by the school which might cause a cyclist delay.	1 (Amber)
	Pedestrian provision	Pedestrian footway provision is good/ continuous. Crossing points are not signalised and improvements could be made here.	2 (Green)
Safety	Traffic volume	Traffic volumes expected to be moderate. Pedestrians can keep distance from road traffic but cyclists would be required to use the road.	2 (Green)
	Traffic speed	Traffic speeds are low because of schools, pedestrians can keep distance from road traffic but cyclists would be required to use the road.	1 (Amber)
	Visibility and risk of collision	Visibility is generally good, but cyclists required to use the road. Side roads are infrequent and there are junctions at the start/ end of segment.	1 (Amber)
Comfort	Surface quality		2 (Green)
	Effective width	Generally sufficient road and footpath width as well as road width on most of the route. Narrow footways on both sides in some places.	1 (Amber)
	Wayfinding	Clear wayfinding to schools on route and clearly signed shared-use path.	2 (Green)
Attractiveness	Maintenance	Footways and road is well maintained.	2 (Green)
	Security	Some cycle stands along segment but not secured. There is appropriate natural surveillance.	1 (Amber)
	Traffic noise and pollution	Traffic noise and pollution not expected to affect the attractiveness.	2 (Green)

Segment 20

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Segment connects to just two other segments. Cyclists are able to join and leave the segment safely but there are a number of junctions which add to journey disruption.	1 (Amber)
	Route Coherence	Poor provision of tactile paving and dropped kerbs. There are a number of incoherent sections along the segment which require connecting.	0 (Red)
Directness	Route efficiency	As the crow flies distance: 0.98km Segment length: 1.19m Deviation factor: 1.2 Footway provision does not cater to desire lines and segment of Allandale between George St and Taverners is very steep.	0 (Red)
	Stops and delays	There are a number of stops/ delays along the segment such as roundabouts and left/right turns onto junctions.	1 (Amber)
	Pedestrian provision	There are sufficient footways along the route, but these are sometimes incoherent (provision through Randall Park isn't clearly signed, and isn't properly paved).	1 (Amber)
Safety	Traffic volume	Traffic volumes expected to be moderate. Pedestrians can keep distance from road traffic but cyclists would be required to use the road.	1 (Amber)
	Traffic speed	Traffic speeds are low because of schools, pedestrians can keep distance from road traffic but cyclists would be required to use the road.	1 (Amber)
	Visibility and risk of collision	There is no cyclist provision, whilst the junctions are not major, there are a number of junctions with no cyclist provision or dedicated, signalised crossing points.	0 (Red)
Comfort	Surface quality	Surface quality varies along segment.	1 (Amber)
	Effective width	Generally sufficient road and footpath width as well as road width on most of the route. Narrow footways on both sides in some places.	1 (Amber)
	Wayfinding	Poor wayfinding and signage.	0 (Red)
Attractiveness	Maintenance	Lack of active frontage and natural surveillance especially through Randall Park.	1 (Amber)
	Security	No secure cycle parking along segment.	2 (Green)
	Traffic noise and pollution	Traffic noise and pollution not expected to affect the attractiveness.	2 (Green)

Segment 21

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Cyclists can easily join/ exit segment and it is very clear to navigate.	2 (Green)
	Route Coherence	Clear, well marked segment.	2 (Green)
Directness	Route efficiency	As the crow flies distance: 535m Segment length: 553m Deviation factor: 1	2 (Green)
	Stops and delays	N/A - off-road shared use path.	2 (Green)
	Pedestrian provision	Shared-use path.	2 (Green)
Safety	Traffic volume	N/A - off-road shared-use path.	2 (Green)
	Traffic speed	N/A - off-road shared-use path.	2 (Green)
	Visibility and risk of collision	No risk of collision as is an off-road shared-use path and pedestrians/ cyclists are fully segregated from traffic. Heightened risk of collisions at the southern end at the roundabout with Queensway and Marlowes where cyclists will need to enter/exit the carriageway directly onto the roundabout.	1 (Amber)
Comfort	Surface quality	Newly paved surface from what can be determined from satellite view (street view only available at start/ end of segment).	2 (Green)
	Effective width	Pedestrians and cyclists are segregated with markings to reduce risk of collision.	2 (Green)
	Wayfinding		2 (Green)
Attractiveness	Maintenance	No lighting present through park from what can be determined from satellite view (street view only available at start/ end of segment).	1 (Amber)
	Security	No clear CCTV / cycle storage.	1 (Amber)
	Traffic noise and pollution	N/A - off-road shared-use path.	2 (Green)

Segment 22

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Cyclists can easily join/ exit segment and it is very clear to navigate.	2 (Green)
	Route Coherence	Clear, well marked segment.	2 (Green)
Directness	Route efficiency	As the crow flies distance: 212m Segment length: 213m Deviation factor: 1	2 (Green)
	Stops and delays	N/A - off-road path.	2 (Green)
	Pedestrian provision	Shared-use path with no crossings required as no interaction with traffic.	2 (Green)
Safety	Traffic volume	N/A - off-road shared-use path.	2 (Green)
	Traffic speed	N/A - off-road shared-use path.	2 (Green)
	Visibility and risk of collision	No risk of collision as is an off-road shared-use path and pedestrians/ cyclists are fully segregated from traffic.	2 (Green)
Comfort	Surface quality	Western end of path is not paved.	1 (Amber)
	Effective width	Pedestrians and cyclists are segregated with markings for majority of segment.	2 (Green)
	Wayfinding		2 (Green)
Attractiveness	Maintenance	Well used path. Lighting and maintenance under the bridge appears poor.	1 (Amber)
	Security	No clear CCTV / cycle storage.	1 (Amber)
	Traffic noise and pollution	N/A - off-road path.	2 (Green)

Segment 23

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Segment connects to 3 other segments and is in the centre of Hemel. Cyclists are able to easily join/ exit the segment.	2 (Green)
	Route Coherence	The route is coherent, but there are some junctions without dropped kerbs/ tactile paving.	1 (Amber)
Directness	Route efficiency	As the crow flies distance: 886m Segment length: 905m Deviation factor: 1	2 (Green)
	Stops and delays	Stopping/ give way frequency is low (one roundabout on segment).	2 (Green)
	Pedestrian provision	Footway provision along High Street is good, but the northern end of the segment does not have a footway on both sides of the road - it ends suddenly and is narrow before this.	0 (Red)
Safety	Traffic volume	Traffic volume expected to be moderate north of the roundabout with Fletcher Way and low south of the roundabout (one way NB).	1 (Amber)
	Traffic speed	Traffic speed low (20mph along High St).	2 (Green)
	Visibility and risk of collision	Visibility generally good with few junctions along segment.	1 (Amber)
Comfort	Surface quality	High St is cobbled rather than smooth. North of Fletcher Way, some localised resurfacing required.	1 (Amber)
	Effective width	Significant variation in footway widths along High St and northern segment of route.	1 (Amber)
	Wayfinding	Clearer signage between High St and Piccotts End Rd would be valuable.	1 (Amber)
Attractiveness	Maintenance	Moderate street clutter along High Street and slightly overgrown vegetation.	1 (Amber)
	Security	No secure cycle parking along segment but good amount of natural surveillance.	1 (Amber)
	Traffic noise and pollution	Traffic noise and pollution not expected to affect the attractiveness.	2 (Green)

Segment 24

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Cyclists can connect to other routes without needing to dismount, however doesn't connect to many other routes.	1 (Amber)
	Route Coherence	There is poor pavement provision . There is no tactile paving.	0 (Red)
Directness	Route efficiency	As the crow flies distance between Link Rd and Dodds Ln: 821m Segment length: 863m Deviation factor: 1.1	2 (Green)
	Stops and delays		2 (Green)
	Pedestian provision	Poor footway provision.	0 (Red)
Safety	Traffic volume	Traffic volume expected to be moderate as segment connects to Link Rd.	1 (Amber)
	Traffic speed	Traffic speed low (30mph) with some traffic calming measures implemented to the northern section of the segment but not present on the southern section.	1 (Amber)
	Visibility and risk of collision	Visibility could be improved and cycling facilities non-existent. However there are no major junctions/ conflicting movements.	1 (Amber)
Comfort	Surface quality	Surface quality generally good, but localised resurfacing required.	1 (Amber)
	Effective width	Footway widths narrow/ non-existent.	0 (Red)
	Wayfinding	Existing wayfinding from Piccotts End Rd and Piccotts End Ln.	2 (Green)
Attractiveness	Maintenance	Some evidence of overgrown vegitation.	0 (Red)
	Security	No secure cycle storage and segment is quite isolated.	1 (Amber)
	Traffic noise and pollution	Could be seen as unattractive given poor infrastructure which increases car dominance.	1 (Amber)

Segment 25

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Connects to 2 segments. Reasonably safe to join.	1 (Amber)
	Route Coherence	Multiple pelican crossings as well as multiple island crossings. Lack of tactile paving in places.	2 (Green)
Directness	Route efficiency	As crow flies.	2 (Green)
	Stops and delays	Pelican crossings are only cause of stops and delays.	2 (Green)
	Pedestian provision	Pavements far wider than 2m in places with many crossings.	2 (Green)
Safety	Traffic volume	High traffic volume.	1 (Amber)
	Traffic speed	30mph limit.	2 (Green)
	Visibility and risk of collision	Wide road with low speed limit along with many pedestrian crossings so risk is low. Lack of cycle lanes etc however.	2 (Green)
Comfort	Surface quality	Good quality and new pavement in places.	2 (Green)
	Effective width	Wide road with 2 lanes in places. Mini roundabouts may effect conflict with.	2 (Green)
	Wayfinding	Little wayfinding on segment.	1 (Amber)
Attractiveness	Maintenance	Well maintained, well used and well lit. Overlooked throughout as well as being in town centre.	2 (Green)
	Security	Cycle parking adjacent to West Herts College.	1 (Amber)
	Traffic noise and pollution	Busy road which will cause high pollution especially with buses.	1 (Amber)

Segment 26

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Connects to 3 segments. Difficulty in joining Two Waters Road from Plough Roundabout. Major junction from southern end of Two Waters Road.	1 (Amber)
	Route Coherence	Lack of tactile paving at t-junction. Clear road markings.	1 (Amber)
Directness	Route efficiency	616 / 606 = 1.01	2 (Green)
	Stops and delays	No stops bar pelican crossing.	1 (Amber)
	Pedestrian provision	Formal crossing every 300m. Pavement generally wider than 2 metres.	2 (Green)
Safety	Traffic volume	High volume of cars, LGVs and HGVs. Part of strategic route through Hemel Hempstead	0 (Red)
	Traffic speed	40mph speed limit	1 (Amber)
	Visibility and risk of collision	No cycle infrastructure evident apart from by Plough Roundabout, however this is not clear	0 (Red)
Comfort	Surface quality	Good surface in most areas	1 (Amber)
	Effective width	Relatively road with hatching in middle of road for most of segment	2 (Green)
	Wayfinding	Poor wayfinding	0 (Red)
Attractiveness	Maintenance	Well lit, well maintained, not overlooked on many parts of segment	1 (Amber)
	Security	No cycle parking available near accesses to park	1 (Amber)
	Traffic noise and pollution	High levels of traffic and air pollution as key route through Hemel Hempstead	0 (Red)

Segment 27

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Connects to 3 segments. Cyclists able to join from cycle lane on arm of Plough Roundabout.	2 (Green)
	Route Coherence	Formal crossings are start and end of segment.	1 (Amber)
Directness	Route efficiency	704 / 686 = 1.02.	2 (Green)
	Stops and delays	Bus stops on road may cause delays, otherwise just residential T-junctions.	1 (Amber)
	Pedestrian provision	> 2metre wide pavements throughout. Cars parked on pavements (parking spaces mainly).	1 (Amber)
Safety	Traffic volume	Key link from Plough roundabout southbound. Although HGVs, LGVs will use A414 and A4251	1 (Amber)
	Traffic speed	30mph throughout.	2 (Green)
	Visibility and risk of collision	Cars parked on road, filter lanes for turning left/right on Lawn Lane.	1 (Amber)
Comfort	Surface quality		2 (Green)
	Effective width		2 (Green)
	Wayfinding	No wayfinding.	0 (Red)
Attractiveness	Maintenance	Well it, well used and overlooked throughout.	2 (Green)
	Security	Residential area so no cycle parking.	2 (Green)
	Traffic noise and pollution	Key link from Plough roundabout southbound. Although HGVs, LGVs will use A414 and A4251.	1 (Amber)

Segment 28

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Connects to 3 segments.	2 (Green)
	Route Coherence	As crow flies.	2 (Green)
Directness	Route efficiency	2 crossing points available on Durrants Hill Road. One pelican, two island (either end of segment). No formal crossings on Frogmore Road.	2 (Green)
	Stops and delays	Traffic lights over one river bridge meanwhile other bridge is very narrow. Cyclist go on the footway, on the side of the bridge.	1 (Amber)
	Pedestrian provision	Pavements generally wider than 2metres and are of surface quality. Tactile pavement throughout at all junctions.	2 (Green)
Safety	Traffic volume	Key link over river, traffic might be greater at rush hour. Frogmore Road is access to development only.	1 (Amber)
	Traffic speed	30mph throughout.	2 (Green)
	Visibility and risk of collision	Bridges may cause risk of collision. Many T-junctions on short segment.	0 (Red)
Comfort	Surface quality	Pavement and road in good condition.	2 (Green)
	Effective width	Relatively narrow road throughout especially over bridges.	0 (Red)
	Wayfinding	Poor wayfinding throughout.	0 (Red)
Attractiveness	Maintenance	Well lit, well used but many places are not overlooked.	1 (Amber)
	Security	Cannot see any secure cycle parking, however might be some in car parks, however limited access impedes view.	1 (Amber)
	Traffic noise and pollution		1 (Amber)

Segment 29

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Connects to 5 segments. Safe connection bar A414 connection.	2 (Green)
	Route Coherence	No formal crossings along entire route. Road markings lacking in many areas. Informal crossings, a few raised tables at junctions.	1 (Amber)
Directness	Route efficiency	Wood Crescent via Wheelers Lane (1.2) has far better deviation score then via Deaconsfield Road (1.26).	1 (Amber)
	Stops and delays	Crossroad and T-junction could impact speeds, however both are low traffic junctions.	1 (Amber)
	Pedestrian provision	Pavements are wider than 2m throughout, however cars are parked on pavement along Wood Crescent and Deaconsfield Road.	1 (Amber)
Safety	Traffic volume	All roads residential and quiet. Not much use as ratruns.	2 (Green)
	Traffic speed	30mph speed limit, ability to lower to 20mph as all residential.	2 (Green)
	Visibility and risk of collision	Slow traffic, however.	2 (Green)
Comfort	Surface quality		2 (Green)
	Effective width	Greater than 2 metres along most of segment. Many parked cars causing obstructions to cycles.	1 (Amber)
	Wayfinding		0 (Red)
Attractiveness	Maintenance	Well lit, overlooked by many houses with short drives. Well maintained.	2 (Green)
	Security	No secure parking as residential area.	2 (Green)
	Traffic noise and pollution	Low traffic, however may be more noise towards A414 end of segment	2 (Green)

Segment 30

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Connects to four segments	2 (Green)
	Route Coherence	Pelican crossing at eastern end of segment. Poor connection at western end of segment	1 (Amber)
Directness	Route efficiency	841 / 755 = 1.13	2 (Green)
	Stops and delays	Delays may occur when the path joins Leys Road. However only off road bikes would use this route.	1 (Amber)
	Pedestrian provision	Pavement is wider than 2m	1 (Amber)
Safety	Traffic volume		2 (Green)
	Traffic speed	30mph and path	2 (Green)
	Visibility and risk of collision	Wide pavement and hatching in middle of road, however vehicles are parked on pavement in places. Path in park is not paved	2 (Green)
Comfort	Surface quality	Path is mainly trodden grass. Path and road are mainly of good surface quality	1 (Amber)
	Effective width	Path is narrow through park. Good width on road	1 (Amber)
	Wayfinding		0 (Red)
Attractiveness	Maintenance	Road is well maintained, however path is not.	1 (Amber)
	Security	No cycle parking available, however residential area	0 (Red)
	Traffic noise and pollution		2 (Green)

Segment 31

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Connects to 4 segments. St Albans Hill is narrow and harder to cyclists to join this part of the segment	1 (Amber)
	Route Coherence	Only one formal crossing at Bennetts End Road part of segment. Crossing between Bennetts End Road and St Albans Hill is non existent. Guardrail preventing crossing despite and making a paved footway leading nowhere	1 (Amber)
Directness	Route efficiency	778 / 736 = 1.05. Efficient route	2 (Green)
	Stops and delays	T-junction connecting two half of segment - Bennetts Road is a busy thoroughfare so will impede cyclists turning right. Several T-junctions along route.	1 (Amber)
	Pedestrian provision	>2metre pavement on both sides of road, cars parked on pavement on parts of Bennetts End Road. St Albans Hill has grass verge for parts.	1 (Amber)
Safety	Traffic volume	Shared use path along Bennetts End Rd	0 (Red)
	Traffic speed	30mph throughout	2 (Green)
	Visibility and risk of collision		0 (Red)
Comfort	Surface quality	Good road and pavement surface	2 (Green)
	Effective width	St Albans Hill is a narrow two way road where overtaking cyclists will be hard due to slight hill and several bends. Bennetts Hill Road is a suitable width.	1 (Amber)
	Wayfinding	Wayfinding at junction of St Albans Hill and Bennetts End Road	1 (Amber)
Attractiveness	Maintenance	Well lit throughout, however St Albans Hill has many overhanging trees. Not overlooked on parts of St Albans Hill.	1 (Amber)
	Security		0 (Red)
	Traffic noise and pollution	Both roads are key thoroughfares in Hemel Hempstead. St Albans Hill runs parallel to A414.	1 (Amber)

Segment 32

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Connects to 3 segments. Residential segment so safer for pedestrians and cyclists.	2 (Green)
	Route Coherence	Only start and end of route have tactile paving. Lack of signage. No crossings.	0 (Red)
Directness	Route efficiency	Deviation factor: 357 / 334 = 1.06.	2 (Green)
	Stops and delays	6 T-junctions throughout route (priority for all bar mini roundabout). Difficult to maintain speeds. Cars also parked on pavement/road impede this.	0 (Red)
	Pedestrian provision	No formal crossings. Dropped kerbs on all crossings. Pavement of sufficient width of both sides of road. Cars parking on pavement in places.	1 (Amber)
Safety	Traffic volume	Traffic volumes expected to be low, however can be used as a rat run.	1 (Amber)
	Traffic speed	30mph speed limit.	2 (Green)
	Visibility and risk of collision	Verges in places along White Hart Road. Many conflicting movement. Various hazards including cars parked on roads.	0 (Red)
Comfort	Surface quality	Road surface is good. Pavement is uneven in places.	1 (Amber)
	Effective width	Residential roads shared with cycles. Pavements are a mix of sufficiently wide and narrow in places.	1 (Amber)
	Wayfinding	No wayfinding or signing.	0 (Red)
Attractiveness	Maintenance	Well lit, overlooked along entire route. Safe and usable due to being residential area.	2 (Green)
	Security	No secure cycle parking, however this is a residential area where this normally would not be found.	1 (Amber)
	Traffic noise and pollution	Used as a rat run in addition to local traffic.	1 (Amber)

Segment 33

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity		2 (Green)
	Route Coherence	Three crossing points, all with tactile paving.	2 (Green)
Directness	Route efficiency	As the crow flies.	2 (Green)
	Stops and delays		2 (Green)
	Pedestrian provision	Great connectivity to Nickey Line and other segments to the immediate north and south of segment.	2 (Green)
Safety	Traffic volume	Busy road due it's role as the A4147, however cycle and pedestrians share a pavement.	1 (Amber)
	Traffic speed	Speed limit of 40mph and road relatively wide.	1 (Amber)
	Visibility and risk of collision	Wide verges for 3/4 of the segment with the remaining northern quarter having substantially wide pavements. Cycles are physically separated from traffic for 3/4 of this route.	2 (Green)
Comfort	Surface quality	Good surface quality bar 30 metres where resurfacing should take place.	1 (Amber)
	Effective width	Pavements are typically > 2m. Road is wide enough for vehicles to overtake cyclists safely where they are on road.	2 (Green)
	Wayfinding	Wayfinding is only visible where Nickey Line crosses over A4147.	1 (Amber)
Attractiveness	Maintenance	Well lit, vegetation is managed. Route is not overlooked for majority of it.	1 (Amber)
	Security	No secure cycle parking along route.	0 (Red)
	Traffic noise and pollution	Major thoroughfare through the town, meaning high vehicle levels.	0 (Red)

Segment 34

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity	Area of high density of HGVs impedes cyclists and connectivity onto segment.	1 (Amber)
	Route Coherence	Few dropped kerbs and tactile paving.	1 (Amber)
Directness	Route efficiency	Route is not very efficient and is not direct as the crow flies. Narrow pavement on Three Cherry Trees Lane.	1 (Amber)
	Stops and delays	One stop is routing from Swallowdale Lane to Three Cherry Trees Lane.	2 (Green)
	Pedestrian provision	Only formal crossing point is on Swallowdale Lane adjacent to roundabout. Footway provision on all turnings into industrial areas is adequate with mainly dropped kerbs but no tactile paving.	0 (Red)
Safety	Traffic volume	High volume of HGVs and LGVs. Flow of vehicles is moderate.	0 (Red)
	Traffic speed	Lack of speed limit signs. Junction between Swallowdale Lane and Three Cherry Trees Line is near a bend.	0 (Red)
	Visibility and risk of collision		1 (Amber)
Comfort	Surface quality	Good road and pavement surface.	2 (Green)
	Effective width	Swallowdale Lane - wide road with wide grass verges but narrow pavement. Three Cherry Trees Lane - narrower lanes, similar pavement width but only on one side.	2 (Green)
	Wayfinding	No signing.	0 (Red)
Attractiveness	Maintenance	Well lit, overlooked by industrial areas but set back from road. Shrubbery on one side of Three Cherry Trees Lane.	1 (Amber)
	Security	Cannot see any cycle parking within close proximity to the segment.	0 (Red)
	Traffic noise and pollution	Located in industrial area with many HGVs and LGVs. In addition, many vehicles at rush hour due to high density of employment.	0 (Red)

Segment 35

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity		2 (Green)
	Route Coherence	Several crossings with tactile and island. No pelican or zebra crossings.	1 (Amber)
Directness	Route efficiency		2 (Green)
	Stops and delays	2 mini roundabouts and 2 traffic filters are potential sites of stops.	1 (Amber)
	Pedestrian provision	Cars parked on parts of pavement causing obstruction. Wide in places. Several crossings with tactile and island. No pelican or zebra crossings.	1 (Amber)
Safety	Traffic volume	School times would be only time when this segment would have higher motor traffic.	2 (Green)
	Traffic speed	2 traffic filters and humps impede vehicle speed. 30mph speed limit.	2 (Green)
	Visibility and risk of collision		2 (Green)
Comfort	Surface quality	Generally good surface condition with good quality carriageway paint.	2 (Green)
	Effective width	Cars parked on road in places, however road is still wide enough for cyclist, 2 cars and parked car. Cars parked on pavements in places - otherwise pavement has sufficient width.	1 (Amber)
	Wayfinding	No wayfinding.	0 (Red)
Attractiveness	Maintenance	Well lit, well maintained, addition of school on segment makes the route safer.	2 (Green)
	Security	Cannot see any cycle parking within close proximity to the segment.	0 (Red)
	Traffic noise and pollution	Traffic at school times will make air pollution worse.	1 (Amber)

Segment 36

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity		2 (Green)
	Route Coherence	1 zebra crossing and 2 island crossing. Long stretches without crossing.	1 (Amber)
Directness	Route efficiency	Deviation factor. 929 / 912 = 1.01.	2 (Green)
	Stops and delays	5 mini roundabouts with one double mini roundabout which is not advantageous for cyclists.	1 (Amber)
	Pedestrian provision	Cars parked on parts of pavement in several places. Wide pavement throughout. 1 pelican crossing. 1 island crossing with tactile and 1 without tactile.	1 (Amber)
Safety	Traffic volume	Moderate traffic levels.	2 (Green)
	Traffic speed	5 mini roundabouts slow traffic down. 30mph speed limit.	2 (Green)
	Visibility and risk of collision	Many T-junctions onto Northridge Way.	1 (Amber)
Comfort	Surface quality	Generally good surface condition with good quality carriageway paint.	2 (Green)
	Effective width		2 (Green)
	Wayfinding	No wayfinding.	0 (Red)
Attractiveness	Maintenance	Well lit, overlooked along entire route. Safe and usable due to being residential area.	2 (Green)
	Security	No cycle parking available, however residential area.	0 (Red)
	Traffic noise and pollution		2 (Green)

Segment 37

Key requirement	Factor	Comments	Score
Cohesion	Network connectivity		2 (Green)
	Route Coherence	1 crossing on segment which is located at southern end with no tactile paving.	1 (Amber)
Directness	Route efficiency	Deviation factor. 684 / 577 = 1.18.	1 (Amber)
	Stops and delays	T-junction only possible location of delay.	2 (Green)
	Pedestrian provision	Good pedestrian provision with wide pavement and wide verges on Ashtree Way. Although there is a pavement on both side of Green End Road, it is narrow in many places. Only one crossing throughout.	1 (Amber)
Safety	Traffic volume	Low traffic levels.	2 (Green)
	Traffic speed	30mph speed limit.	2 (Green)
	Visibility and risk of collision	Low risk of collision of Ashtree Way, however slightly higher risk on Green End Road due to T-junctions.	1 (Amber)
Comfort	Surface quality	Generally good surface condition with good quality carriageway paint. Green End Road only had parking bays painted however.	1 (Amber)
	Effective width	Green End Road is narrow in places with several bends and parked cars hindering visibility.	1 (Amber)
	Wayfinding	No wayfinding	0 (Red)
Attractiveness	Maintenance	Well lit, overlooked along entire route. Safe and usable due to being residential area.	2 (Green)
	Security	No cycle parking available, however residential area.	0 (Red)
	Traffic noise and pollution		2 (Green)

Appendix B – Interventions List

Note: Dacorum LCWIP interventions are not included in this table

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
LS-1	Cambrian Way Local Mobility Hub	Local Mobility Hub located near to the junction with Wensleydale, close to Nickey Line, and served by Bus Route 2	Local Network	Multi-Modal	Physical	Within Existing Highway	Segment 19	Cluster 5; Cluster 22
LS-2	Keens Field Mobility Hub	Local Mobility Hub located at Queensway-St Paul's Rd (close to Nickey Line) OR Cattsdell-Thumpers junction area. Served by Bus Routes 2, 3 and 4	Local Network	Multi-Modal	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	Cluster 5; Cluster 22
LS-3	Grovehill Local Mobility Hub	Local Mobility Hub located at Aycliffe Drive (Grovehill) opp. Henry Wells Square. Served by Bus Route 2	Local Network	Multi-Modal	Physical	Within Existing Highway	Segment 35	Cluster 4; Cluster 5; Cluster 16
LS-4	Woodhall Farm Local Mobility Hub	Local Mobility Hub located on Shenley Road, Woodhall Fm near Sainsbury's. Served by Bus Route 2	Local Network	Multi-Modal	Physical	Within Existing Highway	Segment 14	Cluster 8; Cluster 19
LS-5	Adeyfield Local Mobility Hub	Local Mobility Hub located at The Queen's Square, Adeyfield local centre. Served by Bus Routes 1 and 302	Local Network	Multi-Modal	Physical	Within Existing Highway	Segment 16	Cluster 7, Cluster 9
LS-6	Maylands South Local Mobility Hub	At or near future HERT interchange at junction of A414 Breakspear Way/Maylands Avenue	Key Network	Multi-Modal	Physical	Within Existing Highway	Segment 15	Cluster 11
LS-7	Jarman Park Local Mobility Hub	Local Mobility Hub located at Jarman Park near to vehicle access or adjacent to marked bus stop. Not currently served by any local bus service but could be served by the HERT in the future	Key Network	Multi-Modal	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	Cluster 10
LS-8	Bennetts End Local Mobility Hub	Local Mobility Hub located at Peascroft Road/Bennetts End Road, close to the local shopping parade. Served by Bus Routes 1 and 2	Local Network	Multi-Modal	Physical	Within Existing Highway	Segment 30	Cluster 2; Cluster 21
LS-9	Leverstock Green Local Mobility Hub	Local Mobility Hub located on Leverstock Green Way, close to the local shopping parade. Served by Bus Routes 20, 302 and 721	Local Network	Multi-Modal	Physical	Within Existing Highway	Segment 10	Cluster 12
LS-10	Warners End Local Mobility Hub	Local Mobility Hub at Warners End Road/Long Chaulden, close to the local shopping parade. Served by Bus Routes 3, 4 and ML1.	Local Network	Multi-Modal	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	Cluster 20, Cluster 27
LS-11	Galley Hill Local Mobility Hub	Local Mobility Hub located in Galley Hill opposite the Baptist Church. Served by Bus Routes 3 and 4.	Local Network	Multi-Modal	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	Cluster 17
LS-12	Chaulden Local Mobility Hub	Local Mobility Hub located close to the Honeycross Rd junction. Served by Bus Routes 3 and ML1	Local Network	Multi-Modal	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	Cluster 15; Cluster 20
LS-13	Maylands Central Local Mobility Hub	Local Mobility Hub located at Wood Lane End car park (requites removal of parking spaces). Served by Bus Routes 302, 320 and ML1.	Local Network	Multi-Modal	Physical	Within Existing Highway	Segment 15	Cluster 11
LS-14	Maylands Multi Modal Interchange (Metro Mobility Hub)	Integrated metro mobility hub with facilities to encourage and facilitate modes of transport other than the private car; this will connect the site to key destinations including Hemel Hempstead Train Station and the Maylands Business Park. Mobility hub to provide a bus and coach interchange near Maylands with access to the A414/M1. Served by existing or new express coach services along the M1 (e.g. Greenline and National Express) and local express buses to neighbouring towns including a potential cross-county express bus service (HERT). Opportunity for associated cycle and pedestrian improvements. This forms part of Phase 2 of the package of transport measures for M1 J8 enhancements - Prioritisation of active and sustainable modes of travel.	Key Network	Multi-Modal	Physical	Within LP Development Site	LCWIP audited route (Segment 1)	Cluster 11
LS-16	Plough Roundabout Link Break - bus priority	Investigate the potential for introducing bus priority at the Plough Roundabout, particularly in the vicinity of the bus interchange which could also be served by the HERT in the future.	Key Network	Bus/Coach/MRT	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	Cluster 3, Cluster 18, Cluster 25
LS-17	A414 St Albans Road (town centre approach) bus priority	Bus priority lane on the A414 westbound approaching the Plough Roundabout including bus gate signals to enable buses to move from the nearside to the offside lane. To accommodate the bus lane, there is likely to be a need to reduce general traffic space by a lane in either the eastbound or westbound direction.	Key Network	Bus/Coach/MRT	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	Cluster 18; Cluster 25
LS-19	Bus Only Traffic Filter - Station Road	A Bus Only traffic filter (in both directions) on A4146 Station Road, east of St John's Road, to prevent through traffic. Could be in operation throughout the day, or at peak times only. It would benefit Bus Routes 1, 2, 4, 20, 302, 352, 501, ML1 and X5. Additional locations for bus only traffic filters across Hemel Hempstead are not confirmed at this time and would be subject to feasibility and assessment of the traffic re-routeing effects.	Key Network	Bus/Coach/MRT	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	Cluster 18, Cluster 24
LS-20	Bus Only Traffic Filters - wider Hemel Hempstead	Additional locations for bus only traffic filters could be considered across Hemel Hempstead. Provision is currently made for up to 4 additional locations, subject to feasibility and public consultation. These locations will be determined based on more detailed investigations including consideration of the potential impacts on traffic re-routing. They should be considered in locations which are already well served by bus services.	Key Network or Local Network	Bus/Coach/MRT	Physical	Within Existing Highway	To be determined	To be determined

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
LS-22	North Hemel Hempstead Local Mobility Hub - west	Local Mobility Hub located within the proposed North Hemel Hempstead development site HH01/HH02 around the proposed mixed-use area MU1 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	Multi-Modal	Physical	Within LP Development Site	Segments 14, 18, 24 and 35	Cluster 4, Cluster 8; Cluster 16; Cluster 19
LS-23	North Hemel Hempstead Local Mobility Hub - central	Local Mobility Hub located within the proposed North Hemel Hempstead development site HH01/HH02 around the proposed mixed-use area MU2 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	Multi-Modal	Physical	Within LP Development Site	Segments 14, 18, 24 and 35	Cluster 4, Cluster 8; Cluster 16; Cluster 19
LS-24	North Hemel Hempstead Local Mobility Hub east	Local Mobility Hub located within the proposed North Hemel Hempstead development site HH01/HH02 on the eastern side near to the A4146 Redbourn Road and around the proposed mixed-use area MU3 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	Multi-Modal	Physical	Within LP Development Site	Segments 14, 18, 24 and 35	Cluster 4, Cluster 8; Cluster 16; Cluster 19
LS-25	East Hemel Hempstead Local Mobility Hub	Metro Mobility Hub located within the proposed East Hemel Hempstead development site in the northern part of the development, south of the A4146 Redbourn Road and around the proposed mixed-use area MU4 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	Multi-Modal	Physical	Within LP Development Site	Segments 10, 11, 13, 14, 34 and LCWIP audited route (Segment 1)	Cluster 11; Cluster 19
LS-26	East Hemel Hempstead Local Mobility Hub	Metro Mobility Hub located within the proposed East Hemel Hempstead development site in the southern part of the development, north of the A4147 Hemel Hempstead Road and around the proposed mixed-use area MU6 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	Multi-Modal	Physical	Within LP Development Site	Segments 10, 11, 13, 14, 34 and LCWIP audited route (Segment 1)	Cluster 11
LS-27	Marchmont Farm Local Mobility Hub	Local Mobility Hub located within the proposed Marchmont Farm development site HH22 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	Multi-Modal	Physical	Within LP Development Site	Segments 23, 24 and LCWIP audited route (Segment 1)	Cluster 5; Cluster 16; Cluster 22
LS-28	Polehanger Lane Local Mobility Hub	Local Mobility Hub located within the proposed Polehanger Lane development site NEW4 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	Multi-Modal	Physical	Within LP Development Site	No Segment	Cluster 6, Cluster 17
LS-29	Shendish Manor and Fairfields Local Mobility Hub	Local Mobility Hub located within the proposed Shendish Manor and Fairfields development site NEW3 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Development Road Network	Multi-Modal	Physical	Within LP Development Site	Segments 6 and 7	Cluster 28
LS-30	Hemel Hempstead Station Forecourt Enhancements (Metro Mobility Hub)	Revised layout to the station forecourt to provide a more attractive and accessible environment for walking, wheeling and cycling, improved taxi rank, improved bus interchange facilities in line with the Metro Mobility Hub standards. This will be the terminating/turn-around point for the proposed HERT MRT system.	Close to Key Network	Multi-Modal	Physical	Within Existing Highway	Segment 5 and LCWIP audited route (Segment 1)	Cluster 24
LS-31	Hemel Hempstead Station Upgrade	Refresh of the station infrastructure including refurbished ticket office, subway and stairwells to platforms	Close to Key Network	Rail	Physical	Within Existing Highway	Segment 5 and LCWIP audited route (Segment 1)	Cluster 24
LS-32	M1 Junction 8 enhancement - Phase 3 - M1 Junction 8 - current proposals	Phase 3 of package of transport measures to enhance M1 Junction 8 and surrounding area. To provide additional capacity and connectivity to Maylands and Herts IQ, and relieve congestion on the A414. Land to the east of Junction 8 is safeguarded, in case it is required to come forward for junction improvements (Phase 3 J8 enhancements). Reconfiguration of M1 Junction 8 on the eastern side, including a new roundabout adjoining	M1/Key Network	Highways	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	None

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
		the southbound on/off-slips and a new connector road over the M1 and connecting into Green Lane north of the A414						
LS-33	M1 Junction 8 enhancement - Phase 1 Phoenix Gateway Roundabout re-configuration and signalisation	Phase 1 of package of transport measures to enhance M1 Junction 8 and surrounding area - Replacement of the existing Phoenix Gateway/Green Lane roundabout on the A414 with a signal-controlled crossroads which should help to manage traffic flows through the junction	Key Network	Highways	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	None
LS-34	A414 Breakspear Way walking and cycling bridge for active modes	A high quality, attractive bridge for walking, wheeling and cycling connecting the East Hemel Hempstead site north and south of the A414 between Green Lane and the M1. This forms part of Phase 2 of the package of transport measures for M1 J8 enhancements - Prioritisation of active and sustainable modes of travel.	Key Network	Highways	Physical	Within Existing Highway & Within LP Development Site	LCWIP audited route (Segment 1)	None
LS-35	A414 Dual Carriageway gap closure - Lamsey Street	Closure of the central reservation gap to right turning traffic - traffic will be diverted to the next roundabout or an alternative route	Key Network	Highways	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	Cluster 10; Cluster 21
LS-36	A414 Dual Carriageway gap closure - Wood Crescent	Closure of the central reservation gap to right turning traffic - traffic will be diverted to the next roundabout or an alternative route	Key Network	Highways	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	Cluster 10; Cluster 21
LS-37	A414 Dual Carriageway gap closure - St Albans Rd leading into Mariner Way & Sandmere Close	Closure of the central reservation gap to right turning traffic - traffic will be diverted to the next roundabout or an alternative route	Key Network	Highways	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	None
LS-38	A414 Dual Carriageway gap closure - Rant Meadow	Closure of the central reservation gap to right turning traffic - traffic will be diverted to the next roundabout or an alternative route	Key Network	Highways	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	None
LS-42	Cherry Tree Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Cherry Tree Lane between Three Cherry Trees Lane to Redbourn Road. Closure to through traffic.	Green Loop	Highways	Physical	Within Existing Highway	Segment 13	Cluster 19
LS-43	Punchbowl Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Punchbowl Lane. The section of the lane west of the M1 will be subsumed within East Hemel Hempstead development and may therefore be subject to alteration. Closure to through traffic.	Other (Strategic Active Connections)	Highways	Physical	Within Existing Highway	Within development site	None
LS-44	Hogg End Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Hog End Lane. The section of the lane west of the M1 will be subsumed within East Hemel Hempstead development and may therefore be subject to alteration. Closure to through traffic.	Other (Strategic Active Connections)	Highways	Physical	Within Existing Highway	Within development site	None
LS-45	Green Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Green Lane between Breakspear Park office complex access and junction with Westwick Row. The section of Green Lane adjacent to Breakspear Park may be subject to alteration resulting from the East Hemel Hempstead development and changes to the A414 Phoenix Gateway Roundabout. Closure to through traffic.	Other	Highways	Physical	Within Existing Highway	Within development site	Cluster 12
LS-46	Bunkers Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Bunkers Lane between Longdean Park and Bedmond Road. Closure to through traffic.	Green Loop	Highways	Physical	Within Existing Highway	No Segment	Cluster 1; Cluster 23
LS-47	Blackwater Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Blackwater Lane. This lane will be subsumed within East Hemel Hempstead development (reserve school development site) and may therefore be subject to change. Closure to through traffic.	Green Loop	Highways	Physical	Within Existing Highway	Within development site	None
LS-48	Berkhamsted Road Gateway Corridor	Alterations to Berkhamsted Road adjacent to the proposed Poleshanger Lane development which will include a vehicular access onto this road. Comprising a reduction in the speed limit from National Speed limit to 30 or 40mph between the access to Boxted Farm and the existing settlement boundary.	Other	Highways	Physical	Within Existing Highway	No Segment	Cluster 6; Cluster 17
LS-49	Fields End Lane/Pouchen End Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Fields End Lane, joining another proposed Quietway at its western end at Pouchen End Lane, and Boxted Road at its eastern end. Closure to through traffic.	Green Loop	Highways	Physical	Within Existing Highway	No Segment	Cluster 6; Cluster 17
LS-50	Boxted Road Green Loop Crossing Point	Pedestrian and cycle crossing on Boxted Road adjacent to the junction with Fields End Lane (proposed Quietway) and Berkhamsted Road (which is not open to traffic at its western end, and is also proposed as a Quietway)	Local Network	Active Travel	Physical	Within Existing Highway	No Segment	Cluster 6; Cluster 17

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
LS-51	Polehanger Lane-Leighton Buzzard Road Green Loop	Upgrade to existing PRoW (Footpath) Hemel Hempstead (013) linking Polehanger Lane and Leighton Buzzard Road to form part of the proposed Green Loop.	Green Loop	Active Travel	Physical	Within Existing Highway	Within development site	Cluster 6; Cluster 17
LS-52	Holtsmere End Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Holtsmere End Lane between a location in the vicinity of PRoW (Footpath) Great Gaddesden 048 and Redbourn 011. This lane will run through or along the perimeter of the proposed East Hemel Hempstead development and therefore may be subject to alteration as part of the development. Where Holtsmere End Lane currently links onto Gaddesden Lane on the north-eastern side of the proposed Nort/East Hemel Hempstead developments, this should also be considered for Quietway treatment to discourage traffic ratrunning through the development or conversely traffic routeing out of the development onto Gaddesden Lane.	Green Loop	Highways	Physical	Within Existing Highway	Within development site	Cluster 19
LS-53	Redbourn Road Green Loop Crossing Point	Pedestrian and cycle crossing on B487 Redbourn Road adjacent to the junction between Cherry Tree Lane and Holtsmere End Lane to connect sections of the proposed Green Loop running through the East Hemel Hempstead development on either side.	Key Network	Active Travel	Physical	Within Existing Highway	Segment 14	Cluster 19
LS-54	A4147 Hemel Hempstead Road Gateway Corridor	Alterations to the A4147 Hemel Hempstead Road between the existing settlement boundary and the junction with Beechtree Lane and Appspond Lane (between M1 and A414), comprising: 1) speed limit changes 30mph along most of the length, with a buffer 40mph section at the eastern most end up to Beechtree Lane and Appsond Lane; 2) provision of upgraded shared use pedestrian and cycle route along the full length (northern side of the road); 3 crossings including 1 signal-controlled pedestrian/cycle crossing (for access to proposed secondary school on southern side) and a crossing to link with the Blackwater Lane Green Loop; raised M1 bridge parapet (northern side) to facilitate cycling. Upgrades may be influenced by where proposed vehicle accesses will be created into the East Hemel Hempstead development site and school entrance.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 14	Cluster 12
LS-55	Bunkers Lane-Blackwater Lane Quietway Crossing Point	Pedestrian and cycle crossing on Bedmond Road adjacent to the junction with Bunkers Lane (proposed Quietway) and Blackwater Lane (proposed Quietway)	Other	Active Travel	Physical	Within Existing Highway	Segment 10	Cluster 12
LS-56	The Denes Centre Local Mobility Hub	Local Mobility Hub located adjacent to the Denes local shopping parade. Served nearby by Bus Route 2	Other	Multi-Modal	Physical	Within Existing Highway	Segment 8	Cluster 1; Cluster 23
LS-57	Two Waters (London Road) Local Mobility Hub	Local Mobility Hub located on London Road in Two Waters Opportunity Area, opposite McDonalds drive-thru and close to the A414 junction. Served nearby by Bus Route 322	Key Network	Multi-Modal	Physical	Within Existing Highway	Segment 6	Cluster 13; Cluster 14
LS-58	E-Bike Hire Scheme with E-Bike docking hubs (where not co-located at Mobility Hubs) - Hemel Hempstead Inner	Information sourced from Transport Initiatives LLP's June 2024 report. Could comprise 26-34 docking hubs; Hemel Hempstead Outer - 13-17 docking hubs ((Two Waters OA - 9 hubs; Kings Langley 8 hubs; Maylands Business Park 7 docking hubs; North HH 10 hubs; East HH 15 docking hubs). Assume simple docking equipment and/or a marked area on the highway.	Multiple	Active Travel	Physical	Within Existing Highway	Multiple links	All Clusters
LS-59	Apsley Station Forecourt & Cycle Provision	Enlarge pedestrian footway in front of station ticket hall, double the number of cycle stands (currently 12), removal of some parking spaces to provide space for enlarged footway and additional cycle stands, planting and landscaping.	Key Network	Active Travel	Physical	Within Existing Highway (Network Rail land?)	Segment 7	Cluster 28
LS-61	B487 Hemel Hempstead Road Gateway Corridor	Alterations to the B487 Hemel Hempstead Road between the existing settlement boundary and the M1 bridge, comprising: 1) speed limit changes 30mph along the frontage of the proposed East Hemel Hempstead development, with a buffer 40mph section at the eastern; 2) provision of new cycle and pedestrian route on at least one side of the road to link with existing footway provision west of Cherry Tree Lane; 3) at least 1 controlled pedestrian/cycle crossing (to connect sections of the East Hemel Hempstead development on either side; 4) alteration to the B487-Cherry Tree Lane-Holtsmere Lane junction in line with the Quietway treatments proposed to the two lanes (including signage and kerbed build outs to discourage through traffic); 5) upgraded bus stops. It is anticipated there will be one junction serving access to the proposed East Hemel Hempstead development on either side of the road.	Key Network	Active Travel	Physical	Within Existing Highway	Segment 10	Cluster 12

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
LS-62	St Albans-Hemel Hempstead Bus Connectivity	Review bus service connections between St Albans and Hemel Hempstead from the perspective of identifying opportunities for increasing service frequencies and/or reducing journey times e.g. introducing new services with limited stops or re-routeing services along the A414 to simulate what could eventually form the future HERT corridor. Existing services in the corridor include Bus Route 721.	Key Network	Bus/Coach/MRT	Physical	Within Existing Highway	Multiple links	All Clusters
LS-63	Northern Hemel Hempstead-Watford Town Centre, Croxley and Rickmansworth Connectivity	Review bus service connections between North Hemel Hempstead, Watford, Croxley and Rickmansworth from the perspective of identifying opportunities for increasing service frequencies and/or reducing journey times e.g. introducing new services with limited stops or re-routeing services along the A41, A4251, Bedmond Road and/or the M1. Existing services in the corridor include Bus Routes 20 and 322.	Key Network	Bus/Coach/MRT	Physical	Within Existing Highway	Multiple links	All Clusters
LS-64	B440 Leighton Buzzard Road Gateway Corridor (Piccotts End to Link Road/Galley Hill	Alterations to the B440 Leighton Buzzard Road in conjunction with the North Hemel Hempstead proposed development (which could potentially provide a vehicle access onto this road). Measures include reducing the current 50mph section to 40mph (matching the 40mph section to the north); reducing the current 60mph section leading out of Hemel Hempstead to 40mph; installing a signal-controlled Toucan crossing adjacent to Public Footpath 'Hemel Hempstead 013'); provision LTN standard cycle and footway (replacing the existing narrow footway) on the western side of the road (approx. 680m): provision of signal-controlled crossing on Galley Hill at southern end of corridor, east of the B440-A4147 roundabout.	Key Network	Active Travel	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	None
LS-65	Luton-Hemel Hempstead Bus Connectivity	Review bus and coach service connections between Luton and Hemel Hempstead from the perspective of identifying opportunities for increasing service frequencies and/or reducing journey times e.g. introducing new services with limited stops or re-routeing services to improve connectivity. Existing services between the two towns are Bus Routes 46 and 721.	Key Network	Bus/Coach/MRT	Physical	Within Existing Highway	Multiple links	All Clusters
LS-66	Revision to Parking Standard Zones - expanding the scope for car-free new developments	Revision to Parking Standard Zones as currently specified in the Parking Standards Supplementary Planning Document (2020) - expansion of Zone 1 including merging with Zone 2 to the east of the town centre and into Two Waters/Apsley, area east of the A414. Increase the scope for car-free developments across a wider proportion of the more accessible, better connected parts of the town.	Multiple	Highways	Soft	Within Existing Highway	Multiple links	Cluster 13; Cluster 14: Cluster 18; Cluster 25
LS-67	Increased parking enforcement	Increase in parking enforcement by Civil Enforcement Officers, including specifically additional officer patrols for on-street parking.	Multiple	Highways	Soft	Within Existing Highway	Multiple links	None
LS-68	Marlowes - West Herts College Local Mobility Hub	Local Mobility Hub outside the college, and served by Bus Routes 2, 4 and 46.	Key Network	Multi-Modal	Physical	Within Existing Highway	Segment 25	Cluster 25; Cluster 26
LS-69	West of Hemel Local Mobility Hub	Local Mobility Hub within the proposed development or on the adjacent Long Chaulden, currently served by Bus Routes 3, 4 and ML1	Local Network	Multi-Modal	Physical	Within Existing Highway	Within development site	Cluster 6; Cluster 15; Cluster 20
LS-70	A414 Maylands Avenue - Green Lane bus priority lanes	Maylands Avenue to Green Lane - eastbound and westbound bus lanes (approx.335m in length) with signal-controlled bus gate at the terminating end. Would necessitate removal of a general traffic lane in at least one direction as there is insufficient space for bus lanes within the verge area on both sides of the road.	Key Network	Bus/Coach/MRT	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	None
LS-71	A414 Maylands Avenue Roundabout Signalisation	Partial signalisation of Maylands Avenue roundabout - northern and eastern arms and opposing circulatories. Removal of left-turn bypass lane from north to east. Provide two lane exit onto A414 eastbound with widened central reserve to create more stacking space on southbound circulatory. Introduce a new at-grade crossing facility to the east of the roundabout, to replace or complement the existing footbridge.	Key Network	Bus/Coach/MRT	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	None
LS-72	A414 Rant Meadow to Bennetts End Road bus priority lane	Westbound only bus lane between Rant Meadow and Bennetts End Road roundabout with signal controlled bus gate. May require some reallocation of road space.	Key Network	Bus/Coach/MRT	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	None

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
LS-73	Upgraded Town Centre Riverside Bus Interchange	Upgrade to the Riverside Bus Interchange to align with Metro Mobility Hub standards including better facilities for waiting passengers. Assume the overall capacity of the interchange will not be influenced by the adjacent Riverside development	Key Network	Bus/Coach/MRT	Physical	Within Existing Highway	LCWIP audited route (Segment 1)	None
LS-74	Western Access Plaza to Apsley Station	A new plaza and western access to Apsley Station. Assumed to comprise a small ticket office at ground level, cycle parking facilities, vehicle drop-off however no car parking will be provided. Alongside this, provision should be made for additional accessibility features including step-free access to all platforms which would necessitate a new footbridge and three lifts.	Other	Rail	Physical	Within LP Development Site	No Segment	None
LS-75	Footbridge overhaul or additional/replacement bridge near Apsley Marina	(LS-75) Overhaul of the existing, modern footbridge to reduce maintenance or provision of a replacement or additional bridge over the canal which can also accommodate cyclists.	Other	Active Travel	Physical	Within Existing Highway	No Segment	Cluster 14
LS-76	A4147 Hemel Hempstead-St Albans cycle route	An off-road shared use footway and cycleway between Appspond Lane/Beechtree Lane and King Harry Lane, expected to run along the northern side of the road.	Other	Active Travel	Physical	Within Existing Highway	No Segment	None
SG2-1	Kingsland Road-Horsecroft Road crossing	(SG2-1) Add uncontrolled or marked priority cycling and pedestrian crossing where the PRoW crosses Kingsland Road and Horsecroft Road. Likely to require reduction in marked parking bays. Consider kerbed build out with dropped kerb and tactile paving.	Other	Active Travel	Physical	Within Existing Highway	Segment 2	Cluster 24
SG2-2	20mph speed limit zone including Fishery Road	(SG2-2) Investigate the introduction of a 20mph speed limit zone in this area, including Fishery Road, Kingsland Road and Horsecroft Road. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Local Network	Highways	Physical	Within Existing Highway	Segment 2	Cluster 24
SG2-3	Traffic calming on Kingsland Road and Horsecroft Road	(SG2-3) Provide traffic calming features near crossings e.g. Add speed cushions on approaches to both crossings (these may be required as part of a 20mph speed limit zone). *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Other	Highways	Physical	Within Existing Highway	Segment 2	Cluster 24
SG2-4	Pedestrian route enhancements on Fishery Passage	(SG2-4) Increase pedestrian capacity (widen footways and/or reallocate carriageway) on Fishery Passage close to the junction with Horsecroft Road. Consider parking control measures to prevent parking on pavement including bollards if not an obstruction to pedestrians. Add tactile paving at northern end of short footway running into Fishery Passage	Other	Active Travel	Physical	Within Existing Highway	Segment 2	Cluster 24
SG2-5	Wayfinding signage on Horsecroft Road and Kingsland Road	(SG2-5) Introduce wayfinding signs at key junction points (Horsecroft Road, Kingsland Road, River Park) indicating distance and travel time on foot to the station.	Other	Active Travel	Physical	Within Existing Highway	Segment 2	Cluster 24
SG2-6	Cycle parking stands at bus stop on Fishery Road	(SG2-6) Add cycle parking stands adjacent to bus stop on Fishery Road (southbound)	Local Network	Active Travel	Physical	Within Existing Highway	Segment 2	Cluster 24
SG3-1	Crossing improvements around Cowper Road	(SG3-1) Add tactile paving and dropped kerbs at Cowper Road/St John's Road, Crouchfield, Grosvenor Terrace, The Poplars, Cowper Road/Gravel Hill Terrace	Other	Active Travel	Physical	Within Existing Highway	Segment 3	Cluster 3; Cluster 24
SG3-2	Crossing improvements around along Gravel Hill Terrace	(SG3-2) Tighten kerb radii at junction of Gravel Hill Terrace and Woodland Close. Introduce informal crossings with dropped kerbs with tactile paving at Woodland Close and Cardy Road junctions onto Gravel Hill Terrace	Local Network	Active Travel	Physical	Within Existing Highway	Segment 3	Cluster 3; Cluster 24
SG3-3	20mph speed limit including on Cowper Road	(SG3-3) Investigate introducing 20mph limits/zones covering Cowper Road. Retained intervention, but added the following note: *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Other	Highways	Physical	Within Existing Highway	Segment 3	Cluster 3; Cluster 24
SG3-4	Marked parking bays on Cowper Road	(SG3-4) Reduce the occurrence of pavement parking where feasible, such as introduction of marked parking bays on one side of the road	Other	Highways	Physical	Within Existing Highway	Segment 3	Cluster 3; Cluster 24
SG3-5	Cycle hanger storage on Cowper Road	(SG3-5) Provide cycle storage facility - hanger (x2) for residents on Cowper Rd. To be located within the highway, removing some car parking space.	Other	Active Travel	Physical	Within Existing Highway	Segment 3	Cluster 3; Cluster 24
SG4-1	Junction crossing improvements on Cowper Road	(SG4-1) Add tactile paving; add dropped kerbs; improve signage and wayfinding	Other	Active Travel	Physical	Within Existing Highway	Segment 4	Cluster 3; Cluster 24
SG4-2	Beechfield Road-Cornfields alleyway crossing	(SG4-2) Add new uncontrolled cycling and pedestrian crossing at Beechfield Road and alleyway through to The Cornfields	Other	Active Travel	Physical	Within Existing Highway	Segment 4	Cluster 3; Cluster 24

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
SG4-3	Junction crossing improvements on Crouchfield	(SG4-3) Tighten kerb radii and reduce crossing widths at the junctions of Crouchfield/Beechfield Road, and Crouchfield/Nestlecroft. Also introduce raised speed table uncontrolled pedestrian crossings at each junction.	Other	Active Travel	Physical	Within Existing Highway	Segment 4	Cluster 3; Cluster 24
SG4-4	Footway widening approaching The Cornfields	(SG4-4) Widen the footway on the approach to The Cornfields (eastern side). Introduce a need handrail around the edge. Introduce dropped kerbs and tactile paving on either side of the road (avoiding manhole covers)	Other	Active Travel	Physical	Within Existing Highway	Segment 4	Cluster 3; Cluster 24
SG4-5	Footpath width vegetation cut-back	(SG4-5) Manage vegetation along footpaths to maximise width and increase visibility	Other	Active Travel	Physical	Within Existing Highway	Segment 4	Cluster 3; Cluster 24
SG4-6	Pedestrian route street lighting enhancements	(SG4-6) Investigate introducing additional street lighting along pedestrian routes	Other	Active Travel	Physical	Within Existing Highway	Segment 4	Cluster 3; Cluster 24
SG4-7	Glenview Gardens cycle hanger storage	(SG4-7) Add cycle storage facilities for residents along Glenview Gardens	Local Network	Active Travel	Physical	Within Existing Highway	Segment 4	Cluster 3; Cluster 24
SG5-1	A4251 London Road cycle route	(SG5-1) New on-road advisory cycle lanes (both directions) between the A4146 and A414 junctions where there is sufficient carriageway width. Provision of a section of off-road route at the eastern end (northern side of the road) on the approach to the A4251-A414 signalised junction.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 5	Cluster 13; Cluster 28
SG5-2	A4251 London Road footway widths	(SG5-2) Increase pedestrian footway width by cutting back encroaching vegetation and improving maintenance of footway including renewed surfacing	Local Network	Active Travel	Physical	Within Existing Highway	Segment 5	Cluster 13; Cluster 28
SG5-3	A4251 London Road Speed VMS	(SG5-3) Add VMS speed feedback sign	Local Network	Highways	Physical	Within Existing Highway	Segment 5	Cluster 13; Cluster 28
SG5-4	A4251 London Road-A4146 Station Road Junction Reconfiguration including provision for cyclists and buses	(SG5-4) Major junction improvement - convert to signal-controlled crossroads with cycle priority at A4251/A4146 including advance stop lines or bicycle boxes. Include hurry call detection for buses travelling between London Road (west) and Station Road.	Local Network	Highways	Physical	Within Existing Highway	Segment 5	Cluster 13; Cluster 28
SG6-1	Two Waters Road-London Road pedestrian-cycle link	(SG6-1) Widen Public footpath cutting the corner of Two Waters Road and London Road to accommodate cyclists and pedestrians (leading to the proposed Mobility Hub at the southern end). At the northern end, provide kerbed build-out with dropped kerbs to designate end of the cycle path and advise cyclists to join the carriageway). Removing of c.2-3 car lengths of kerbside parking.	Key Network	Active Travel	Physical	Within Existing Highway	Segment 6	Cluster 14; Cluster 28
SG6-2	Two Waters Road-London Road junction improvement	(SG6-2) Tighten kerb radii/ reduce crossing width at Two Waters Road junction and introduce a speed table at or close to mouth of the junction.	Key Network	Active Travel	Physical	Within Existing Highway	Segment 6	Cluster 14; Cluster 28
SG6-3	Durrants Hill Road-London Road junction improvement	(SG6-3) Tighten kerb radii/ reduce crossing width at Durrants Hill Rd and introduce a speed table at or close to mouth of the junction.	Key Network	Active Travel	Physical	Within Existing Highway	Segment 6	Cluster 14; Cluster 28
SG6-4	Kents Avenue-London Road junction improvement	(SG6-4) Tighten kerb radii/ reduce crossing width at Kents Avenue junction and introduce a speed table at or close to mouth of the junction.	Key Network	Active Travel	Physical	Within Existing Highway	Segment 6	Cluster 14; Cluster 28
SG6-5	Retail Park access pedestrian crossing improvement	(SG6-5) Add marked pedestrian crossing at the retail park access roundabout arm leading to Sainsbury's	Key Network	Active Travel	Physical	Within Existing Highway	Segment 6	Cluster 14; Cluster 28
SG6-6	20mph speed limit on London Road	(SG6-6) Investigate introducing 20mph speed limit between Featherbed Lane and Weymouth Street. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Key Network	Highways	Physical	Within Existing Highway	Segment 6	Cluster 14; Cluster 28
SG7-2	London Road Dootlittle Meadows crossings and compact roundabout treatment	(SG7-2) Add new cycling crossing and improve pedestrian crossing facilities at A4251/Doolittle Meadows roundabout (create a compact roundabout by reducing the kerb radii on the approaches (mark as single lane)	Key Network	Highways	Physical	Within Existing Highway	Segment 7	Cluster 14; Cluster 28
SG7-3	London Road access to Apsley Station controlled pedestrian crossing	(SG7-3) Introduce signal-controlled crossing at the location of the existing uncontrolled crossing with refuge island close to the station access road. Removal of central hatched area, increase width of footway on the southern end between the crossing and station access (approx. 20m). Crossing on bus-compliant raised speed table. Removal of c.4 c4-6 car lengths of kerbside parking bays)	Key Network	Active Travel	Physical	Within Existing Highway	Segment 7	Cluster 14; Cluster 28
SG7-4	London Road access to Doolittle Meadows controlled pedestrian crossing	(SG7-4) Introduce signal-controlled crossing at the location of the existing uncontrolled crossing west of the A4251/Doolittle Meadows Roundabout, on bus-compliant raised speed table	Key Network	Active Travel	Physical	Within Existing Highway	Segment 7	Cluster 14; Cluster 28

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
SG7-5	Traffic calming approach Doolittle Meadows	(SG7-5) Add speed cushions on the approaches to A4251/Doolittle Meadows roundabout	Key Network	Active Travel	Physical	Within Existing Highway	Segment 7	Cluster 14; Cluster 28
SG7-6	London Road Apsley pedestrian capacity enhancement	(SG7-6) Increase pedestrian capacity (Widen footways and/or reallocate carriageway space)	Key Network	Active Travel	Physical	Within Existing Highway	Segment 7	Cluster 14; Cluster 28
SG7-7	London Road Apsley Wayfinding signage	(SG7-7) Introduce way-finding signage indicating pedestrian routes between London Road and canal	Key Network	Active Travel	Physical	Within Existing Highway	Segment 7	Cluster 14; Cluster 28
SG8-1	Great Elms Road side arm crossing improvements	(SG8-1) Add tactile paving; add dropped kerbs; improve signage and wayfinding at junctions between Great Elms Road with (a) Belswains Lane, (b) Ash Grove, (c) Oakdene Road.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 8	Cluster 2; Cluster 21, Cluster 23, Cluster 28
SG8-2	Great Elms Road to Mulready Walk controlled crossing	(SG8-2) Provide signal-controlled pedestrian crossing facility on Belswains Lane between Great Elms Rd and Mulready Walk. Consider kerb-build out on northern side, removing narrow central hatched area within carriageway	Local Network	Active Travel	Physical	Within Existing Highway	Segment 8	Cluster 2; Cluster 21, Cluster 23, Cluster 28
SG8-3	Great Elms Road side arm crossing and kerb radii treatments	(SG8-3) Tighten kerb radii and reduce crossing widths junctions between Great Elms Rd and (a) Kings Ave, (b) Oak St, (c) Barnfield, (d) Sanders Rd, (e) Deansway, (f) Horselers, (g) Candlefield Rd. Introduce tactile paving and provide contrasting surface treatment to denote crossings.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 8	Cluster 2; Cluster 21, Cluster 23, Cluster 28
SG8-4	Great Elms Road & Candlefield Road traffic calming	(SG8-4) Provide traffic calming features along Great Elms Rd and Candlefield Rd - speed cushions	Local Network	Active Travel	Physical	Within Existing Highway	Segment 8	Cluster 2; Cluster 21, Cluster 23, Cluster 28
SG8-5	Great Elms Road pavement parking prevention	(SG8-5) Introduce bollards to discourage or prevent pavement parking	Local Network	Active Travel	Physical	Within Existing Highway	Segment 8	Cluster 2; Cluster 21, Cluster 23, Cluster 28
SG8-6	Great Elms Road - Coronation Fields crossing	(SG8-6) Introduce un-controlled crossing with tactile paving on raised speed table adjacent to Coronation Fields, linking the footpaths leading away from Great Elms Road on either side	Local Network	Active Travel	Physical	Within Existing Highway	Segment 8	Cluster 2; Cluster 21, Cluster 23, Cluster 28
SG8-7	Great Elms Road and Candlefield Road Cycle Hangers	(SG8-7) Add cycle hanger storage facilities (x3) for residents	Local Network	Active Travel	Physical	Within Existing Highway	Segment 8	Cluster 2; Cluster 21, Cluster 23, Cluster 28
SG9-1	Peascroft Road cycle route and side-arm junction Copenhagen crossings	(SG9-1) New off-carriageway shared footway cycleway between Bennetts End Road and existing cycle route which links Northend and Malmes Court, incorporating Copenhagen Crossings (3x) on Kiln Ground, St Michaels Avenue and Kilncroft	Local Network	Active Travel	Physical	Within Existing Highway	Segment 9	Cluster 2, Cluster 12, Cluster 21
SG9-2	Peascroft Road-Bennetts End Road Junction cycle crossing improvements	(SG9-2) Improve cycling crossing facilities using road markings at Bennetts End Rd/ Peascroft Rd mini-roundabout	Local Network	Active Travel	Physical	Within Existing Highway	Segment 9	Cluster 2, Cluster 12, Cluster 21
SG9-3	Peascroft Road mini roundabout traffic calming	(SG9-3) Provide speed cushions on two approaches to Bennetts End Rd/ Peascroft Rd mini-roundabout. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Local Network	Active Travel	Physical	Within Existing Highway	Segment 9	Cluster 2, Cluster 12, Cluster 21
SG9-4	Peascroft Road area 20mph speed limit	(SG9-4) Investigate introducing 20mph limits/zones at Peascroft Rd (residential area with schools) and Malmes Croft. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Local Network	Active Travel	Physical	Within Existing Highway	Segment 9	Cluster 2, Cluster 12, Cluster 21
SG9-5	Peascroft Road pavement parking restrictions	(SG9-5) Physical parking control measures such as bollards, double yellow lines to prevent cars parking on footway	Local Network	Active Travel	Physical	Within Existing Highway	Segment 9	Cluster 2, Cluster 12, Cluster 21
SG9-6	Peascroft Road/Northend cycle stands	(SG9-6) Add cycle stands (x4) along the route, opposite the green space near Kilncroft and Longfield	Local Network	Active Travel	Physical	Within Existing Highway	Segment 9	Cluster 2, Cluster 12, Cluster 21
SG9-7	Malmes Croft off-carriageway cycle route	(SG9-7) New off-carriageway shared footway cycleway at eastern end of Malmes Croft, between Windermere Close and Leverstock Green Way	Local Network	Active Travel	Physical	Within Existing Highway	Segment 9	Cluster 2, Cluster 12, Cluster 21

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
SG10-1	Leverstock Green Way Village Centre to A414 Cycle Route	(SG10-1) New off-carriageway shared use cycle and footway on the southern/western side of the road between Malmes Croft and A414 signal-controlled crossing (west of Maylands Avenue junction). Include reduced kerb radii at Green Dell Way to reduce crossing width with tactile paving and contrasting surface treatment to indicate uncontrolled crossing location. Also include short section south of Malmes Croft to the signal-controlled crossing and upgrade crossing to a Toucan crossing	Local Network	Active Travel	Physical	Within Existing Highway	Segment 10	Cluster 11: Cluster 12
SG10-2	New controlled crossing between St Davids Close and Greenachres	(SG10-2) Provide a new controlled crossing between St Davids Close and Greenachres to serve access to the inbound bus stop from housing on the eastern side of road. In conjunction, widen footways on both sides of the road, either side of the crossing, and incorporate tactile paving and dropped kerbs and include short footway extension on southern side of St Davids Close arm	Local Network	Active Travel	Physical	Within Existing Highway	Segment 10	Cluster 12
SG10-3	Leverstock Green Way side arm junction treatments	(SG10-3) Tighten kerb radii where feasible to reduce crossing width and install tactile paving with dropped kerbs at side arms with a) Curtis Road, b) Church Road, c) Pancake Lane and d) Bartel Close	Local Network	Active Travel	Physical	Within Existing Highway	Segment 10	Cluster 12
SG10-4	Additional cycle parking at Leverstock Green Village Centre	(SG10-4) Add cycle parking (c. 6x cycle stands) adjacent to the controlled crossing outside the Leverstock Green Village Centre shopping parade	Local Network	Active Travel	Physical	Within Existing Highway	Segment 10	Cluster 12
SG11-1	Mickleford Road junction crossing improvements	(SH11-1) Add tactile paving at Micklefield Road (junctions with Green Lane and Poynders Hill)	Other	Active Travel	Physical	Within Existing Highway	Segment 11	Cluster 11: Cluster 12
SG11-2	A4147 Toucan Crossing and cycle link into Woolmer Drive	(SG11-2) Provide signal-controlled Toucan crossing on A4147, in addition to a shared use cycle and footway on the eastern side of the Toucan crossing, leading round into Woolmer Drive as far as the bus stop (c.70m) where provision should be made for cyclists to safely enter/exit the carriageway.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 11	Cluster 11: Cluster 12
SG11-3	20mph zone covering roads including Woolmer Drive, Green Lane, Mickleford Road and Datchworth Turn	(SG11-3) 20mph zone covering all roads leading off the A4147 and as far south as Green Lane up to and including junction with Kingcup Avenue (3 external entry points). Assume provision of additional traffic calming features to help ensure compliance with speed limit, c. x20 pairs of speed cushions. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	Other	Active Travel	Physical	Within Existing Highway	Segment 11	Cluster 11: Cluster 12
SG11-4	Cycle Hanger storage on Mickleford Road and Datchworth Turn	(SG11-4) Add cycle hanger storage facilities for residents, including on Datchworth Turn and Micklefield Road (x2 hangers)	Other	Active Travel	Physical	Within Existing Highway	Segment 11	Cluster 11: Cluster 12
SG14-1	Redbourn Road side junction crossing improvements	(SG14-1) Improve pedestrian crossing facilities at a) The Melings and b) Half Moon Meadow junctions with Redbourn Road, reducing the kerb radii on the eastern side of both junctions (removing the short slip road sections) adding tactile paving on both sides of Redbourn Rd aligned with current uncontrolled crossings.	Key Network	Active Travel	Physical	Within Existing Highway	Segment 14	Cluster 4; Cluster 5; Cluster 8; Cluster 19
SG14-2	Redbourn Road-Three Cherry Trees Junction Enhancement	(SG14-2) Redbourn Road-Three Cherry Trees Lane-Shelby Road Junction Enhancement - signalisation scheme incorporating controlled crossings for pedestrians on all sides	Key Network	Highways	Physical	Within Existing Highway	Segment 14	Cluster 4; Cluster 5; Cluster 8; Cluster 19
SG15-1	Maylands Avenue Shared Use Cycle Corridor	(SG15-1) Provision of a high quality, off-road cycle route along the full length between the A414 Breakspear Way and A4147 Swallowdale Lane (eastern side of the road). Expected to comprise widening of the existing shared-use path to meet standards including replacing areas of grass verge and localised reduction in carriageway space (e.g. removal of additional lanes at some junctions (access to Aldi/Nuffield Health/McDonalds; junction with Wood Lane End). Assume cyclist priority on some side arms (Eaton Road; Maxted Road; x3 accesses to Hosking Court). Also, provision of a Toucan crossing at location of existing uncontrolled crossing with refuge islands just north of the Travelodge vehicle access). Include upgrade to the existing shared use route between the A414 at-grade signal crossing to the proposed Toucan crossing on Maylands Avenue. Also provide additional signal-controlled crossing points on Maylands Avenue in the vicinity of Dixons Turn and Eaton Road	Key Network	Active Travel	Physical	Within Existing Highway	Segment 15	Cluster 11
SG15-2	Maylands Avenue Wayfinding Signage	(SG15-2) Additional wayfinding signage showing directions and distances to key destinations including mobility hubs	Key Network	Active Travel	Physical	Within Existing Highway	Segment 15	Cluster 11

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
SG16-1	Longlands side arm pedestrian crossing improvements	(SG16-1) Implement dropped kerbs and tactile paving at side-arm junctions with Ellen Close; Hobletts Road; Springfield Road; Little Road; and Ellingham Road	Local Network	Active Travel	Physical	Within Existing Highway	Segment 16	Cluster 7; Cluster 9
SG16-2	Longlands Additional Zebra Crossings	(SG16-2) Two additional Zebra crossings on extended speed table, between Broadfield Road and Sawyer's Way, and between Vauxhall Road and Field Road (replacing existing uncontrolled crossing)	Local Network	Active Travel	Physical	Within Existing Highway	Segment 16	Cluster 7; Cluster 9
SG16-3	Longlands Pavement Parking Prevention	(SG16-3) Physical measures e.g. bollards or landscaping features such as rain gardens, to prevent pavement parking on sections of footway along Longlands where it is not already permitted, especially in the vicinity of junctions (Broadfield Road, Sawyer's Way; The Queen's Square, Windmill Road and Vauxhall Road) and focus on sections adjacent to playing fields either side of The Adeyfield School	Local Network	Highways	Physical	Within Existing Highway	Segment 16	Cluster 7; Cluster 9
SG16-4	Longlands Shared Use Cycle Path	(SG16-4) Create an off-road shared use path on the eastern side of the road, between The Queen's Square (including a 50m section on this side road to provide access to the Local Mobility Hub - separate proposal) and the A414 St Albans Road.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 16	Cluster 7; Cluster 9
SG16-5	Continuous Pavement crossings at Fields Road and Vauxhall Road	(SG16-5) Install Copenhagen crossings at the side arm junctions of Field Road, Vauxhall Road	Local Network	Active Travel	Physical	Within Existing Highway	Segment 16	Cluster 7; Cluster 9
SG16-6	Longlands Wayfinding Signage	(SG16-6) Implement wayfinding at start/end of segment and close to The Queen's Square	Local Network	Active Travel	Physical	Within Existing Highway	Segment 16	Cluster 7; Cluster 9
SG17-1	Great Road cycle route	(SG17-1) Provide an off-road shared use cycle path between the junction with Queensway and south of the junction with Hobletts Road.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 17	Cluster 7; Cluster 9
SG17-2	Great Road additional zebra crossing	(SG17-2) Install a new Zebra crossing on extended raised speed table between Hobletts Road and Springfield Road	Local Network	Active Travel	Physical	Within Existing Highway	Segment 17	Cluster 7; Cluster 9
SG17-3	Great Road traffic calming features	(SG17-3) Install traffic calming features at the northern end where the road is on a steep incline	Local Network	Highways	Physical	Within Existing Highway	Segment 17	Cluster 7; Cluster 9
SG17-4	Great Road Wayfinding Signage	(SG17-4) Add wayfinding/ signage indicating direction and distance/time towards The Queens Square and Nickey Line	Local Network	Active Travel	Physical	Within Existing Highway	Segment 17	Cluster 7; Cluster 9
SG18-1	Washington Avenue side-arm junction pedestrian crossing improvements	(SG18-1) Implement tactile paving on Washington Avenue at Dunlin Avenue; Ninian Road; Claymore; Argyll Road; Robin Hood Meadow; Turnpike Green; Stevenage Rise, St Agnells Lane; Craigavon Road; Basildon Square; Waveney.	Local Network / Key Network	Active Travel	Physical	Within Existing Highway	Segment 18	Cluster 5; Cluster 16
SG18-2	Washington Avenue/Aycliffe Road roundabout crossings	(SG18-2) Implement zebra crossings on Washington Ave/Aycliffe Dr roundabout arms. Place the entire junction on a raised speed table	Local Network	Active Travel	Physical	Within Existing Highway	Segment 18	Cluster 5; Cluster 16
SG18-3	Aycliffe Drive zebra crossing	(SG18-3) Implement zebra crossing into/ out of Margaret Lloyd Playground (in location of existing splitter island)	Local Network	Active Travel	Physical	Within Existing Highway	Segment 18	Cluster 5; Cluster 16
SG18-4	Washington Avenue four additional zebra crossings	(SG18-4) Install four zebra crossings on raised speed tables on Washington Avenue. Retain existing subway or consider fencing off.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 18	Cluster 5; Cluster 16
SG18-5	Aycliffe Drive cycle lane upgrade and splitter island removal	(SG18-5) Upgrade advisory cycle lane to segregated cycle lane to improve safety. Remove splitter island features along the current route and widen marked lanes where feasible.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 18	Cluster 5; Cluster 16
SG19-1	Cambrian Way cycle route	(SG19-1) Segregated cycle route or shared use path along Cambrian Way between Link Road and Malvern Way. Widen the footways leading up to the western side of the Link Road roundabout to facilitate shared use, and widen the uncontrolled crossing points across Link Road. Enlarge the size of the roundabout western arm splitter island by reducing the Link Road approach to a single lane (reducing crossing distance)	Local Network	Active Travel	Physical	Within Existing Highway	Segment 19	Cluster 5; Cluster 22
SG19-2	Malvern Way residential cycle street (link to Nickey Line)	(SG19-2) Designate Malvern Way and southern section of Chilterns as a Residential Cycle Street with on-street advisory lanes	Local Network	Active Travel	Physical	Within Existing Highway	Segment 19	Cluster 5; Cluster 22
SG19-3	Fletcher Way bridge and Nickey Line access	(SG19-3) Improved ramp access to Nickey Line at Fletcher Way - resurfacing and trim back vegetation. Widen the footway on the northern side of Fletcher Way (removing hatched area in	Local Network	Active Travel	Physical	Within Existing Highway	Segment 19	Cluster 5; Cluster 22

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
		the centre, to accommodate a widening footway/cycleway. Raise height of bridge parapet so that it is suitable for cyclists						
SG19-4	Cambrian Way to Nickey Line Wayfinding Signage	(SG19-4) Add wayfinding signage to guide cyclists and pedestrians between Cambrian Way and the Nickey Line	Local Network	Active Travel	Physical	Within Existing Highway	Segment 19	Cluster 5; Cluster 22
SG20-1	Allandale-George Street-Figtree Hill side arm pedestrian crossing improvements	(SG20-1) Implement dropped kerbs and tactile paving along entire segment - Allandale junctions with Slippers Hill; Garland Close, George Street, St Mary's Road; Grover Close, Chapel Street, Honey Pot Close, Randalls Ride; Taverners. - George Street junctions with Heather Way and Figtree Hill. - Figtree junction with B487 Queensway	Local Network	Active Travel	Physical	Within Existing Highway	Segment 20	Cluster 22; Cluster 26
SG20-2	Allandale new uncontrolled crossing south of Smithfield	(SG20-2) Implement uncontrolled crossing with dropped kerbs and tactile paving approximately 20m south of the Allandale-Smithfield mini roundabout	Local Network	Active Travel	Physical	Within Existing Highway	Segment 20	Cluster 22; Cluster 26
SG20-3	Allandale localised footway widening	(SG20-3) Footway widening - removal of grass verge between St Mary's Road and George Street	Local Network	Active Travel	Physical	Within Existing Highway	Segment 20	Cluster 22; Cluster 26
SG20-4	Allandale bus stop upgrades	(SG20-4) Upgrade bus stops adjacent to George Street junction to incorporate raised Kassel kerbs	Local Network	Bus/Coach/MRT	Physical	Within Existing Highway	Segment 20	Cluster 22; Cluster 26
SG20-5	Allandale Traffic Calming	(SG20-5) Implement traffic calming (speed tables or cushions) on four sections of Allandale - a) between Smithfield and Taverners; b) between Taverners and Randalls Ride; c) between Chapel Close and Grover Close; and d) between Garland Close and Slippers Hill	Local Network	Active Travel	Physical	Within Existing Highway	Segment 20	Cluster 22; Cluster 26
SG20-6	Allandale Wayfinding Signage	(SG20-6) Improve wayfinding along segment	Local Network	Active Travel	Physical	Within Existing Highway	Segment 20	Cluster 22; Cluster 26
SG21-1	Queensway-Marlowes Roundabout speed reduction measures	(SG21-1) Reduce the kerb radii all approaches, notably on the Marlowes and Queensway approach arms to provide a single lane. This will increase deflection and reduce speeds through the junction. Provide give-way markings on the cycleway approach to increase the prominence of the cycleway approach	Key Network	Active Travel	Physical	Within Existing Highway	Segment 21	Cluster 25; Cluster 26
SG22-1	Gadebridge Park cycle stands	(SG22-1) Implement cycle stands adjacent to the car park	Other	Active Travel	Physical	Within Existing Highway	Segment 22	Cluster 26
SG23-1	Piccotts End Road uncontrolled crossing	(SG23-1) Provide an uncontrolled crossing at the northern end of the western footway, where it terminates (south of Gadebridge Lane)	Local Network	Active Travel	Physical	Within Existing Highway	Segment 23	Cluster 26
SG23-2	Piccotts End Road Gadebridge Park active mode access improvement	(SG23-2) Provide a kerbed build out adjacent to the gated entrance into Gadebridge Park (incorporating vehicle crossover for maintenance access).	Local Network	Active Travel	Physical	Within Existing Highway	Segment 23	Cluster 26
SG23-3	Piccotts End Road Wayfinding Signage	(SG23-3) Implement wayfinding signage at access to Gadebridge Park	Local Network	Active Travel	Physical	Within Existing Highway	Segment 23	Cluster 26
SG24-1	Piccotts End Road Traffic Calming	(SG24-1) Implement additional traffic calming features to manage risk of excessive speeds on the southern section. Two raised speed tables - a) approximately 30m north of the A4147 roundabout and b) 10m north of the Piccotts End Lane junction (also incorporating kerbed build out on eastern side to prevent kerbside parking on the northern side of the junction.	Local Network	Highways	Physical	Within Existing Highway	Segment 24	Cluster 26
SG25-1	Marlowes 20mph zone	(SG25-1) Consider 20mph on entire length of the segment	Key Network	Highways	Physical	Within Existing Highway	Segment 25	Cluster 25; Cluster 26
SG25-2	Hillfield Road-Marlowes junctions reconfiguration	(SG25-2) Convert King Harry Street-Hillfield Road junction to a conventional T-junction. Reduce the Hillfield Road approach to Marlowes to a single lane, widen the footway adjacent to the crossing.	Key Network	Highways	Physical	Within Existing Highway	Segment 25	Cluster 25
SG25-3	Marlows carriageway reconfiguration - Hillfield Road-Combe Street	(SG25-3) a) Remove the landscaped central reservation on Marlowes between Hillfield Road and Combe Street. b) Reduce the northbound carriageway to a single lane and widen the footway on western side. c) Install an additional controlled crossing adjacent to the Wetherspoon public house, on a raised speed table.	Key Network	Active Travel	Physical	Within Existing Highway	Segment 25	Cluster 25
SG25-4	Marlows carriageway reconfiguration - Combe Street-Midland Road	(SG25-4) a) Remove landscaped central reservation on Marlowes between Combe Street and Midland Road and widen the footway on eastern side. Reduce the southbound carriageway to a single lane. b) Install an additional controlled crossing adjacent to the library, on a raised speed table.	Key Network	Active Travel	Physical	Within Existing Highway	Segment 25	Cluster 25

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
SG25-5	Marlowes cycle stands	(SG25-5) Add cycle stands outside shopping parades (note - separate proposal for a Mobility Hub outside the college)	Key Network	Active Travel	Physical	Within Existing Highway	Segment 25	Cluster 25
SG25-6	Midland Road pedestrian crossing	(SG25-6) Install controlled zebra crossing on a raised speed table on Midlands Road on the eastern side of the Marlowes roundabout	Key Network	Active Travel	Physical	Within Existing Highway	Segment 25	Cluster 25
SG26-1	Two Waters Way Cycle Link	(SG26-1) Provide segregated cycle lane along Two Waters Way by removing hatching in the middle of road (removal of right turn filters, single lane in both direction). To be located on the western side between the Plough Roundabout and River Bulbourne and on the eastern side to London Road. The northern section, north of Corner Hall, would need to be provided as a shared use facility off-road as there is insufficient space within the carriageway. In the vicinity of the River Bulbourne provide a Toucan crossing. At the northern end, provide a widened bridge over the River Gade and shared use route across to Station Road.	Key Network	Active Travel	Physical	Within Existing Highway	Segment 26	Cluster 13; Cluster 18
SG26-2	A414 Hemel Gateway 30mph signage	(SG26-2) More prominent 30mph signage on the A414 approaching the signaglised junction with London Road	Key Network	Active Travel	Physical	Within Existing Highway	Segment 26	Cluster 13; Cluster 18
SG26-3	Corner Hall cycle parking	(SG26-3) Add cycle parking stands on Corner Hall (west of the river)	Key Network	Active Travel	Physical	Within Existing Highway	Segment 26	Cluster 13; Cluster 18
SG26-4	Corner Hall pedestrian crossing improvements	(SG26-4) Add tactile paving at Corner Hall	Key Network	Active Travel	Physical	Within Existing Highway	Segment 26	Cluster 13; Cluster 18
SG26-5	Two Waters Way Wayfinding Signage	(SG26-5) Improve signage and wayfinding	Key Network	Active Travel	Physical	Within Existing Highway	Segment 26	Cluster 13; Cluster 18
SG27-1	Lawn Lane-Crabtree Lane pedestrian crossing improvement	(SG27-1) Junction between Lawn Lane and Crabtree Lane. Remove guardrail, increase refuge island width and reduce side arm approach to a single lane. Build out width of footway on southern side and incorporate dropped kerbs with tactile paving	Local Network	Active Travel	Physical	Within Existing Highway	Segment 27	Cluster 18
SG27-2	Lawn Lane new signalised crossing near Crabtree Lane	(SG27-2) Additional signal-controlled pedestrian crossing north of the junction with Crabtree Lane on a raised speed table	Local Network	Active Travel	Physical	Within Existing Highway	Segment 27	Cluster 18
SG27-3	Lawn Lane new signalised crossing near Corner Hall	(SG27-3) Additional signal-controlled pedestrian crossing north of junction with Corner Hall on a raised speed table	Local Network	Active Travel	Physical	Within Existing Highway	Segment 27	Cluster 18
SG27-4	Corner Hall Stopping Up and widened footway	(SG27-4) Closure of the Corner Hall one-way section at the junction with Lawn Lane - provision of a continuous footway. Remove hatching and right turn filter to accommodate widened footway on western side	Local Network	Active Travel	Physical	Within Existing Highway	Segment 27	Cluster 18
SG28-1	Durrants Hill Road-Ebberns Road pedestrian crossing improvements	(SG28-1) Improve pedestrian crossing facilities at the side arm junction with Ebberns Road including dropped kerbs and tactile paving	Local Network	Active Travel	Physical	Within Existing Highway	Segment 28	Cluster 13; Cluster 14
SG28-2	Durrents Hill additional pedestrian crossing	(SG28-2) Provide an uncontrolled crossing adjacent to the entrance into the park, north of the junction with Ebberns Road. Provide localised widening of the footway on the eastern side of the road, removing space for kerb-side parking	Local Network	Active Travel	Physical	Within Existing Highway	Segment 28	Cluster 13; Cluster 14
SG28-3	Durrants Hill Road Wayfinding Signage	(SG28-3) Provide wayfinding signage	Local Network	Active Travel	Physical	Within Existing Highway	Segment 28	Cluster 13; Cluster 14
SG28-4	Durrants Hill Road cycle parking	(SG28-4) Install cycle parking adjacent to the public toilets	Local Network	Active Travel	Physical	Within Existing Highway	Segment 28	Cluster 13; Cluster 14
SG29-1	A414 new crossing near to Wood Crescent/Wood Lane junctions	(SG29-1) New parallel signal-controlled pedestrian/cycle crossing near to the Wood Crescent and Wood Lane junctions on the A414	Local Network	Active Travel	Physical	Within Existing Highway	Segment 29	Cluster 10; Cluster 14: Cluster 21
SG29-2	Wood Crescent-Runham Road-Deaconsfield Road Wayfinding Signage	(SG29-2) Introduce wayfinding at key junction decision points	Local Network	Active Travel	Physical	Within Existing Highway	Segment 29	Cluster 10; Cluster 14: Cluster 21

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
SG30-1	Leys Road cycle route	(SG30-1) Introduce offroad shared use cycle and footway utilising existing wide footway on the western/northern side of the road between the junction with St Albans Hill and Bennetts Gate shopping parade. Removal of some grass verge to create sufficient width and use of bollards or markings to discourage pavement parking. Include Copenhagen crossings on Lime Walk, Long John, Howe Road and Kimps Way	Local Network	Active Travel	Physical	Within Existing Highway	Segment 30	Cluster 10; Cluster 14: Cluster 21
SG30-2	Leys Road-Peascroft junction reconfiguration and parallel crossing	(SG30-2) Provide a parallel pedestrian cycle zebra crossing on the Peascroft arm of the Leys Road mini roundabout. Convert Mini roundabout priority T-junction layout.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 30	Cluster 10; Cluster 14: Cluster 21
SG30-3	Lime Walk park desire line shared use path	(SG30-3) Formalise the desire lane path crossing Lime Walk park between Leys Road and St Albans Hill to provide a shared use path. Install widened uncontrolled crossing with tactile paving onto St Albans Hill. Provide steps, handrail and wheeling channel at the western end of the path leading down onto St Albans Hill, and signs indicating for cyclists to dismount on approach to the steps. Provide a short shared-use path linking St Albans Hill and Wheelers Road to link into the improved crossing	Local Network	Active Travel	Physical	Within Existing Highway	Segment 30	Cluster 10; Cluster 14: Cluster 21
SG30-4	Lime Walk park Wayfinding Signage	(SG30-4) Introduce Wayfinding signage at both ends of Lime Walk park path	Local Network	Active Travel	Physical	Within Existing Highway	Segment 30	Cluster 10; Cluster 14: Cluster 21
SG30-5	Lime Walk park cycle parking	(SG30-5) Introduce cycle parking at the south-eastern corner of Lime Walk park	Local Network	Active Travel	Physical	Within Existing Highway	Segment 30	Cluster 10; Cluster 14: Cluster 21
SG31-1	St Albans Hill Zebra Crossing by Dacorum Athletics Track	(SG31-1) New zebra crossing on St Albans Hill adjacent Dacorum Athletics Track. Placed on raised speed table leading to playground to follow the desire line.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 31	Cluster 10
SG31-2	St Albans Hill - Bennetts End Road pedestrian crossing improvement	(SG31-2) Tighten kerb radii/ reduce crossing width and improve pedestrian and cycling crossing with widened refuge islands	Local Network	Active Travel	Physical	Within Existing Highway	Segment 31	Cluster 10
SG31-3	Bennetts End Road cycle route	(SG31-3) New off-road shared use cycle and footway along the eastern side of Bennetts End Road between the A414 and Peascroft Road. Incorporating Copenhagen crossings on side arm junctions with Gammon Close, Belsize Road, Acorn Road, Rant Meadow and Goldcroft. Also convert the existing zebra crossing adjacent to the Bennetts Gate shopping parade to a parallel zebra crossing.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 31	Cluster 21
SG31-4	Bennetts End Road Wayfinding signage	(SG31-4) Introduce wayfinding and signage	Local Network	Active Travel	Physical	Within Existing Highway	Segment 31	Cluster 21
SG31-5	Cycle parking at Snow Centre	(SG31-5) Introduce cycle parking at the Snow Centre along St Albans Hill	Local Network	Active Travel	Physical	Within Existing Highway	Segment 31	Cluster 10
SG32-1	Pedestrian crossing improvements on side arms along White Hart Road and Windmill Road	(SG32-1) Tactile paving at side arm junctions - Eastwick Row, White Hart Drive, Windmill Road, Abel Close and Homefield Road	Local Network	Active Travel	Physical	Within Existing Highway	Segment 32	Cluster 7; Cluster 9
SG32-2	White Hart Road signal-controlled crossing north of A414	(SG32-3) Signal controlled crossing on White Hart Road north of the A414 roundabout. Include localised widening of the footway on the western side	Local Network	Active Travel	Physical	Within Existing Highway	Segment 32	Cluster 7; Cluster 9
SG32-3	White Hart Road-Windmill Road Wayfinding signage	(SG32-3) Improve signage and wayfinding	Local Network	Active Travel	Physical	Within Existing Highway	Segment 32	Cluster 7; Cluster 9
SG33-1	Redbourn Road-Swallowdale Lane Roundabout reconfiguration including improved crossings	(SG33-1) Reconfiguration of the Redbourn Road-Swallowdale Lane-High Street Green-Queensway roundabout - removing the left turn filters and building out the verges to reducing crossing distances. Installing Toucan crossings on the eastern and southern arms of the junction.	Key Network	Active Travel	Physical	Within Existing Highway	Segment 33	None
SG33-2	Additional Wayfinding Signage on Redbourn Road	(SG33-2) Implement wayfinding at start/end of segment	Key Network	Active Travel	Physical	Within Existing Highway	Segment 33	None

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
SG34-1	Toucan Crossings on Swallowdale Lane	(SG34-1) Install Toucan crossings on Swallowdale Road between a) Eastman Way and Maxted Road, and b) between Maxted Road and Three Cherry Trees Lane	Local Network	Active Travel	Physical	Within Existing Highway	Segment 34	None
SG34-2	Signalised crossing on Three Cherry Trees Lane	(SG34-2) Install a pelican crossing on Three Cherry Trees Lane south of the Caravan Park entrance. Also provide localised widening to the footway along the eastern side of Three Cherry Trees Lane between the proposed crossing to just south of Admiral Avenue	Local Network	Active Travel	Physical	Within Existing Highway	Segment 34	None
SG34-3	Shared use Cycleway on Swallowdale Lane	(SG34-3) Implement a shared use cycleway and footway on the northern side of Swallowdale Lane between Eastman Way and just west of Three Cherry Trees Lane.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 34	None
SG34-4	Cycleway on Three Cherry Trees Lane - Swallowdale Lane to Boundary Way	(SG34-4) Widen the existing footway on the southern side of Three Cherry Trees Lane to enable shared use between Boundary Way and Swallowdale Lane	Local Network	Active Travel	Physical	Within Existing Highway	Segment 34	None
SG34-5	Maxted Road pedestrian crossing improvements	(SG35-5) Provide tactile paving at the junction with Maxted Road	Local Network	Active Travel	Physical	Within Existing Highway	Segment 34	None
SG34-6	Swallowdale Lane and Three Cherry Trees Lane Wayfinding signage	(SG34-6) Install wayfinding at start and end of segment and at junction of Swallowdale Lane and Three Cherry Trees Lane.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 34	None
SG35-1	Cycleway along St Agnells Lane	(SG35-1) Implement an offroad shared use cycleway along the full length of St Agnells Lane, located on the western side from Washington Avenue and remaining on the same side of the road for the full length, terminating on the eastern side at the junction with Redbourn Road. Include 4x Copenhagen crossings at St Agnells Court, Cupid Green Lane, Essex Mead and Old Maple	Local Network	Active Travel	Physical	Within Existing Highway	Segment 35	None
SG35-2	Zebra crossing adjacent to Cupid Green Lane junction	(SG35-2) Install zebra crossing on raised speed table adjacent to Cupid Green Lane	Local Network	Active Travel	Physical	Within Existing Highway	Segment 35	None
SG35-3	Cupid Green Lane Quietway	(SG35-3) Convert Cupid Green Lane to a Quiteway to discourage through traffic. To provide an attractive route for walking and cycling from North Hemel Hempstead through Grovehill. Permit vehicle access to the allotments but closed to through traffic north of this point. Where Cupid Green Lane currently links onto Gaddesden Lane on the northern side of the proposed North Hemel Hempstead development, this should also be considered for Quietway treatment to discourage traffic rat-running through the development or conversely traffic routeing out of the development onto Gaddesden Lane.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 35	None
SG35-4	Grovehill Playing Fields - connection to North Hemel Hempstead development	Provision of a new shared footway and cyclepath link through Grovehill Playing Fields, linking into the existing path where it currently ends, and connecting into the planned North Hemel Hempstead development.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 35	None
SG35-5	Washington Avenue-North Hemel Hempstead footway/cycle link	A new link for pedestrians and cyclists, adjacent to the Education Support Centre on Washington Avenue, to connect into the proposed North Hemel Hempstead development.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 35	None
SG35-6	Woodhall Farm-North Hemel Hempstead footway/cycle link	A new route for pedestrians and cyclists to link Shenley Road between the Sainsbury's and Brockwood Primary School. Likely to use a section of existing footway adjacent to the supermarket car park at the western end, however reallocation of land from the school may be required at the eastern end.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 35	None
SG36-1	Northridge Way-Cangels Close-Moorland Road Cycle Route	(SG36-1) Implement an offroad shared use cycleway along Northridge Way between the junctions with Warners End Road and Cangels Close. Implement on-street advisory route along Cangels Close and Moorland Road and a parallel zebra crossing just east of the Cangels Close junction.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 36	None
SG36-2	Northridge Way-Jocketts Road crossing and cycle route	(SG36-2) Install new parallel zebra crossing on raised speed table on Northridge Way, north of the junction with Jocketts Road. Include an 80m section of shared use cycleway running on Jocketts Road between Northridge Way and Shrubhill Road with dropped kerbs at western end for cyclists to enter/exit the carriageway	Local Network	Active Travel	Physical	Within Existing Highway	Segment 36	None
SG36-3	Northridge Way Wayfinding Signage	(SG36-3) Introduce wayfinding northern end of segment, Northridge Park and at junction of Jocketts Road.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 36	None

ID	Name	Description	Network Category	Mode Category	Physical or Soft	Within LP Site or Highway	Route Segment	Trip Attractor Cluster
SG36-4	Northridge Way Park cycle parking	(SG36-4) Introduce cycle parking at Northridge Park, close to play park and basketball court.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 36	None
SG37-1	Green End Road crossing and traffic calming feature near St Rose's School	(SG37-1) Install new uncontrolled crossing on Green End Road by St Rose's Infant and Nursery School as part of a kerbed build out with single lane give way to oncoming traffic.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 37	None
SG37-2	Zebra crossing on Ashtree Way	(SG37-2) Install new zebra crossing by Ashtree Way and Green End Road.	Local Network	Active Travel	Physical	Within Existing Highway	Segment 37	None

Appendix C – Interventions Phasing and Costings

Note: Dacorum LCWIP interventions are not included in this table

ID	Name	Description	Associated LP Development(s)	Timescale for Delivery	Planning Authority	Base Costs	Traffic Management @ 25%	Main Contractor Prelimin-aries and Overheads and Profit @ 30%	Professional Fees @ 10%	Contingency @ 15%	TOTAL Cost
LS-1	Cambrian Way Local Mobility Hub	Local Mobility Hub located near to the junction with Wensleydale, close to Nickey Line, and served by Bus Route 2	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-2	Keens Field Mobility Hub	Local Mobility Hub located at Queensway-St Paul's Rd (close to Nickey Line) OR Cattsdell-Thumpers junction area. Served by Bus Routes 2, 3 and 4	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-3	Grovehill Local Mobility Hub	Local Mobility Hub located at Aycliffe Drive (Grovehill) opp. Henry Wells Sq. Served by Bus Route 2	North Hemel Hempstead	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-4	Woodhall Farm Local Mobility Hub	Local Mobility Hub located on Shenley Road, Woodhall Fm near Sainsbury's. Served by Bus Route 2	North Hemel Hempstead	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-5	Adeyfield Local Mobility Hub	Local Mobility Hub located at The Queen's Square, Adeyfield local centre. Served by Bus Routes 1 and 302	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-6	Maylands South Local Mobility Hub	At or near future HERT interchange at junction of A414 Breakspear Way/Maylands Avenue	East Hemel Hempstead	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-7	Jarman Park Local Mobility Hub	Local Mobility Hub located at Jarman Park near to vehicle access or adjacent to marked bus stop. Not currently served by any local bus service but could be served by the HERT in the future	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-8	Bennetts End Local Mobility Hub	Local Mobility Hub located at Peascroft Road/Bennetts End Road, close to the local shopping parade. Served by Bus Routes 1 and 2	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-9	Leverstock Green Local Mobility Hub	Local Mobility Hub located on Leverstock Green Way, close to the local shopping parade. Served by Bus Routes 20, 302 and 721	East Hemel Hempstead	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-10	Warners End Local Mobility Hub	Local Mobility Hub at Warners End Road/Long Chaulden, close to the local shopping parade. Served by Bus Routes 3, 4 and ML1.	Polehanger Lane	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-11	Galley Hill Local Mobility Hub	Local Mobility Hub located in Galley Hill opposite the Baptist Church. Served by Bus Routes 3 and 4.	Polehanger Lane; Grovehill Local Centre	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-12	Chaulden Local Mobility Hub	Local Mobility Hub located close to the Honeycross Rd junction. Served by Bus Routes 3 and ML1	West Hemel Hempstead	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-13	Maylands Central Local Mobility Hub	Local Mobility Hub located at Wood Lane End car park (requites removal of parking spaces). Served by Bus Routes 302, 320 and ML1.	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-14	Maylands Multi Modal Interchange (Metro Mobility Hub)	Integrated metro mobility hub with facilities to encourage and facilitate modes of transport other than the private car; this will connect the site to key destinations including Hemel Hempstead Train Station and the Maylands Business Park. Mobility hub to provide a bus and coach interchange near Maylands with access to the A414/M1. Served by existing or new express coach services along the M1 (e.g. Greenline and National Express) and local express buses to neighbouring towns including a potential cross-county express bus service (HERT). Opportunity for associated cycle and pedestrian improvements. This forms part of Phase 2 of the package of transport measures for M1 J8 enhancements - Prioritisation of active and sustainable modes of travel.	TBD - could be located within East Hemel Hempstead site	2036/37-2040/41	TBD*	£ 427,000.00	£ 106,750.00	£ 160,125.00	£ 69,387.50	£ 114,489.38	£ 877,751.88

LS-16	Plough Roundabout Link Break - bus priority	Investigate the potential for introducing bus priority at the Plough Roundabout, particularly in the vicinity of the bus interchange which could also be served by the HERT in the future.	All LP sites	2036/37-2040/41	Dacorum Borough Council	£ 19,497.84	£ 4,874.46	£ 7,311.69	£ 3,168.40	£ 5,227.86	£ 40,080.25
LS-17	A414 St Albans Road (town centre approach) bus priority	Bus priority lane on the A414 westbound approaching the Plough Roundabout including bus gate signals to enable buses to move from the nearside to the offside lane. To accommodate the bus lane, there is likely to be a need to reduce general traffic space by a lane in either the eastbound or westbound direction.	All LP sites	2036/37-2040/41	Dacorum Borough Council	£ 21,568.88	£ 5,392.22	£ 8,088.33	£ 3,504.94	£ 5,783.16	£ 44,337.53
LS-19	Bus Only Traffic Filter - Station Road	A Bus Only traffic filter (in both directions) on A4146 Station Road, east of St John's Road, to prevent through traffic. Could be in operation throughout the day, or at peak times only. It would benefit Bus Routes 1, 2, 4, 20, 302, 352, 501, ML1 and X5.	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 34,668.88	£ 8,667.22	£ 13,000.83	£ 5,633.69	£ 9,295.59	£ 71,266.22
LS-20	Bus Only Traffic Filters - wider Hemel Hempstead	Additional locations for bus only traffic filters could be considered across Hemel Hempstead. Provision is currently made for up to 4 additional locations, subject to feasibility and public consultation. These locations will be determined based on more detailed investigations including consideration of the potential impacts on traffic re-routing. They should be considered in locations which are already well served by bus services.	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 138,675.52	£ 34,668.88	£ 52,003.32	£ 22,534.77	£ 37,182.37	£ 285,064.87
LS-22	North Hemel Hempstead Local Mobility Hub - west	Local Mobility Hub located within the proposed North Hemel Hempstead development site HH01/HH02 around the proposed mixed-use area MU1 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	North Hemel Hempstead	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-23	North Hemel Hempstead Local Mobility Hub - central	Local Mobility Hub located within the proposed North Hemel Hempstead development site HH01/HH02 around the proposed mixed-use area MU2 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	North Hemel Hempstead	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-24	North Hemel Hempstead Local Mobility Hub east	Local Mobility Hub located within the proposed North Hemel Hempstead development site HH01/HH02 on the eastern side near to the A4146 Redbourn Road and around the proposed mixed-use area MU3 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	North Hemel Hempstead	2031/32-2035/36	St Albans City and District Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-25	East Hemel Hempstead Local Mobility Hub	Metro Mobility Hub located within the proposed East Hemel Hempstead development site in the northern part of the development, south of the A4146 Redbourn Road and around the proposed mixed-use area MU4 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	East Hemel Hempstead	2031/32-2035/36	St Albans City and District Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19

LS-26	East Hemel Hempstead Local Mobility Hub	Metro Mobility Hub located within the proposed East Hemel Hempstead development site in the southern part of the development, north of the A4147 Hemel Hempstead Road and around the proposed mixed use area MU6 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	East Hemel Hempstead	2031/32-2035/36	St Albans City and District Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-27	Marchmont Farm Local Mobility Hub	Local Mobility Hub located within the proposed Marchmont Farm development site HH22 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Marchmont Farm	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-28	Polehanger Lane Local Mobility Hub	Local Mobility Hub located within the proposed Polehanger Lane development site NEW4 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Polehanger Lane	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-29	Shendish Manor and Fairfields Local Mobility Hub	Local Mobility Hub located within the proposed Shendish Manor and Fairfields development site NEW3 - to be provided by the developer at a location which is accessible within the site and aligned to the Local Mobility Hub standards applied across Hemel Garden Communities	Shendish Manor and Fairfields	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-30	Hemel Hempstead Station Forecourt Enhancements (Metro Mobility Hub)	Revised layout to the station forecourt to provide a more attractive and accessible environment for walking, wheeling and cycling, improved taxi rank, improved bus interchange facilities in line with the Metro Mobility Hub standards. This will be the terminating/turn-around point for the proposed HERT MRT system.	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 427,000.00	£ 106,750.00	£ 160,125.00	£ 69,387.50	£ 114,489.38	£ 877,751.88
LS-31	Hemel Hempstead Station Upgrade	Refresh of the station infrastructure including refurbished ticket office, subway and stairwells to platforms	All LP sites	2036/37-2040/41	Dacorum Borough Council	-	-	-	-	-	£ 7,410,000.00
LS-32	M1 Junction 8 enhancement - Phase 3 - M1 Junction 8 - current proposals	Phase 3 of package of transport measures to enhance M1 Junction 8 and surrounding area. To provide additional capacity and connectivity to Maylands and Herts IQ, and relieve congestion on the A414. Land to the east of Junction 8 is safeguarded, in case it is required to come forward for junction improvements (Phase 3 J8 enhancements). Reconfiguration of M1 Junction 8 on the eastern side, including a new roundabout adjoining the southbound on/off-slips and a new connector road over the M1 and connecting into Green Lane north of the A414	Post 2041 - additional government funding required?	Post 2041	St Albans City and District Council	-	-	-	-	-	£ 106,900,000.00
LS-33	M1 Junction 8 enhancement - Phase 1 Phoenix Gateway Roundabout re-configuration and signalisation	Phase 1 of package of transport measures to enhance M1 Junction 8 and surrounding area - Replacement of the existing Phoenix Gateway/Green Lane roundabout on the A414 with a signal-controlled crossroads which should help to manage traffic flows through the junction	East Hemel Hempstead	2026/27-2030/31	Cross-boundary	-	-	-	-	-	£ 1,056,500.00

LS-34	A414 Breakspear Way walking and cycling bridge for active modes	A high quality, attractive bridge for walking, wheeling and cycling connecting the East Hemel Hempstead site north and south of the A414 between Green Lane and the M1. This forms part of Phase 2 of the package of transport measures for M1 J8 enhancements - Prioritisation of active and sustainable modes of travel.	East Hemel Hempstead	2031/32-2035/36	St Albans City and District Council	-	-	-	-	-	£ 22,000,000.00
LS-35	A414 Dual Carriageway gap closure - Lamsey Street	Closure of the central reservation gap to right turning traffic - traffic will be diverted to the next roundabout or an alternative route	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 21,886.55	£ 5,471.64	£ 8,207.46	£ 3,556.56	£ 5,868.33	£ 44,990.54
LS-36	A414 Dual Carriageway gap closure - Wood Crescent	Closure of the central reservation gap to right turning traffic - traffic will be diverted to the next roundabout or an alternative route	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 21,886.55	£ 5,471.64	£ 8,207.46	£ 3,556.56	£ 5,868.33	£ 44,990.54
LS-37	A414 Dual Carriageway gap closure - St Albans Rd leading into Mariner Way & Sandmere Close	Closure of the central reservation gap to right turning traffic - traffic will be diverted to the next roundabout or an alternative route	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 21,216.03	£ 5,304.01	£ 7,956.01	£ 3,447.60	£ 5,688.55	£ 43,612.20
LS-38	A414 Dual Carriageway gap closure - Rant Meadow	Closure of the central reservation gap to right turning traffic - traffic will be diverted to the next roundabout or an alternative route	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 21,886.55	£ 5,471.64	£ 8,207.46	£ 3,556.56	£ 5,868.33	£ 44,990.54
LS-42	Cherry Tree Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Cherry Tree Lane between Three Cherry Trees Lane to Redbourn Road. Closure to through traffic.	East Hemel Hempstead	2031/32-2035/36	St Albans City and District Council	£ 165,000.00	£ 41,250.00	£ 61,875.00	£ 26,812.50	£ 44,240.63	£ 339,178.13
LS-43	Punchbowl Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Punchbowl Lane. The section of the lane west of the M1 will be subsumed within East Hemel Hempstead development and may therefore be subject to alteration. Closure to through traffic.	East Hemel Hempstead	2031/32-2035/36	St Albans City and District Council	£ 160,000.00	£ 40,000.00	£ 60,000.00	£ 26,000.00	£ 42,900.00	£ 328,900.00
LS-44	Hogg End Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Hog End Lane. The section of the lane west of the M1 will be subsumed within East Hemel Hempstead development and may therefore be subject to alteration. Closure to through traffic.	East Hemel Hempstead	2031/32-2035/36	St Albans City and District Council	£ 160,000.00	£ 40,000.00	£ 60,000.00	£ 26,000.00	£ 42,900.00	£ 328,900.00
LS-45	Green Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Green Lane between Breakspear Park office complex access and junction with Westwick Row. The section of Green Lane adjacent to Breakspear Park may be subject to alteration resulting from the East Hemel Hempstead development and changes to the A414 Phoenix Gateway Roundabout. Closure to through traffic.	East Hemel Hempstead	2031/32-2035/36	St Albans City and District Council	£ 2,400.00	£ 600.00	£ 900.00	£ 390.00	£ 643.50	£ 4,933.50
LS-46	Bunkers Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Bunkers Lane between Longdean Park and Bedmond Road. Closure to through traffic.	All LP sites	2031/32-2035/36	Dacorum Borough Council*	£ 105,800.00	£ 26,450.00	£ 39,675.00	£ 17,192.50	£ 28,367.63	£ 217,485.13
LS-47	Blackwater Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Blackwater Lane. This lane will be subsumed within East Hemel Hempstead development (reserve school development site) and may therefore be subject to change. Closure to through traffic.	East Hemel Hempstead	2031/32-2035/36	St Albans City and District Council	£ 160,000.00	£ 40,000.00	£ 60,000.00	£ 26,000.00	£ 42,900.00	£ 328,900.00

LS-48	Berkhamsted Road Gateway Corridor	Alterations to Berkhamsted Road adjacent to the proposed Poleshanger Lane development which will include a vehicular access onto this road. Comprising a reduction in the speed limit from National Speed limit to 30 or 40mph between the access to Boxted Farm and the existing settlement boundary.	Polehanger Lane	2031/32-2035/36	Dacorum Borough Council	£ 6,000.00	£ 1,500.00	£ 2,250.00	£ 975.00	£ 1,608.75	£ 12,333.75
LS-49	Fields End Lane/Pouchen End Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Fields End Lane, joining another proposed Quietway at its western end at Pouchen End Lane, and Boxted Road at its eastern end. Closure to through traffic.	Polehanger Lane	2031/32-2035/36	Dacorum Borough Council	£ 110,800.00	£ 27,700.00	£ 41,550.00	£ 18,005.00	£ 29,708.25	£ 227,763.25
LS-50	Boxted Road Green Loop Crossing Point	Pedestrian and cycle crossing on Boxted Road adjacent to the junction with Fields End Lane (proposed Quietway) and Berkhamsted Road (which is not open to traffic at its western end, and is also proposed as a Quietway)	Polehanger Lane	2031/32-2035/36	Dacorum Borough Council	£ 10,823.00	£ 2,705.75	£ 4,058.63	£ 1,758.74	£ 2,901.92	£ 22,248.03
LS-51	Polehanger Lane-Leighton Buzzard Road Green Loop	Upgrade to existing PRoW (Footpath) Hemel Hempstead (013) linking Polehanger Lane and Leighton Buzzard Road to form part of the proposed Green Loop.	Polehanger Lane	2031/32-2035/36	Dacorum Borough Council	£ 468,086.32	£ 117,021.58	£ 175,532.37	£ 76,064.03	£ 125,505.65	£ 962,209.95
LS-52	Holtsmere End Lane Quietway	Quietway, indicated by signs and some physical measures at entry points, on Holtsmere End Lane between a location in the vicinity of PRoW (Footpath) Great Gaddesden 048 and Redbourn 011. This lane will run through or along the perimeter of the proposed East Hemel Hempstead development and therefore may be subject to alteration as part of the development. Where Holtsmere End Lane currently links onto Gaddesden Lane on the north-eastern side of the proposed Nort/East Hemel Hempstead developments, this should also be considered for Quietway treatment to discourage traffic rat-running through the development or conversely traffic routeing out of the development onto Gaddesden Lane.	East Hemel Hempstead	2031/32-2035/36	Cross-boundary	£ 156,000.00	£ 39,000.00	£ 58,500.00	£ 25,350.00	£ 41,827.50	£ 320,677.50
LS-53	Redbourn Road Green Loop Crossing Point	Pedestrian and cycle crossing on B487 Redbourn Road adjacent to the junction between Cherry Tree Lane and Holtsmere End Lane to connect sections of the proposed Green Loop running through the East Hemel Hempstead development on either side.	East Hemel Hempstead	2031/32-2035/36	St Albans City and District Council	£ 10,823.00	£ 2,705.75	£ 4,058.63	£ 1,758.74	£ 2,901.92	£ 22,248.03
LS-54	A4147 Hemel Hempstead Road Gateway Corridor	Alterations to the A4147 Hemel Hempstead Road between the existing settlement boundary and the junction with Beechtree Lane and Appspond Lane (between M1 and A414), comprising: 1) speed limit changes 30mph along most of the length, with a buffer 40mph section at the eastern most end up to Beechtree Lane and Appspond Lane; 2) provision of upgraded shared use pedestrian and cycle route along the full length (northern side of the road); 3 crossings including 1 signal-controlled pedestrian/cycle crossing (for access to proposed secondary school on southern side) and a crossing to link with the Blackwater Lane Green Loop; raised M1 bridge parapet (northern side) to facilitate cycling. Upgrades may be influenced by where proposed vehicle accesses will be created into the East Hemel Hempstead development site and school entrance.	East Hemel Hempstead	2031/32-2035/36	St Albans City and District Council	£ 749,000.00	£ 187,250.00	£ 280,875.00	£ 121,712.50	£ 200,825.63	£ 1,539,663.13

LS-55	Bunkers Lane-Blackwater Lane Quietway Crossing Point	Pedestrian and cycle crossing on Bedmond Road adjacent to the junction with Bunkers Lane (proposed Quietway) and Blackwater Lane (proposed Quietway)	East Hemel Hempstead	2031/32-2035/36	St Albans City and District Council	£ 98,800.00	£ 24,700.00	£ 37,050.00	£ 16,055.00	£ 26,490.75	£ 203,095.75
LS-56	The Denes Centre Local Mobility Hub	Local Mobility Hub located adjacent to the Denes local shopping parade. Served nearby by Bus Route 2	All LP Sites	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-57	Two Waters (London Road) Local Mobility Hub	Local Mobility Hub located on London Road in Two Waters Opportunity Area, opposite McDonalds drive-thru and close to the A414 junction. Served nearby by Bus Route 322	National Grid and 339-353 London Road; Symbio Site, Whiteleaf Road	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-58	E-Bike Hire Scheme with E-Bike docking hubs (where not co-located at Mobility Hubs) - Hemel Hempstead Inner	Information sourced from Transport Initiatives LLP's June 2024 report. Could comprise 26-34 docking hubs; Hemel Hempstead Outer - 13-17 docking hubs ((Two Waters OA - 9 hubs; Kings Langley 8 hubs; Maylands Business Park 7 docking hubs; North HH 10 hubs; East HH 15 docking hubs). Assume simple docking equipment and/or a marked area on the highway.	All LP Sites	2026/27-2030/31	Dacorum Borough Council	-	-	-	-	-	Not costed
LS-59	Apsley Station Forecourt & Cycle Provision	Enlarge pedestrian footway in front of station ticket hall, double the number of cycle stands (currently 12), removal of some parking spaces to provide space for enlarged footway and additional cycle stands, planting and landscaping.	Apsley Mills Retail Park; Shendish Manor and Fairfields	2031/32-2035/36	Dacorum Borough Council	£ 8,526.00	£ 2,131.50	£ 3,197.25	£ 1,385.48	£ 2,286.03	£ 17,526.26
LS-61	B487 Hemel Hempstead Road Gateway Corridor	Alterations to the B487 Hemel Hempstead Road between the existing settlement boundary and the M1 bridge, comprising: 1) speed limit changes 30mph along the frontage of the proposed East Hemel Hempstead development, with a buffer 40mph section at the eastern; 2) provision of new cycle and pedestrian route on at least one side of the road to link with existing footway provision west of Cherry Tree Lane; 3) at least 1 controlled pedestrian/cycle crossing (to connect sections of the East Hemel Hempstead development on either side; 4) alteration to the B487-Cherry Tree Lane-Holtsmere Lane junction in line with the Quietway treatments proposed to the two lanes (including signage and kerbed build outs to discourage through traffic); 5) upgraded bus stops. It is anticipated there will be one junction serving access to the proposed East Hemel Hempstead development on either side of the road.	East Hemel Hempstead	2031/32-2035/36	St Albans City and District Council	£ 723,007.25	£ 180,751.81	£ 271,127.72	£ 117,488.68	£ 193,856.32	£ 1,486,231.78
LS-62	St Albans-Hemel Hempstead Bus Connectivity	Review bus service connections between St Albans and Hemel Hempstead from the perspective of identifying opportunities for increasing service frequencies and/or reducing journey times e.g. introducing new services with limited stops or re-routeing services along the A414 to simulate what could eventually form the future HERT corridor. Existing services in the corridor include Bus Route 721.	All LP sites	2026/27-2030/31	Cross-boundary	-	-	-	-	-	Not costed

LS-63	Northern Hemel Hempstead-Watford Town Centre, Croxley and Rickmansworth Connectivity	Review bus service connections between North Hemel Hempstead, Watford, Croxley and Rickmansworth from the perspective of identifying opportunities for increasing service frequencies and/or reducing journey times e.g. introducing new services with limited stops or re-routeing services along the A41, A4251, Bedmond Road and/or the M1. Existing services in the corridor include Bus Routes 20 and 322.	All LP sites	2026/27-2030/31	Cross-boundary	-	-	-	-	-	Not costed
LS-64	B440 Leighton Buzzard Road Gateway Corridor (Piccotts End to Link Road/Galley Hill	Alterations to the B440 Leighton Buzzard Road in conjunction with the North Hemel Hempstead proposed development (which could potentially provide a vehicle access onto this road). Measures include reducing the current 50mph section to 40mph (matching the 40mph section to the north); reducing the current 60mph section leading out of Hemel Hempstead to 40mph; installing a signal-controlled Toucan crossing adjacent to Public Footpath 'Hemel Hempstead 013'); provision LTN standard cycle and footway (replacing the existing narrow footway) on the western side of the road (approx. 680m): provision of signal-controlled crossing on Galley Hill at southern end of corridor, east of the B440-A4147 roundabout.	North Hemel Hempstead	2031/32-2035/36	Dacorum Borough Council	£ 516,800.00	£ 129,200.00	£ 193,800.00	£ 83,980.00	£ 138,567.00	£ 1,062,347.00
LS-65	Luton-Hemel Hempstead Bus Connectivity	Review bus and coach service connections between Luton and Hemel Hempstead from the perspective of identifying opportunities for increasing service frequencies and/or reducing journey times e.g. introducing new services with limited stops or re-routeing services to improve connectivity. Existing services between the two towns are Bus Routes 46 and 721.	All LP sites	2026/27-2030/31	Cross-boundary	-	-	-	-	-	Not costed
LS-66	Revision to Parking Standard Zones - expanding the scope for car-free new developments	Revision to Parking Standard Zones as currently specified in the Parking Standards Supplementary Planning Document (2020) - expansion of Zone 1 including merging with Zone 2 to the east of the town centre and into Two Waters/Apsley, area east of the A414. Increase the scope for car-free developments across a wider proportion of the more accessible, better connected parts of the town.	All LP sites	2026/27-2030/31	Dacorum Borough Council	-	-	-	-	-	Not costed
LS-67	Increased parking enforcement	Increase in parking enforcement by Civil Enforcement Officers, including specifically additional officer patrols for on-street parking.	All LP sites	2026/27-2030/31	Dacorum Borough Council	-	-	-	-	-	Not costed
LS-68	Marlowes - West Herts College Local Mobility Hub	Local Mobility Hub outside the college, and served by Bus Routes 2, 4 and 46.	Civic Zone, Marlowes	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-69	West of Hemel Local Mobility Hub	Local Mobility Hub within the proposed development or on the adjacent Long Chaulden, currently served by Bus Routes 3, 4 and ML1	West Hemel Hempstead	2031/32-2035/36	Dacorum Borough Council	£ 180,300.00	£ 45,075.00	£ 67,612.50	£ 29,298.75	£ 48,342.94	£ 370,629.19
LS-70	A414 Maylands Avenue - Green Lane bus priority lanes	Maylands Avenue to Green Lane - eastbound and westbound bus lanes (approx.335m in length) with signal-controlled bus gate at the terminating end. Would necessitate removal of a general traffic lane in at least one direction as there is insufficient space for bus lanes within the verge area on both sides of the road.	East Hemel Hempstead	Post 2041	Dacorum Borough Council	£ 601,261.00	£ 150,315.25	£ 225,472.88	£ 97,704.91	£ 161,213.11	£ 1,235,967.14

LS-71	A414 Maylands Avenue Roundabout Signalisation	Partial signalisation of Maylands Avenue roundabout - northern and eastern arms and opposing circulatories. Removal of left-turn bypass lane from north to east. Provide two lane exit onto A414 eastbound with widened central reserve to create more stacking space on southbound circulatory. Introduce a new at-grade crossing facility to the east of the roundabout, to replace or complement the existing footbridge.	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 396,000.00	£ 99,000.00	£ 148,500.00	£ 64,350.00	£ 106,177.50	£ 814,027.50
LS-72	A414 Rant Meadow to Bennetts End Road bus priority lane	Westbound only bus lane between Rant Meadow and Bennetts End Road roundabout with signal-controlled bus gate. May require some reallocation of road space.	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 506,825.00	£ 126,706.25	£ 190,059.38	£ 82,359.06	£ 135,892.45	£ 1,041,842.14
LS-73	Upgraded Town Centre Riverside Bus Interchange	Upgrade to the Riverside Bus Interchange to align with Metro Mobility Hub standards including better facilities for waiting passengers. Assume the overall capacity of the interchange will not be influenced by the adjacent Riverside development	All LP sites	2036/37-2040/41	Dacorum Borough Council	£ 427,000.00	£ 106,750.00	£ 160,125.00	£ 69,387.50	£ 114,489.38	£ 877,751.88
LS-74	Western Access Plaza to Apsley Station	A new plaza and western access to Apsley Station. Assumed to comprise a small ticket office at ground level, cycle parking facilities, vehicle drop-off however no car parking will be provided. Alongside this, provision should be made for additional accessibility features including step-free access to all platforms which would necessitate a new footbridge and three lifts.	All LP sites	2036/37-2040/41	Dacorum Borough Council	£ 5,015,000.00	£ 1,253,750.00	£ 1,880,625.00	£ 814,937.50	£ 1,344,646.88	£ 10,308,959.38
LS-75	Footbridge overhaul or additional/replacement bridge near Apsley Marina	(LS-75) Overhaul of the existing, modern footbridge to reduce maintenance or provision of a replacement or additional bridge over the canal which can also accommodate cyclists.	All LP sites	2036/37-2040/41	Dacorum Borough Council	£ 2,600,000.00	£ 650,000.00	£ 975,000.00	£ 422,500.00	£ 697,125.00	£ 5,344,625.00
LS-76	A4147 Hemel Hempstead-St Albans cycle route	An off-road shared use footway and cycleway between Appspond Lane/Beechtree Lane and King Harry Lane, expected to run along the northern side of the road.	All LP sites	2036/37-2040/41	St Albans City and District Council	£ 1,265,000.00	£ 316,250.00	£ 474,375.00	£ 205,562.50	£ 339,178.13	£ 2,600,365.63
SG2-1	Kingsland Road-Horsecroft Road crossing	(SG2-1) Add uncontrolled or marked priority cycling and pedestrian crossing where the PRoW crosses Kingsland Road and Horsecroft Road. Likely to require reduction in marked parking bays. Consider kerbed build out with dropped kerb and tactile paving.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 22,000.00	£ 5,500.00	£ 8,250.00	£ 3,575.00	£ 5,898.75	£ 45,223.75
SG2-2	20mph speed limit zone including Fishery Road	(SG2-2) Investigate the introduction of a 20mph speed limit zone in this area, including Fishery Road, Kingsland Road and Horsecroft Road. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	West Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 18,000.00	£ 4,500.00	£ 6,750.00	£ 2,925.00	£ 4,826.25	£ 37,001.25
SG2-3	Traffic calming on Kingsland Road and Horsecroft Road	(SG2-3) Provide traffic calming features near crossings e.g. Add speed cushions on approaches to both crossings (these may be required as part of a 20mph speed limit zone). *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 63,000.00	£ 15,750.00	£ 23,625.00	£ 10,237.50	£ 16,891.88	£ 129,504.38

SG2-4	Pedestrian route enhancements on Fishery Passage	(SG2-4) Increase pedestrian capacity (widen footways and/or reallocate carriageway) on Fishery Passage close to the junction with Horsecroft Road. Consider parking control measures to prevent parking on pavement including bollards if not an obstruction to pedestrians. Add tactile paving at northern end of short footway running into Fishery Passage	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 8,233.30	£ 2,058.32	£ 3,087.49	£ 1,337.91	£ 2,207.55	£ 16,924.57
SG2-5	Wayfinding signage on Horsecroft Road and Kingsland Road	(SG2-5) Introduce wayfinding signs at key junction points (Horsecroft Road, Kingsland Road, River Park) indicating distance and travel time on foot to the station.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 5,500.00	£ 1,375.00	£ 2,062.50	£ 893.75	£ 1,474.69	£ 11,305.94
SG2-6	Cycle parking stands at bus stop on Fishery Road	(SG2-6) Add cycle parking stands adjacent to bus stop on Fishery Road (southbound)	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 189.00	£ 47.25	£ 70.88	£ 30.71	£ 50.68	£ 388.51
SG3-1	Crossing improvements around Cowper Road	(SG3-1) Add tactile paving and dropped kerbs at Cowper Road/St John's Road, Crouchfield, Grosvenor Terrace, The Poplars, Cowper Road/Gravel Hill Terrace	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 2,785.73	£ 696.43	£ 1,044.65	£ 452.68	£ 746.92	£ 5,726.41
SG3-2	Crossing improvements around along Gravel Hill Terrace	(SG3-2) Tighten kerb radii at junction of Gravel Hill Terrace and Woodland Close. Introduce informal crossings with dropped kerbs with tactile paving at Woodland Close and Cardy Road junctions onto Gravel Hill Terrace	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 5,233.73	£ 1,308.43	£ 1,962.65	£ 850.48	£ 1,403.29	£ 10,758.58
SG3-3	20mph speed limit including on Cowper Road	(SG3-3) Investigate introducing 20mph limits/zones covering Cowper Road. Retained intervention but added the following note: *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 12,000.00	£ 3,000.00	£ 4,500.00	£ 1,950.00	£ 3,217.50	£ 24,667.50
SG3-4	Marked parking bays on Cowper Road	(SG3-4) Reduce the occurrence of pavement parking where feasible, such as introduction of marked parking bays on one side of the road	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 50,000.00	£ 12,500.00	£ 18,750.00	£ 8,125.00	£ 13,406.25	£ 102,781.25
SG3-5	Cycle hanger storage on Cowper Road	(SG3-5) Provide cycle storage facility - hanger (x2) for residents on Cowper Rd. To be located within the highway, removing some car parking space.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 10,530.00	£ 2,632.50	£ 3,948.75	£ 1,711.13	£ 2,823.36	£ 21,645.73
SG4-1	Junction crossing improvements on Cowper Road	(SG4-1) Add tactile paving; add dropped kerbs; improve signage and wayfinding	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 816.86	£ 204.22	£ 306.32	£ 132.74	£ 219.02	£ 1,679.17
SG4-2	Beechfield Road-Cornfields alleyway crossing	(SG4-2) Add new uncontrolled cycling and pedestrian crossing at Beechfield Road and alleyway through to The Cornfields	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 10,823.00	£ 2,705.75	£ 4,058.63	£ 1,758.74	£ 2,901.92	£ 22,248.03
SG4-3	Junction crossing improvements on Crouchfield	(SG4-3) Tighten kerb radii and reduce crossing widths at the junctions of Crouchfield/Beechfield Road, and Crouchfield/Nestlecroft. Also introduce raised speed table uncontrolled pedestrian crossings at each junction.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 51,233.73	£ 12,808.43	£ 19,212.65	£ 8,325.48	£ 13,737.04	£ 105,317.33
SG4-4	Footway widening approaching The Cornfields	(SG4-4) Widen the footway on the approach to The Cornfields (eastern side). Introduce a need handrail around the edge. Introduce dropped kerbs and tactile paving on either side of the road (avoiding manhole covers)	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 9,416.86	£ 2,354.22	£ 3,531.32	£ 1,530.24	£ 2,524.90	£ 19,357.54
SG4-5	Footpath width vegetation cut-back	(SG4-5) Manage vegetation along footpaths to maximise width and increase visibility	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 1,816.80	£ 454.20	£ 681.30	£ 295.23	£ 487.13	£ 3,734.66
SG4-6	Pedestrian route street lighting enhancements	(SG4-6) Investigate introducing additional street lighting along pedestrian routes	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 1,170.84	£ 292.71	£ 439.07	£ 190.26	£ 313.93	£ 2,406.81
SG4-7	Glenview Gardens cycle hanger storage	(SG4-7) Add cycle storage facilities for residents along Glenview Gardens	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 5,265.00	£ 1,316.25	£ 1,974.38	£ 855.56	£ 1,411.68	£ 10,822.87

SG5-1	A4251 London Road cycle route	(SG5-1) New on-road advisory cycle lanes (both directions) between the A4146 and A414 junctions where there is sufficient carriageway width. Provision of a section of off-road route at the eastern end (northern side of the road) on the approach to the A4251-A414 signalised junction.	Hemel Hempstead Station Gateway; National Grid and 339-353 London Road; Symbio Site, Whiteleaf Road	2026/27-2030/31	Dacorum Borough Council	£ 16,720.00	£ 4,180.00	£ 6,270.00	£ 2,717.00	£ 4,483.05	£ 34,370.05
SG5-2	A4251 London Road footway widths	(SG5-2) Increase pedestrian footway width by cutting back encroaching vegetation and improving maintenance of footway including renewed surfacing	Hemel Hempstead Station Gateway; National Grid and 339-353 London Road; Symbio Site, Whiteleaf Road	2026/27-2030/31	Dacorum Borough Council	£ 360,000.00	£ 90,000.00	£ 135,000.00	£ 58,500.00	£ 96,525.00	£ 740,025.00
SG5-3	A4251 London Road Speed VMS	(SG5-3) Add VMS speed feedback sign	Hemel Hempstead Station Gateway; National Grid and 339-353 London Road; Symbio Site, Whiteleaf Road	2026/27-2030/31	Dacorum Borough Council	£ 12,000.00	£ 3,000.00	£ 4,500.00	£ 1,950.00	£ 3,217.50	£ 24,667.50
SG5-4	A4251 London Road-A4146 Station Road Junction Reconfiguration including provision for cyclists and buses	(SG5-4) Major junction improvement - convert to signa-controlled crossroads with cycle priority at A4251/A4146 including advance stop lines or bicycle boxes. Include hurry call detection for buses travelling between London Road (west) and Station Road.	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 240,000.00	£ 60,000.00	£ 90,000.00	£ 39,000.00	£ 64,350.00	£ 493,350.00
SG6-1	Two Waters Road-London Road pedestrian-cycle link	(SG6-1) Widen Public footpath cutting the corner of Two Waters Road and London Road to accommodate cyclists and pedestrians (leading to the proposed Mobility Hub at the southern end). At the northern end, provide kerbed build-out with dropped kerbs to designate end of the cycle path and advise cyclists to join the carriageway). Removing of c.2-3 car lengths of kerbside parking.	National Grid and 339-353 London Road; Symbio Site, Whiteleaf Road; Apsley Mills Retail Park	2026/27-2030/31	Dacorum Borough Council	£ 12,483.43	£ 3,120.86	£ 4,681.29	£ 2,028.56	£ 3,347.12	£ 25,661.25
SG6-2	Two Waters Road-London Road junction improvement	(SG6-2) Tighten kerb radii/ reduce crossing width at Two Waters Road junction and introduce a speed table at or close to mouth of the junction.	National Grid and 339-353 London Road; Symbio Site, Whiteleaf Road; Apsley Mills Retail Park	2026/27-2030/31	Dacorum Borough Council	£ 28,400.00	£ 7,100.00	£ 10,650.00	£ 4,615.00	£ 7,614.75	£ 58,379.75
SG6-3	Durrants Hill Road-London Road junction improvement	(SG6-3) Tighten kerb radii/ reduce crossing width at Durrants Hill Rd and introduce a speed table at or close to mouth of the junction.	National Grid and 339-353 London Road; Symbio Site, Whiteleaf Road; Apsley Mills Retail Park	2026/27-2030/31	Dacorum Borough Council	£ 27,200.00	£ 6,800.00	£ 10,200.00	£ 4,420.00	£ 7,293.00	£ 55,913.00
SG6-4	Kents Avenue-London Road junction improvement	(SG6-4) Tighten kerb radii/ reduce crossing width at Kents Avenue junction and introduce a speed table at or close to mouth of the junction.	National Grid and 339-353 London Road; Symbio Site, Whiteleaf Road; Apsley Mills Retail Park	2026/27-2030/31	Dacorum Borough Council	£ 27,200.00	£ 6,800.00	£ 10,200.00	£ 4,420.00	£ 7,293.00	£ 55,913.00
SG6-5	Retail Park access pedestrian crossing improvement	(SG6-5) Add marked pedestrian crossing at the retail park access roundabout arm leading to Sainsbury's	National Grid and 339-353 London Road; Symbio Site, Whiteleaf Road; Apsley Mills Retail Park	2026/27-2030/31	Dacorum Borough Council	£ 52,000.00	£ 13,000.00	£ 19,500.00	£ 8,450.00	£ 13,942.50	£ 106,892.50
SG6-6	20mph speed limit on London Road	(SG6-6) Investigate introducing 20mph speed limit between Featherbed Lane and Weymouth Street. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	National Grid and 339-353 London Road; Symbio Site, Whiteleaf Road; Apsley Mills Retail Park	2026/27-2030/31	Dacorum Borough Council	£ 12,000.00	£ 3,000.00	£ 4,500.00	£ 1,950.00	£ 3,217.50	£ 24,667.50

SG7-2	London Road Dootlittle Meadows crossings and compact roundabout treatment	(SG7-2) Add new cycling crossing and improve pedestrian crossing facilities at A4251/Doolittle Meadows roundabout (create a compact roundabout by reducing the kerb radii on the approaches (mark as single lane)	Apsley Mills Retail Park	2031/32-2035/36	Dacorum Borough Council	£ 205,800.00	£ 51,450.00	£ 77,175.00	£ 33,442.50	£ 55,180.13	£ 423,047.63
SG7-3	London Road access to Apsley Station controlled pedestrian crossing	(SG7-3) Introduce signal-controlled crossing at the location of the existing uncontrolled crossing with refuge island close to the station access road. Removal of central hatched area, increase width of footway on the southern end between the crossing and station access (approx. 20m). Crossing on bus-compliant raised speed table. Removal of c.4 c4-6 car lengths of kerbside parking bays)	Apsley Mills Retail Park	2031/32-2035/36	Dacorum Borough Council	£ 144,447.00	£ 36,111.75	£ 54,167.63	£ 23,472.64	£ 38,729.85	£ 296,928.86
SG7-4	London Road access to Doolittle Meadows controlled pedestrian crossing	(SG7-4) Introduce signal-controlled crossing at the location of the existing uncontrolled crossing west of the A4251/Doolittle Meadows Roundabout, on bus-compliant raised speed table	Apsley Mills Retail Park	2031/32-2035/36	Dacorum Borough Council	£ 175,000.00	£ 43,750.00	£ 65,625.00	£ 28,437.50	£ 46,921.88	£ 359,734.38
SG7-5	Traffic calming approach Doolittle Meadows	(SG7-5) Add speed cushions on the approaches to A4251/Doolittle Meadows roundabout	Apsley Mills Retail Park	2031/32-2035/36	Dacorum Borough Council	£ 23,000.00	£ 5,750.00	£ 8,625.00	£ 3,737.50	£ 6,166.88	£ 47,279.38
SG7-6	London Road Apsley pedestrian capacity enhancement	(SG7-6) Increase pedestrian capacity (Widen footways and/or reallocate carriageway space)	Apsley Mills Retail Park	2031/32-2035/36	Dacorum Borough Council	£ 480,000.00	£ 120,000.00	£ 180,000.00	£ 78,000.00	£ 128,700.00	£ 986,700.00
SG7-7	London Road Apsley Wayfinding signage	(SG7-7) Introduce way-finding signage indicating pedestrian routes between London Road and canal	Apsley Mills Retail Park	2031/32-2035/36	Dacorum Borough Council	£ 6,600.00	£ 1,650.00	£ 2,475.00	£ 1,072.50	£ 1,769.63	£ 13,567.13
SG8-1	Great Elms Road side arm crossing improvements	(SG8-1) Add tactile paving; add dropped kerbs; improve signage and wayfinding at junctions between Great Elms Road with (a) Belswains Lane, (b) Ash Grove, (c) Oakdene Road.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 12,986.59	£ 3,246.65	£ 4,869.97	£ 2,110.32	£ 3,482.03	£ 26,695.56
SG8-2	Great Elms Road to Mulready Walk controlled crossing	(SG8-2) Provide signal-controlled pedestrian crossing facility on Belswains Lane between Great Elms Rd and Mulready Walk. Consider kerb-build out on northern side, removing narrow central hatched area within carriageway	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 120,720.00	£ 30,180.00	£ 45,270.00	£ 19,617.00	£ 32,368.05	£ 248,155.05
SG8-3	Great Elms Road side arm crossing and kerb radii treatments	(SG8-3) Tighten kerb radii and reduce crossing widths junctions between Great Elms Rd and (a) Kings Ave, (b) Oak St, (c) Barnfield, (d) Sanders Rd, (e) Deansway, (f) Horselers, (g) Candlefield Rd. Introduce tactile paving and provide contrasting surface treatment to denote crossings.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 34,518.05	£ 8,629.51	£ 12,944.27	£ 5,609.18	£ 9,255.15	£ 70,956.16
SG8-4	Great Elms Road & Candlefield Road traffic calming	(SG8-4) Provide traffic calming features along Great Elms Rd and Candlefield Rd - speed cushions	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 23,000.00	£ 5,750.00	£ 8,625.00	£ 3,737.50	£ 6,166.88	£ 47,279.38
SG8-5	Great Elms Road pavement parking prevention	(SG8-5) Introduce bollards to discourage or prevent pavement parking	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 800.00	£ 200.00	£ 300.00	£ 130.00	£ 214.50	£ 1,644.50
SG8-6	Great Elms Road - Coronation Fields crossing	(SG8-6) Introduce un-controlled crossing with tactile paving on raised speed table adjacent to Coronation Fields, linking the footpaths leading away from Great Elms Road on either side	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 55,384.00	£ 13,846.00	£ 20,769.00	£ 8,999.90	£ 14,849.84	£ 113,848.74
SG8-7	Great Elms Road and Candlefield Road Cycle Hangers	(SG8-7) Add cycle hanger storage facilities (x3) for residents	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 15,795.00	£ 3,948.75	£ 5,923.13	£ 2,566.69	£ 4,235.03	£ 32,468.60
SG9-1	Peascroft Road cycle route and side-arm junction copenhagen crossings	(SG9-1) New off-carriageway shared footway cycleway between Bennetts End Road and existing cycle route which links Northend and Malmes Court, incorporating Copenhagen Crossings (3x) on Kiln Ground, St Michaels Avenue and Kilncroft	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 435,000.00	£ 108,750.00	£ 163,125.00	£ 70,687.50	£ 116,634.38	£ 894,196.88

SG9-2	Peascroft Road-Bennetts End Road Junction cycle crossing improvements	(SG9-2) Improve cycling crossing facilities using road markings at Bennetts End Rd/ Peascroft Rd mini-roundabout	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 41.75	£ 10.44	£ 15.66	£ 6.78	£ 11.19	£ 85.82
SG9-3	Peascroft Road mini roundabout traffic calming	(SG9-3) Provide speed cushions on two approaches to Bennetts End Rd/ Peascroft Rd mini-roundabout. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 23,000.00	£ 5,750.00	£ 8,625.00	£ 3,737.50	£ 6,166.88	£ 47,279.38
SG9-4	Peascroft Road area 20mph speed limit	(SG9-4) Investigate introducing 20mph limits/zones at Peascroft Rd (residential area with schools) and Malmes Croft. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 18,000.00	£ 4,500.00	£ 6,750.00	£ 2,925.00	£ 4,826.25	£ 37,001.25
SG9-5	Peascroft Road pavement parking restrictions	(SG9-5) Physical parking control measures such as bollards, double yellow lines to prevent cars parking on footway	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 2,400.00	£ 600.00	£ 900.00	£ 390.00	£ 643.50	£ 4,933.50
SG9-6	Peascroft Road/Northend cycle stands	(SG9-6) Add cycle stands (x4) along the route, opposite the green space near Kilncroft and Longfield	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 252.00	£ 63.00	£ 94.50	£ 40.95	£ 67.57	£ 518.02
SG9-7	Malmes Croft off-carriageway cycle route	(SG9-7) New off-carriageway shared footway cycleway at eastern end of Malmes Croft, between Windermere Close and Leverstock Green Way	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 36,000.00	£ 9,000.00	£ 13,500.00	£ 5,850.00	£ 9,652.50	£ 74,002.50
SG10-1	Leverstock Green Way Village Centre to A414 Cycle Route	(SG10-1) New off-carriageway shared use cycle and footway on the southern/western side of the road between Malmes Croft and A414 signal-controlled crossing (west of Maylands Avenue junction). Include reduced kerb radii at Green Dell Way to reduce crossing width with tactile paving and contrasting surface treatment to indicate uncontrolled crossing location. Also include short section south of Malmes Croft to the signal-controlled crossing and upgrade crossing to a Toucan crossing	East Hemel Hempstead; Plots 2/3 Kier Park, Maylands Avenue	2026/27-2030/31	Dacorum Borough Council	£ 302,384.00	£ 75,596.00	£ 113,394.00	£ 49,137.40	£ 81,076.71	£ 621,588.11
SG10-2	New controlled crossing between St Davids Close and Greenachres	(SG10-2) Provide a new controlled crossing between St Davids Close and Greenachres to serve access to the inbound bus stop from housing on the eastern side of road. In conjunction, widen footways on both sides of the road, either side of the crossing, and incorporate tactile paving and dropped kerbs and include short footway extension on southern side of St Davids Close arm	East Hemel Hempstead	2031/32-2035/36	Dacorum Borough Council	£ 57,784.00	£ 14,446.00	£ 21,669.00	£ 9,389.90	£ 15,493.34	£ 118,782.24
SG10-3	Leverstock Green Way side arm junction treatments	(SG10-3) Tighten kerb radii where feasible to reduce crossing width and install tactile paving with dropped kerbs at side arms with a) Curtis Road, b) Church Road, c) Pancake Lane and d) Bartel Close	East Hemel Hempstead	2031/32-2035/36	Dacorum Borough Council	£ 6,336.00	£ 1,584.00	£ 2,376.00	£ 1,029.60	£ 1,698.84	£ 13,024.44
SG10-4	Additional cycle parking at Leverstock Green Village Centre	(SG10-4) Add cycle parking (c. 6x cycle stands) adjacent to the controlled crossing outside the Leverstock Green Village Centre shopping parade	East Hemel Hempstead; Plots 2/3 Kier Park, Maylands Avenue; Site to the south of Green Lane	2026/27-2030/31	Dacorum Borough Council	£ 378.00	£ 94.50	£ 141.75	£ 61.43	£ 101.35	£ 777.03
SG11-1	Mickleford Road junction crossing improvements	(SH11-1) Add tactile paving at Micklefield Road (junctions with Green Lane and Poynders Hill)	East Hemel Hempstead; Site to the south of Green Lane	2026/27-2030/31	Dacorum Borough Council	£ 768.00	£ 192.00	£ 288.00	£ 124.80	£ 205.92	£ 1,578.72

SG11-2	A4147 Toucan Crossing and cycle link into Woolmer Drive	(SG11-2) Provide signal-controlled Toucan crossing on A4147, in addition to a shared use cycle and footway on the eastern side of the Toucan crossing, leading round into Woolmer Drive as far as the bus stop (c.70m) where provision should be made for cyclists to safely enter/exit the carriageway.	East Hemel Hempstead; Site to the south of Green Lane	2026/27-2030/31	Dacorum Borough Council	£ 165,467.00	£ 41,366.75	£ 62,050.13	£ 26,888.39	£ 44,365.84	£ 340,138.10
SG11-3	20mph zone covering roads including Woolmer Drive, Green Lane, Mickleford Road and Datchworth Turn	(SG11-3) 20mph zone covering all roads leading off the A4147 and as far south as Green Lane up to and including junction with Kingcup Avenue (3 external entry points). Assume provision of additional traffic calming features to help ensure compliance with speed limit, c. x20 pairs of speed cushions. *Note: this area falls within a wider area identified by HCC as being a potential 20mph zone, subject to further investigation.*	East Hemel Hempstead; Site to the south of Green Lane	2026/27-2030/31	Dacorum Borough Council	£ 493,000.00	£ 123,250.00	£ 184,875.00	£ 80,112.50	£ 132,185.63	£ 1,013,423.13
SG11-4	Cycle Hanger storage on Mickleford Road and Datchworth Turn	(SG11-4) Add cycle hanger storage facilities for residents, including on Datchworth Turn and Micklefield Road (x2 hangers)	East Hemel Hempstead; Site to the south of Green Lane	2026/27-2030/31	Dacorum Borough Council	£ 10,530.00	£ 2,632.50	£ 3,948.75	£ 1,711.13	£ 2,823.36	£ 21,645.73
SG14-1	Redbourn Road side junction crossing improvements	(SG14-1) Improve pedestrian crossing facilities at a) The Melings and b) Half Moon Meadow junctions with Redbourn Road, reducing the kerb radii on the eastern side of both junctions (removing the short slip road sections) adding tactile paving on both sides of Redbourn Rd aligned with current uncontrolled crossings.	East Hemel Hempstead; North Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 19,968.00	£ 4,992.00	£ 7,488.00	£ 3,244.80	£ 5,353.92	£ 41,046.72
SG14-2	Redbourn Road-Three Cherry Trees Junction Enhancement	(SG14-2) Redbourn Road-Three Cherry Trees Lane-Shelby Road Junction Enhancement - signalisation scheme incorporating controlled crossings for pedestrians on all sides	East Hemel Hempstead; North Hemel Hempstead	2031/32-2035/36	Dacorum Borough Council	£ 240,000.00	£ 60,000.00	£ 90,000.00	£ 39,000.00	£ 64,350.00	£ 493,350.00
SG15-1	Maylands Avenue Shared Use Cycle Corridor	(SG15-1) Provision of a high quality, off-road cycle route along the full length between the A414 Breakspear Way and A4147 Swallowdale Lane (eastern side of the road). Expected to comprise widening of the existing shared-use path to meet standards including replacing areas of grass verge and localised reduction in carriageway space (e.g. removal of additional lanes at some junctions (access to Aldi/Nuffield Health/McDonalds; junction with Wood Lane End). Assume cyclist priority on some side arms (Eaton Road; Maxted Road; x3 accesses to Hosking Court). Also provision of a Toucan crossing at location of existing uncontrolled crossing with refuge islands just north of the Travelodge vehicle access). Include upgrade to the existing shared use route between the A414 at-grade signal crossing to the proposed Toucan crossing on Maylands Avenue. Also provide additional signal-controlled crossing points on Maylands Avenue in the vicinity of Dixons Turn and Eaton Road	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 655,200.00	£ 163,800.00	£ 245,700.00	£ 106,470.00	£ 175,675.50	£ 1,346,845.50
SG15-2	Maylands Avenue Wayfinding Signage	(SG15-2) Additional wayfinding signage showing directions and distances to key destinations including mobility hubs	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 6,600.00	£ 1,650.00	£ 2,475.00	£ 1,072.50	£ 1,769.63	£ 13,567.13
SG16-1	Longlands side arm pedestrian crossing improvements	(SG16-1) Implement dropped kerbs and tactile paving at side-arm junctions with Ellen Close; Hobletts Road; Springfield Road; Little Road; and Ellingham Road	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 4,084.32	£ 1,021.08	£ 1,531.62	£ 663.70	£ 1,095.11	£ 8,395.83

SG16-2	Longlands Additional Zebra Crossings	(SG16-2) Two additional Zebra crossings on extended speed table, between Broadfield Road and Sawyer's Way, and between Vauxhall Road and Field Road (replacing existing uncontrolled crossing)	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 86,000.00	£ 21,500.00	£ 32,250.00	£ 13,975.00	£ 23,058.75	£ 176,783.75
SG16-3	Longlands Pavement Parking Prevention	(SG16-3) Physical measures e.g. bollards or landscaping features such as rain gardens, to prevent pavement parking on sections of footway along Longlands where it is not already permitted, especially in the vicinity of junctions (Broadfield Road, Sawyer's Way; The Queen's Square, Windmill Road and Vauxhall Road) and focus on sections adjacent to playing fields either side of The Adeyfield School	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 16,953.90	£ 4,238.48	£ 6,357.71	£ 2,755.01	£ 4,545.76	£ 34,850.86
SG16-4	Longlands Shared Use Cycle Path	(SG16-4) Create an off-road shared use path on the eastern side of the road, between The Queen's Square (including a 50m section on this side road to provide access to the Local Mobility Hub - separate proposal) and the A414 St Albans Road.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 361,000.00	£ 90,250.00	£ 135,375.00	£ 58,662.50	£ 96,793.13	£ 742,080.63
SG16-5	Continuous Pavement crossings at Fields Road and Vauxhall Road	(SG16-5) Install Cophenhagen crossings at the side arm junctions of Field Road, Vauxhall Road	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 110,000.00	£ 27,500.00	£ 41,250.00	£ 17,875.00	£ 29,493.75	£ 226,118.75
SG16-6	Longlands Wayfinding Signage	(SG16-6) Implement wayfinding at start/end of segment and close to The Queen's Square	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 5,500.00	£ 1,375.00	£ 2,062.50	£ 893.75	£ 1,474.69	£ 11,305.94
SG17-1	Great Road cycle route	(SG17-1) Provide an off-road shared use cycle path between the junction with Queensway and south of the junction with Hobletts Road.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 81,400.00	£ 20,350.00	£ 30,525.00	£ 13,227.50	£ 21,825.38	£ 167,327.88
SG17-2	Great Road additional zebra crossing	(SG17-2) Install a new Zebra crossing on extended raised speed table between Hobletts Road and Springfield Road	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 63,000.00	£ 15,750.00	£ 23,625.00	£ 10,237.50	£ 16,891.88	£ 129,504.38
SG17-3	Great Road traffic calming features	(SG17-3) Install traffic calming features at the northern end where the road is on a steep incline	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 101,000.00	£ 25,250.00	£ 37,875.00	£ 16,412.50	£ 27,080.63	£ 207,618.13
SG17-4	Great Road Wayfinding Signage	(SG17-4) Add wayfinding/ signage indicating direction and distance/time towards The Queens Square and Nickey Line	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 3,300.00	£ 825.00	£ 1,237.50	£ 536.25	£ 884.81	£ 6,783.56
SG18-1	Washington Avenue side-arm junction pedestrian crossing improvements	(SG18-1) Implement tactile paving on Washington Avenue at Dunlin Avenue; Ninian Road; Claymore; Argyll Road; Robin Hood Meadow; Turnpike Green; Stevenage Rise, St Agnells Lane; Craigavon Road; Basildon Square; Waveney.	North Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 4,224.00	£ 1,056.00	£ 1,584.00	£ 686.40	£ 1,132.56	£ 8,682.96
SG18-2	Washington Avenue/Aycliffe Road roundabout crossings	(SG18-2) Implement zebra crossings on Washington Ave/Aycliffe Dr roundabout arms. Place the entire junction on a raised speed table	North Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 184,000.00	£ 46,000.00	£ 69,000.00	£ 29,900.00	£ 49,335.00	£ 378,235.00
SG18-3	Aycliffe Drive zebra crossing	(SG18-3) Implement zebra crossing into/ out of Margaret Lloyd Playground (in location of existing splitter island)	North Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 52,216.86	£ 13,054.22	£ 19,581.32	£ 8,485.24	£ 14,000.65	£ 107,338.29
SG18-4	Washington Avenue four additional zebra crossings	(SG18-4) Install four zebra crossings on raised speed tables on Washington Avenue. Retain existing subway or consider fencing off.	North Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 295,000.00	£ 73,750.00	£ 110,625.00	£ 47,937.50	£ 79,096.88	£ 606,409.38
SG18-5	Aycliffe Drive cycle lane upgrade and splitter island removal	(SG18-5) Upgrade advisory cycle lane to segregated cycle lane to improve safety. Remove splitter island features along the current route and widen marked lanes where feasible.	North Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 16,771.60	£ 4,192.90	£ 6,289.35	£ 2,725.39	£ 4,496.89	£ 34,476.12

SG19-1	Cambrian Way cycle route	(SG19-1) Segregated cycle route or shared use path along Cambrian Way between Link Road and Malvern Way. Widen the footways leading up to the western side of the Link Road roundabout to facilitate shared use, and widen the uncontrolled crossing points across Link Road. Enlarge the size of the roundabout western arm splitter island by reducing the Link Road approach to a single lane (reducing crossing distance)	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 568,000.00	£ 142,000.00	£ 213,000.00	£ 92,300.00	£ 152,295.00	£ 1,167,595.00
SG19-2	Malvern Way residential cycle street (link to Nickey Line)	(SG19-2) Designate Malvern Way and southern section of Chilterns as a Residential Cycle Street with on-street advisory lanes	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 196,000.00	£ 49,000.00	£ 73,500.00	£ 31,850.00	£ 52,552.50	£ 402,902.50
SG19-3	Fletcher Way bridge and Nickey Line access	(SG19-3) Improved ramp access to Nickey Line at Fletcher Way - resurfacing and trim back vegetation. Widen the footway on the northern side of Fletcher Way (removing hatched area in the centre, to accommodate a widening footway/cycleway. Raise height of bridge parapet so that it is suitable for cyclists	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 12,189.76	£ 3,047.44	£ 4,571.16	£ 1,980.84	£ 3,268.38	£ 25,057.58
SG19-4	Cambrian Way to Nickey Line Wayfinding Signage	(SG19-4) Add wayfinding signage to guide cyclists and pedestrians between Cambrian Way and the Nickey Line	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 4,400.00	£ 1,100.00	£ 1,650.00	£ 715.00	£ 1,179.75	£ 9,044.75
SG20-1	Allandale-George Street-Figtree Hill side arm pedestrian crossing improvements	(SG20-1) Implement dropped kerbs and tactile paving along entire segment - Allandale junctions with Slippers Hill; Garland Close, George Street, St Mary's Road; Grover Close, Chapel Street, Honey Pot Close, Randalls Ride; Taverners. - George Street junctions with Heather Way and Figtree Hill. - Figtree junction with B487 Queensway	All LP Sites	2026/27-2030/31	Dacorum Borough Council	£ 7,729.75	£ 1,932.44	£ 2,898.65	£ 1,256.08	£ 2,072.54	£ 15,889.46
SG20-2	Allandale new uncontrolled crossing south of Smithfield	(SG20-2) Implement uncontrolled crossing with dropped kerbs and tactile paving approximately 20m south of the Allandale-Smithfield mini roundabout	All LP Sites	2026/27-2030/31	Dacorum Borough Council	£ 2,496.86	£ 624.22	£ 936.32	£ 405.74	£ 669.47	£ 5,132.62
SG20-3	Allandale localised footway widening	(SG20-3) Footway widening - removal of grass verge between St Mary's Road and George Street	All LP Sites	2026/27-2030/31	Dacorum Borough Council	£ 3,600.00	£ 900.00	£ 1,350.00	£ 585.00	£ 965.25	£ 7,400.25
SG20-4	Allandale bus stop upgrades	(SG20-4) Upgrade bus stops adjacent to George Street junction to incorporate raised Kassel kerbs	All LP Sites	2026/27-2030/31	Dacorum Borough Council	£ 1,784.70	£ 446.18	£ 669.26	£ 290.01	£ 478.52	£ 3,668.67
SG20-5	Allandale Traffic Calming	(SG20-5) Implement traffic calming (speed tables or cushions) on four sections of Allandale - a) between Smithfield and Taverners; b) between Taverners and Randalls Ride; c) between Chapel Close and Grover Close; and d) between Garland Close and Slippers Hill	All LP Sites	2026/27-2030/31	Dacorum Borough Council	£ 138,000.00	£ 34,500.00	£ 51,750.00	£ 22,425.00	£ 37,001.25	£ 283,676.25
SG20-6	Allandale Wayfinding Signage	(SG20-6) Improve wayfinding along segment	All LP Sites	2026/27-2030/31	Dacorum Borough Council	£ 6,600.00	£ 1,650.00	£ 2,475.00	£ 1,072.50	£ 1,769.63	£ 13,567.13
SG21-1	Queensway-Marlowes Roundabout speed reduction measures	(SG21-1) Reduce the kerb radii all approaches, notably on the Marlowes and Queensway approach arms to provide a single lane. This will increase deflection and reduce speeds through the junction. Provide give-way markings on the cycleway approach to increase the prominence of the cycleway approach	Civic Zone, Marlowes & Old Town	2026/27-2030/31	Dacorum Borough Council	£ 22,199.35	£ 5,549.84	£ 8,324.76	£ 3,607.39	£ 5,952.20	£ 45,633.54
SG22-1	Gadebridge Park cycle stands	(SG22-1) Implement cycle stands adjacent to the car park	All LP Sites	2026/27-2030/31	Dacorum Borough Council	£ 504.00	£ 126.00	£ 189.00	£ 81.90	£ 135.14	£ 1,036.04
SG23-1	Piccotts End Road uncontrolled crossing	(SG23-1) Provide an uncontrolled crossing at the northern end of the western footway, where it terminates (south of Gadebridge Lane)	North Hemel Hempstead; Marchmont Farm	2026/27-2030/31	Dacorum Borough Council	£ 20,816.86	£ 5,204.22	£ 7,806.32	£ 3,382.74	£ 5,581.52	£ 42,791.67

SG23-2	Piccotts End Road Gadebridge Park active mode access improvement	(SG23-2) Provide a kerbed build out adjacent to the gated entrance into Gadebridge Park (incorporating vehicle crossover for maintenance access).	North Hemel Hempstead; Marchmont Farm	2026/27-2030/31	Dacorum Borough Council	£ 900.00	£ 225.00	£ 337.50	£ 146.25	£ 241.31	£ 1,850.06
SG23-3	Piccotts End Road Wayfinding Signage	(SG23-3) Implement wayfinding signage at access to Gadebridge Park	North Hemel Hempstead; Marchmont Farm	2026/27-2030/31	Dacorum Borough Council	£ 1,100.00	£ 275.00	£ 412.50	£ 178.75	£ 294.94	£ 2,261.19
SG24-1	Piccotts End Road Traffic Calming	(SG24-1) Implement additional traffic calming features to manage risk of excessive speeds on the southern section. Two raised speed tables - a) approximately 30m north of the A4147 roundabout and b) 10m north of the Piccotts End Lane junction (also incorporating kerbed build out on eastern side to prevent kerbside parking on the northern side of the junction.	North Hemel Hempstead; Marchmont Farm	2026/27-2030/31	Dacorum Borough Council	£ 41,200.00	£ 10,300.00	£ 15,450.00	£ 6,695.00	£ 11,046.75	£ 84,691.75
SG25-1	Marlowes 20mph zone	(SG25-1) Consider 20mph on entire length of the segment	Civic Zone, Marlowes	2026/27-2030/31	Dacorum Borough Council	£ 42,000.00	£ 10,500.00	£ 15,750.00	£ 6,825.00	£ 11,261.25	£ 86,336.25
SG25-2	Hillfield Road-Marlowes junctions reconfiguration	(SG25-2) Convert King Harry Street-Hillfield Road junction to a conventional T-junction. Reduce the Hillfield Road approach to Marlowes to a single lane, widen the footway adjacent to the crossing.	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 29,725.20	£ 7,431.30	£ 11,146.95	£ 4,830.35	£ 7,970.07	£ 61,103.86
SG25-3	Marlows carriageway reconfiguration - Hillfield Road-Combe Street	(SG25-3) a) Remove the landscaped central reservation on Marlowes between Hillfield Road and Combe Street. b) Reduce the northbound carriageway to a single lane and widen the footway on western side. c) Install an additional controlled crossing adjacent to the Wetherspoon public house, on a raised speed table.	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 98,928.72	£ 24,732.18	£ 37,098.27	£ 16,075.92	£ 26,525.26	£ 203,360.35
SG25-4	Marlows carriageway reconfiguration - Combe Street-Midland Road	(SG25-4) a) Remove landscaped central reservation on Marlowes between Combe Street and Midland Road and widen the footway on eastern side. Reduce the southbound carriageway to a single lane. b) Install an additional controlled crossing adjacent to the library, on a raised speed table.	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 91,801.20	£ 22,950.30	£ 34,425.45	£ 14,917.70	£ 24,614.20	£ 188,708.84
SG25-5	Marlowes cycle stands	(SG25-5) Add cycle stands outside shopping parades (note - separate proposal for a Mobility Hub outside the college)	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 756.00	£ 189.00	£ 283.50	£ 122.85	£ 202.70	£ 1,554.05
SG25-6	Midland Road pedestrian crossing	(SG25-6) Install controlled zebra crossing on a raised speed table on Midlands Road on the eastern side of the Marlowes roundabout	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 63,384.00	£ 15,846.00	£ 23,769.00	£ 10,299.90	£ 16,994.84	£ 130,293.74
SG26-1	Two Waters Way Cycle Link	(SG26-1) Provide segregated cycle lane along Two Waters Way by removing hatching in the middle of road (removal of right turn filters, single lane in both direction). To be located on the western side between the Plough Roundabout and River Bulbourne and on the eastern side to London Road. The northern section, north of Corner Hall, would need to be provided as a shared use facility off-road as there is insufficient space within the carriageway. In the vicinity of the River Bulbourne provide a Toucan crossing. At the northern end, provide a widened bridge over the River Gade and shared use route across to Station Road.	Riverside; Symbio Site, Whiteleaf Road; Paradise; Hemel Hempstead Hospital	2026/27-2030/31	Dacorum Borough Council	£ 433,198.60	£ 108,299.65	£ 162,449.48	£ 70,394.77	£ 116,151.37	£ 890,493.87
SG26-2	A414 Hemel Gateway 30mph signage	(SG26-2) More prominent 30mph signage on the A414 approaching the signalised junction with London Road	Riverside; Symbio Site, Whiteleaf Road; Paradise; Hemel Hempstead Hospital	2026/27-2030/31	Dacorum Borough Council	£ 6,000.00	£ 1,500.00	£ 2,250.00	£ 975.00	£ 1,608.75	£ 12,333.75

SG26-3	Corner Hall cycle parking	(SG26-3) Add cycle parking stands on Corner Hall (west of the river)	Riverside; Symbio Site, Whiteleaf Road; Paradise; Hemel Hempstead Hospital	2026/27-2030/31	Dacorum Borough Council	£ 252.00	£ 63.00	£ 94.50	£ 40.95	£ 67.57	£ 518.02
SG26-4	Corner Hall pedestrian crossing improvements	(SG26-4) Add tactile paving at Corner Hall	Riverside; Symbio Site, Whiteleaf Road; Paradise; Hemel Hempstead Hospital	2026/27-2030/31	Dacorum Borough Council	£ 768.00	£ 192.00	£ 288.00	£ 124.80	£ 205.92	£ 1,578.72
SG26-5	Two Waters Way Wayfinding Signage	(SG26-5) Improve signage and wayfinding	Riverside; Symbio Site, Whiteleaf Road; Paradise; Hemel Hempstead Hospital	2026/27-2030/31	Dacorum Borough Council	£ 2,200.00	£ 550.00	£ 825.00	£ 357.50	£ 589.88	£ 4,522.38
SG27-1	Lawn Lane-Crabtree Lane pedestrian crossing improvement	(SG27-1) Junction between Lawn Lane and Crabtree Lane. Remove guardrail, increase refuge island width and reduce side arm approach to a single lane. Build out width of footway on southern side and incorporate dropped kerbs with tactile paving	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 10,449.38	£ 2,612.35	£ 3,918.52	£ 1,698.02	£ 2,801.74	£ 21,480.01
SG27-2	Lawn Lane new signalised crossing near Crabtree Lane	(SG27-2) Additional signal-controlled pedestrian crossing north of the junction with Crabtree Lane on a raised speed table	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 142,400.00	£ 35,600.00	£ 53,400.00	£ 23,140.00	£ 38,181.00	£ 292,721.00
SG27-3	Lawn Lane new signalised crossing near Corner Hall	(SG27-3) Additional signal-controlled pedestrian crossing north of junction with Corner Hall on a raised speed table	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 143,216.86	£ 35,804.22	£ 53,706.32	£ 23,272.74	£ 38,400.02	£ 294,400.17
SG27-4	Corner Hall Stopping Up and widened footway	(SG27-4) Closure of the Corner Hall one-way section at the junction with Lawn Lane - provision of a continuous footway. Remove hatching and right turn filter to accommodate widened footway on western side	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 37,600.00	£ 9,400.00	£ 14,100.00	£ 6,110.00	£ 10,081.50	£ 77,291.50
SG28-1	Durrants Hill Road-Ebberns Road pedestrian crossing improvements	(SG28-1) Improve pedestrian crossing facilities at the side arm junction with Ebberns Road including dropped kerbs and tactile paving	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 2,016.86	£ 504.22	£ 756.32	£ 327.74	£ 540.77	£ 4,145.92
SG28-2	Durrents Hill additional pedestrian crossing	(SG28-2) Provide an uncontrolled crossing adjacent to the entrance into the park, north of the junction with Ebberns Road. Provide localised widening of the footway on the eastern side of the road, removing space for kerb-side parking	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 21,656.86	£ 5,414.22	£ 8,121.32	£ 3,519.24	£ 5,806.75	£ 44,518.39
SG28-3	Durrants Hill Road Wayfinding Signage	(SG28-3) Provide wayfinding signage	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 3,300.00	£ 825.00	£ 1,237.50	£ 536.25	£ 884.81	£ 6,783.56
SG28-4	Durrants Hill Road cycle parking	(SG28-4) Install cycle parking adjacent to the public toilets	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 252.00	£ 63.00	£ 94.50	£ 40.95	£ 67.57	£ 518.02
SG29-1	A414 new crossing near to Wood Crescent/Wood Lane junctions	(SG29-1) New parallel signal-controlled pedestrian/cycle crossing near to the Wood Crescent and Wood Lane junctions on the A414	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 291,400.00	£ 72,850.00	£ 109,275.00	£ 47,352.50	£ 78,131.63	£ 599,009.13
SG29-2	Wood Crescent-Runham Road-Deaconsfield Road Wayfinding Signage	(SG29-2) Introduce wayfinding at key junction decision points	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 2,200.00	£ 550.00	£ 825.00	£ 357.50	£ 589.88	£ 4,522.38
SG30-1	Leys Road cycle route	(SG30-1) Introduce offroad shared use cycle and footway utilising existing wide footway on the western/northern side of the road between the junction with St Albans Hill and Bennetts Gate shopping parade. Removal of some grass verge to create sufficient width and use of bollards or markings to discourage pavement parking. Include Copenhagen crossings on Lime Walk, Long John, Howe Road and Kimps Way	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 626,861.90	£ 156,715.48	£ 235,073.21	£ 101,865.06	£ 168,077.35	£ 1,288,592.99
SG30-2	Leys Road-Peascroft junction reconfiguration and parallel crossing	(SG30-2) Provide a parallel pedestrian cycle zebra crossing on the Peascroft arm of the Leys Road mini roundabout. Convert Mini roundabout priority T-junction layout.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 74,000.00	£ 18,500.00	£ 27,750.00	£ 12,025.00	£ 19,841.25	£ 152,116.25

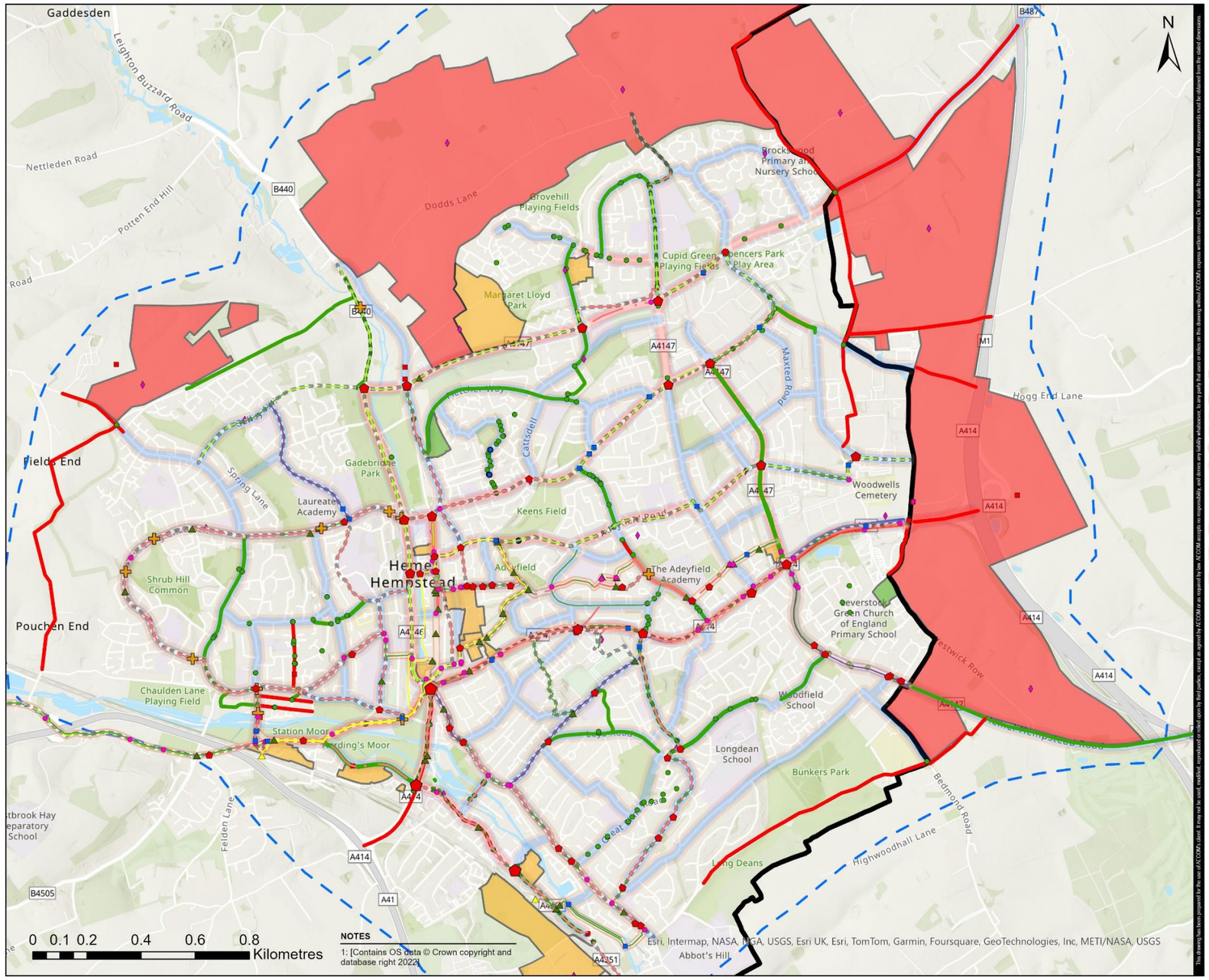
SG30-3	Lime Walk park desire line shared use path	(SG30-3) Formalise the desire lane path crossing Lime Walk park between Leys Road and St Albans Hill to provide a shared use path. Install widened uncontrolled crossing with tactile paving onto St Albans Hill. Provide steps, handrail and wheeling channel at the western end of the path leading down onto St Albans Hill, and signs indicating for cyclists to dismount on approach to the steps. Provide a short shared-use path linking St Albans Hill and Wheelers Road to link into the improved crossing	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 108,016.86	£ 27,004.22	£ 40,506.32	£ 17,552.74	£ 28,962.02	£ 222,042.17
SG30-4	Lime Walk park Wayfinding Signage	(SG30-4) Introduce Wayfinding signage at both ends of Lime Walk park path	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 2,200.00	£ 550.00	£ 825.00	£ 357.50	£ 589.88	£ 4,522.38
SG30-5	Lime Walk park cycle parking	(SG30-5) Introduce cycle parking at the south-eastern corner of Lime Walk park	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 189.00	£ 47.25	£ 70.88	£ 30.71	£ 50.68	£ 388.51
SG31-1	St Albans Hill Zebra Crossing by Dacorum Athletics Track	(SG31-1) New zebra crossing on St Albans Hill adjacent Dacorum Athletics Track. Placed on raised speed table leading to playground to follow the desire line.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 63,000.00	£ 15,750.00	£ 23,625.00	£ 10,237.50	£ 16,891.88	£ 129,504.38
SG31-2	St Albans Hill - Bennetts End Road pedestrian crossing improvement	(SG31-2) Tighten kerb radii/ reduce crossing width and improve pedestrian and cycling crossing with widened refuge islands	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 34,816.86	£ 8,704.22	£ 13,056.32	£ 5,657.74	£ 9,335.27	£ 71,570.42
SG31-3	Bennetts End Road cycle route	(SG31-3) New off-road shared use cycle and footway along the eastern side of Bennetts End Road between the A414 and Peascroft Road. Incorporating Copenhagen crossings on side arm junctions with Gammon Close, Belsize Road, Acorn Road, Rant Meadow and Goldcroft. Also convert the existing zebra crossing adjacent to the Bennetts Gate shopping parade to a parallel zebra crossing.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 203,261.80	£ 50,815.45	£ 76,223.18	£ 33,030.04	£ 54,499.57	£ 417,830.04
SG31-4	Bennetts End Road Wayfinding signage	(SG31-4) Introduce wayfinding and signage	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 1,100.00	£ 275.00	£ 412.50	£ 178.75	£ 294.94	£ 2,261.19
SG31-5	Cycle parking at Snow Centre	(SG31-5) Introduce cycle parking at the Snow Centre along St Albans Hill	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 252.00	£ 63.00	£ 94.50	£ 40.95	£ 67.57	£ 518.02
SG32-1	Pedestrian crossing improvements on side arms along White Hart Road and Windmill Road	(SG32-1) Tactile paving at side arm junctions - Eastwick Row, White Hart Drive, Windmill Road, Abel Close and Homefield Road	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 2,352.86	£ 588.22	£ 882.32	£ 382.34	£ 630.86	£ 4,836.61
SG32-2	White Hart Road signal-controlled crossing north of A414	(SG32-3) Signal controlled crossing on White Hart Road north of the A414 roundabout. Include localised widening of the footway on thr western side	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 122,400.00	£ 30,600.00	£ 45,900.00	£ 19,890.00	£ 32,818.50	£ 251,608.50
SG32-3	White Hart Road-Windmill Road Wayfinding signage	(SG32-3) Improve signage and wayfinding	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 3,300.00	£ 825.00	£ 1,237.50	£ 536.25	£ 884.81	£ 6,783.56
SG33-1	Redbourn Road-Swallowdale Lane Roundabout reconfiguration including improved crossings	(SG33-1) Reconfiguration of the Redbourn Road-Swallowdale Lane-High Street Green-Queensway roundabout - removing the left turn filters and building out the verges to reducing crossing distances. Installing Toucan crossings on the eastern and southern arms of the junction.	All LP sites	2031/32-2035/36	Dacorum Borough Council	£ 534,957.50	£ 133,739.38	£ 200,609.06	£ 86,930.59	£ 143,435.48	£ 1,099,672.01
SG33-2	Additional Wayfinding Signage on Redbourn Road	(SG33-2) Implement wayfinding at start/end of segment	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 2,200.00	£ 550.00	£ 825.00	£ 357.50	£ 589.88	£ 4,522.38
SG34-1	Toucan Crossings on Swallowdale Lane	(SG34-1) Install Toucan crossings on Swallowdale Road between a) Eastman Way and Maxted Road, and b) between Maxted Road and Three Cherry Trees Lane	East Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 280,000.00	£ 70,000.00	£ 105,000.00	£ 45,500.00	£ 75,075.00	£ 575,575.00

SG34-2	Signalised crossing on Three Cherry Trees Lane	(SG34-2) Install a pelican crossing on Three Cherry Trees Lane south of the Caravan Park entrance. Also provide localised widening to the footway along the eastern side of Three Cherry Trees Lane between the proposed crossing to just south of Admiral Avenue	East Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 141,600.00	£ 35,400.00	£ 53,100.00	£ 23,010.00	£ 37,966.50	£ 291,076.50
SG34-3	Shared use Cycleway on Swallowdale Lane	(SG34-3) Implement a shared use cycleway and footway on the northern side of Swallowdale Lane between Eastman Way and just west of Three Cherry Trees Lane.	East Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 95,400.00	£ 23,850.00	£ 35,775.00	£ 15,502.50	£ 25,579.13	£ 196,106.63
SG34-4	Cycleway on Three Cherry Trees Lane - Swallowdale Lane to Boundary Way	(SG34-4) Widen the existing footway on the southern side of Three Cherry Trees Lane to enable shared use between Boundary Way and Swallowdale Lane	East Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 34,800.00	£ 8,700.00	£ 13,050.00	£ 5,655.00	£ 9,330.75	£ 71,535.75
SG34-5	Maxted Road pedestrian crossing improvements	(SG35-5) Provide tactile paving at the junction with Maxted Road	East Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 384.00	£ 96.00	£ 144.00	£ 62.40	£ 102.96	£ 789.36
SG34-6	Swallowdale Lane and Three Cherry Trees Lane Wayfinding signage	(SG34-6) Install wayfinding at start and end of segment and at junction of Swallowdale Lane and Three Cherry Trees Lane.	East Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 3,300.00	£ 825.00	£ 1,237.50	£ 536.25	£ 884.81	£ 6,783.56
SG35-1	Cycleway along St Agnells Lane	(SG35-1) Implement a offroad shared use cycleway along the full length of St Agnells Lane, located on the western side from Washington Avenue and remaining on the same side of the road for the full length, terminating on the eastern side at the junction with Redbourn Road. Include 4x Copenhagen crossings at St Agnells Court, Cupid Green Lane, Essex Mead and Old Maple	North Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 966,751.90	£ 241,687.98	£ 362,531.96	£ 157,097.18	£ 259,210.35	£ 1,987,279.37
SG35-2	Zebra crossing adjacent to Cupid Green Lane junction	(SG35-2) Install zebra crossing on raised speed table adjacent to Cupid Green Lane	North Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 63,000.00	£ 15,750.00	£ 23,625.00	£ 10,237.50	£ 16,891.88	£ 129,504.38
SG35-3	Cupid Green Lane Quietway	(SG35-3) Convert Cupid Green Lane to a Quiteway to discourage through traffic. To provide an attractive route for walking and cycling from North Hemel Hempstead through Grovehill. Permit vehicle access to the allotments but closed to through traffic north of this point. Where Cupid Green Lane currently links onto Gaddesden Lane on the northern side of the proposed North Hemel Hempstead development, this should also be considered for Quietway treatment to discourage traffic rat-running through the development or conversely traffic routeing out of the development onto Gaddesden Lane.	North Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 380,000.00	£ 95,000.00	£ 142,500.00	£ 61,750.00	£ 101,887.50	£ 781,137.50
SG35-4	Grovehill Playing Fields - connection to North Hemel Hempstead development	Provision of a new shared footway and cyclepath link through Grovehill Playing Fields, linking into the existing path where it currently ends, and connecting into the planned North Hemel Hempstead development.	North Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 136,150.00	£ 34,037.50	£ 51,056.25	£ 22,124.38	£ 36,505.22	£ 279,873.34
SG35-5	Washington Avenue-North Hemel Hempstead footway/cycle link	A new link for pedestrians and cyclists, adjacent to the Education Support Centre on Washington Avenue, to connect into the proposed North Hemel Hempstead development.	North Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 38,505.00	£ 9,626.25	£ 14,439.38	£ 6,257.06	£ 10,324.15	£ 79,151.84
SG35-6	Woodhall Farm-North Hemel Hempstead footway/cycle link	A new route for pedestrians and cyclists to link Shenley Road between the Sainsbury's and Brockwood Primary School. Likely to use a section of existing footway adjacent to the supermarket car park at the western end, however reallocation of land from the school may be required at the eastern end.	North Hemel Hempstead	2026/27-2030/31	Dacorum Borough Council	£ 60,395.50	£ 15,098.88	£ 22,648.31	£ 9,814.27	£ 16,193.54	£ 124,150.50

SG36-1	Northridge Way-Cangels Close-Moorland Road Cycle Route	(SG36-1) Implement an offroad shared use cycleway along Northridge Way between the junctions with Warners End Road and Cangels Close. Implement on-street advisory route along Cangels Close and Moorland Road and a parallel zebra crossing just east of the Cangels Close junction.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 612,000.00	£ 153,000.00	£ 229,500.00	£ 99,450.00	£ 164,092.50	£ 1,258,042.50
SG36-2	Northridge Way-Jocketts Road crossing and cycle route	(SG36-2) Install new parallel zebra crossing on raised speed table on Northridge Way, north of the junction with Jocketts Road. Include an 80m section of shared use cycleway running on Jocketts Road between Northridge Way and Shrubhill Road with dropped kerbs at western end for cyclists to enter/exit the carriageway	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 74,016.43	£ 18,504.11	£ 27,756.16	£ 12,027.67	£ 19,845.66	£ 152,150.03
SG36-3	Northridge Way Wayfinding Signage	(SG36-3) Introduce wayfinding northern end of segment, Northridge Park and at junction of Jocketts Road.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 3,300.00	£ 825.00	£ 1,237.50	£ 536.25	£ 884.81	£ 6,783.56
SG36-4	Northridge Way Park cycle parking	(SG36-4) Introduce cycle parking at Northridge Park, close to play park and basketball court.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 252.00	£ 63.00	£ 94.50	£ 40.95	£ 67.57	£ 518.02
SG37-1	Green End Road crossing and traffic calming feature near St Rose's School	(SG37-1) Install new uncontrolled crossing on Green End Road by St Rose's Infant and Nursery School as part of a kerbed build out with single lane give way to oncoming traffic.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 3,456.86	£ 864.22	£ 1,296.32	£ 561.74	£ 926.87	£ 7,106.02
SG37-2	Zebra crossing on Ashtree Way	(SG37-2) Install new zebra crossing by Ashtree Way and Green End Road.	All LP sites	2026/27-2030/31	Dacorum Borough Council	£ 63,000.00	£ 15,750.00	£ 23,625.00	£ 10,237.50	£ 16,891.88	£ 129,504.38

Appendix D – Intervention Maps

All Proposed Interventions with Key and Local Network (including interventions identified in the Dacorum LCWIP)



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LEGEND

- Dacorum District Boundary
- HGC Programme Area

Key Network and Local Network
- Key Network
- Local Network

Hemel Hempstead Development Sites (July 2024 Strategy)
- Small (<100 dwellings)
- Medium (101 - 500 dwellings)
- Large (>500 dwellings)

Further details on interventions are contained in other maps

Interventions
- Active Travel
- Bus/Coach/MRT
- Highways
- Multi-Modal
- Rail
- Active Travel
- Bus/Coach/MRT
- Highways
- Large Junction Improvements
- Medium Junction Improvements
- Minor Junction Improvements
- New_Improved Pedestrian and Cycle Crossing
- New_Improved Pedestrian Crossing
- Public Realm Improvements
- Traffic Management Measures
- Alternative
- Footpath Improvements
- Segregated Cycle Way
- Priority Cycling Routes for Audit
- Priority Walking Routes for Audit

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ISSUE PURPOSE
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PROJECT NUMBER
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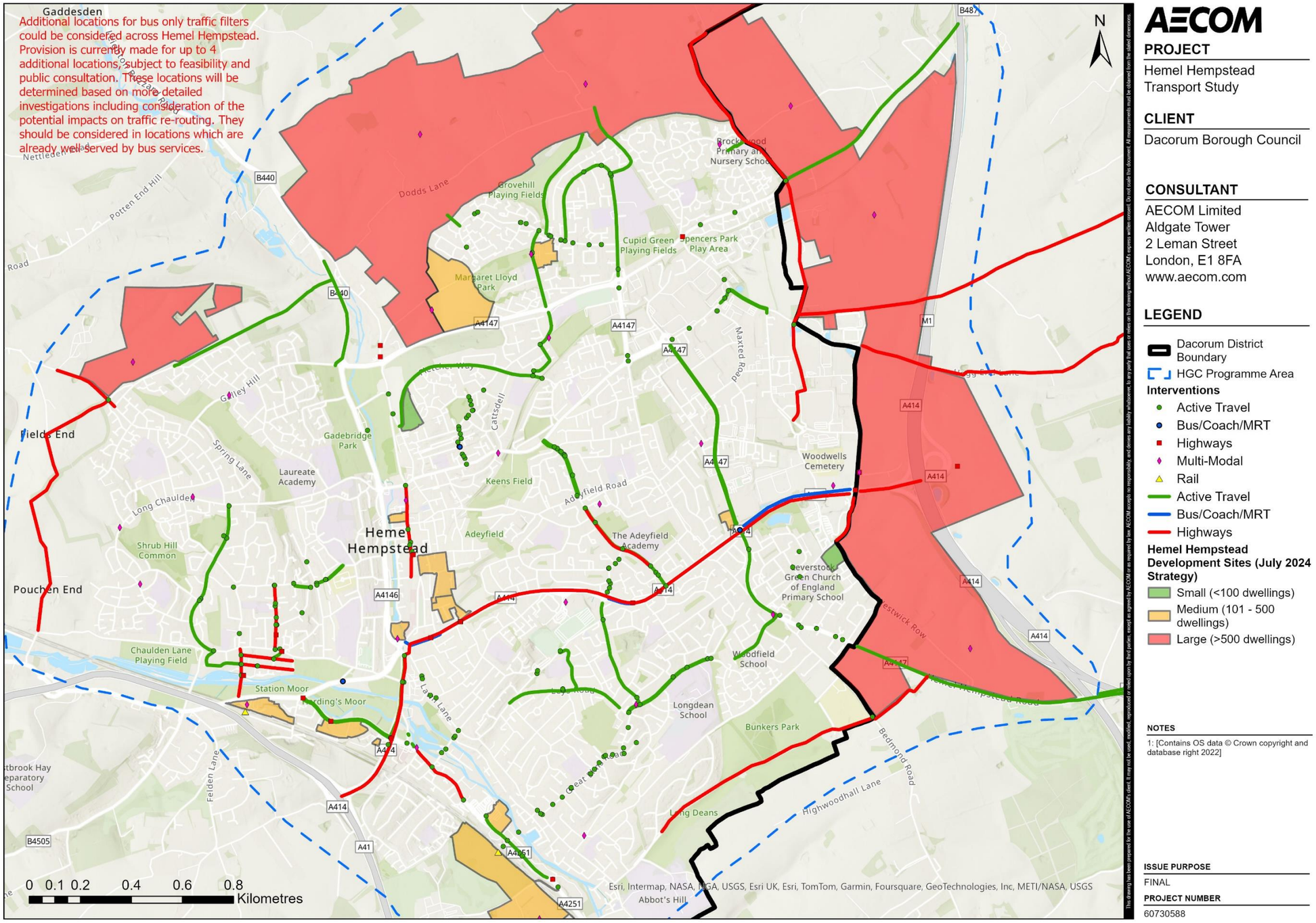
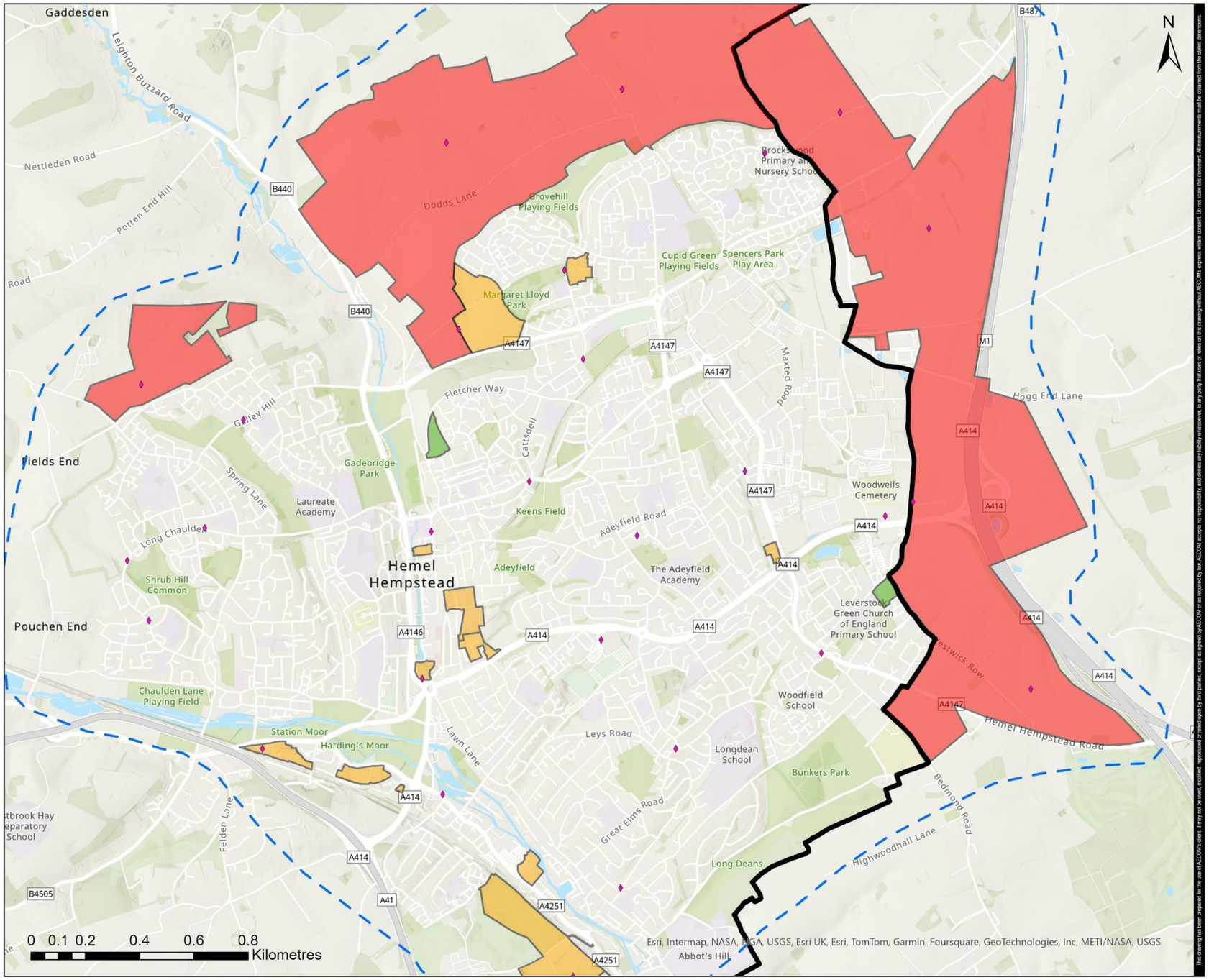
All proposed interventions (not including interventions identified in the Dacorum LCWIP)



Multi Modal interventions



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LEGEND
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Interventions
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- Bus/Coach/MRT
- Highways
- Multi-Modal
- Rail

Hemel Hempstead Development Sites (July 2024 Strategy)
- Small (<100 dwellings)
- Medium (101 - 500 dwellings)
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ISSUE PURPOSE
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PROJECT NUMBER
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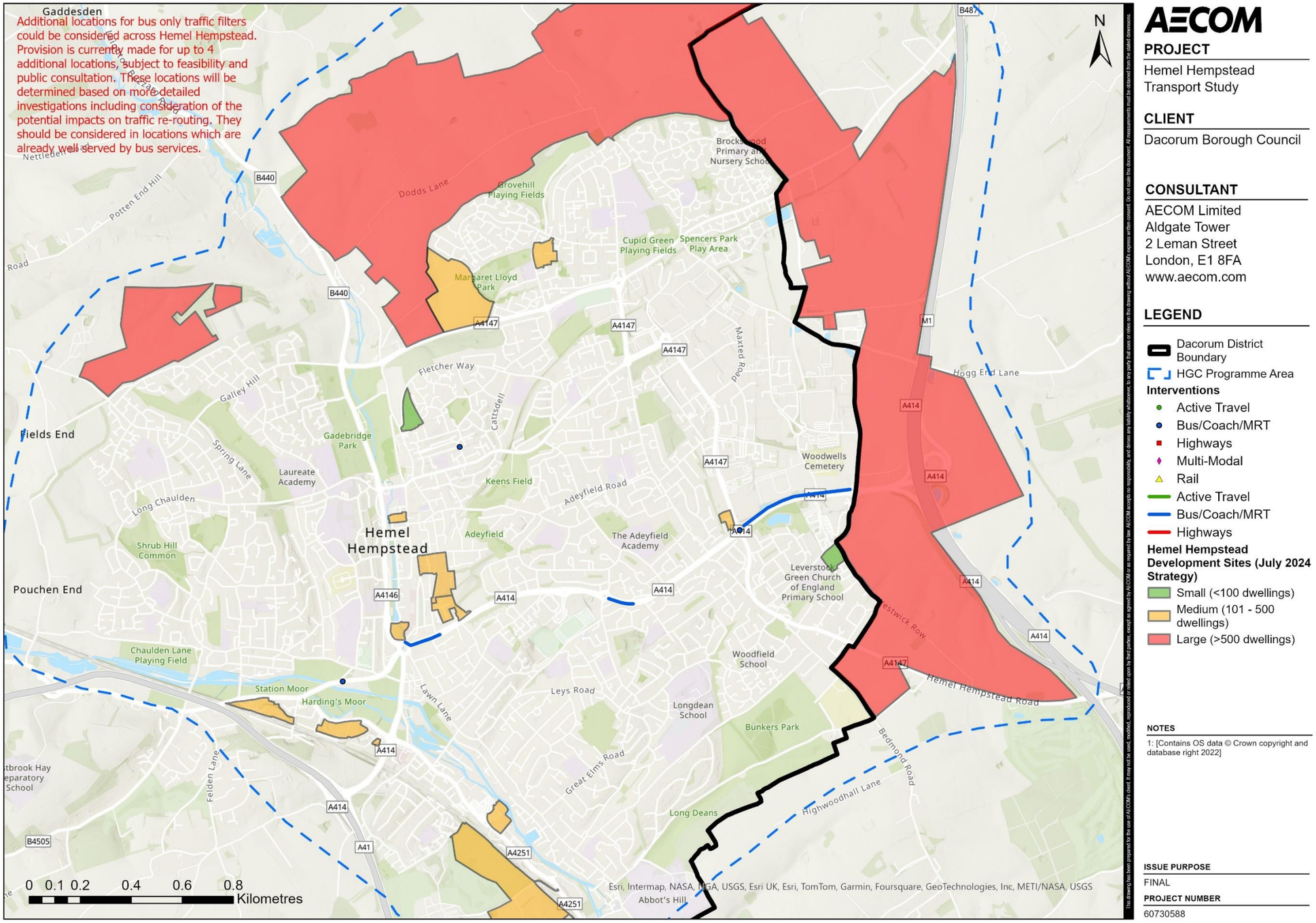
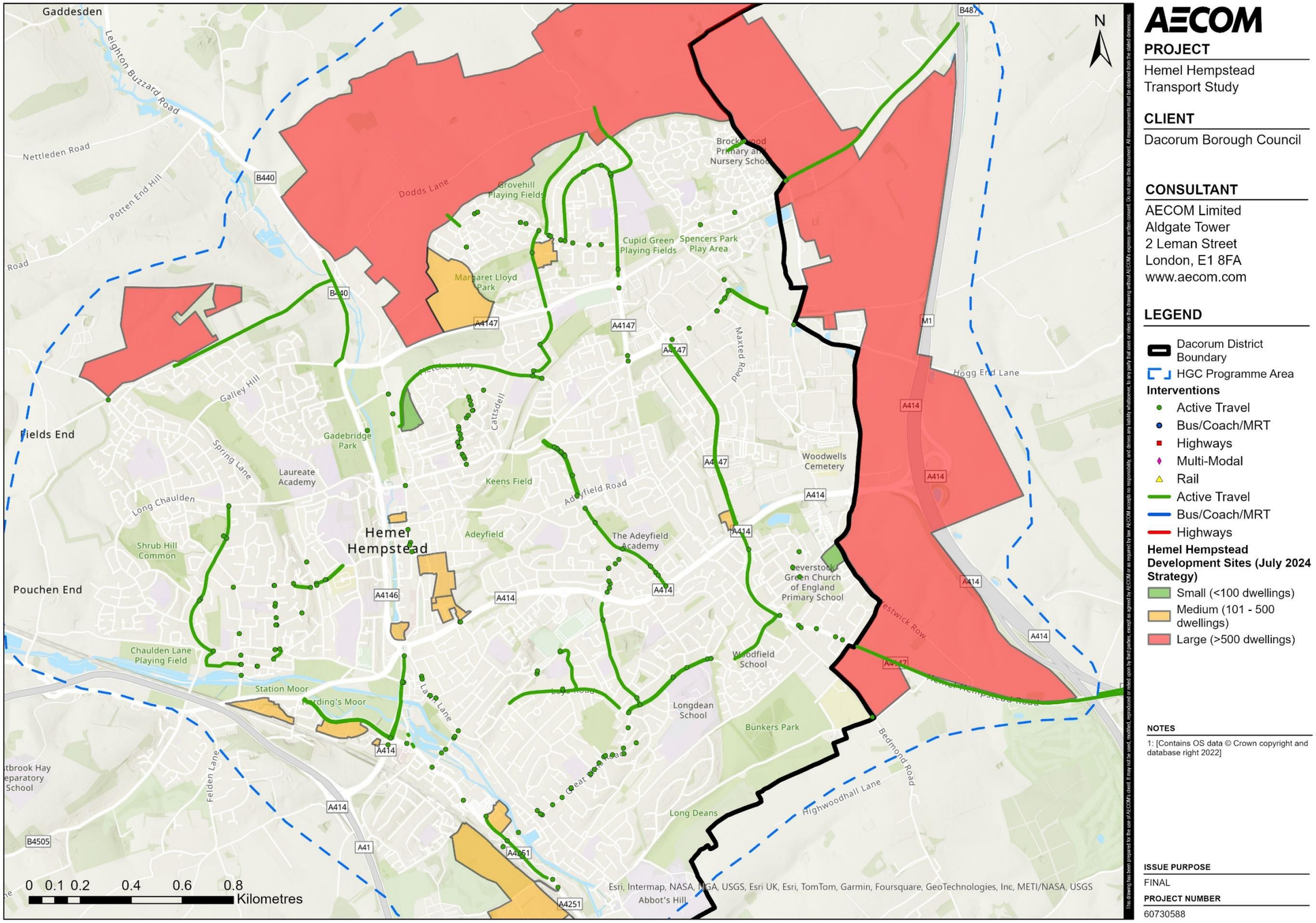
Bus/Coach/HERT-related interventions



Active Travel interventions (not including Dacorum LCWIP interventions)



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LEGEND

- Dacorum District Boundary
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Interventions

- Active Travel
- Bus/Coach/MRT
- Highways
- Multi-Modal
- Rail
- Active Travel
- Bus/Coach/MRT
- Highways

Hemel Hempstead Development Sites (July 2024 Strategy)

- Small (<100 dwellings)
- Medium (101 - 500 dwellings)
- Large (>500 dwellings)

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ISSUE PURPOSE
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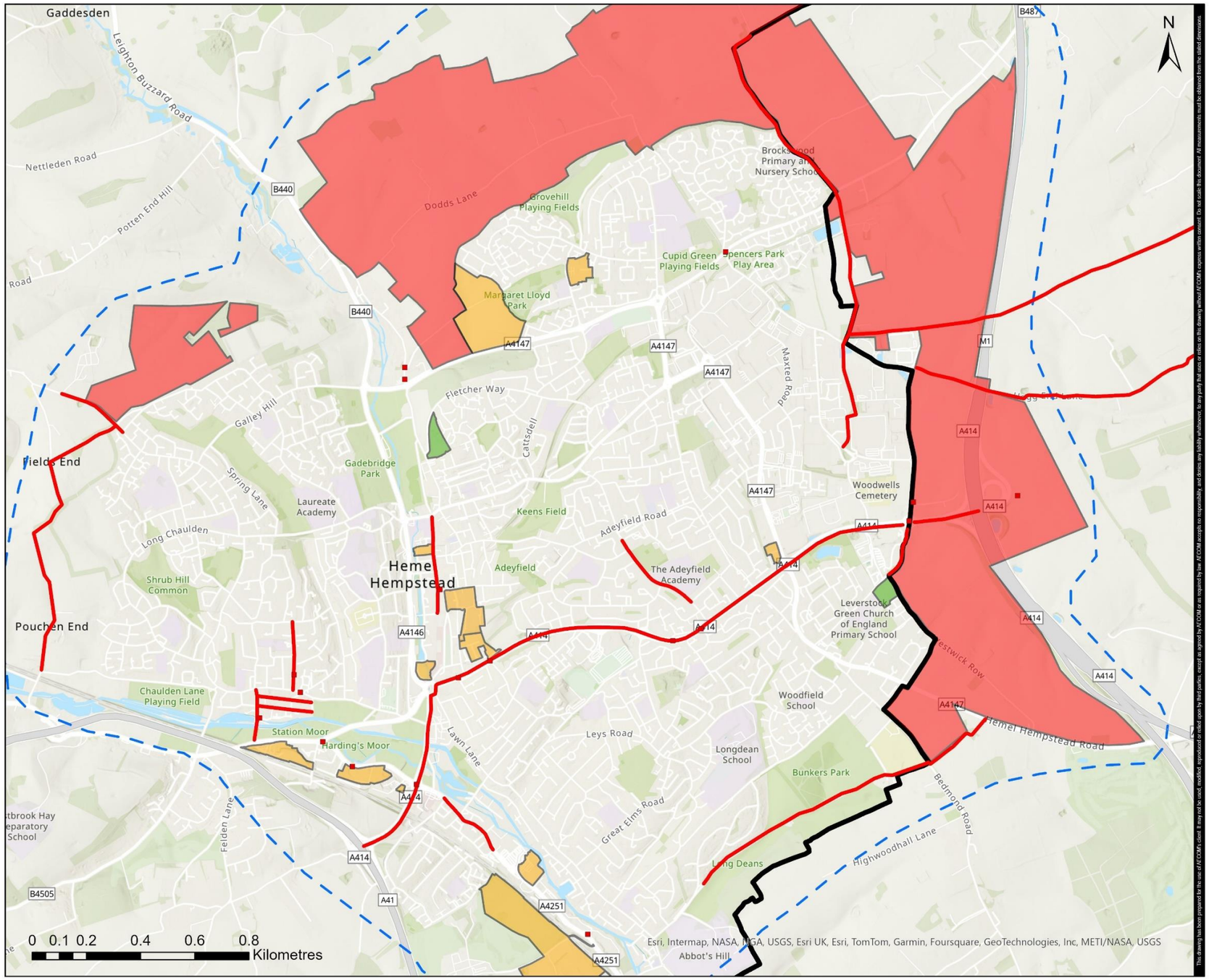
PROJECT NUMBER
60730588

Highways interventions



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LEGEND
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Interventions
- Active Travel
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Hemel Hempstead Development Sites (July 2024 Strategy)
- Small (<100 dwellings)
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- Large (>500 dwellings)

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ISSUE PURPOSE
FINAL

PROJECT NUMBER
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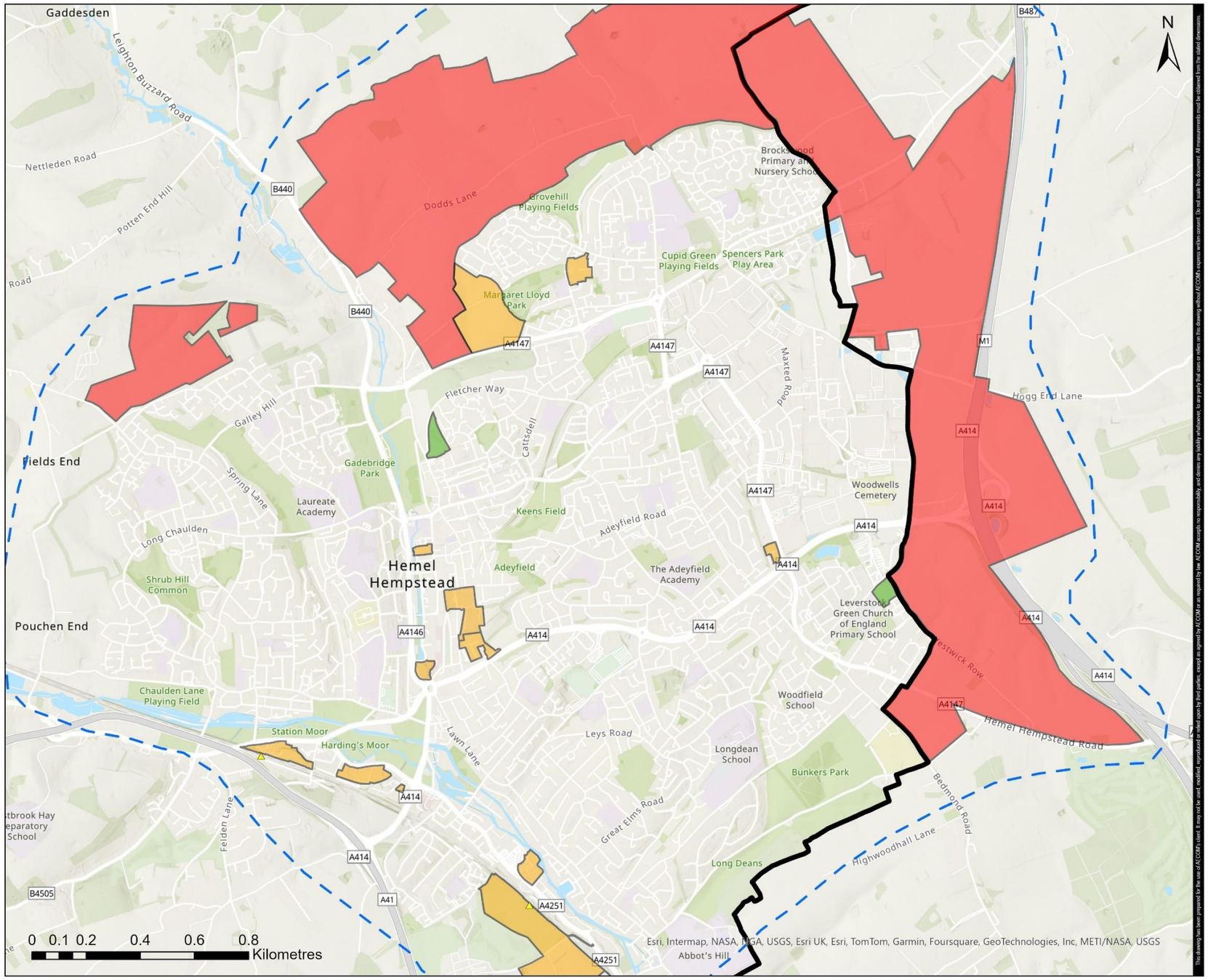
Rail interventions



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LEGEND
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Interventions
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Hemel Hempstead Development Sites (July 2024 Strategy)
- Small (<100 dwellings)
- Medium (101 - 500 dwellings)
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PROJECT NUMBER
60730588

Appendix E – Definitions

Category	Name	Definition
Network	Key Network	Intervention is directly on or adjacent to the Key Network which will primarily serve a movement function and is formed of 7 key routes: -Route 1: A414 / Station Road (Hemel Hempstead Rail Station – Herts IQ); -Route 2: Adey field (Leighton Buzzard Road – Heart of Maylands); -Route 3: Queensway (Leighton Buzzard Road – Maylands Ave); -Route 4: Link Road / Redbourn Road (Leighton Buzzard Road – Redbourn Road); -Route 5: New North and East Hemel Sustainable Transport Corridor (Leighton Buzzard Road – A4147); -Route 6: Leighton Buzzard Road / Two Waters Road / A4251 (Link Road – Apsley); and -Route 7: Redbourn Road / Maylands Avenue (Link Road – A414).
Network	Local Network	The Local Network supplements the Key Network and is formed of three subsequent networks: -Local Active Travel Network (Cycling, Wheeling, Walking and micro-mobility); -Local Passenger Transport Network (Public Transport including bus and HERT routes); and -The Green Network (Continuous, traffic-free, or low-traffic routes designed to support active travel such as the Nickey Line and Grand Union Canal).
Network	Development Road Network	Proposed development roads which may eventually form part of the Key Network, Local Network or remaining network of roads.
Network	Green Loop	Routeing around the town comprising a mixture of PRoW and Quietways largely traffic free except at crossing points.
Network	Remaining network	Other roads which do not form part of the Vision and Strategy definition of Key Network and Local Network.
Significance	Strategic	Large, complex intervention that it potentially going to have wider implications at a town-level. In many situations, it is likely to be required to mitigate the cumulative impacts of development growth and existing population travel needs. Its complexity might imply that it cannot be delivered in the short term, however it could be split into phases (building blocks) so that components of the overall intervention can be delivered earlier in the Local Plan period.
Significance	Local	Small-medium sized interventions which are more likely to be associated with one or several Local Plan development sites, and/or intended to mitigate smaller-scale cumulative impacts across the town
Mode	Multi-Modal	Interventions which facilitate interchange between modes, specifically new Local and Micro Mobility Hubs and improvements to existing bus interchanges and railway stations. Could include improvements to active mode infrastructure at these locations, including crossings, footways and cycle parking.
Mode	Bus/Coach/MRT	Interventions including enhanced bus stop facilities (including improved shelters); alterations to bus stop positioning (including moving bus stops out of laybys and into the main carriageway); new bus, coach and/or MRT interchanges; bus priority (including bus gates, bus lanes).
Mode	Active Travel	Interventions including new or improved cycle routes, footways and crossing facilities within the highway and also on PRoW. Can also include existing roads redesignated as Quietways and proposals associated with the Green Loop and on the Nickey Line and Grand Union Canal Towpath.
Mode	Highways	Interventions to manage traffic flows on the existing highway including alterations to junctions such as new or upgraded traffic signals, changes to parking facilities (on or off-street), speed limit changes and traffic calming measures.
Phase	Interim	An intervention which is intended to be in place in the short-medium term before being replaced or enhanced/expanded into an end-state intervention.
Phase	End-State	An intervention which is not expected to be replaced or enhanced further within the context of accommodating growth across the garden communities as defined in the Dacorum and St Albans Local Plans.
Physical Intervention or Soft Measure	Physical Intervention	A physical intervention, altering the local highway or requiring land outside of the highway boundary, which requires predominantly capital expenditure for implementation.
Physical Intervention or Soft Measure	Soft Measure	An initiative or programme which requires predominantly revenue expenditure for its implementation.
LP Site Attribution Scenarios	Single - Scenario 1	Intervention is located entirely within a LP site and meets the S106 tests. 100% funded by the LP site developer.
LP Site Attribution Scenarios	Single - Scenario 2	Intervention is located on the immediate edge of a LP site but within the existing public highway (excludes site access arrangements) and meets the S106 tests. 100% funded by the LP site developer.

Category	Name	Definition
LP Site Attribution Scenarios	Single - Scenario 3	Intervention is located on a desire line route which is either directly linked to a LP site boundary or commences near to a site, where the entirety of the intervention is within 1km of any point on the LP site boundary line (irrespective of where LP site vehicular and non-vehicular accesses may be proposed) and meets the S106 tests. 100% funded by the LP site developer.
LP Site Attribution Scenarios	Multiple - Scenario 1	Intervention is located on a desire line route which is either directly linked to two or more LP site boundaries or commences near to all of the sites, where the entirety of the intervention is within 1km of any point on boundary line for all of the LP sites in question (irrespective of where LP site vehicular and non-vehicular accesses may be proposed) and meets the S106 tests. 100% funded by the LP site developer, apportioned to each development according to the TOTAL proposed number of dwellings.
LP Site Attribution Scenarios	Multiple - Scenario 2	Intervention is located on a desire line route which is linked to multiple LP sites however it is located over 1km from of any point on boundary line for all of the LP sites in question (irrespective of where LP site vehicular and non-vehicular accesses may be proposed) and meets the S106 tests. 100% funded by pooled contributions from all LP sites, proportionate to the total number of dwellings proposed.
LP Site Attribution Scenarios	Unlinked	Intervention is either a) not located on a desire line route to a LP site or sites, b) is not located near to a LP development site or sites, and/or c) is of a scale that would necessitate external funding. This intervention would not meet some or all of the S106 tests. Requires 100% external funding.
Mobility Hubs	Metro Mobility Hubs	Represent the largest mobility hubs in the network, strategically placed in locations where significant transport interchange will take place, for example at Hemel Hempstead Rail Station and potential stops on the HERT rapid transit network. The facilities will provide and be tailored to support medium and longer distance journeys (including those leaving the Hemel Hempstead area).
Mobility Hubs	Local Mobility Hubs	Will still have the opportunity to provide a wide range of services but will be targeting different locations to the Metro mobility hub(s). The Local mobility hub(s) will be placed in new and existing local centres, designed to complement the existing range of services the local centres in Hemel Hempstead provide, enhancing them by increasing the sustainable and active travel facilities. Helping to encourage people away from private car use in these locations, which are currently dominated by car parking spaces, make using the car for short journeys from an individual's home to the local centre the easiest option.
Mobility Hubs	Micro Mobility Hubs	The smallest scale of mobility hub, Micro mobility hub(s), will further complement the network, ensuring no residential or business location is too far from an easily identifiable interchange location. 4.2.82. An example of an existing UK based mobility hub which could form a template for HGC Micro mobility hub(s) is located in the London Borough of Redbridge. Delivered in 2021, and the first CoMoUK accredited Mobility Hub, the suburban mini hub includes seating for a community café, cycle parking, planting, a car club bay, EV charging, and space to include micromobility.